

Town of Pomfret
 5218 Pomfret Road
 North Pomfret, VT 05053
 Agenda for Tuesday, April 21, 2015 Special Selectboard Meeting
6:00pm at the Pomfret Town Offices

Agenda Item	Presiding Officer	Timeframe
1. Call to Order	Chair	6:00pm
2. Public Comment	Chair	6:01-6:05pm
3. State Grant Applications: a. Review and consider approval of “Annual Financial Plan – Town Highways” (see attached) b. Review and consider approval of “State of Vermont Standard Grant Agreement # BC1637” (see attached)	Road Commissioner	6:05-6:15pm
4. Highway Speed Study: Review and consider approval of authorizing one or more Board representatives to work with Two Rivers Ottauquechee Regional Commission to conduct a highway speed study (see attached “Setting Speed Limits – A Guide for Vermont Towns”)	Chair	6:15-6:30pm
5. FY 2016 Budget Review	Chair	6:30-8:50pm
6. Closing public comments & adjournment	Chair	8:50-9:00pm

ANNUAL FINANCIAL PLAN - TOWN HIGHWAYS
19 V.S.A. § 306(j)

TA-60

Town of **Pomfret** Fiscal Year **2016** Begin **7/1/15** End **6/30/16**

INCOME

DESCRIPTION	ESTIMATED
State Funds - 19 V.S.A. Section 306(a):	
Class 1 0.000	\$ 0.00
Class 2 14.6580	\$ 60247.40
Class 3 47.750	\$ 72645.32
Town Tax Funds – 19 V.S.A. Section 307	\$ 874300
Special Funds (e.g., bonds or earmarks):	
a. State Aid - Highways	\$ 130000
b. Traffic Fines	\$ 6000
c.	\$
TOTAL	\$ 136000

EXPENSES

DESCRIPTION	ESTIMATED
Winter Maintenance	\$ 342425
Non-Winter Maintenance	\$ 314925
Major Construction Projects	
a. Bridge Repair-16 Mill Brook	\$ 20000
b.	\$
c.	\$
TOTAL	\$ 677350

Comments:

Budget numbers used were rejected by voters at Town Meeting on March 3, 2015 and do not include paving or structure granted funded projects.

Selectboard may revise budget request to voters at forthcoming Special Town Meeting.

This form shall be signed by the appropriate town officials and forwarded to the District Transportation Administrator.

TA-60 Rev 09-13

ANNUAL FINANCIAL PLAN - TOWN HIGHWAYS

TA-60

19 V.S.A. § 306(j)
(page 2)

We, the Legislative Body of the Municipality of **Pomfret** _____ certify that funds raised by municipal taxes are equivalent to or greater than a sum of at least **\$300.00** per mile for each mile of Class 1, 2, and 3 Town Highway in the municipality. (19 V.S.A. 307)

_____ Date: _____

(Duly Authorized Representatives)

The submitted Town Plan meets the requirements of Title 19, Section 306(j).

_____ Date: _____

District Transportation Administrator

Budget FY 2016 – Not approved by Town

Income

Town Taxes	\$874,300.00	
State Aid – Highways	\$130,000.00	
Traffic Fines	<u>\$6,000.00</u>	
		\$1,010,300.00

Expenses

Labor & Benefits	\$232,000.00	
Insurance	\$29,000.00	
Materials	\$251,250.00	
Equipment	\$145,850.00	
Garage Building	\$28,300.00	
Contracts	\$278,900.00	
Highway Special Projects	\$20,000.00	
Highway Vehicle Reserve	<u>\$25,000.00</u>	
		\$1,010,300.00

Division between Winter and Non-Winter Maintenance

Winter

Labor & Benefits	\$116,000.00	
Insurance	\$14,500.00	
Equipment	\$72,925.00	
Salt	\$75,000.00	
Sand	\$54,000.00	
Signs, Snow Fencing & Posts	<u>\$10,000.00</u>	
		\$342,425.00

Non-Winter

Labor & Benefits	\$116,000.00	
Insurance	\$14,500.00	
Equipment	\$72,925.00	
Crushed Stone	\$72,000.00	
Chloride	\$18,000.00	
Cold Patch & Hot Mix	\$1,500.00	
Culverts & Headwalls	\$9,000.00	
Bandrail	<u>\$11,000.00</u>	
		\$314,925.00

Major Construction Projects

Repair Bridge 16 Mill Brook	<u>\$20,000.00</u>	
		<u>\$20,000.00</u>
		\$677,350.00

**Town Operating Account
Detail of Revenues, Expenditures, Budget**

	Budget FY 2014 (6-mo)	Actual FY 2014 (6-mo)	Budget FY 2015 (12-mo)	Actual FY 2015;1st 6-mo	Budget FY - 2016
Administration	0.00	6.68	0.00	0.00	200.00
Electricity--Pomfret FD	0.00	7,374.68	0.00	595.65	1,526.00
Electricity--Teago FD	0.00	0.00	0.00	393.90	1,152.00
Propane Pomfret Fire Dept	0.00	471.25	0.00	969.85	8,807.00
Heating oil, Teago FD	0.00	647.73	0.00	1,242.66	9,807.00
Equip (Hose, Tools etc)	0.00	0.00	0.00	175.21	90.00
SCBA & Gas Meter	0.00	0.00	0.00	39,189.00	33,680.00
Traffic Control Devices	0.00	836.43	0.00	0.00	600.00
Turnout Gear	0.00	0.00	0.00	0.00	5,982.00
Fire Equipment Reserve Fu	0.00	0.00	35,000.00	35,000.00	25,000.00
Comm Eq Res Fund	0.00	36.25	0.00	0.00	0.00
Operating Expenses-Fast S	1,000.00	386.30	4,000.00	0.00	3,500.00
FAST squad supplies	0.00	0.00	0.00	366.59	5,000.00
Fast Squad Equipment Rese	0.00	0.00	4,400.00	4,400.00	4,400.00
Membership/Subscriptions	0.00	50.00	0.00	165.00	735.00
Total Emergency Services	32,890.00	32,089.15	183,479.00	143,099.59	191,112.00
Fire Dept. Diesel fuel	0.00	0.00	0.00	0.00	1,200.00
FD: septic systems	0.00	0.00	0.00	0.00	300.00
Fire Dept Training	0.00	0.00	0.00	0.00	2,000.00
FD alarm systems	0.00	0.00	0.00	0.00	500.00
FD vehicle purchase	0.00	0.00	0.00	0.00	0.00
FD Reserve: non-App Equip	0.00	0.00	0.00	0.00	10,660.00
Municipal Special Project					
Abbott Library Build. Res	0.00	0.00	3,000.00	3,000.00	3,000.00
Town Hall Roof	15,000.00	0.00	0.00	0.00	0.00
Town Buildings Improvemen	2,000.00	0.00	2,000.00	1,516.59	2,000.00
Total Mun Special Projects	17,000.00	0.00	5,000.00	4,516.59	5,000.00
Voted Appropriations					
Abbott	0.00	0.00	36,935.00	36,935.00	37,754.00
Cemetery Appropriation	2,500.00	0.00	5,000.00	5,000.00	9,500.00
Emergency Services Approp	0.00	0.00	0.00	0.00	0.00
Visiting Nurses of VT and	0.00	0.00	3,950.00	3,950.00	3,950.00
Mental Health	0.00	0.00	0.00	0.00	0.00
Council on Aging	0.00	0.00	2,500.00	2,500.00	2,500.00
Woodstock Area Job Bank	0.00	0.00	300.00	300.00	300.00
HCRS	0.00	0.00	979.00	979.00	979.00
Ottauquechee Comm. Partne	0.00	0.00	2,500.00	2,500.00	2,500.00
Spectrum Teen Center	0.00	0.00	750.00	750.00	750.00
Pentangle	0.00	0.00	900.00	950.00	950.00
WISE of Upper Valley	0.00	0.00	0.00	0.00	400.00
Total Voted Appropriations	2,500.00	0.00	53,814.00	53,864.00	59,583.00
Total Town Expenditures	122,862.00	125,240.48	410,298.50	302,175.48	507,555.00
Total General Fund	-90,948.00	-33,811.78	730,469.50	926,684.14	-186,026.00



State of Vermont
Finance & Administration
Contract Administration
One National Life Drive
Montpelier VT 05633-5001
<http://vtrans.vermont.gov>

Agency of Transportation

[phone] 802-828-2641
[fax] 802-828-5545
[ttd] 800-253-0191

April 13, 2015

Michael Reese, Pomfret Selectboard
Town of Pomfret
5218 Pomfret Road
Pomfret, VT 05053

RE: Town Highway Structures Program FY 2015

Contract Number: BC1637

Dear Mr. Reese:

Attached, please find a Town Highway Structures Program FY 2015 Agreement# BC1637. Please have the authorized personnel sign and return the document to me at your earliest convenience.

Standard State Contract Provisions: Insurance Requirements: Before commencing work on this Agreement the Party must provide certificates of insurance to show that the following minimum coverage is in effect in accordance with the Standard State Contract Provisions. A Certificate of General Liability Insurance in the amount of \$1,000,000, Automobile Insurance in the amount of \$1,000,000 and Worker's Compensation insurance in accordance with the laws of the State of Vermont. **Certificate of Insurance MUST state: Party shall name State of Vermont and its officers and employees as additional insured for liability arising out of this Agreement.** It is the responsibility of the Party to maintain current certificates of insurance on file with the state through the term of the Agreement.

When the agreement has been fully executed, I will date and return a fully executed copy for your file.

Should you have any questions or concerns, please contact me at 802-828-2641.

Sincerely,

A handwritten signature in cursive script that reads "Tricia Scribner".

Tricia Scribner
Contracts Specialist II
Enclosure



STATE OF VERMONT
STANDARD GRANT AGREEMENT

Agreement# BC1637

Part 2 – Grant Agreement

1. Parties: This is a Grant Agreement for financial assistance between the State of Vermont, Agency of Transportation (hereinafter called “State”), and the Town of Pomfret with principal place of business at 5218 Pomfret Road, Pomfret, VT 05053, (hereinafter called “Grantee”). If Grantee does not have a Business Account Number, it is the Grantee’s responsibility to contact the Vermont Department of Taxes to determine if, by law, the Grantee is required to have a Vermont Department of Taxes Business Account Number.
2. Subject Matter: The subject matter of this Grant Agreement is financial assistance to a municipality under 19 V.S.A. § 306(e) for maintenance, including actions to extend life expectancy, and construction of bridges, culverts, and other structures, including causeways and retaining walls, intended to preserve the integrity of the traveled portion of class 1, 2, and 3 town highways. Detailed services to be provided by the Grantee are described in Attachment A.
3. Award Details: Amounts, dates and other award details are as shown in the attached *Grant Agreement Part 1 – Grant Award Detail*. A detailed scope of worked covered by this award is described in Attachment A.
4. Amendment: No changes, modifications, or amendments in the terms and conditions of this Grant Agreement shall be effective unless reduced to writing, numbered, and signed by the duly authorized representative of the State and Grantee.
5. Cancellation: This Grant Agreement may be suspended or cancelled by either party by giving written notice at least thirty (30) days in advance.
6. The Grantee hereby certifies as follows:
 - a. The Grantee has funds available to finance the local share of the project during the Grant period.
 - b. The Grantee [X] has* [] has not** adopted town road and bridge standards which meet or exceed the minimum State-approved codes and standards produced by the Vermont Agency of Transportation (VTrans) and approved by the Vermont Agency of Natural Resources (VANR). If the Grantee has adopted codes and standards which meet these minimum requirements, the Grantee further certifies that the municipality follows and adheres to those adopted codes and standards.
 - c. The Grantee [X]has* [] does not have** an Infrastructure Study (three years or less old) which identifies location, size, deficiencies/condition of roads, bridges, causeways, culverts and highway-related retaining walls on class 1, 2, and 3 town highways, and estimated cost of repair.

- d. The Grantee has submitted the Annual Town Plan required by 19 V.S.A. § 306(j) to VTrans' district office.
 - e. Where a municipality has adopted codes and standards meeting the minimums required by VTrans and has an Infrastructure Study, the project is eligible for a 90% State share, not to exceed the maximum limiting amount stated on page 1 of this Grant Agreement.
 - f. Where a municipality has not adopted codes and standards meeting the minimums required by VTrans or lacks an Infrastructure Study, the project is eligible for an 80% State share, not to exceed the maximum limiting amount stated on page 1 of this Grant Agreement.
7. The Town/Municipality has completed the Environmental Resource checklist in Attachment A.
8. Attachments: This Grant Agreement consists of 11 pages including the following attachments which are incorporated herein:

- Attachment A – Grant Application (Scope of Work and Checklist)
- Attachment B – Payment Provisions
- Attachment C – Customary State Grant Provisions
- Attachment D – Other Provisions

WE, THE UNDERSIGNED PARTIES, AGREE TO BE BOUND BY THIS GRANT AGREEMENT.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUBRECIPIENT:
TOWN OF POMFRET

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: Secretary of Transportation

Title: _____

Date: _____, 20__

Date: _____, 20__

APPROVED AS TO FORM:

DATE: 4/7/2015



 ASSISTANT ATTORNEY GENERAL

STATE OF VERMONT GRANT AGREEMENT		Part 1-Grant Award Detail					
SECTION I - GENERAL GRANT INFORMATION							
¹ Grant #: BC1122		² Original <input checked="" type="checkbox"/> Amendment #					
³ Grant Title: Town Highway Structures Program FY 2015							
⁴ Amount Previously Awarded: \$ 0.00		⁵ Amount Awarded This Action: \$ 87,458.40	⁶ Total Award Amount: \$ 87,458.40				
⁷ Award Start Date: Execution		⁸ Award End Date: 12/31/14	⁹ Subrecipient Award: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				
¹⁰ Vendor #: 3101448900-20		¹¹ Grantee Name: Town of Pomfret					
¹² Grantee Address: 5218 Pomfret Road							
¹³ City: North Pomfret		¹⁴ State: VT	¹⁵ Zip Code: 05053				
¹⁶ State Granting Agency: Vermont Agency of Transportation			¹⁷ Business Unit: 08110				
¹⁸ Performance Measures: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		¹⁹ Match/In-Kind: \$9,687.60	Description: Local				
²⁰ If this action is an amendment, the following is amended: Amount: <input type="checkbox"/> Funding Allocation: <input type="checkbox"/> Performance Period: <input type="checkbox"/> Scope of Work: <input type="checkbox"/> Other: <input type="checkbox"/>							
SECTION II - SUBRECIPIENT AWARD INFORMATION							
²¹ Grantee DUNS #: 804863298		²² Indirect Rate: N/A % <small>(Approved rate or do min/mis 10%)</small>	²³ FFATA: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				
²⁴ Grantee Fiscal Year End Month (MM format): 6		²⁵ R&D: <input type="checkbox"/>					
²⁶ DUNS Registered Name (if different than VISION Vendor Name in Box 11):							
SECTION III - FUNDING ALLOCATION							
STATE FUNDS							
Fund Type	²⁷ Awarded Previously	²⁸ Award This Action	²⁹ Cumulative Award	³⁰ Special & Other Fund Descriptions			
General Fund	\$0.00	\$0.00	\$0.00				
Special Fund	\$0.00	\$0.00	\$0.00				
Global Commitment <small>(non-subrecipient funds)</small>	\$0.00	\$0.00	\$0.00				
Other State Funds	\$0.00	\$87,458.40	\$87,458.40	Transportation Funds			
FEDERAL FUNDS <small>(Includes subrecipient Global Commitment funds)</small>			Required Federal Award Information				
³¹ CFDA #	³² Program Title	³³ Awarded Previously	³⁴ Award This Action	³⁵ Cumulative Award	³⁶ FAIN	³⁷ Federal Award Date	³⁸ Total Federal Award
		\$0.00	\$0.00	\$0.00			\$0.00
³⁹ Federal Awarding Agency:		⁴⁰ Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
Total Awarded - All Funds		\$0.00	\$87,458.40	\$87,458.40			\$0.00
SECTION IV - CONTACT INFORMATION							
STATE GRANTING AGENCY				GRANTEE			
NAME: Chris Bump				NAME: Michael Reese			
TITLE: District 4				TITLE: Pomfret Selectboard			
PHONE: 295-8888				PHONE: 457-4770			
EMAIL: chris.bump@state.vt.us				EMAIL: michael.reese@pomfretvt.us			

**ATTACHMENT A
SCOPE OF WORK TO BE PERFORMED BY GRANTEE**

See Grant Application and Checklist at the end of this grant agreement.

**ATTACHMENT B
PAYMENT PROVISIONS**

The State agrees to compensate the Grantee for services performed up to the maximum amount stated on page 1 of this Grant Agreement provided such services are within the scope of the Grant and are authorized as provided for under the terms and conditions of this Grant.

A close out report must also be submitted within 45 days of the project completion or end date of the Grant, whichever is first, documenting that the project has been completed and accepted by the Grantee (this is also on the VTrans TA65 form).

If the project is not completed before the end date of the Grant, the Grantee will have no claim for reimbursement under this Grant Agreement.

All completed forms should be submitted to:

Name: Chris Bump
Title: District Project Manager
Address: Vermont Agency of Transportation
District 4
221 Beswick Drive
White River Junction, VT 05001

**ATTACHMENT C: STANDARD STATE PROVISIONS
FOR CONTRACTS AND GRANTS**

1. **Entire Agreement:** This Agreement, whether in the form of a Contract, State Funded Grant, or Federally Funded Grant, represents the entire agreement between the parties on the subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect.
2. **Applicable Law:** This Agreement will be governed by the laws of the State of Vermont.
3. **Definitions:** For purposes of this Attachment, "Party" shall mean the Contractor, Grantee or Subrecipient, with whom the State of Vermont is executing this Agreement and consistent with the form of the Agreement.
4. **Appropriations:** If this Agreement extends into more than one fiscal year of the State (July 1 to June 30), and if appropriations are insufficient to support this Agreement, the State may cancel at the end of the fiscal year, or otherwise upon the expiration of existing appropriation authority. In the case that this Agreement is a Grant that is funded in whole or in part by federal funds, and in the event federal funds become unavailable or reduced, the State may suspend or cancel this Grant immediately, and the State shall have no obligation to pay Subrecipient from State revenues.
5. **No Employee Benefits For Party:** The Party understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation or sick leave, workers compensation or other benefits or services available to State employees, nor will the state withhold any state or federal taxes except as required under applicable tax laws, which shall be determined in advance of execution of the Agreement. The Party understands that all tax returns required by the Internal Revenue Code and the State of Vermont, including but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Party, and information as to Agreement income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes.
6. **Independence, Liability:** The Party will act in an independent capacity and not as officers or employees of the State.

The Party shall defend the State and its officers and employees against all claims or suits arising in whole or in part from any act or omission of the Party or of any agent of the Party. The State shall notify the Party in the event of any such claim or suit, and the Party shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit.

After a final judgment or settlement the Party may request recoupment of specific defense costs and may file suit in Washington Superior Court requesting recoupment. The Party shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Party.

The Party shall indemnify the State and its officers and employees in the event that the State, its officers or employees become legally obligated to pay any damages or losses arising from any act or omission of the Party.

7. **Insurance:** Before commencing work on this Agreement the Party must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Party to maintain current certificates of insurance on file with the state through the term of the Agreement. No warranty is made that the coverages and limits listed

herein are adequate to cover and protect the interests of the Party for the Party's operations. These are solely minimums that have been established to protect the interests of the State.

Workers Compensation: With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont.

General Liability and Property Damage: With respect to all operations performed under the contract, the Party shall carry general liability insurance having all major divisions of coverage including, but not limited to:

- Premises - Operations
- Products and Completed Operations
- Personal Injury Liability
- Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

- \$1,000,000 Per Occurrence
- \$1,000,000 General Aggregate
- \$1,000,000 Products/Completed Operations Aggregate
- \$ 50,000 Fire/ Legal/Liability

Party shall name the State of Vermont and its officers and employees as additional insureds for liability arising out of this Agreement.

Automotive Liability: The Party shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Agreement. Limits of coverage shall not be less than: \$1,000,000 combined single limit.

Party shall name the State of Vermont and its officers and employees as additional insureds for liability arising out of this Agreement.

8. **Reliance by the State on Representations:** All payments by the State under this Agreement will be made in reliance upon the accuracy of all prior representations by the Party, including but not limited to bills, invoices, progress reports and other proofs of work.
9. **Requirement to Have a Single Audit:** In the case that this Agreement is a Grant that is funded in whole or in part by federal funds, the Subrecipient will complete the Subrecipient Annual Report annually within 45 days after its fiscal year end, informing the State of Vermont whether or not a Single Audit is required for the prior fiscal year. If a Single Audit is required, the Subrecipient will submit a copy of the audit report to the granting Party within 9 months. If a single audit is not required, only the Subrecipient Annual Report is required.

For fiscal years ending before December 25, 2015, a Single Audit is required if the subrecipient expends \$500,000 or more in federal assistance during its fiscal year and must be conducted in accordance with OMB Circular A-133. For fiscal years ending on or after December 25, 2015, a Single Audit is required if the subrecipient expends \$750,000 or more in federal assistance during its fiscal year and must be conducted in accordance with 2 CFR Chapter I, Chapter II, Part 200, Subpart F. The Subrecipient Annual Report is required to be submitted within 45 days, whether or not a Single Audit is required.

10. **Records Available for Audit:** The Party shall maintain all records pertaining to performance under this agreement. "Records" means any written or recorded information, regardless of physical form or characteristics, which is produced or acquired by the Party in

the performance of this agreement. Records produced or acquired in a machine readable electronic format shall be maintained in that format. The records described shall be made available at reasonable times during the period of the Agreement and for three years thereafter or for any period required by law for inspection by any authorized representatives of the State or Federal Government. If any litigation, claim, or audit is started before the expiration of the three year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

11. Fair Employment Practices and Americans with Disabilities Act: Party agrees to comply with the requirement of Title 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Party shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Party under this Agreement. Party further agrees to include this provision in all subcontracts.

12. Set Off: The State may set off any sums which the Party owes the State against any sums due the Party under this Agreement; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided hereinafter.

13. Taxes Due to the State:

- a. Party understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
- b. Party certifies under the pains and penalties of perjury that, as of the date the Agreement is signed, the Party is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.
- c. Party understands that final payment under this Agreement may be withheld if the Commissioner of Taxes determines that the Party is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.
- d. Party also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the Party has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Party has no further legal recourse to contest the amounts due.

14. Child Support: (Applicable if the Party is a natural person, not a corporation or partnership.) Party states that, as of the date the Agreement is signed, he/she:

- a. is not under any obligation to pay child support; or
- b. is under such an obligation and is in good standing with respect to that obligation; or
- c. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Party makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Party is a resident of Vermont, Party makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

15. **Sub-Agreements:** Party shall not assign, subcontract or subgrant the performance of this Agreement or any portion thereof to any other Party without the prior written approval of the State. Party also agrees to include in all subcontract or subgrant agreements a tax certification in accordance with paragraph 13 above.
16. **No Gifts or Gratuities:** Party shall not give title or possession of any thing of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this Agreement.
17. **Copies:** All written reports prepared under this Agreement will be printed using both sides of the paper.
18. **Certification Regarding Debarment:** Party certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Party nor Party's principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Party further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Party is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing/debarment>
19. **Certification Regarding Use of State Funds:** In the case that Party is an employer and this Agreement is a State Funded Grant in excess of \$1,001, Party certifies that none of these State funds will be used to interfere with or restrain the exercise of Party's employee's rights with respect to unionization.
20. **Internal Controls:** In the case that this Agreement is an award that is funded in whole or in part by Federal funds, in accordance with 2 CFR Part II, §200.303, the Party must establish and maintain effective internal control over the Federal award to provide reasonable assurance that the Party is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the award. These internal controls should be in compliance with guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework", issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).
21. **Mandatory Disclosures:** In the case that this Agreement is an award funded in whole or in part by Federal funds, in accordance with 2CFR Part II, §200.113, Party must disclose, in a timely manner, in writing to the State, all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Failure to make required disclosures may result in the imposition of sanctions which may include disallowance of costs incurred, withholding of payments, termination of the Agreement, suspension/debarment, etc.
22. **Conflict of Interest:** Party must disclose in writing any potential conflict of interest in accordance with Uniform Guidance §200.112, Bulletin 5 Section IX and Bulletin 3.5 Section IV.B.

(End of Standard Provisions)

**ATTACHMENT D
OTHER GRANT AGREEMENT PROVISIONS**

1. **Cost of Materials:** Grantee will not buy materials and resell to the State at a profit.
2. ~~**Identity of workers:** The Grantee will assign the following individuals to the services to be performed under the provisions of this agreement, and these individuals shall be considered essential to performance. [cite individuals]. Should any of the individuals become unavailable during the period of performance, the State shall have the right to approve any proposed successors, or, at its option, to cancel the remainder of the Agreement. [Deliberately omitted]~~
3. ~~**Work Product Ownership:** Upon full payment by the State, all products of the Grantee's work, including outlines, reports, charts, sketches, drawings, art work, plans, photographs, specifications, estimates, computer programs, or similar documents, become the sole property of the State of Vermont and may not be copyrighted or resold by Grantee. [Deliberately omitted]~~
4. **Prior Approval/Review of Releases:** Any notices, information pamphlets, press releases, research reports, or similar other publications prepared and released in written or oral form by the Grantee under this Grant Agreement shall be approved/reviewed by the State prior to release.
5. **Ownership of Equipment:** Any equipment purchased by or furnished to the Grantee by the State under this grant agreement is provided on a loan basis only and remains the property of the State.
6. ~~**Legal Services:** If the Grantee will be providing legal services under this Grant Agreement, Grantee agrees that during the term of the Grant Agreement he or she will not represent anyone in a matter, proceeding, or lawsuit against the State of Vermont or any of its agencies or instrumentalities. After termination of this Grant Agreement, Grantee also agrees that he or she will not represent anyone in a matter, proceeding, or lawsuit substantially related to this Grant Agreement. [Deliberately omitted.]~~
7. **Grantee's Liens:** Grantee will discharge any and all contractors' or mechanics' liens imposed on property of the State through the actions of subcontractors.
8. ~~**Performance Bond:** The Grantee shall, prior to commencing work under this Grant Agreement, furnish to the State a payment and performance bond from a reputable insurance company licensed to do business in the State of Vermont, guaranteeing the satisfactory completion of the Grant Agreement by the Grantee and payment of all subcontractors, suppliers and employees. Applies to subcontractors. [Deliberately omitted]~~
9. ~~**Professional Liability Insurance:** Before commencing work on this Grant Agreement and throughout the term of this Grant Agreement, Grantee shall procure and maintain professional liability insurance for any and all services performed under this Grant Agreement, with minimum coverage of \$_____ per occurrence. [Deliberately omitted.]~~
10. **State Minimum Wage:** The Grantee will comply with the state minimum wage laws and regulations, if applicable.

11. **Health Insurance Portability and Accountability Act (HIPAA):** The confidentiality of any health care information acquired by or provided to the Grantee shall be maintained in compliance with any applicable State or federal laws or regulations.
12. **Equal Opportunity Plan:** If it is required by the Federal Office of Civil Rights to have a plan, the Grantee must provide a copy of the approval of its Equal Opportunity Plan.
13. **Supplanting:** If required, the Grantee will submit a Certification that funds will not be used to supplant local or other funding.
14. **Compliance with Cost Principles:** Grantee shall comply with the requirements set forth in 2 CFR 225 (for state and local governments including schools), A-122 (for non-profit organizations), or A-21 (for higher education institutions) as appropriate for the Grantee's type of organization.
15. **Compliance with Administrative Regulations:** Grantee shall comply with requirements of OMB Circular A-102 (state and local governments and schools) or A-110 (institutions of higher education, hospitals, and non-profit organizations) as appropriate for the Grantee's type of organization.
16. **Construction;** The Grantee will construct the project using sound engineering practices and in accordance with plans defining the work.
17. **Permits; Compliance with Permit Conditions.** The Grantee will obtain all necessary permits and other approvals required to construct the Project and will be responsible for assuring that all permit or approval requirements are complied with during construction and, to the extent applicable, for the life of the project.
18. **Damage to Abutters.** The Grantee will pay the total cost of any incidental damages that may be sustained by abutting or adjacent property owners or occupants as the result of construction of the project.
19. **Acquisition of Additional Right-of-Way.** The Grantee will be responsible for obtaining additional right-of-way, if any, needed for the project. The cost of any such right-of-way shall be the responsibility of the Grantee.
20. **Utility Relocations.** The Grantee will be responsible for making any necessary arrangements for utility relocations needed to accommodate the project. Please call Dig Safe at 1-800-DigSafe (www.digsafe.com). The cost of any improvements to existing utilities shall be the responsibility of the Grantee or the utility.
21. **Traffic Control.** The Grantee will provide all traffic control necessary to assure the safe movement of traffic during construction.

22. **Maintenance of Project Improvements.** The Grantee will maintain the completed project in a manner satisfactory to the State or its authorized representatives and shall make ample provisions each year for town highways and structures. In this regard, the Grantee acknowledges that its attention has been directed to Vermont Statutes Annotated, Title 19, Sections 304 (Duties of selectmen) and 310 (Highways, bridges and trails).



VERMONT

AGENCY OF TRANSPORTATION

FY 2015 Municipal Highway Grant Application

APPLYING FOR: Structures Class 2 Roadway Emergency

MUNICIPALITY: Pomfret ADDRESS: 5218 Pomfret Road, North Pomfret, VT 05053

MUNICIPAL CONTACT (name): Michael Reese, Pomfret Selectboard

Phone: (802) 457-4770 E-Mail: Michael.Reese@PomfretVT.us

ACCOUNTING SYSTEM: Automated Manual Combination

DUNS #: 804863298 Grantee FY End Month (mm format): 06

DISTRICT CONTACT (name): Chris Bump

Phone: (802) 296-5567 E-Mail: Chris.Bump@state.vt.us

SCOPE OF WORK TO BE PERFORMED BY GRANTEE

Location of Work. The work described below involves the following town highway structure:

TH# 1, (Name) Pomfret Road which is a class 2 town highway.

Bridge # _____, which crosses _____

Culvert # N/A, for which the original size was 36" and the replacement size is 60"

Causeway: _____

Retaining Wall: _____

Estimated Completion Date: 11/24/2014

Work to Be Done:

Replace existing culvert damaged by storm event July 2013 with 60 inch CMP, reinforced concrete headwalls at Inlet and outlet. CMP embedded 18 inches below stream bed to provide AOP.

See attached project plans.

Detailed Cost Estimate (below or attached):

See attached Construction Contract.

Estimated Project Amount: \$ 97,176.00

Municipality has adopted Codes & Standards that meet or exceed the State approved template? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Municipality has a current Network Inventory? (less than 3 years old) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Municipality MUST complete the following environmental resource checklist:	
EXISTING STRUCTURES: (check all that apply)	
<input checked="" type="checkbox"/> Steel Tube Culvert	<input type="checkbox"/> Concrete Box Culvert
<input type="checkbox"/> Stone Culvert	<input type="checkbox"/> Concrete Bridge
<input type="checkbox"/> Ditch	<input type="checkbox"/> Rolled Beam/Plate Girder Bridge
<input type="checkbox"/> Metal Truss Bridge	<input type="checkbox"/> Wooden Covered Bridge
<input type="checkbox"/> There are foundation remains, mill ruins, stone walls or other.	<input type="checkbox"/>
<input type="checkbox"/> Stone Abutments or Piers	<input type="checkbox"/> Buildings (over 50 yrs old) within 300 feet of work
PROJECT DESCRIPTION: (check all that apply)	
<input type="checkbox"/> The Project involves engineering/ planning only.	<input type="checkbox"/> The project consists of repaving existing paved surfaces only.
<input type="checkbox"/> The project consists of reestablishing existing ditches only.	<input type="checkbox"/> All work will be done from the existing road or shoulder.
<input checked="" type="checkbox"/> The structure is being replaced on existing location/alignment.	<input checked="" type="checkbox"/> There will be excavation within 300 feet of a river or stream.
<input type="checkbox"/> There will be excavation within a flood plain.	<input type="checkbox"/> Road reclaiming, reconstruction, or widening
<input type="checkbox"/> Tree cutting / clearing.	<input type="checkbox"/> Temporary off-road access is required.
<input type="checkbox"/> New ditches will be established.	<input type="checkbox"/> The roadway will be realigned.
The municipality has included photos of the Project. Must show infrastructure and surrounding features, as much as possible. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
The municipality has included a detailed Scope of Work. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Below this line to be filled in by VTrans staff:

Recommended Award Amount: \$ 87,458.40

District Staff Approval: (name) Chris Bump Date: 1/15/2015

Archaeology Approval: J. Russell B. Gauthier Date: See Below

Historic Preservation Approval: J. Ehrlich K. O'Shea Date: See Below

Archology/Historic Preservation Conditions/Comments:

See attached CE/NEPA

This was a ER project that is being converted to a Town Highways Structures Grant

Archaeology and Historic Preservation Approvals are contained in the CE/NEPA Document

Note:

Projects may involve impacts to protected historic or archaeological resources. For more information, responsible parties are encouraged to contact the individuals listed below:

Jen Russell, VTrans Archaeology Officer,
802-828-3981, jeanine.russell@state.vt.us

OR

Brennan Gauthier, VTrans Assistant Archaeologist,
802-828-3965, brennan.gauthier@state.vt.us

Judith Ehrlich, VTrans Historic Preservation Officer,
802-828-1708, judith.ehrlich@state.vt.us

OR

Kaitlin O'Shea, VTrans Historic Preservation Specialist,
802-828-3962, kaitlin.OShea@state.vt.us



State of Vermont
Agency of Transportation
Environmental Section
One National Life Drive
Montpelier, VT 05633-5001
www.aot.state.vt.us

[phone] 802-828-1278
[fax] 802-828-2334
[tdd] 800-253-0191

Matthew Hake, Division Administrator
Federal Highway Administration
P.O. Box 568, Montpelier, VT 05601

November 6, 2013

Attn: Kenneth R. Sikora, Environmental Program Manager
Re: Pomfret Culvert TH1 MM 6.28 (ER Event 13-1 Project)

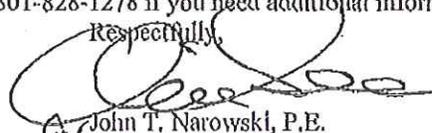
Dear Mr. Hake:

Project Pomfret Culvert TH1 MM 6.28 is located on Town Highway 1 (Pomfret Road) at mile marker 6.28. Construction will consist of replacement of the existing 3 foot culvert with a new 4 x 60 foot culvert along with other incidental items. The pavement over the new culvert will have 25 foot approaches that will be cold planed to 1.5 inches, which includes pavement removed to replace the culvert. It will be required that all excavation be backfilled at the close of business every day. Work will be completed from the roadway with a lane closure.

The Vermont Agency of Transportation (VTrans) has considered the potential environmental consequences of the project in accordance with the National Environmental Policy Act (NEPA). VTrans recommends the project be classified as a Categorical Exclusion pursuant to 23 CFR 771.117(d)(3) "Environmental Impact and Related Procedures - Categorical Exclusions" as the project consists of bridge (culvert) replacement.

The project will not involve substantial planning, resources, or expenditures; nor is it likely to induce significant alterations in land use, planned growth, development patterns, traffic volumes, or traffic patterns. No significant environmental impact is expected to result from construction or maintenance of this facility. However, the project will involve permanent repair of an ER Event 13-1 project that was damaged in the July flooding. Please contact Jeff Ramsey, Environmental Specialist North Region at 801-828-1278 if you need additional information.

Respectfully,



John T. Narowski, P.E.
Environmental Services Engineer

Endorsement to the Vermont Agency of Transportation

FHWA concurrence in this Categorical Exclusion determination is indicated by electronic signature/stamp and date on VTrans' Environmental NEPA SharePoint Site.
(<https://outside.vermont.gov/agency/vtrans/ENEPA/Lists/CE/AllItems.aspx>)

Attachments

cc:

Andrew Bernier, Project Manager
Project File

Pomfret Culvert TH1 MM 6.28
Categorical Exclusion Environmental Analysis

Page 1 of 5
11/06/13

**Categorical Exclusion
Environmental Analysis Sheet**

Town Pomfret Project No. Culvert TH1 MM 6.28 Route Town Highway 1

Project Setting: Urban _____ Village _____ Rural X
 Traffic n/a Year n/a Typical varies
 AASHTO Functional Classification _____

Project Purpose & Need:

The purpose of the project is to replace a falling culvert that was damaged by flooding. The need for the project is due to the damaged condition of the culvert and the need to provide a safe roadway for the traveling public.

Project Description:

Project Pomfret Culvert TH1 MM 6.28 is located on Town Highway 1 (Pomfret Road) at mile marker 6.28. Construction will consist of replacement of the existing 3 foot culvert with a new 4 x 60 foot culvert along with other incidental items. The pavement over the new culvert will have 25 foot approaches that will be cold planed to 1.5 inches, which includes pavement removed to replace the culvert. It will be required that all excavation be backfilled at the close of business every day. Work will be completed from the roadway with a lane closure.

CRITERIA OF 23 CFR 771.117 (C) APPLICABLE? _____ YES X NO

NOTE: PROJECTS THAT MEET THE CRITERIA OF 23 CFR 771.17 (C) NEED ONLY ADDRESS THOSE ISSUES MARKED WITH AN ASTERISK (*). THIS DOES NOT PRECLUDE THE NEED TO OBTAIN APPLICABLE STATE & FEDERAL CONCURRENCES & PERMITS.

1. **Air Quality**
 Ten year increase in ADT < 10,000 (10,000 allowed maximum per MOA)
 Urban intersection improvement Yes _____ No X

2. **Noise**
 Type I Project (VTrans Noise Policy) Yes _____ No X
 If yes, number of receptors impacted n/a
 Mitigation Requirements n/a

3. **Water Quality**
Lakes or Ponds
 VANR Lakes & Ponds permit Yes _____ No X Acquired _____
Rivers or Streams
 VANR Title 19 Consultation Yes X No _____ Completed done by town
Wetlands
 * Wetland Impact area Temporary 0 Permanent 0
 * Buffer Impact area Temporary 0 Permanent 0
 * VANR Wetland Permit Yes _____ No X Acquired _____
401 Water Quality Certification Yes X No _____ Acquired Title 19
Stormwater Discharge Permit Yes _____ No X Acquired _____
Flood plains Encroachment Yes _____ No X Volume _____
 Describe Hydraulic Changes larger hydraulic opening
Ground Water/Surface Water/Well Impacts Yes _____ No X
 (Describe) n/a
 ANR Comments none at this time

4. **U.S. Army Corps of Engineers**
 Section 10 and/or Section 404 Permit Required Yes No Acquired pending
 Permit Type General Permit Category 2
 COE Comments none at this time
5. **U.S. Coast Guard**
 Navigable Waters Yes No Involved Waterway unnamed trib to Mill Brook
 Rivers & Harbors Act Section 9 and/or
 Bridge Act of 1946 Permit(s) Required Yes No Acquired
 Section 144(h) "Exemption" Yes No Acquired
 USCG Comments none at this time
- * 6. **Threatened and Endangered Species and Habitat**
 Present in Project Area Yes No
 ANR Non-Game and Natural Heritage Program comments none at this time
 USF&WS comments none at this time
7. **Agricultural Land**
 Prime/secondary/locally important soils affected Yes No
 Current land use existing culvert beneath Town Highway 1
 Form 1006 Parts I, III, VI, VII, completed (FHWA) Yes No
 Form 1006 Parts II, IV, V completed (NRCS) Yes No
 Vermont Department of Agriculture comments none at this time
8. **Hazardous/ Residual Waste Liabilities**
 Present in project area Yes No
 Determination from VANR list Yes No
 Determination from field visit Yes No
 Borings completed Yes No
 Petroleum related wastes Yes No
 CERCLA involvement Yes No
 Remediation required Yes No
 Describe: There aren't any hazardous or residual waste liabilities within the project area per the ANR Natural Resources Atlas online mapping 11/06/13.
- * 9. **Historical or Archaeological Resources (Section 106)**
 Historic Resources: Present in project area Yes No
 Archeological Resources: Present in project area Yes No
 Section 106 determination No Historic Properties Affected issued 11/05/13
 Memorandum of Agreement needed Yes No Executed
 SHPO coordination completed n/a per Deputy SHPO PA
 Advisory Council coordination completed n/a
- * 10. **Section 4(f) and 6(f) Resources**
 Section 4(f) Resource(s) present in project area Yes No
 Nature of Section 4(f)
 Parks/Rec, Areas Wildlife and Waterfowl Refuge Historic Property
 Temporary use of 4(f) resource Yes No
 Permanent use of 4(f) resource Yes No
 Section 4(f) Approval (check one)
 Negative Declaration de minimis 4(f) Programmatic 4(f) Circulated 4(f)

Section 4(f) Comments There aren't any 4(f) resources within the project limits.

Section 6(f) involvement (LWCF Funding) Yes _____ No X

National Park Service Conversion Approval n/a

Section 6(f) Comments There aren't any 6(f) resources within the project limits.

* 11. **Right of Way**

New ROW Acquisition fee simple Yes _____ No X

permanent easement Yes _____ No X

temporary easement Yes _____ No X

Description of taking n/a

Improved properties acquired Yes _____ No X

Displacements Rental Units 0 Private Homes 0 Businesses 0

Relocation services to be provided n/a

Properties available for relocation n/a

12. **Public Participation Opportunity**

Pre-Design Site Meeting Yes _____ No X Date _____

Public Information Meeting Yes _____ No X Date _____

Public Hearing Required (502) Yes _____ No X Date _____

Comments by Local Officials/RPC's _____

13. **Social and Economic Concerns**

Project consistent with Local and Regional Land Use Plans Yes X No _____

Describe Project will not change existing land use. _____ (Attach correspondence from officials)

Neighborhood and Community Concerns Yes _____ No X

_____ Churches _____ Elderly

_____ Schools _____ Handicapped

_____ Low Income Housing _____ Environmental Justice Exec. Order 12898

_____ Emergency Services _____ Other

Describe n/a

Effect on local business Yes _____ No X (Describe) _____

Temp. effect on business Yes X No _____ (Describe) minor construction delays

Loss of parking Yes _____ No X (Describe) _____

Pedestrian Facilities Sidewalk Widths Existing none Proposed none

Bicycle Facilities Paved Shoulder Widths Existing varies Proposed same

If not minimum standard (sidewalk 5ft, paved shoulder 4ft), explain damaged culvert replacement

14. **Aesthetic Concerns**

Scenic Byway/VT Scenic Highway Yes _____ No X

Describe n/a

15. **Effects of Temporary Detour/ Bridge**

Detour required Yes _____ No X Length _____ (Attach Plans)

Temporary bridge required Yes _____ No X (Attach Plans)

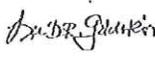
Impacts of Detour/ Bridge n/a

Public notification of detour n/a

Field Inspection Comments: See supporting documentation.

Summary of Commitments and Mitigation

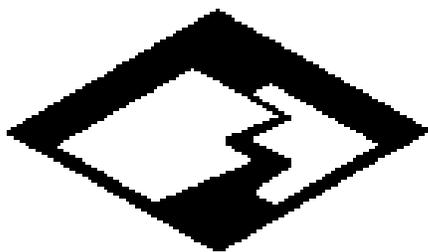
Describe: There aren't any commitments or mitigation requirements.

Prepared by:		Date:	2013.11.06	Reviewed by:		2013.11.06
			13:09:24 -05'00'			
	Signature		Date		Signature	Date

Document Template Last Revised 06/14/11

2012

Setting Speed Limits- A Guide for Vermont Towns



Vermont Local Roads
Saint Michael's College
Updated May 2012

Special thanks to the following people who made substantial contributions to the production of this handbook and to the 1994 videotape "Setting Speed Limit".

Sally Collopy, (Retired), Vermont Local Roads Program

Hank Lambert, (Retired), Vermont Local Roads Program

Douglas F. Brink, (Retired), Traffic and Safety Division, Vermont Agency of Transportation

Loren B. Fraser, (Retired), Traffic and Safety Division, Vermont Agency of Transportation

Robert "Dick" Keene, (Retired), Traffic and Safety Division, Vermont Agency of Transportation

Nancy Avery, Roadway, Traffic and Safety Division, Vermont Agency of Transportation

David F. Antone
Director
Vermont Local Roads Program
St. Michael's College, Box 260
One Winooski Park
Colchester, VT 05439

We work to foster a safe, efficient, and environmentally sound surface transportation system by improving the skills and knowledge of the municipal transportation workforce and leaders.

- Vermont Local Roads Mission Statement

Setting Speed Limits

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Introduction

State law and the Manual on Uniform Traffic Control Devices (MUTCD) regulate the procedures for establishing effective and enforceable speed limits. Title 23 V.S.A. Section 1007 authorizes the local governing body to establish effective and enforceable speed limits on town highways at not more than 50 MPH or less than 25 MPH and to do so on the basis of a traffic engineering investigation or study. This provision mandates that any speed limit must be justified and reasonable, based on the conditions that prevail on the particular road or street being considered. Refer to page 29 of this handbook for the text of 23 V.S.A. Section 1007.

This handbook is a guide to be used by Vermont municipal officials in setting reasonable and safe speed limits on town roads and streets. Together with the ten-minute videotape entitled "Setting Speed Limits", this handbook provides the basic information necessary to set speed limits on municipal roads and streets.

Assistance Available

Vermont Local Roads
Saint Michael's College
1 Winooski Park, Box 260
Colchester, VT 05439
1-800-462-6555

Vermont Agency of Transportation
Roadway, Traffic and Safety
One National Life Drive
Montpelier, VT 05633-5001
1-802-828-2664

(The Traffic and Safety Division may be able to print out spot speed study information for towns who send in their raw data. Call the Traffic and Safety Division for information first.)

Check with the staff of your regional planning commission who may be able to assist.

Principles for Setting Speed Limits

There are basically two principles for setting speed limits to achieve reasonable and safe speeds.

The first is to protect the public and curb unreasonable behavior. Motorists should have some assurance that the risk of having an accident is low on that particular road or street if they obey the speed limit.

Of course, operators have responsibilities. They should drive at speeds that are reasonable and proper for the prevailing conditions such as snow and ice, fog, darkness, heavy traffic, and so on. Speed limits tell the motorist what the maximum speed is. Drivers should use common sense and drive according to the prevailing conditions and surroundings. They also must heed other traffic control devices such as black/yellow warning signs, pavement markings, flashing beacons, and so on.

Second, to effectively enforce a law, the public must believe that the law is reasonable. Local officials should not set a uniform speed limit for all roads and streets, nor should they succumb to pressure by residents to lower speed limits. The random installation of signs and speed limits can be detrimental to safety by breeding disrespect for all speed limits. The majority of motorists will drive at a speed that they perceive to be safe. In the absence of a study identifying that speed limit, setting a speed limit too low merely punishes motorists who otherwise obey the law. Studies indicate that the measured average speed that most drivers perceive safe is at or very close to the speed limit established by a traffic engineering study.

Gravel roads are particularly difficult to assess. They typically do not exhibit the same characteristics as paved roads. Most are more narrow, have more horizontal and vertical curves and are not as heavily traveled as paved roads. One school of thought is not to set a speed limit at all due to the difficulty in assigning a uniform speed limit. Residents often oppose this concept. Each situation should be thoroughly investigated and scrutinized before assigning a speed limit.

Conducting a traffic engineering study provides information for basing judgments on facts and not on guesses or political pressure.

Recommended Practice

A traffic engineering study allows you to carefully consider the characteristics of each road, its surrounding features, and other factors. You then have the information you need to make a reasonable judgment in assigning a speed limit that is "reasonable and safe."

Conducting a traffic engineering study does not mean you have to be an engineer. But you do have to investigate the conditions. The following criteria comprise the minimum requirements for a traffic engineering study.

Only three forms are necessary. All can be copied. Use the "Traffic Engineering Report" on page 22 for items one through six. Use the "Spot Speed Study Field Data Sheet" on page 24 and the "Spot Speed Study Summary" on page 26 for item 2, monitoring vehicle speeds.

1. Consider the road itself, such as the characteristics of the travel surface, the condition of the shoulder, the road's alignment and sight distance, the width of the road and shoulders and the number of lanes.

Determine the presence of passing zones.

Determine the maximum grade and the degree of critical curves. Steep roads and sharp curves usually require slower speeds.

Consider what motorists might do if you lowered the speed limit because of the presence of a hazard. Would this create a situation where motorists would risk passing slow moving vehicles, for example, thus creating greater danger?

As you travel the road, look for these and other characteristics and record the information on the "Traffic Engineering Report" form.

2. Monitor the speed at which vehicles are traveling. Do this by performing a spot speed study and recording the speeds on the "Spot Speed Study Field Data Sheet." This consists of monitoring a minimum of 100 vehicles and identifying that speed under which most (85%) vehicles are traveling. (Surveying exactly 100 vehicles makes it easier to calculate percentages.) Experience has shown that a posted speed limit near this value is safe and reasonable.

On low volume roads, instead of gathering a sample of 100 vehicles, you might use several time runs and estimate the speed. In fact, the Vermont Agency of Transportation suggests that obtaining the 85th percentile speed on low volume roads may not be practical. It may require too much time to obtain a significant sample.

Another method is to determine the pace speed to obtain the 85th percentile speed. It is the ten mile-per-hour band of travel speeds containing the largest number of observed vehicles. See the explanation on page 25.

3. Look for roadside development and culture. Is it a densely residential area? A commercial area with many driveways entering the highway? A school zone? A trailer park? Or is it rural farmland? Considering the type and the density of development along the road will help you to decide what is a reasonable and safe speed for those conditions. Record the information on the form.
4. Determine the safe speed for curves or other hazardous locations within the zone, such as intersections.

You can determine the advisory speed for a curve by driving the section in a conventional automobile. Make several passes along the centerline of the travel lane at constant speeds, increasing the speed by 5 mph on each pass. Select the speed that allows you to negotiate the curve safely and comfortably, without excessive braking or feeling a concern for safety. If you find you are leaning in the seat while negotiating a curve, it is an indication you are going too fast.

The Vermont Agency of Transportation sometimes uses a ball bank indicator, also known as a slope meter, to determine the advisory speed of a curve. They cost about \$200.

Use the following chart to determine the maximum safe speed for approaching an intersection based on stopping sight distance.

HIGHWAY CONDITIONS (THREE OR MORE MUST BE SATISFIED)				
Design speed (mph)	Minimum Length of Zone Equals or Exceeds (miles)	Average Distance Between Intersections Equals or Exceeds (feet)	Number of Roadside Businesses does not Exceed (per mile)	PRELIMINARY
				ESTIMATE OF MAXIMUM SPEED (mph)
20	0.2	no min	no max	20
30	0.2	no min	no max	30
40	0.3	125	8	40
50	0.5	250	6	50
60	0.5	500	4	60
70	0.5	1000	1	70

Use a black on yellow advisory speed plate placed below the warning sign to indicate the safe speed. The advisory speed plate cannot be the same or higher than the posted speed limit.

5. Record the parking practices and pedestrian activity in the area. Record whether parking is on the roadway or off street. Is parking controlled by signs or markings or meters?

Make a note about pedestrian activities. Higher pedestrian activity may require a lower speed.

6. Record the reported accident experience for a recent twelve month period. High accident experience may indicate a need to moderate the speed limit. Consider, however, that accidents are caused by other contributing factors such as turning movements, intersections, DWI, ice and snow, and the like.

On the "Traffic Engineering Report" form, note any other features that may influence traffic movement.

Determining the Speed

With the data you have collected, you can determine a proper speed for the road under consideration. A reasonable and safe speed will give a driver time to react and stop or slow down sufficiently to avoid potential conflicts while driving at a comfortable speed. You can test for the proper speed by driving the road section at constant speeds, increasing the speed by 5 mph on each pass. This is similar to testing for safe speeds on low volume roads.

Towns sometimes tend to set speed limits too low. This merely creates more speeders, since the majority of motorists drive at speeds they perceive to be safe. Speeds set too low can also create more, and sometimes dangerous, passing. Many people will strictly obey the speed limit regardless of whether it is too slow for the majority of drivers.

Generally speaking, the Vermont Agency of Transportation's Traffic and Safety Division does not recommend setting speed limits on Class 3 gravel roads. Most people tend to drive on gravel roads at speeds slower than what towns might set them.

The traffic engineering survey is a reasonable method for helping you make an informed decision about the proper speed for a particular road. No one of the criteria by itself determines "reasonable and safe". To make an informed decision, consider all the criteria.

Adopting a Traffic Ordinance

Once you have decided the speed limits for your streets and highways, the next step is to adopt an ordinance, making speed limits official municipal policy.

A traffic ordinance establishes speed limits and other traffic regulations (STOP, YIELD, parking, etc.) as municipal policy. (Refer to 23 V.S.A. Sections 1007 and 1008, and 24 V.S.A. Section 2291(4).) The ordinance makes the speed limits and other traffic regulations a matter of local law and therefore enforceable. A traffic ordinance can be passed by the local governing body unless petitioned by at least 5% of the people, in which case a vote of the townspeople is also required.

Provisions for passing an ordinance are in Title 24 V.S.A., Section 1972. Follow them carefully. People who challenge speed limits in court often question the procedures the town followed, especially whether the town conducted a traffic engineering study and whether the town followed all the steps in adopting the ordinance.

The traffic ordinance should describe the speed zone accurately. This can be done by referring to a town map, stating a distance from the beginning point to an identifiable point such as an intersection or town line, as well as the direction and distance to the end of the zone. Several speed zones of the same or of different limits may be included in one ordinance. Amendments to the ordinance can be made as the needs arise. Make sure to record the completed traffic study forms and the ordinance in the permanent town records. However, the lack of evidence of a traffic engineering study will not invalidate a local speed limit ordinance as adopted or amended under V.S.A. Title 23 Motor Vehicles 1007 Local Speed Limits, after 5 years following the day on which the speed limit ordinance took effect.

The following model suggests what might be contained in a municipal traffic ordinance. A town should produce an ordinance that reflects its own unique conditions.

A Model Traffic Ordinance

TRAFFIC ORDINANCE

Town of _____, Vermont

Pursuant to the provisions of Title 23, Vermont Statutes Annotated, Section 1007 and 1008, and Title 24, Vermont Statutes Annotated Sections 1971 and 2291(1)(4) and (5), and such other general enactments as may be material hereto, it is hereby ordained by the Board of Selectmen of the Town of _____ that the following Traffic Ordinance is adopted for the Town of _____, Vermont.

ARTICLE I DEFINITIONS

The definitions of Title 23, Vermont Statutes Annotated, Section 4 are incorporated by reference.

ARTICLE II SCOPE

The ordinance establishes special traffic regulations on public highways within the Town of _____, Vermont.

ARTICLE III TRAFFIC CONTROL DEVICES

- Section 1.** It shall be unlawful for any person to disobey the direction of a traffic control device except in response to the direction of a law enforcement officer.
- Section 2.** It shall be unlawful for any person to intentionally remove, injure, obstruct, deface, alter or tamper with any traffic control device.
- Section 3.** It shall be unlawful for any person to install any sign or device which may resemble or be mistaken for an official traffic control device, without prior approval of the Town of _____, Board of Selectmen.

**ARTICLE IV
SPEED REGULATIONS**

On the basis of engineering and traffic studies, the following speed limits are hereby established.

- T.H. #1 - A maximum speed of 25 m.p.h. from the intersection of VT. Route _____ easterly to the intersection of T.H. #2, then a maximum speed of 40 m.p.h. from the intersection of T.H. #3 easterly and southerly to the _____Town Line.
- T.H.#2 - A maximum speed of 35 m.p.h. from the intersection of VT. Route _____ to the _____Town Line.
- T.H.#3 - A maximum speed of 35 m.p.h. from the intersection of T.H.#1 to the _____Town Line.
- T.H.#4 - A maximum speed of 35 m.p.h. for the entire length.
- T.H.#6 - A maximum speed of 35 m.p.h. from the intersection of VT. Route _____ to the _____Town Line.
- T.H.#7 - A maximum speed of 30 m.p.h. from the intersection of VT. Route _____ to the _____Town Line.
- T.H.#8 - A maximum speed of 30 m.p.h. for the entire length.
- T.H.#16 - A maximum speed of 35 m.p.h. from the intersection of T.H.#20.
- T.H.#26 - A maximum speed of 30 m.p.h. for its entire length.
- T.H.#31 - A maximum speed of 25 m.p.h. from the intersection of Vt. Route _____, extending easterly a distance of 0.83 miles east of Vt. Route _____, to intersection of T.H. #1

The above speed limits shall be posted in accordance with the standards set forth in the Manual of Uniform Traffic Control Devices and shall be in effect when so posted.

**ARTICLE V
STOP AND YIELD INTERSECTIONS**

- Section 1.** The following intersections shall be designated is stop intersections and shall be so signed:
 - T.H. #4 entering T.H. #3
 - T.H. #16 entering T.H. #3
 - T.H. #18 entering T.H. #3
 - T.H. #24 entering T.H. #3

- Section 2.** The following intersections shall be designated as "YIELD" intersections and shall be so signed:
 - T.H. #3 entering T.H. #1
 - T.H. #4 entering T.H. #1
 - T.H. #28 entering T.H. #4

**ARTICLE VI
PARKING REGULATIONS**

- Section 1.** It shall be unlawful to park at any time on either side of T.H. #1 from the intersection of Vt. Route _____ easterly for a distance of forty-five (45) feet.
- Section 2.** It shall be unlawful to park on the south side of T.H. #1 from a point two hundred fifteen (215) feet east of Vt. Route _____ easterly to the covered bridge.
- Section 3.** It shall be unlawful to park at any time on T.H. #24 between the intersection of Vt. Route _____ and the _____ town line.
- Section 4.** It shall be unlawful to park on T.H. #1 between the intersections of Vt. Route _____ and the covered bridge, and within any municipal parking lot between the hours of 12:00 P.M. and 7:00 A.M. from November 15th to April 30th.
- Section 5.** Any vehicle parked in violation of the provisions of this Article may be summarily removed at the owner's expense, by order of any law enforcement officer, road commissioner, or selectman.
- Section 6.** If the owner of a vehicle summarily removed under section 5 hereof does not claim such vehicle and pay all towing and storage expenses within thirty (30) days of the date of such removal, the title to such vehicle shall escheat to the Town and the vehicle may be sold or otherwise disposed of in accordance with Title 27, Vermont Statutes Annotated, Section 11.
- Section 7.** Nothing in this Article shall be construed to make unlawful vehicular stops in obedience to the direction of a law enforcement officer or for causes beyond the control of the operator.

**ARTICLE VII
DESIGNATED ONE-WAY STREETS**

The following street or portion of said street is hereby designated as a one-way street and the direction of travel shall be as follows.

_____ Street: Legal direction of travel, from intersection of _____
Street and Vermont State Highway Route No. _____ shall be south to the intersection of
_____ Street and _____ Street.

_____ Road: Legal direction of travel, from intersection of _____
Road with _____ Road, shall be west to the intersection of _____
Road with _____ Road.

**ARTICLE VIII
LOADED VEHICLES**

No vehicle shall be driven or moved on any street unless such vehicle is so constructed or loaded so as to prevent its contents from dropping, sitting, leaking or otherwise escaping there from.

**ARTICLE IX
GENERAL PROVISIONS**

Section 1. Separate Offenses:

Each violation of a provision of this ordinance shall be deemed a separate offense.

Section 2. Penalties:

The provisions of this ordinance shall be cumulative to the fullest extent permitted by law with respect to all other statutes or ordinances now or hereafter adopted regardless of their order of passage or enactment.

Section 3. Severability:

The provisions of this ordinance are declared to be severable and if any provisions hereof be adjudged invalid such judgment shall not affect the validity of any other provisions.

Section 4. Designation:

This ordinance may be referred to as the _____ Traffic Ordinance and in a prosecution hereunder a copy of such ordinance, certified by the Town Clerk shall be prima facie evidence thereof. An allegation that the act constituting the offense charged is contrary to a specified provision of this ordinance shall be a sufficient reference hereto.

Section 5. Repeal of Prior Ordinances:

Any other ordinance or traffic regulation heretofore adopted by the Town of _____ is hereby repealed.

Section 6. Publication and Posting:

This ordinance shall be published in the _____ on _____, 20____ and shall be filed with the _____ Town Clerk on _____, 20____.

Adopted by the Board of Selectmen, Town of _____ at its meeting held on the _____ day of _____, 20____.

QUESTIONS OFTEN ASKED ABOUT LOCAL SPEED LIMITS

Q. Should the local ordinance be approved by the State Traffic Committee?

A. No. Title 23 V.S.A., Section 1007, provides an avenue of appeal if there is dissension over the adoption process.

Q. Can a single speed limit, for example 35 MPH, be established for all the roads in town and posted at each highway entering the town?

A. It is doubtful that an engineering and traffic study would indicate that any one speed limit would be proper for all highways in a town. Signing only at the town line does not fulfill the mandate of the law for posting speed limits.

Q. What is wrong with installing a few signs where they are needed for whatever good they can do without enforcement?

A. This does not conform to the law and it will breed disrespect for all speed limits. An enforcement officer who cites someone on the assumption that a speed zone is valid will be embarrassed when trying to prove the case in court. The officer will be reluctant to enforce local regulations further.

Q. When is a traffic engineering study required?

A. To lower or raise existing speed limits. A study is not required to initially establish a 50-mph zone.

Q. Do we have to hire a professional engineer to do the study?

A. No. Anyone can gather the information needed.

Q. What if the selectmen receive a petition from a significant number of residents demanding a speed limit in a certain area?

A. The law states that the speed limit must be based on an engineering and traffic study. A petition may result in a survey, but the decision to establish a speed limit must be based on the results of the study, not the opinion of the petitioners.

Q. Should the speed limit be set 5 or 10 mph below what the investigation indicates to make up for the tolerance allowed by enforcement officers?

A. No. The statutes do not provide for a tolerance. A speed limit set too low is not realistic and will not command the respect of motorists.

Q. Should towns install speed limit signs on all of their town highways?

A. Probably not since the minimum/maximum speed limits are 25 mph and 50 mph respectively. A speed limit of 25 mph might be too high for most class 4 town highways and some class 3 town highways. By the same token, 50 mph signs on gravel town highways would suggest it is safe to drive at that speed when, in fact, it might not be.

Q. Are advance signs such as “Reduced Speed Limit Ahead” signs required on the approach to the speed limit zone?

A. No. Such signs are not required, but they are recommended where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit.

Q. Should a speed limit be set at the safe speed for the worst spot in the proposed zone?

A. No. A spot hazard such as a sharp curve or intersection should be treated with the appropriate warning sign for the particular hazard. The warning sign may or may not include an advisory speed plate. An established speed limit is not a guarantee that the speed can be maintained throughout the zone. It is a speed that will allow the driver time to react to a variety of situations which may occur within the zone.

Q. How does a town go about making a change in speed limits on state highways?

A. The governing body of the community (Town Administrator, Town Manager, Selectboard, etc.) should write a letter to the Traffic Committee Coordinator, State of Vermont, Roadway, Traffic & Safety, One National Life Drive, Montpelier, VT 05633-5001 requesting a speed limit change indicating the route, the exact location, and citing their reasons for the change. A copy of the letter should be sent to the District Transportation Administrator. Staff of the State’s Traffic Committee will conduct a traffic and engineering study of the location and present their findings to the Traffic Committee at an open meeting, in which the Town will be notified and invited, to present their testimony before a ruling is determined.

SIGNS

1. Postings Signs

Title 23 V.S.A. Section 1025 adopts the MUTCD as the standard for all traffic control signs, signals, and markings on town highways in Vermont. The MUTCD lists basic requirements for signs, signals and markings to be effective. They must

- fulfill a need
- command attention
- convey a clear, simple meaning
- allow adequate time for a proper response

Basic suggestions for the selection and use of signs are:

- Use approved signs (size, shape, colors, text)
- Try to achieve uniformity among signs (size, message)
- Keep messages simple.
- Place signs in locations where they will be easily seen; avoid locations just over the brow of a hill or just around a curve
- Use signs only when necessary

2. Categories of Signs

Regulatory signs inform drivers that specific regulations apply at specific places and times. Speed limit and stop signs are regulatory signs.

Warning signs advise drivers of potentially hazardous locations, maneuvers or activities.

Guide signs give information about routes, directions, destinations, points of interest and services.

3. Size and Spacing of Signs

The MUTCD has guidelines for the size, shape, color, height, distances, and retro-reflectivity of signs. The standard size and color for a regulatory speed limit sign is 24" wide x 30" high with a black border and legend on a white background. The 24"x 30" size sign shall be used for all conventional highways. On a low-volume road the minimum size 18" wide x 24" high size sign can be used.

Note that a low-volume road shall be defined as follows:

A. A low-volume road shall be a facility lying outside of built-up areas of cities, towns, and communities, and it shall have a traffic volume of less than 400 AADT.

B. A low-volume road shall not be a freeway, an expressway, an interchange ramp, a freeway service road, a road on a designated State highway system, or a residential street in a neighborhood. In terms of highway classification, it shall be a variation of a conventional road or a special purpose road as defined in Section 1A.13 of the 2009 MUTCD.

C. A low-volume road shall be classified as either paved or unpaved.

Basically, the above states that low-volume roads typically include agriculture, recreational, resource management and development, such as, mining and logging and grazing and local rural roads.

The "Reduced Speed Ahead" regulatory sign (R2-5A) have been replaced in the 2009 MUTCD with the "Reduced Speed Limit Ahead" warning sign (W3-5 or W3-5a). If used, the "Reduced Speed Limit Ahead" sign shall be followed by a "Speed Limit" sign (R2-1) installed at the beginning of the zone where the speed limit applies. The speed limit on the "Reduced Speed Limit Ahead" sign shall be identical to the "Speed Limit" sign displayed on the subsequent "Speed Limit" sign. Also a "Speed Limit" sign should be installed following each major intersection in both directions of travel. Intermediate signs should be posted as needed to remind motorist what the speed is in that zone. See page 18 for sign spacing.

There is no set minimum distance between signs within a speed limit zone. Since intermediate signs remind drivers of the speed limit, the distance between them should be determined based on time and roadside distractions. Based on a 1-minute time span, for example, a 25 or 30 mph limit could be signed about every 1/2 mile and a 40 or 45 mph limit could be signed about every 3/4 mile. This assumes that there are no unusual distractions to occupy a driver's attention such as recreation activities, shop windows, other types of signs, panoramic views and the like.

Another rule of thumb could be 0.3 to 0.4 miles for 25 to 30 mph speed zones and 0.5 to 0.8 miles for 35 to 45 mph zones. Signs within a 50 mph zone can be a mile of two apart since State law indicates the speed limit is 50 mph unless otherwise posted.

Do not use speed zones to warn motorists of hazardous conditions. On rural roads, for example, avoid posting speed limits, say from 40 to 30 to 35 to 45 back to 30 and so on. Rather, try to establish one speed limit and use advisory speed plates as needed for curves, hills and other hazardous conditions.

4. Inspecting and Maintaining Signs

Signs must be maintained if they are to be effective and enforceable. Survey road signs for damaged or come up missing at least twice a year, under daytime, nighttime (for reflectivity), and inclement weather conditions. Clean all signs to improve reflectivity. Clear away brush, limbs or grass which may obstruct signs. Straighten leaning posts. Missing STOP signs should be considered an emergency and replaced immediately.

Keep a detailed inventory for every traffic sign. This information may be necessary for legal purposes and for planning replacement of signs. A good record system will list the sign type, date of installation, type of support, and maintenance or replacement activities. It is a good practice to mark the date on the back of each sign panel when it is put in place.

If you prefer a hand written method, this one comes from Thomas Szebenyi at the Cornell Local Roads Program.

Create a file of 4 X 6 cards and lay each card out as follows:

Date: (Today)
Road: (Name)
Direction of Travel:
Starting point: (In miles or kilometers)
Location: (from reference starting point)
MUTCD sign code: (This is essential when ordering signs.)
Text on sign:
Size: (width x height, and cost)
Placement: (left, right, center, overhead)
Pointing which direction: (forward, reverse)
Support type and cost: (steel channel, pipe, etc.)
Date installed:

On the back of each card, you can then record:

Inspection date:
Condition of sign:
Defects:
Date of work order:
Work order purpose:
Date work completed:

Enforcement

A speed limit will only be as effective as the enforcement it receives. To be enforceable, a speed limit must conform to both the state statutes and the MUTCD. Enforcement officers need the backing of a traffic ordinance based on an engineering and traffic study.

Enforcement of speed limits is sometimes necessary for maintaining conformance by motorists. Irrational drivers cannot be controlled except by enforcement. Never establish speed limits artificially low to slow irrational drivers. It doesn't work. If speed limits are set too low for a particular road or street, even responsible drivers will usually exceed the limit. Enforcement then becomes unnecessarily time consuming and a drain on resources.

Also consider that local drivers tend to be the frequent violators because they claim to know the road "by heart". This should not give them license to exceed the speed limits.

Forms

The form on the facing page, "Traffic Engineering Report for a Spot Speed Limit Study" was developed for use by the Vermont Agency of Transportation. It encourages a thorough investigation of a road or street for purposes of setting a speed limit.

Gather as much information as you can.

M.P. = mile post

TH = Town Highway

Make copies of this form. One copy is needed for each road section you survey.

State of Vermont, Agency of Transportation

TRAFFIC ENGINEERING REPORT FOR A SPEED LIMIT STUDY ON A State Hwy. _____ Town Hwy. _____ Other: _____ (In accordance to Title 23 VSA, Section 1003)			Date
CHARACTERISTICS	Left Side	Right Side	Town
No. of Roadway Lanes			
Roadway, Width (feet)			County
" , Surface Type			
" , Condition			Route No.
Shoulder, Width (feet)			
" , Surface Type			Village
" , Condition			
Sidewalk, Width (feet)			From M.P.
" , Surface Type			
" , Condition			Thru M.P.
Curbing, Type of			
" , Condition			Length (miles)

TOPO	No. of Drives	No. of Houses/Farms	List Small Businesses	State/TH Junctions
Left				
Right				

ALIGNMENT	No. 1	No. 2	No. 3
Curves, From/Thru M.P.			
" , Degree of			
" , Ballbank Reading			
" , Current Adv. MPH			
" , Proposed Adv. MPH			
Grades, From/Thru M.P.			
" , Percent of			
Passing Zone M.P. (NB/EB)			
" " (SB/ WB)			
Crosswalk Milepoints			
Bridge, Milepoints			
" , Widths c/c (ft.)			

PARKING INFO: From/Thru M.P. _____ Meet Needs? _____

Controlled by: Signs _____ Markings _____ Meters _____

Hinders: Thru Traffic? _____ THS? _____ Drive? _____

PARKING ZONES: From/Thru M.P. _____

ACCIDENTS: From 19__ Thru 19__ Actual/Critical Accident Rate _____

Total No. ____ Injured ____ Fatalities ____ Drives ____

Types of (1) _____ (2) _____

RECOMMENDATIONS (by _____): _____

Report done by: _____

Spot Speed Survey Field Data Sheet

1. Fill out the information required at the top of the form. (M.P. stands for mile post.)
2. Circle appropriate direction of travel for vehicles being monitored, either northbound/southbound (NB/SB) or eastbound/westbound (EB/WB).
3. Aim the radar gun in the appropriate direction and wait for a car to drive by. When the car passes through the radar field a number will flash in the target window of the unit. Go down the appropriate column for cars or for trucks and buses, and then the column for direction. Find the speed along the left of the column which coincides with the speed of the vehicle and put down a tic mark. Preceding or following the placement of the tic mark make another tic mark on some scrap paper to represent the vehicle. Continue in this manner until your scrap paper has 100 tic marks, representing 100 vehicles. Count the tics to be sure you have enough information.

Make copies of this form. One copy is needed for each road section you survey.

Vermont Agency of Transportation Spot Speed Survey Field Data Sheet

Study No.	Setup M.P.
Date	Day
Town	
Route No.	
Posted Speed Limit	

From M.P.	To M.P.
Weather	
Survey Hours	
Observers	
Passing Zones (Begin/End)	

Describe Setup Locations

MPH	CARS				MPH	TRUCKS AND BUSES			
	NB EB		SB WB			NB EB		SB WB	
70&OVER					70&OVER				
69					69				
68					68				
67					67				
66					66				
65					65				
64					64				
63					63				
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30					30				
29					29				
28					28				
27					27				
26					26				
25					25				
24					24				
23					23				
22					22				
21&Under					21&Under				
Totals									

Summary of a Spot Speed Survey

Modal Speed The modal speed is the speed at which the highest number of vehicles are travelling. Place a check mark next to the modal speed.

Average (Median) Speed The average (median) speed is the speed at which at least 50% of the vehicles are travelling.

85th Percentile The 85th percentile is the speed at or below which 85% of the sample of vehicles surveyed are travelling. So, of 100 vehicles surveyed, $100 \times .85$ represents 85 vehicles from the bottom of the column. The 85th percentile for sixty-two vehicles, for example, would be $62 \times .85 = 52.7$. Round up the number to 53.

Ten Mile Pace The ten mile pace is the block of ten miles per hour which contains the most vehicles. Look for an area that appears to have the most vehicles in it and add them up. Put a line above the ten miles per hour block and another one below it. Now check to see if you can move the lines up or down simultaneously, to increase the total number of cars. If not, then this is the ten mile pace.

Speed Limit Range The speed limit range has two numbers. It has a high number and a low number. The high number of the speed limit range is the lowest of two numbers minus three. The two numbers are 1) the 85th percentile, and 2) the high number of the ten mile pace. Choose the lowest of those two numbers and subtract three from it. That is the high number of the percent in pace. Now, the low number of the speed limit range is the low number of the ten mile pace.

Percent in Ten mile Pace This is the percent of vehicles travelling within the ten mile pace. Sum the vehicles in the ten-mile pace and divide them by the total number of vehicles (which should be 100). So, for example, if you have a total of 100 vehicles, 62 of which are in the ten-mile pace, you would have 62 percent in pace.

Make copies of this form. One copy is needed for each road section you survey.

State of Vermont, Agency of Transportation

SUMMARY OF A SPOT SPEED SURVEY
(Use one sheet for Each Spot Speed Survey)

Date _____ Page _____

Setup No. _____ Setup M.P. _____ Setup Area: From _____ Thru _____

Town _____ County _____ Route No. _____

Present Speed Limit _____ ADT _____ Year ADT _____ DHV _____

General Remarks on Traffic (Only for the Area Covered by this Spot Speed Survey)

	Cars, Vans and Light Trucks	Large Trucks and Buses	All Vehicles
Median Speed			
85th Percentile Speed			
Modal Speed			
10- Mile Pace			
Percent in 10-Mile Pace			
Speed Limit Range (Use all vehicles column)			

MPH	Cars, Vans and Light Trucks	Accum. Pct.	Large Trucks and Buses	Accum Pct.	All Vehicles	Accum Pct.
Over 60						
56-60						
51-55						
46-50						
41-45						
36-40						
31-35						
26-30						
Under 26						
Totals						

Summary done by _____

Definitions

85th percentile speed - the speed at or below which 85 percent of the sample of free flowing vehicles are travelling. This speed should be determined by conduction a spot speed study.

Advisory speed - the speed at which a specific feature along the street or highway can be safely traversed.

Basic Speed Law - no person shall operate a motor vehicle at a speed greater than is reasonable and proper for the prevailing conditions.

Manual on Uniform Traffic Control Devices (MUTCD) - the national standard adopted by state law as the standard to be followed by state and municipal authorities in Vermont.

Pace - the 10 miles per hour band of travel speeds containing the largest number of observed vehicles.

Speed Limit - the maximum (or minimum) speed permitted on a section of street or highway.

Tolerance - the numerical difference between the speed limit and the minimum speed at which enforcement action is taken.

References

Chittenden County Regional Planning Commission Speed Limit Handbook, CCRPC, Essex Junction, VT, 1989.

Manual of Traffic engineering Studies, fourth Edition, Institute of Transportation Engineers, Washington, D.C., 1976.

Manual on Uniform Traffic control Devices, U.S. Government Printing Office, Washington, D.C., 2009 edition.

Speed Zone Guidelines: A Proposed Recommended Practice, Institute of Transportation Engineers, 525 School Street., S.W., Suite 410, Washington, D.C. 20024-2797, 1993, 5 pages.

Setting Speed Limits: A Guide for Vermont Towns, Vermont Local Roads Program, Saint Michael's College, Colchester, VT, 1986.

Sign Inventory Program Using 4 X 6 Index Cards, From "Nuggets and Nibbles", Winter, 1994, Cornell Local Roads Program newsletter.

Vermont State Statutes of Note

This reference list is not intended to be an all-inclusive listing of what may be helpful information in state statute. Vermont State Statutes can be viewed online at: <http://www.leg.state.vt.us/statutesmain.cfm>

Title 23: Motor Vehicles. Chapter 13- Operation of Vehicles

- § 1007. Local speed limits
- § 1007a. Neighborhood electric vehicles; speed limit
- § 1008. Regulations in municipalities
- § 1008a. Regulation of motor vehicles at state airports
- § 1025. Standards
- § 1081. Basic rule and maximum limits
- § 1082. Slow-moving vehicles
- § 1083. Special speed limitations
- § 1431. Height and width limits
- § 1432. Length of vehicles; authorized highways

Title 24: Municipal and County Government. Chapter 61- Regulatory Provisions; Police Power of Municipality

- § 2291. Enumeration of powers

Title 24: Municipal and County Government. Chapter 59: Adoption and Enforcement Of Ordinances And Rules

- § 1972. Procedure

Title 13: Crimes and Criminal Procedure. Chapter 223- Fines, Costs, & Penalties

- § 7251. Municipalities; payment to and liability of

Title 20: Internal Security and Public Safety. Chapter 151- Vermont Criminal Justice Training Council

- § 2358. Minimum training standards

Sections of note from the 2009 Manual on Uniform Traffic Control Devices (MUTCD)

This reference list is not intended to be an all-inclusive listing of what may be helpful information from the 2009 MUTCD.

For a free PDF version of the manual visit <http://mutcd.fhwa.dot.gov/>

Section 2B.13 Speed Limit Sign ffi2-D

Section 2B.14 Truck Speed Limit Sign (R2-2)

Section 2B.15 Night Speed Limit Plaque (R 2-JP)

Section 2B.17 Higher Fines Signs and plaque (R2-6P, R2-JO, and R2-JJ)

Section 2C.05 Placement of Warning Signs

Section 2C.38 Reduced Speed Limit Ahead Signs (W3-5, W3-5a)