STATE OF VERMONT AGENCY OF TRANSPORTATION

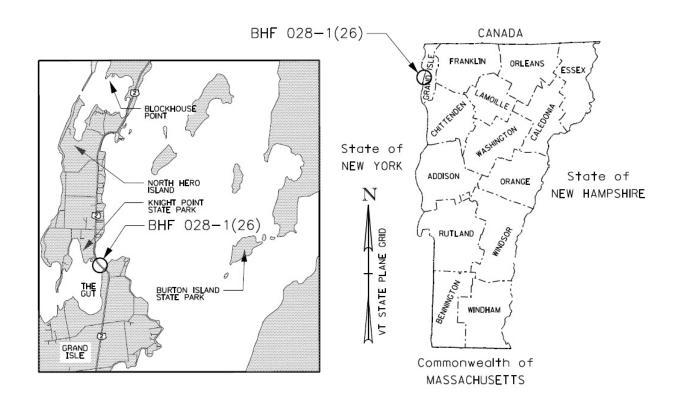
Traffic Management Plan

FOR

BHF 028-1(26)

Bridge 8 Replacement on U.S. Route 2

February 20, 2018



This TMP and the information contained herein is for informational purposes only and has been developed for use by the Contractor in the development of any required site specific traffic control plan. The information as contained in the TMP should not be considered "all inclusive" of conditions or scenarios that will be encountered on site during construction operations. Rather, it should be used in conjunction will all other contract plans, specifications and other requirements when preparing any site specific traffic control plan.

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1.0 Project Description

This section provides an overview of the project:

- Project Location
 - Towns of North Hero and Grand Isle in Grand Isle County on U.S. Route 2.
- Work zone limits
 - The project is located at a point in North Hero 0.064 mile west of the North Hero/Grand Isle town line (Sta. 518+40.1) and continues easterly on U.S. Route 2 in Grand Isle for 0.125 mile.

Project background information

- Work to be performed under this project includes replacement of the existing bridge and associated roadway improvements.
- Overview of roadways directly affected by project work zones
 - Side roads extending off of U.S. Route 2 just outside the project limits include Landing Lane and Drawbridge Lane. Work on these roadways is anticipated to be extremely limited at this time. Access in and out of these roads may be impacted due to stopped traffic during construction activities and operation of the movable bridge.

Specific traffic restrictions expected on major roadways during the work

- Traffic will be diverted around the western side of U.S. Route 2's existing drawbridge onto a temporary roadway. A temporary movable structure is also needed to maintain marine traffic during the construction of the new movable structure. The work zone speed limit in the vicinity of the temporary movable structure will need to be reduced to 25 mph due to the proposed horizontal and vertical geometry. It is anticipated that the work zone speed limit reduction from the 50 mph posted speed to the 25 mph speed limit associated with the alignment of the temporary roadway approaches to the temporary movable structure will be accomplished in two steps. Other possible restrictions expected during construction will be shoulder and lane closures.
- Regional projects that may impact each other

VTrans

- o N/A
- Project Schedule
 - Target Construction Schedule: Construction activities are scheduled to start in Spring 2018 and be completed during the 2022 construction season.

2.0 TMP Team—Roles and Responsibilities

Roles and responsibilities are defined below to help coordinate all the activities related to TMP development, implementation, and monitoring. This section includes contact information and roles and responsibilities for major personnel involved in the project.

- **TMP Development Managers**—Agency/Consultant personnel who have primary responsibility for reviewing and approving the TMP.
- **TMP Implementation Task Leaders**—Responsible for managing or overseeing specific transportation management tasks during the execution of the work.

- **Emergency Service Contacts**—Public and semi-public agencies, such as hospitals, schools, health clinics, etc., who must be kept informed about the work zone activities, especially in case of a road closure.
- **Contractor**—Prepare and execute the Traffic Management Plan that addresses site specific vehicular and pedestrian mobility needs. Actively engage the emergency response personnel when the project is about to be advanced in a manner that could impact their operations or ability to serve people.

Contact information and roles and responsibilities of major personnel involved in the project. (These tables can be modified to meet agency needs.)

TMP Development Managers			
Consultant			
Name/Title: Thomas A. French, P.E./Senior			
Project Manager/Office Leader			
Phone: (603) 391-0856			
Email: thomas.french@hdrinc.com			

Roles and Responsibilities: Review and approval of the Traffic Management Plan prepared by the Contractor.

TMP Implementation Task Leaders			
VTrans			
Name/Title: T.B.D./Resident Engineer Unit: Agency of Transportation			
Phone: T.B.D. Email: T.B.D.@vermont.gov			
]			

Roles and Responsibilities: Overseeing traffic management tasks on-site while construction activities are being executed.

Emergency Service Contacts		
Fire and Emergency Medical Services (FEMS) Police Department (PD)		
Name/Title: Ronnie Bushway/Fire Warden	Name/Title: Ray Allen/Sheriff	
Unit: Grand Isle Volunteer Fire Department	Unit: Grand Isle County Sheriff's Department	
Phone: (802) 372-5012	Phone: (802) 372-4482	
Email: N/A	Email: ray.allen@vermont.gov	
Roles and Responsibilities: Provide emergency response services as required.		



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Contractor		
Contractor	Superintendent	
Name/Title:	Name/Title:	
Address:	Unit:	
Phone:	Phone:	
Email:	Email:	

Roles and Responsibilities: Prepare and execute the Traffic Management Plan that addresses site specific vehicular and pedestrian mobility needs. Actively engage the emergency response personnel when the project is about to be advanced in a manner that could impact their operations or ability to serve people.

Contractor's Competent Person	Contractor's Safety Officer		
Name/Title:	Name/Title:		
Unit:	Unit:		
Phone:	Phone:		
Email:	Email:		

Roles and Responsibilities: Points of contact for concerns raised after the Traffic Management Plan is implemented and the Contractor's CEO or Superintendent are not readily available.

3.0 Preliminary Work Zone Impact Assessment

This preliminary assessment of the work zone has been performed to help identify issues or uncover problem areas that should be considered during project development. However, the information contained herein is for informational purposes only and has been developed for use by the Contractor in the development of any required site specific traffic control plan. The information as contained in the TMP should not be considered "all inclusive" of conditions or scenarios that will be encountered on site during construction operations. Rather, it should be used in conjunction will all other contract plans, specifications and other requirements when preparing any site specific traffic control plan.

Does the project include a long-term closure and/or extended weekend closure? Yes If Yes, what is/are the applicable type of facility(ies)?

• Bridge 8 will be closed during construction, but a temporary on-site detour route including a temporary movable structure will be constructed prior to the closing the existing bridge to maintain both vehicular and marine traffic.

Can traffic be detoured?

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There is a potential detour route which would involve sending traffic north on Interstate 89 through the Town of Milton, St. Albans City, and the Town of Swanton, then west on Vermont Route 78 to U.S. Route 2. However, this route would be unacceptably long, approximately 65 miles (1 hour and 20 minutes), and shall only be used in the event of an emergency situation requiring a full road closure for an extended length of time. The on-site detour route shall be maintained during construction.

Is the existing shoulder sufficient to support traffic during construction?

• The shoulder would be sufficient to support traffic during construction of the temporary bridge, but two lanes of traffic will be maintained during construction of the new movable structure using an on-site detour that will be constructed prior to closing the existing movable structure.

Is additional width required on culverts or bridges to maintain traffic?

• The temporary bridge will provide sufficient width to maintain two lanes of traffic. Larger farm vehicles should also be expected to cross the temporary bridge during construction.

Is there a pedestrian/bicycle facility that must be maintained?

• The temporary bridge will allow pedestrians and bicyclists to travel through the work zone.

Would a temporary structure(s) be required?

• A temporary movable bridge will be proposed on the western side of the existing bridge during construction. This structure will allow two-way traffic and pedestrians to travel around the work zone.

Would a median crossover be needed?

N/A

Would there be a need to maintain railroad traffic?

N/A

Could maintenance of traffic have an impact on existing or proposed utilities?

 No, maintenance of traffic should not impact existing or proposed utilities within the project limits.

Does it appear that maintenance of traffic will require additional right-of-way?

• No, traffic will remain within the highway right of way throughout construction.

Can the contractor restrict the roadway during the time periods listed?

- Overnight Limited night work will be allowed.
- Local celebrations T.B.D.
- Holidays The Contractor shall not carry on construction operations on all State holidays except as authorized by the Engineer. The Contractor shall cease construction operations on holidays, the day before if a holiday falls on Tuesday, and the day after if a holiday falls on Friday.
- Weekends The Contractor shall not carry on construction operations on Sundays except as authorized by the Engineer
- Sporting events/other special events T.B.D.

VTrans

Will project timing (for example, start or end date) be affected by special events?

- School closings or openings:
 - School openings will occur during the last week of August.
 - School closings will occur in mid-June.
- Holidays:
 - The Contractor shall not carry on construction operations on all State holidays except as authorized by the Engineer. The Contractor shall cease construction

operations on holidays, the day before if a holiday falls on Tuesday, and the day after if a holiday falls on Friday.

- Weekends:
 - The Contractor shall not carry on construction operations on Sundays except as authorized by the Engineer.
- Special Events:
 - North Hero Events
 - Great Ice Business Expo Typically 3rd weekend in February.
 - Annual Duct Tape Regada (make boats out of duct tape and cardboard) Typically 1st weekend in August.
 - Summer Farmer's Market Every Wednesday afternoon and Saturday during the summer.
 - Roast Beef Dinner put on twice a year by the Fire Department Typically around Memorial Day and Labor Day.
 - Annual Garage sale put on by Fire Department Usually scheduled for a day in June.
 - The Great Ice Winter Festival in February (volunteer based) Typically 3rd week in February.
 - Grand Isle does not have any known special events at this time.

It should be assumed that work will not be permitted during State holidays and Sundays unless prior permission is obtained from VTrans and the Towns of North Hero and Grand Isle. The special events listed above are not anticipated to impact the project given that two lanes of traffic will be maintained. Columbus Day is no longer listed as a holiday in the Vermont spec book, but it is known to be one of the busiest holidays in Vermont. Coordination should be made with nearby state parks, camps, and marinas during the construction season to gain a better understanding of what types of traffic can be expected. See Appendix B for additional contact information.

Are there any projects to be considered along the corridor or in the region?

- Roadwork in the immediate area being performed under other municipal contracts that may affect traffic or the contractor's operations? No
- Roadwork on other roads that may affect the use of alternate routes? No

Are there other maintenance of traffic issues? If so, specify.

- Bridge 8 on U.S. Route 2 spanning between North Hero and Grand Isle is a movable drawbridge which allows the passage of boats traveling on Lake Champlain. This passage must be maintained to some extent during construction.
- Adequate width, up to 13 feet, must be achievable during construction to allow the passage of farm equipment between North Hero and Grand Isle.

4.0 Existing Conditions

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This section provides the Contractor an overview of the existing conditions within the project area. However, the information contained herein is for informational purposes only and has been developed for use by the Contractor in the development of any required site specific traffic control plan. The information as contained in the TMP should not be considered "all inclusive"



of conditions or scenarios that will be encountered on site during construction operations. Rather, it should be used in conjunction will all other contract plans, specifications and other requirements when preparing any site specific traffic control plan.

- Roadway characteristics (history, roadway classification, number of lanes, geometrics, urban/suburban/rural).
 - Roadway Classification:
 - U.S. Route 2 Minor Arterial
 - o Roadway Lane/Shoulder Widths:
 - U.S. Route 2 11'/5'

Contractor shall field verify lane and shoulder widths prior to development of a site specific traffic control plan.

- Historic traffic data (volumes, speed, capacity).
 - A traffic study of U.S. Route 2 was performed by the Vermont Agency of Transportation. The traffic volumes are projected for the years 2018 and 2028.

Traffic Data U.S. Route 2						
YEAR	ADT	DHV	% D	% T	ADTT	20 yr. ESAL
2018	3,000	460	55	2.6	150	1,065,000
2028	3,200	490	55	3.4	210	1,003,000

- Posted/Design Speed:
 - U.S. Route 2 50 mph
- Traffic operations (signal timing, traffic controls).
 - Traffic signal locations:
 - Westbound and eastbound approaches to Bridge 8.
 - Stop sign locations (main routes):
 - N/A
 - Yield locations (main routes):
 - N/A

- Crash data.
 - Crash data obtained from the Vermont Agency of Transportation Public Crash Data Query Tool between the years of 2010 and 2016 can be found in Appendix A of this document.
- Pedestrian/bicycle facilities.
 - The Champlain Bikeway runs along U.S. Route 2.

- It is the Contractor's responsibility to construct the project in a manner that provides pedestrian and bicycle accommodations throughout all phases of construction. Including site specific solutions for the various operations that are anticipated.
- Transit Facilities.
 - o N/A
- Truck routes.
 - o N/A
- Local community and business concerns/issues.
 - Comments/concerns regarding traffic operations, delays, access/egress, etc., that have been received from community, business representatives, and stakeholders during the planning and design stages of the project development:
 - Specific concerns on pedestrian, bicycle, transit facilities, etc. are T.B.D.

5.0 Work Zone Impact Management Strategies

This section provides an overview of various strategies that may be incorporated by the Contractor to improve the safety and mobility of the work zone and reduce the work zone impacts on the road users, community, and businesses. The strategies are grouped according to the following categories:

- 1. Temporary Traffic Control (TTC)
- 2. Transportation Operations (TO)
- 3. Public Information and Outreach (PI&O).

5.1. Temporary Traffic Control (TTC)

Typical Applications from the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) shall be used to facilitate road users through the work zone. These Typical Applications can be found in part 6 of MUTCD, temporary traffic control. Proper use of these methods shall be used to ensure a safe and efficient road user flow and highway worker safety when a work zone, incident, or other event temporarily disrupts normal road user flow. The Typical Applications provided below should not be considered "all inclusive" of conditions or scenarios that will be encountered on site during construction operations.

- MUTCD Typical Applications recommended for this project include:
 - Typical Application 1 Work Beyond the Shoulder
 - Typical Application 3 Work on Shoulders
 - Typical Application 7 Road Closure With a Diversion
 - Typical Application 10 Lane Closure on a Two-Lane Road Using Flaggers

These Typical Applications are not intended to be the only traffic control applications that are available to the contractor. The contractor shall develop site specific traffic control plans if different than what is shown on the plans.



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Temporary Traffic Control	\checkmark
Control Strategies	
1. Construction phasing/staging	X
2. Full roadway closures	X
3. Lane shifts or closures	X
4. One-lane, two-way controlled operation	X
5. Two-way, one-lane traffic/reversible lanes	
6. Ramp closures/relocation	
7. Freeway-to-freeway interchange closures	
8. Night work	X
9. Weekend work	X
10. Work hour restrictions for peak travel	X
11. Pedestrian access improvements	
12. Bicycle access improvements	
13. Business access improvements	
14. Off-site detours/use of alternate routes	
Traffic Control Devices	
15. Temporary signs	X
16. Arrow boards	
17. Channelizing devices	X
18. Temporary pavement markings	X
19. Flaggers and uniformed traffic control officers	X
20. Temporary traffic signals	X
21. Lighting devices	X
Project Coordination Strategies	
22. Other area projects	
23. Utilities	X
24. Right-of-Way	
25. Other transportation infrastructure	X
Innovative Contracting Strategies	
26. Design-Build	
27. A+B Bidding	
28. Incentive/Disincentive clauses	
29. Lane rental	
30. CMGC	X
31. Performance specifications	



North Hero Grand Isle Traffic Management Plan

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Temporary Traffic Control	\checkmark
Innovative or Accelerated Construction Techniques	
32. Prefabricated/precast elements	X
33. Rapid cure materials	X

5.2. Transportation Operations (TO)

The TO component shall include the identification of strategies to mitigate impacts of the work zone on the operation of the transportation system within the work zone impact area. The work zone impact area consists of the immediate work zone as well as affects to the surrounding roadways and communities. Additional information can be acquired from the <u>"Workzone Safety and Mobility Guidelines"</u> (WSMG) and <u>"Appendix A"</u> in the WSMG document:

Examples of practices that may be used to satisfy the TO component may be found at: <u>http://www.ops.fhwa.AOT.gov/wz/rule_guide/sec6.htm#sec63</u>

Transportation Operations	
Demand Management Strategies	
1. Transit service improvements	
2. Transit incentives	
3. Shuttle services	
4. Parking supply management	
5. Variable work hours	
6. Telecommuting	
7. Ridesharing/carpooling incentives	
8. Park-and-Ride promotion	
Corridor/Network Management Strategies	
9. Signal timing/coordination improvements	
10. Temporary traffic signals	X
11. Street/intersection improvements	
12. Bus turnouts	
13. Turn restrictions	
14. Parking restrictions	
15. Truck/heavy vehicle restrictions	
16. Reversible lanes	
17. Dynamic lane closure system	
18. Ramp closures	



Transportation Operations	\checkmark
19. Railroad crossing controls	
20. Coordination with adjacent construction site(s)	
Work Zone ITS Strategies	
21. Late lane merge	
22. PCMS with speed display	X
23. Travel time estimation system	
24. Advanced speed information system	
25. Advanced congestion warning system	
26. Conflict warning system (e.g., construction vehicles entering roadway)	X
27. Travel time monitor system	
28. Freeway queue monitor system	
29. CCTV monitoring	
30. Real-time detour	
Work Zone Safety Management Strategies	
31. Speed limit reduction/variable speed limits	X
32. Temporary traffic signals	X
33. Temporary traffic barrier	X
34. Movable traffic barrier systems	
35. Crash cushions	
36. Temporary rumble strips	X
37. Intrusion alarms	
38. Warning lights	X
39. Automated flagger assistance devices (AFADs)	

Contingency/Incident Management Plans—The Contractor shall consider developing a contingency plan that addresses specific actions that will be taken to restore or minimize impacts on traffic when the congestion or delay exceeds original estimates due to unforeseen events. This includes work-zone crashes, traffic volumes higher than predicted traffic demand, delayed pick-up of lane closures, etc.

The Contingency/Incident Management plan shall include a collaborative effort with the emergency response and the public safety community. Development of such a plan is crucial in the early phases to properly integrate the concerns of the first responder personnel. The Contractor shall consider key components, such as the following six items, in developing the plan:

(1) Incident Detection and Verification; (2) Incident Classification and Response; (3) Site Management; (4) Site Clearance; (5) Motorist Information; (6) Evaluation.

5.3. Public Information and Outreach (PI&O)

The PI component shall include communication strategies that seek to inform the general public of work zone impacts and the changing condition of the project. The general public may include road users, area residences and businesses, and other public entities. Examples of communications strategies that may be used to satisfy the PI component may be found at: http://www.ops.fhwa.AOT.gov/wz/rule_guide/sec6.htm#sec63.

Public Information and Outreach is important to all projects that will have an impact on the public project. This project will create an impact to travelers, businesses, residents, and truckers for the construction season. Properly informing these stakeholders of what to expect during construction will ensure proper public support and reduce problems during construction. It is important to be upfront and clear on the impacts that this project will have on the community, and as such the following measures are recommended:

- Factsheets
 - o A project factsheet can be used to describe the project and why and when it is taking place.
- Business concerns/issues
- Public Input and Surveys
- Social Media to inform the public

Public Information and Outreach	\checkmark
Public Awareness Strategies	
1. Branding	
2. Press kits	X
3. Brochures and mailers	X
4. Press releases/media alerts	X
5. Mass media (earned and/or paid)	
6. Paid advertisements	
7. Project Information Center	
8. Telephone hotline	
9. Planned lane closure website	
10. Project website	X
11. Public meetings/hearings, workshops	
12. Community task forces	
13. Coordination with media/schools/business/emergency services	X
14. Work zone education and safety campaigns	
15.Work zone safety highway signs	X
16.Rideshare promotions	
17. Visual information	



Public Information and Outreach	\checkmark
Motorist Information Strategies	
18.Radio traffic news	X
19.Changeable message signs	X
20. Temporary motorist information signs	
21.Dynamic speed message sign	X
22. Highway Advisory Radio (HAR)	
23.Extinguishable Signs	
24. Highway information network (web-based)	
25. Traveler information systems(wireless, handheld)	
26. Transportation Management Center (TMC)	
27.Live traffic camera(s) on a website	
28. Project information hotline	
29.Email alerts	X

6.0 Notes

7.0 TMP Implementation/Monitoring

The TMP needs to be implemented in the field, as specified, unless any changes have been approved by the agency. To help ensure appropriate implementation, <u>23 CFR 630 Subpart J</u> §630.1012(e) requires that the State/Agency and the contractor each designate a trained person at the project level who has the primary responsibility and sufficient authority for implementing the TMP and other safety and mobility aspects of the project.

Monitoring the performance of the TMP during the construction phase is important to establish whether the predicted impacts closely resemble the actual conditions in the field, and whether the TMP strategies are effective in managing the impacts. TMP monitoring is needed for both oversight and evaluation purposes, such as:

- Monitoring and documenting TMP changes during construction.
- Preparing an evaluation of the TMP, including lessons learned.
- Refining work zone impact analysis processes and models based on outcomes.

TMP monitoring includes details of any specific observational, logging, and/or recording activities conducted during the project for work zone performance measurement purposes. Examples of possible performance measures for TMP monitoring include:

- Volume
- LOS
- Queue length
- Delay
- Travel time

- Number of crashes/incidents
- Incident response and clearance times
- Type and frequency of legitimate complaints received.

The Contractor shall meet with the TMP Implementation Task Leaders on a regular basis to discuss and assess the safety and mobility impacts of the project work zone to date. This helps to assess how well the TMP is managing the project impacts, and can help identify and address issues before they become problems. It also provides the opportunity to verify that all key stakeholders and project officials have been receiving timely notifications where required.

8.0 TMP Review/Approvals

TMPs, and changes to TMPs, must be approved by VTrans before they are implemented.

9.0 Appendices

A. Crash Data

B. Additional Contacts



Appendix A Crash Data



General Summaries - Crash Listing: State Highways and All Federal Aid Highway Systems

Report Run Date: 7/6/2016 2:28:19 PM

ty: Grand Isle											
h: Grand Isle.No	orth Hero										
te: US-2											
h Type: All Cras	sh Types										
Reporting Agency/ Number	Town	Mile Marker Date	Time	Weather	Contributing Circumstances	Direction Of Collision	Number Of Injuries	Number Of Fatalities	Number Of Untimely Deaths	Dir	Road Group
te: US-2		Marker Date	Time	Weather	oncumstances	Direction of Comsion	injunes	ratantics	Deatins		Group
VT0070000/	Grand Isle	0.01 8/3/2012	15:33	Clear		Single Vehicle Crash	0		0	0 W	State System (State Highways and Class I
VT0070000/	Grand Isle	0.02 7/15/2013	11:38			Head On	0			0 VV	State System (State Highways and Class I
VT0070000/	Grand Isle	0.03 7/5/2010	18:17			Head On	0				, , ,
VT0070000/	Grand Isle	0.03 7/5/2010	18:17		Operating vehicle in erratic,	Single Vehicle Crash	0			0 1	State System (State Highways and Class I State System (State Highways and Class I
VTVSP0700/	Grand Isle	0.12 8/30/2015	11:52		No improper driving	Single Vehicle Crash	1				State System (State Highways and Class I
VTVSP0700/	Grand Isle	0.12 8/30/2015	21:33		Under the influence of	Single Vehicle Crash	0		-	0 S	, , , ,
VT0070000/	Grand Isle	0.27 4/4/2012	20:29			Single Vehicle Crash	0			0 W	
						•					
VT0070000/	Grand Isle	0.73 7/30/2011	18:27		Followed too closely	Single Vehicle Crash	1			0 N	State System (State Highways and Class I
VTVSP0700/	Grand Isle	1.06 8/13/2011	08:00		Failure to keep in proper lane	,	0			0 N	, , , , , , , , , , , , , , , , , , , ,
VTVSP0700/ 10A205745	Grand Isle	1.24 12/24/2010	08:26		Driving too fast for conditions		1			0 S	State System (State Highways and Class I
VTVSP0700/ 10A201336	Grand Isle	1.31 4/4/2010	20:10	Clear	Other improper action	Same Direction Sideswipe	0)	0	0 W	State System (State Highways and Class I links)
VT0070000/	Grand Isle	1.31 1/20/2011	08:20	Snow	Driving too fast for conditions	Single Vehicle Crash	0		0	0 N	State System (State Highways and Class I
VTVSP0700/	Grand Isle	1.31 1/5/2013	06:30	Snow	No improper driving	Single Vehicle Crash	1		0	0 E	State System (State Highways and Class I
VT0070000/	Grand Isle	1.46 9/13/2013	16:00	Cloudy	Followed too closely,	Rear End	0)	0	0 W	State System (State Highways and Class I
VT0070000/	Grand Isle	1.8 6/26/2013	15:45	Clear	Operating vehicle in erratic,	Rear End	1		0	0 W	State System (State Highways and Class I
VT0070000/	Grand Isle	2.21 7/1/2014	10:30	Clear	No improper driving	Single Vehicle Crash	0)	0	0 W	State System (State Highways and Class I
VTVSP0700/	Grand Isle	2.22 3/25/2012	18:08	Clear	Fatigued, asleep,	Head On	1		0	0 S	State System (State Highways and Class I
VT0070000/	Grand Isle	2.33 7/22/2015	11:25	Cloudy	Fatigued, asleep	Single Vehicle Crash	0		0	0 W	State System (State Highways and Class I
VTVSP0700/ 11A202971	Grand Isle	2.48 7/4/2011	13:28	Clear	Failure to keep in proper lane	Opp Direction Sideswipe	0		0	0 E	State System (State Highways and Class I links)
VT0070000/	Grand Isle	2.51 8/2/2011	19:44	Clear	Inattention	Rear End	0)	0	0 N	State System (State Highways and Class I
VTVSP0700/	Grand Isle	2.68 1/20/2011	08:44	Clear	Driving too fast for conditions	Single Vehicle Crash	0		0	0 N	State System (State Highways and Class I
VTVSP0700/ 11A202940	Grand Isle	2.74 7/3/2011	11:58	Clear	Distracted	Other - Explain in Narrative	1		0	0 S	State System (State Highways and Class I
VT0070000/ 15GIC0001	Grand Isle	3.1 1/2/2015	07:43	Clear	Failure to keep in proper lane,	Opp Direction Sideswipe	0		0	0 P	- /
VT0070000/	Grand Isle	3.12 2/20/2014	12:34	Clear	Inattention	Single Vehicle Crash	0)	0	0 E	State System (State Highways and Class I
VTVSP0700/	Grand Isle	3.12 4/26/2011	07:40			Rear End	0			0 W	State System (State Highways and Class I
VT0070000/ 10GIC0395	Grand Isle	3.17 3/30/2010	17:05		Followed too closely	Same Direction Sideswipe	4		0	0 N	
VT0070000/	Grand Isle	3.31 9/21/2010	18:42	Clear	Failed to yield right of way	Left Turn and Thru, Angle	2		0	0 S	State System (State Highways and Class I
10GIC1339		0.0.0.0.22010		2.50	i inter to yield light of huy	Broadside>v	-				links)



General Summaries - Crash Listing: State Highways and All Federal Aid Highway Systems

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VTVSP0700/	Grand Isle	3.31 7/9/2011	10:47	Clear	Followed too closely,	Rear End	0	0	0	Ν	State System (State Highways and Class
VTVSP0700/	Grand Isle	3.42 9/20/2015	12:54	Clear	Exceeded authorized speed	Single Vehicle Crash	1	0	0	S	State System (State Highways and Class
VT0070000/ 12GIC1400	Grand Isle	3.63 9/14/2012	13:52	Clear	Failed to yield right of way	Right Turn and Thru, Angle Broadside>^	1	0	0	W	State System (State Highways and Class links)
VTVSP0700/	Grand Isle	3.75 5/24/2015	13:25	Clear	Followed too closely,	Rear End	3	0	0	S	State System (State Highways and Class
VT0070000/ 12GIC1774	Grand Isle	3.79 11/14/2012	22:19	Clear	No improper driving	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class links)
VT0070000/	Grand Isle	3.85 8/31/2015	15:41	Clear	Fatigued, asleep	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	Grand Isle	4.02 1/25/2011	09:52	Snow	Driving too fast for conditions	Single Vehicle Crash	0	0	0	S	State System (State Highways and Class
VT0070000/	Grand Isle	4.18 7/1/2013	18:10	Cloudy	No improper driving	Single Vehicle Crash	0	0	0	Е	State System (State Highways and Class
VT0070000/ 14GIC0101	Grand Isle	4.3 1/17/2014	13:10	Clear	Failed to yield right of way	No Turns, Thru moves only, Broadside ^<	0	0	0	W	State System (State Highways and Class links)
VT0070000/	Grand Isle	4.5 3/14/2012	17:27	Clear	No improper driving	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VTVSP0700/	Grand Isle	4.53 3/19/2013	08:22	Snow	Driving too fast for	Single Vehicle Crash	0	0	0	S	State System (State Highways and Class
VTVSP0700/	Grand Isle	4.53 8/13/2015	05:26				0	0	0		State System (State Highways and Class
VT0070000/	Grand Isle	4.53 2/2/2015	11:24	Snow	Driving too fast for	Rear End	0	0	0	W	State System (State Highways and Class
VT0070000/	Grand Isle	4.53 8/10/2015	15:16	Clear	Failure to keep in proper	Single Vehicle Crash	2	0	0	Ν	State System (State Highways and Class
VT0070000/ 12GIC1272	Grand Isle	4.54 8/29/2012	06:55	Clear	Distracted, Failed to yield right of way	No Turns, Thru moves only, Broadside ^<	3	0	0	S	State System (State Highways and Class links)
VT0070000/	Grand Isle	4.64 2/24/2012	21:00	Snow	Operating defective	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VT0070000/	Grand Isle	4.8 1/22/2011	23:50	Snow	Inattention,	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	Grand Isle	4.96 8/11/2012	17:11	Rain	Fatigued, asleep	Single Vehicle Crash	1	0	0	Е	State System (State Highways and Class
VT0070000/	Grand Isle	5.09 8/16/2014	16:02	Cloudy	Unknown,	Rear End	0	0	0	W	State System (State Highways and Class
VT0070000/ 10GIC1640	Grand Isle	5.12 11/15/2010	17:53	Clear	No improper driving	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/ 14GIC0004	Grand Isle	5.38 1/2/2014	19:29	Snow	Driving too fast for conditions,	Other - Explain in Narrative	0	0	0	W	State System (State Highways and Class links)
VT0070000/	Grand Isle	5.79 9/6/2010	14:39	Clear	No improper driving	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	Grand Isle	5.88 6/30/2014	08:00	Clear	Fatigued, asleep,	Head On	0	0	0	S	State System (State Highways and Class
VT0070000/	Grand Isle	6.23 2/1/2010	22:30	Snow	Driving too fast for conditions	Single Vehicle Crash	1	0	0	Ν	State System (State Highways and Class
VT0070000/	Grand Isle	6.27 11/8/2012	21:24	Clear	No improper driving,	Head On	0	0	0	W	State System (State Highways and Class
VTVSP0700/	Grand Isle	999.99 6/10/2013	05:30				0	0	0		State System (State Highways and Class
VT0070000/ 12GIC0564	Grand Isle	999.99 4/28/2012	21:45	Clear	No improper driving	No Turns, Thru moves only, Broadside ^<	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/	Grand Isle	999.99 9/20/2014	11:09	Cloudy	Inattention	Rear End	0	0	0	Ν	State System (State Highways and Class
VT0070000/	North Hero	0.38 9/13/2013	09:05	Clear	Followed too closely,	Rear End	0	0	0	W	State System (State Highways and Class
VT0070000/ 10GIC1121	North Hero	0.4 8/23/2010	18:27	Clear	Inattention	Same Direction Sideswipe	0	0	0	Ν	State System (State Highways and Class links)
VTVSP0700/ 11A204865	North Hero	0.41 10/16/2011	12:32	Cloudy	Failure to keep in proper lane	Single Vehicle Crash	1	1	0	S	State System (State Highways and Class links)
VT0070000/	North Hero	0.53 3/1/2010	20:35	Clear	No improper driving	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	North Hero	0.67 5/19/2010	14:58	Clear	Failure to keep in proper lane	Head On	2	1	0	S	State System (State Highways and Class
VTVSP0700/	North Hero	0.86 6/9/2013	10:35				0	0	0		State System (State Highways and Class
VT0070000/ 13GIC1024	North Hero	1.24 7/5/2013	19:07	Clear	Failure to keep in proper lane	Same Direction Sideswipe	0	0	0	S	State System (State Highways and Class links)



General Summaries - Crash Listing: State Highways and All Federal Aid Highway Systems

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VTVSP0700/	North Hero	1.97 2/24/2010	01:04	Snow	Driving too fast for conditions	Single Vehicle Crash	1	0	0	Е	State System (State Highways and Class
VT0070000/ 13GIC2097	North Hero	2.35 12/12/2013	15:33	Clear	Failure to keep in proper lane		0	0	0	Е	State System (State Highways and Class links)
VT0070000/	North Hero	2.8 11/7/2015	09:48	Clear	No improper driving	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VT0070000/	North Hero	2.94 1/31/2013	16:40	Clear	Fatigued, asleep	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VTVSP0700/	North Hero	3.1 2/4/2013	00:48	Clear	Inattention	Single Vehicle Crash	1	0	0	Ν	State System (State Highways and Class
VT0070000/ 10GIC0622	North Hero	3.24 5/14/2010	17:43	Clear	Operating vehicle in erratic, reckless, careless, negligent,	Same Direction Sideswipe	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/ 15GIC2590	North Hero	3.94 12/29/2015	17:33	Snow	Driving too fast for conditions	Single Vehicle Crash	0	0	0	Е	State System (State Highways and Class links)
VT0070000/ 14GIC0431	North Hero	4.3 3/16/2014	00:44	Other - Explain in Narrative	Distracted, Driving too fast for conditions	Single Vehicle Crash	1	0	0	N	State System (State Highways and Class links)
VT0070000/ 15GIC0042	North Hero	4.3 1/8/2015	17:02	Blowing Sand, Soil, Dirt, Snow	Driving too fast for conditions	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class links)
VTVSP0700/ 13A205800	North Hero	4.3 12/29/2013	21:20				0	0	0		State System (State Highways and Class links)
VTVSP0700/ 11A200746	North Hero	4.42 2/19/2011	13:36	Severe Crosswinds	Failure to keep in proper lane	Head On	0	0	0	S	State System (State Highways and Class links)
VT0070000/	North Hero	4.56 3/2/2011	18:56	Snow	Failure to keep in proper	Head On	1	0	0	S	State System (State Highways and Class
VT0070000/ 14GIC1472	North Hero	4.61 8/8/2014	14:20	Clear	Other Inside Vehicle	Opp Direction Sideswipe	0	0	0	W	State System (State Highways and Class links)
VT0070000/	North Hero	4.81 7/12/2012	16:46	Clear	No improper driving	Single Vehicle Crash	1	0	0	W	State System (State Highways and Class
VT0070000/	North Hero	4.87 2/24/2010	15:05	Snow	Swerving or avoiding due to	Single Vehicle Crash	0	0	0	S	State System (State Highways and Class
VT0070000/	North Hero	4.95 7/16/2015	11:15	Clear	Followed too closely	Rear End	0	0	0	Е	State System (State Highways and Class
VTVSP0700/	North Hero	5.03 6/20/2014	03:13	Clear	Fatigued, asleep	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VT0070000/	North Hero	5.04 4/29/2011	13:19	Clear	Fatigued, asleep	Single Vehicle Crash	0	0	0	Е	State System (State Highways and Class
VT0070000/ 14GIC2298	North Hero	5.06 11/25/2014	09:30	Rain	Failure to keep in proper lane	Other - Explain in Narrative	0	0	0	S	State System (State Highways and Class links)
VT0070000/	North Hero	5.11 8/14/2015	16:25	Cloudy	Driving too fast for	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	North Hero	5.14 1/23/2012	08:59	Clear	Driving too fast for conditions	Single Vehicle Crash	1	0	0	S	State System (State Highways and Class
VT0070000/	North Hero	5.46 9/19/2012	14:39	Clear	Unknown	Rear-to-rear	0	0	0	Е	State System (State Highways and Class
VTVSP0700/	North Hero	5.5 3/15/2015	18:33	Clear	Fatigued, asleep,	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class
VT0070000/ 12GIC1403	North Hero	5.51 9/15/2012	13:27	Clear	Driving too fast for conditions	No Turns, Thru moves only, Broadside ^<	1	0	0	N	State System (State Highways and Class links)
VT0070000/	North Hero	5.67 7/23/2010	16:00	Clear	Other improper action,	Rear End	0	0	0	Ν	State System (State Highways and Class
VTVSP0700/	North Hero	5.7 6/27/2010	11:28	Clear	Unknown	Rear End	1	0	0	Ν	State System (State Highways and Class
VT0070000/ 14GIC1829	North Hero	5.82 9/22/2014	10:37	Clear	Inattention	Same Direction Sideswipe	0	0	0	S	State System (State Highways and Class links)
VT0070000/	North Hero	5.84 1/28/2010	20:35	Clear	No improper driving	Single Vehicle Crash	0	0	0	S	State System (State Highways and Class
VT0070000/	North Hero	6.23 2/10/2014	07:50	Clear	Followed too closely	Rear End	0	0	0	S	State System (State Highways and Class
VTVSP0700/	North Hero	6.23 5/16/2015	05:36				0	0	0		State System (State Highways and Class
VTVSP0700/	North Hero	6.25 4/6/2012	05:44	Clear	Swerving or avoiding due to	Single Vehicle Crash	1	0	0	S	State System (State Highways and Class



General Summaries - Crash Listing: State Highways and All Federal Aid Highway Systems

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Crash Count = 11	<u>^</u>	-	atal Crash C				rv Crash Count = 31			1	_	sh Count = 74
							Totals:	43	2	0		
VT0070000/ 15GIC1676	North Hero	999.99	8/20/2015	07:28	Clear	Failed to yield right of way	Right Turn and Thru, Same Direction Sideswipe/Angle Crash ^	U	0	0	S	State System (State Highways and Class links)
VT0070000/ 14GIC2527	North Hero		12/30/2014	19:07		No improper driving	Single Vehicle Crash	0	0	-	N	State System (State Highways and Class links)
15GIC0304							Narrative		0	0	vv	links)
VT0070000/	North Hero		2/19/2015	08:55		Faligued, asleep Followed too closely	Other - Explain in	1	0	0	W	State System (State Highways and Class State System (State Highways and Class
VT0070000/	North Hero		8/23/2012	21:16		Disregarded traffic signs, Fatigued, asleep	Single Vehicle Crash	0	0	0	E	State System (State Highways and Class State System (State Highways and Class
VT0070000/	North Hero			14:37		0	Head On Head On	0	0	0		, , , ,
VT0070000/	North Hero		5/27/2013	14:37		Disregarded traffic signs, Disregarded traffic signs,	Head On	0	0	0	S	State System (State Highways and Class State System (State Highways and Class
VT0070000/ VTVSP0700/	North Hero North Hero		7/3/2015	22:18 16:18		Manually Operating an	Rear End Single Vehicle Crash	1	0	0		State System (State Highways and Class State System (State Highways and Class
10GIC1841	North Llove					conditions,			0	0	Б	links)
VT0070000/	North Hero		12/30/2010	20:50		Driving too fast for	Single Vehicle Crash	0	0	0	W	State System (State Highways and Class
VT0070000/	North Hero		1/7/2012	21:32	,	Driving too fast for conditions	- 5	1	0		W	, , , , , , , , , , , , , , , , , , , ,
VTVSP0700/	North Hero	8.46	4/11/2015	02:53	Cloudy	Under the influence of	Single Vehicle Crash	1	0	0	Ν	State System (State Highways and Class
VT0070000/ 12GIC1012	North Hero	8.27	7/15/2012	00:22	Clear	Inattention, Disregarded traffic signs,	Same Direction Sideswipe	0	0	0	Е	State System (State Highways and Class links)
VT0070000/	North Hero	8.27	6/19/2013	17:58	Clear	, , ,	Rear End	0	0	0	W	State System (State Highways and Class
VT0070000/ 15GIC0580	North Hero	8.23	4/9/2015	06:08	Clear	Inattention, Failed to yield right of way	Left Turn and Thru, Broadside v<	0	0	0	W	State System (State Highways and Class links)
VT0070000/ 12GIC1660	North Hero	8.2	10/26/2012	21:30	Clear	No improper driving	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/ 11GIC0914	North Hero	7.75	7/25/2011	16:38	Clear	Inattention	Same Direction Sideswipe	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/ 12GIC1937	North Hero	7.31	12/19/2012	19:22	Clear	No improper driving	Single Vehicle Crash	0	0	0	Ν	State System (State Highways and Class links)
VT0070000/	North Hero		6/11/2010		Clear	Fatigued, asleep	Rear End	1	0	0	Ν	
10GIC1332							Broadside v<					links)

Note: Untimely Deaths are the result of death prior to a crash event. These deaths are not counted in the Fatal/Fatality type counts. They are considered an Incapacitating Injury and are counted in Injury Type crashes.

Note: Report results from the online Public Query Tool may not match exactly with those obtained directly from VTrans Crash staff due to the nuances of reporting by law enforcement and the reporting requirements under the Fatality Analysis Reporting System (FARS).

Appendix B Additional Contacts

Knight Point State Park	Ladd's Landing Marina
Address: 44 Knight Point Rd, North Hero	Address: 412 US-2, Grand Isle
Phone: (802) 372-8389	Phone: (802) 372-5320
Email: N/A	Email: emily@laddslandingmarina.com
Little Cove Marina	YMCA Camp Abnaki
Address: 13 Landing Ln, Grand Isle	Address: 1252 Abnaki Rd, North Hero
Phone: N/A	Phone: (802) 372-8180
Email: N/A	Email: info@campabnaki.org
Grand Isle Elementary School	North Hero Elementary School
Address: 224 US-2, Grand Isle	Address: 6441 US-2, North Hero
Phone: (802) 372-6913	Phone: (802) 372-8866
Email: eriarnz@gisu.org	Email: josrest@gisu.org
Email: eriarnz@gisu.org	Email: josrest@gisu.org
Address:	Address: