

October 11, 2012

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN**

CONFERENCE REPORT

PROJECT: FITZWILLIAM
X-A000(191)
16211
NH 12 & NH 119

DATE OF CONFERENCE: August 16, 2012

LOCATION OF CONFERENCE: Fitzwilliam Town Office

ATTENDED BY: NHDOT
William Oldenburg
Michael Dugas
Steven Babalis
Douglas Graham

(See Attached Attendees List)

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

W. Oldenburg explained that the intersection of NH 12 and NH 119 has been on the Department's radar for many years. The intersection was previously part of the Ten Year Plan but was removed when the Ten Year Plan was reduced in 2009. The Ten Year Plan initially had \$2,100,000 dollars allocated for the project's construction. The intersection is eligible for limited Highway Safety Improvement Program (HSIP) funding due to a Road Safety Audit that was undertaken in 2009 by the Southwest Regional Planning Commission and the Town of Fitzwilliam. He explained that the current Federal highway funding law, known by its acronym of SAFETEA-LU, created the HSIP to identify highway safety issues and provide for modest safety improvements that would achieve a significant reduction in traffic fatalities and serious injuries. New Hampshire receives \$5.5 million per year to implement modest safety improvements in locations where crash data indicates safety deficiencies. He stressed that the HSIP is intended to be data driven; locations identified to use these funds must have a crash history that demonstrates there is a safety need.

M. Dugas discussed the existing conditions at the site. NH 12 was constructed in the late 1950's with twelve-foot travel lanes and four-foot paved shoulders. NH 12 is posted for 35 mph in the vicinity of the intersection and 50 mph north of the intersection. NH 119 is posted for 30 mph. Both NH 119 approaches are stop sign controlled. The two routes cross at a 138 degree angle.

Jaffrey Road is located approximately 400' from the intersection and is used as a short cut between NH 12 north and NH 119 west. Mr. Mike's Mini Mart is located in the northeast quadrant of the intersection. The intersection has a flashing beacon.

NH 12 is a moderately traveled commuter route between Massachusetts and Troy. The predominant turn movement at the intersection is westbound rights from NH 119 onto NH 12 north and southbound lefts from NH 12 onto NH 119 east. The intersection meets traffic signal warrants.

Crash data from January 2006 to April 2009 showed a total of 19 crashes at the intersection. Seven of those resulted in injuries. Nine of those crashes involved rear end collisions.

Many safety concerns were identified in the road safety audit, including the following:

- The extreme skew of the intersection complicates access to and from NH 119.
- The large skew leaves turning vehicles exposed for excessive distances while maneuvering through the intersection.
- The skew makes it difficult for drivers to look left from the side streets.
- The undesirability of the intersection encourages drivers to avoid the intersection by traveling through private driveways and town roads.
- Vegetation inhibits sightlines looking north from the west NH 119 approach.
- The proximity of the Jaffrey Road intersection and Jaffrey Road extension creates additional conflict points in the intersection functional area.
- Turn restriction at the Mr. Mike's drive is occasionally ignored.

M. Dugas then discussed the three proposed alternatives:

Alternative one proposes relocating and reconstructing NH 119 so that NH 119 crosses NH 12 at a 90-degree angle. The intersection would be signalized and opposing exclusive left turn lanes would be installed. Multiple private properties would be impacted. This alternative would be similar to the project's initial intent when it was part of the 10-year plan and would cost approximately two million dollars, not including right-of-way.

Alternative two proposes relocating the NH 119 west approach to Jaffrey Road extension and improving the alignment of the NH 119 east approach. This alternative would have back-to-back exclusive left turn lanes on NH 12. Both NH 119 intersections would be stop sign controlled. The intersections would operate very well for existing and future traffic volumes. Jaffrey Road extension would require full reconstruction to support NH 119 traffic loads. All work would likely be able to be kept within the existing right-of-way. The estimated cost is approximately \$600,000.

Alternative three proposes installing signals at the existing intersection and closing off the NH 12 approach on the Jaffrey Road extension. The NH 119 approaches would be narrowed and have curb installed to discourage vehicles attempting to maneuver side by side. NH 119 approaches would have minor widening to better accommodate truck-turning movements.

W. Oldenburg reported that environmental and historic resources were evaluated at the intersection. Minimizing impacts to the resources will be a priority as the project develops. The

next step in the design process will be determined from the meeting's comments. W. Oldenburg then opened the floor to questions and comments.

Discussion:

Comment: A resident noted that a large tree located on the north west quadrant of the intersection inhibits sightlines. The resident also noted that high travel speed is the primary concern at the intersection. The resident suggested installing a speed radar display similar to that used in Troy to help reduce speeds on NH 12.

Answer: W. Oldenburg responded that the Department discourages using speed radar displays because for some drivers, the devices have the opposite effect. Some drivers attempt to get the highest displayed speed possible ultimately creating a greater safety hazard.

Question: A resident asked who would pay for the signal's maintenance and operation cost.

Answer: W. Oldenburg responded that since the signal is on a state owned route and is not within a compact, the state would be responsible for all of the maintenance and operation cost.

Question: Numerous residents expressed support for roundabouts and inquired whether a roundabout alternative had been investigated. Additionally, some residents noted the Dublin oval-about as a potential example of a traffic calming measure.

Answer: W. Oldenburg responded that some investigation has gone into evaluating the effectiveness and impacts associated with a roundabout. He reported that due to the existing features of the intersection, a roundabout design would likely result in some property impacts. The Department will further evaluate roundabout concepts for review with the Town.

Comment: A resident raised concern about the sightline deficiencies approaching the intersection due to the NH 119 profile.

Response: M. Dugas reported that a traffic signal will help overcome the profile deficiencies because drivers along NH 119 will have a clear view of the traffic signal head approaching the intersection.

Comment: A resident suggested installing oversized signal heads at the intersection.

Response: M. Dugas reported that the Department already uses the largest approved signal heads that are 12 inches in diameter. W. Oldenburg added that the Department has also been enlarging traffic signs for similar reasons.

Comment: A resident suggested installing a strobe on the red signal head to help gain drivers' attention.

Response: W. Oldenburg responded that the Department does not install strobe lights are no longer permitted on traffic signals.

Question: A resident inquired to what a truck-climbing lane would look like on alternative three.

Answer: W. Oldenburg responded that adding a truck-climbing lane would result in added cost and property impacts. The truck-climbing lane would need to extend north beyond

the crest of the hill to allow trucks to accelerate up to travel speed. Constructing a climbing lane is likely beyond the scope of the safety project.

Comment: A resident reported that trucks use Jaffrey Road as a route to the Town of Jaffrey.

Comment: A resident noted that in the past, a relocation of NH 119 was envisioned south of its existing location

Response: W. Oldenburg responded that relocating NH 119 would significantly exceed the scope of this project. He recommended contacting Southwest Regional Planning Commission to work toward investigating whether that could be added to the 10 Year Plan.

Comment: Many residents felt the greatest issue at the intersection is the speeds along NH 12. It was suggested to install transverse rumble strips similar to Exit 5 northbound off ramp. Additionally, many residents felt that a roundabout concept would address speeds on NH 12. It was also suggested to extend the 35 MPH intersection speed zone.

Response: W. Oldenburg reported that there are tools available to the Department to help reduce speeds. W. Oldenburg noted that speeds are high because of the wide and straight attributes of the roadway. To best reduce speed, the nature of the roadway needs to be changed and supported by strong police presence.

Comment: A resident expressed concern for pedestrians along NH 119. She suggested installing a sidewalk from the town common to the intersection.

Response: W. Oldenburg responded that if the Town requests to have a sidewalk installed, then it would be investigated. However, he added that what she is suggesting is outside the limits of the intersection. Crosswalks can be installed in conjunction with this project, but if there are not sidewalks to receive the crosswalk, then it is unlikely they will be installed. W. Oldenburg also noted that when sidewalks are installed, it is the responsibility of the town to maintain them after construction.

Comment: A resident whose home is on NH 119 expressed concern in regards to traffic queues extending past her home. She was concerned about noise created by the constant braking of vehicles.

Response: M. Dugas reported that installing a traffic signal would improve operations at the existing intersection, and alternative two would also have improved operations. Both would result in short queues on NH 119.

Comment: A couple of residents showed support for reflective markers embedded in the roadway to delineate turning paths.

Comment: A resident felt that the sight distance deficiencies could be partially attributed to vegetation growth encroaching on the roadway and insufficient roadside maintenance.

Comment: A resident was concerned that traffic queuing on NH 119 would lead to vehicles using the Crossroad private development as a shortcut to circumvent the queue.

Response: M. Dugas reiterated that the safety improvement would also improve operations. Queuing at the intersection would be minimal and better than the existing conditions.

Submitted by:

Steven J. Babalis, P.E.
Preliminary Design Section

SJB
Noted by M. Dugas

cc: M.Dugas, D. Graham, W. Oldenburg

S:\(TOWNS)\Fitzwilliam\16211\Conference Reports\POPI081512.DOC

MEETING ATTENDANCE

PROJECT Fitzwilliam 16211
LOCATION Fitzwilliam Town Hall
PROJECT NO. X-A001(191) 16211
 Federal State

Name	Agency or Address	Comments
J. B. Mack	SW RPC	
Terry & Gary Gorzelany	93 Rhododendron Rd	
David B. Ellis Sr.	Po Box 153	
Regina Whitcomb	835 Rt 12 South	
Mr & Mrs Dennis Bernard	33 NH Rte 119 E	
VERNON YANG	13 NH Rte 12 So. Po Box 176	
Coni Porter	35 Sunset Rd	
Wayne Kassotis	Fitzwilliam P.T.	
Kevin Woolley	17 NH Rte 119 E	
FRANK LINGENBENDER	MHPOT DISTRICT 4	
Jerry	Fitz Highway	
Tom Decker	8 Rt 12 North Fitz	
Chris Temple	Crossroads Bldg.	
REP. R. J. DWINELL	BOTTOMS UPPER 12 SOUTH	
Paula Thompson	Town Hall	
Stephanie Scherr	27 NH 119 E	
Winthrop Brown Jr	117 Tempelton Trk.	
Barbara Green & David	19 Webber Lane	
Cyndie Martin	44 NH Rt 12 S	
JUDY BEAUREGARD	442 W. LAKE RD	
RODERIC BEAUREGARD	442 W. LAKE RD	
STATE REP SUSAN EMERSON	P.O. Box 646, RINDGE 03461	
Cathy Davis	30 Holman Rd	
DEWEN CARTER	204 JAFFREY Rd	

Date 8/16/2012

