

August 16, 2012

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

CONFERENCE REPORT

PROJECT: RINDGE
X-A000(190)
16210
US 202 & Forristall Road Safety Improvements

DATE OF CONFERENCE: August 1, 2012

LOCATION OF CONFERENCE: Rindge 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 this intersection had come to the Department's attention through studies undertaken as part of the Highway Safety Improvement Program (HSIP). 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. The US 202, Forristall Road, and Middle Winchendon Road intersection was identified as one of the eligible locations for HSIP funding. He noted that 12 crashes were documented at the intersection with 8 of those resulting in injury.

S. Babalis explained the details of the project. US 202 was constructed in 1979 with 12 foot travel lanes and 10 foot paved shoulders. A southbound right turn lane was later constructed on US 202 by a private development as mitigation for increasing the traffic. US 202 experiences approximately 8,000 vehicles per day. Forristall Road has approximately 2,700 vehicles per day and Middle Winchendon has 500 vehicles per day. The predominant turn movements at the intersection are southbound rights from US 202 onto Forristall Road and eastbound lefts from

Forristall Road onto US 202. Traffic volumes at the intersection are high enough to justify the existing right turn lane.

Twelve crashes have been identified at the intersection with the predominant type being right angle crashes (T-Bone Crashes). The combination of the long heavily traveled right turn lane with the high speeds on US 202 creates a condition where two vehicles could be traveling side by side toward the intersection. As a result, the right turning vehicle can block from the view of a vehicle waiting to turn off of Forristall Road, the vehicle traveling south on US 202. If the southbound traveling vehicle goes unperceived, then this scenario can result in a high-speed angled crash.

S. Babalis then explained the proposed concept. The Department proposes relocating the right turn lane toward the west outside of the sightline for vehicles exiting Forristall Road. This would require installing a painted traffic island between the right turn lane and southbound travel lane. The painted traffic island will be 16 feet wide at its widest. The right turn lane will have similar length as the existing right turn lane. The Department proposes widening Forristall Road so that a raised traffic island can be installed. The traffic island will help separate entering and exiting traffic, provide better intersection recognition for vehicles approaching the intersection, and allow the installation of an additional 'Stop' sign for eastbound traffic.

S. Babalis then explained the Department reviewed whether installing traffic signals would be an appropriate treatment at the intersection. It was concluded that signals are not recommended at this intersection. The existing traffic volumes at the intersection do not meet signal warrant thresholds. The Department feels that traffic signals would not reduce crashes at the intersection, but rather could simply change the location and type of the crashes. Signals would also impose delays on the US 202 traffic which today is unimpeded.

W. Oldenburg reported that environmental and historic resources were evaluated at the intersection. Minimizing impacts to the resources will be prioritized as the project develops. The project is estimated to cost \$400,000 all of which will be State and Federal funds. He explained that if there is consensus, on the proposal the improvements could be constructed in 2013.

Discussion:

Comment: A resident felt that vehicles traveling on US 202 are driving too fast and that is the most significant safety issue at the intersection. Additionally, the resident felt that it is difficult to perceive the intersection when traveling on Forristall Road which sometimes causes vehicles to accidentally drive through the stop sign.

Comment: Joel Weissman of Community Transportation concurred that the speeds on US 202 are too fast and suggested installing transverse rumble strips.

Answer: W. Oldenburg responded that there are road treatments available to help reduce speeds. He continued noting the most effective speed reduction treatment is to have a heavy police presence at the location so that the site gains a reputation. The average speed at the intersection will naturally drop as drivers begin to expect an officer on that stretch of road. He explained also that simply reducing the posted speed limit is ineffective at reducing speeds unless it is accompanied by enforcement.

Comment: A resident was concerned that the wide painted median along the right turn lane will encourage vehicles to attempt to maneuver around vehicles waiting to turn left onto Middle Winchendon Road and possibly encroach into the offset right turn lane.

Answer: W. Oldenburg responded that the Department is investigating methods to discourage vehicles from traveling into the painted island. Some possible treatments include installing a raised traffic island or installing rumble strips.

Question: A resident inquired whether a flashing beacon could be installed in conjunction with this project.

Answer: W. Oldenburg responded that flashing beacons are intended to be installed at intersections where driver's awareness needs to be heightened and are taken down once an intersection improvement have mitigated the deficiency. This project will improve the intersection and do away with the need for a flashing beacon. W. Oldenburg added that flashing beacons are most effective for drivers who are unfamiliar with the area. The effectiveness of the flashing beacons significantly diminishes for drivers who regularly travel through the intersection and the beacons end up becoming roadway "white noise". The typical driver at this intersection regularly travels through it.

Question: A resident inquired as to where the posted speed limit drops south of the intersection.

Answer: The posted speed limit drops to 40 MPH south of the New Hampshire and Massachusetts border approximately where the roadway typical narrows.

Comment: Joel Weissman of Community Transportation expressed concern with vehicles accessing US 202 from Forristall Road. J. Weissman articulated that the high speeds on the long straight roadway tangent, combined with the slow maneuverability of the buses makes it difficult for bus drivers to properly assess traffic gaps and transition into traffic. J. Wessmann felt that a traffic signal would improve access to US 202 from the sideroads and potentially reduce over all travel speeds on US 202.

Answer: W. Oldenburg responded that the proposed concept would reduce the exposure time a vehicle experiences leaving Forristall because the design will move the stop bar approximately 10 feet closer to US 202.

The general consensus of the residents present at the meeting was that something needs to be done to improve the intersection and the proposed concept is a good step in the right direction.

Submitted by:

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

SJB
Noted by M. Dugas

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

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MEETING ATTENDANCE

PROJECT

Rindge - US Route 202, Forttall Road, and Middle Winchendon Road

LOCATION

Rindge Town Offices

PROJECT NO.

X-A001(190)

16210

Federal

State

Name	Agency or Address	Comments
Mike DiPasquale	516 Forttall Rd Rindge	
Helen Mae Olson	26 Route 109 Rindge	
Mary King	44 Route 10 Rindge	
ANISA DANDRELL	20 Park St Rindge	
C. Fincher	MADONNA'S LEADER	
Franklin Sterling	SRCS D	
Bertha Olsen	Representative District 7	
Dorlotta Pini	SECRETARY	
Jael Wassman	Town Administrator	
Marie Parley	Community Transportation	
Janelle	719 Forttall Rd Rindge	5th Rindge School Bus Parent

Date 8/1/2012