

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

Brookline
NH 13 safety concerns

Bureau of Highway Design
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June 18, 2019

Mr. Brendan Denehy, Chair
Brookline Selectboard
PO Box 360
Brookline, NH 03033

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Dear Chairman Denehy:

Selectmen's Office
Brookline, NH

The Department has investigated the four locations of concern cited along NH 13 pursuant to the 2018 speed study and offers the following recommendations.

1. NH 13/Old Milford Rd: The proper treatment for this intersection would be to add a southbound left turn lane, as is anticipated to be done by the Ten Year Plan project. Because of the environmental requirements contingent upon pavement widening, and also the potential for property impacts, we do not have the means to pursue these improvements ahead of the Ten Year Plan schedule. In the interim, the Department's maintenance forces will place pavement millings along the roadside in the areas prone to erosion. The compacted millings will provide a firm surface adjacent to the paved shoulder and reduce the hazard to those southbound vehicles that leave the pavement due to inattention or impatience. This intersection does not appear to have a serious enough crash history (based on DMV crash records) to meet the requirements of the road safety audit (RSA) program.
2. NH 13/North Mason Rd: Sight lines at the intersection appear to be adequate for the travel speeds. The addition of a northbound left turn lane would likely be a suitable improvement to the intersection, if it could be shown to be supported by traffic volumes. However, as was stated above, due to the environmental requirements associated with pavement widening and the potential for property and utility impacts, the addition of a left turn lane would require a formal project through the Ten Year Plan. It does not appear possible (or appropriate) to widen the northbound shoulder to allow through traffic to bypass left turning traffic because the bypass movement would be in conflict with the private driveway opposite North Mason Rd and would create an unsafe condition. This intersection does not appear to have a serious

enough crash history (based on DMV crash records) to meet the requirements of the road safety audit (RSA) program. The Town could consider installing advance guide signs for the Town transfer station to give drivers an indication of the possibility of turning traffic.


3. NH 13/Meetinghouse Rd/Mason Rd: This intersection presents complex challenges. The combination of curvature and grades, plus the high speeds along NH 13 (despite the 35 mph posted speed limit), lead to difficult sight lines and challenging vehicle movements. Comprehensive intersection improvements would require a Ten Year Plan project as the improvements would likely be larger in scope than could be undertaken by the Highway Safety Improvement Program. Some interim improvements may be feasible and worth investigating.
 - a. Being able to effectively reduce travel speeds along NH 13 through the intersection would make the intersection safer. This could be achieved through enhanced enforcement, but also potentially with the installation of speed feedback signs. The NHDOT allows towns to purchase, install, and maintain these signs on State highways; however, if they are used the town would need to accept maintenance responsibility for the entire sign assembly including the regulatory speed limit sign (upon which the feedback sign is mounted), and the sign post and hardware. This requirement is for there to be only one entity responsible for the maintenance of the assembly. If you are interested in pursuing this option please contact Mr. William Lambert at the NHDOT Bureau of Traffic, PO Box 483, 18 Smokey Bear Blvd, Concord, NH 03301.
 - b. The Department's maintenance forces have done prior clearing in the southeast quadrant of the intersection, and will revisit this area to determine if additional clearing is possible. The potential clearing may be limited by the proximity of the Nissitissit River to the edge of the road.
 - c. This intersection may be a future candidate for an Intersection Conflict Warning System, which is an intelligent sign system that would warn Route 13 traffic when vehicles are waiting to enter the intersection from the sideroads. However, the potential availability this option is likely still several years away as the State's first pilot locations will not be installed until later this year.
 - d. Prior Transportation Alternative Program projects have built sidewalks along both Meetinghouse Hill Rd and Mason Rd, but there is no formal crosswalk across NH 13. A recent review by the NHDOT determined that a simple painted crosswalk would not be sufficient to provide a safe crossing at this location, and required that visibility enhancements be included in any future crosswalk. The Town could pursue visibility enhancements on its own, which might include improved signs, markings, lighting, and possibly a pedestrian beacon. According to the NHDOT policies, the Town would be responsible for the installation and maintenance of the crosswalk and its amenities. The NHDOT is embarking on a new safety initiative to fund and implement these same visibility improvements to uncontrolled crosswalks

statewide as part of our Highway Safety Improvement Program. This effort is just beginning and priority locations have not yet been determined. Please let me know if the Town would be interested in participating.

4. NH 13/South Main St: Sight lines at the intersection appear to be very good, but operations are complicated by the sharp angle at which South Main St intersects NH 13, and by vehicle conflicts caused by the offset driveways to State Line plaza. This intersection could likely benefit from a reconfiguration of South Main St as it approaches NH 13 to reduce the speed of northbound right turns into South Main St and to reduce the conflicts between turns into South Main St and the private driveways. Based on its crash history, this intersection could be a candidate for an RSA. If desired, please coordinate with the Nashua Regional Planning Commission for assistance applying for an RSA.

If the Town has crash records demonstrating a more substantial number and severity of crashes than I have been able to uncover with DMV crash records, the Town is encouraged to coordinate with Gregg Lantos of the Nashua Regional Planning Commission to investigate applying for an RSA. Please note that the RSA program is competitive and the chance for selection into the program will depend on how this site ranks as compared to other applicants. Please feel free to send me any questions if you would like to discuss these locations further.

Sincerely,



Michael J. Dugas
State Highway Safety Engineer

MJD

cc: W. Lambert
R. Radwanski
G. Lantos – Nashua Regional Planning Commission