



December 2, 2011

Dear:

Subject: Low Cost Safety Improvements at Stop-sign Controlled Intersections

The Federal Highway Administration is actively promoting systematic low cost improvements to increase intersection safety and has presented this concept at a one-day workshop in Massachusetts. Based on that workshop and the desire to reduce fatal and injury crashes, MassDOT is pursuing this approach to improve stop-controlled intersections in which a high number of crashes have occurred. This is consistent with strategies in our Strategic Highway Safety Plan [SHSP] to reduce fatal and injury crashes at intersections. As such, MassDOT has set aside funding to implement the improvements. The proposed improvements will consist of the "basic set of sign and pavement markings" to enhance the stop control. Research has shown this to have a crash reduction factor of 40%. The following items are included, where feasible and practical:

- •Doubled up (left and right) oversize, advance intersection warning signs with street name sign plaques, on the mainline, uncontrolled approaches
- •Doubled up (left and right) oversize, advance "stop ahead" intersection warning signs, on the stop controlled approaches
- •Doubled up (left and right) oversize, "STOP" signs
- Properly placed stop bar(s)
- Removal of any foliage or parking that limits sight obstructions
- •Double arrow warning sign at the stem of T intersections

Using three-years of crash data, 648 stop-controlled intersections were identified as having 9 or more crashes. This threshold (averaging 3 or more crashes per year per intersection) accounts for 21% of all crashes at stop-sign controlled intersections. Fifty-seven (57) of those intersections are under the MassDOT jurisdiction, five (5) are DCR jurisdiction and 586 intersections are locally owned. MassDOT is planning to implement these improvements through a series of construction contracts that will be advertised in the summer of 2012.

MassDOT is seeking your help with a 3 step process. The first step is to review the attached spreadsheet list (you can also check the map through the attached weblink - http://services.massdot.state.ma.us/maptemplate/intersection) and confirm that locally controlled stop-sign controlled intersections are in fact under local ownership and controlled by stop signs. The second step is to verify that no improvements are planned within the next two years (such as signage/marking upgrades or signalizing the intersection) or that improvements have not been made within the past two years that would have provided the above recommended improvements. Please note the results of steps 1 and 2 (verified intersection ownership / control and status of improvements) on the attached spreadsheet lists and return them to Carrie Lavallee, Project Manager, MassDOT Highway Division (contact info below) within one month of receipt of this letter.

Once steps 1 and 2 are complete, MassDOT will need your assistance for step 3 - - conducting the field work. The back-up materials are enclosed to show the level of effort that is needed. However, the actual work will be explained in greater detail once Carrie Lavallee is in receipt of the results from steps 1 and 2. You will receive a phone call, in the near future, from Carrie Lavallee, to discuss this program in more detail.

Please note that there may not be adequate funding to cover all intersections so we ask you to respond in a timely manner to ensure that your community obtains the safety improvements. To

submit the results from steps 1 and 2 or if you have any questions on the program, please contact Carrie Lavallee at 617-973-8834 or <u>carrie.lavallee@state.ma.us</u> or MassDOT, Project Management, 10 Park Plaza, Room 6340, Boston, MA 02116. Likewise, if there is a more appropriate point of contact in your community, please let Carrie know.

Sincerely.

Thomas F. Broderick, PE

Chief Engineer

Enclosures