

4/17/14

Stephanie Pure
Chair, Fremont Neighborhood Council

Dear Stephanie:

I'm writing to follow up on a commitment the Seattle Department of Transportation (SDOT) made to you and the Fremont Neighborhood Council. When we met in February, neighborhood council members provided a number of suggestions for improving the marked crossing on Stone Way North at North 41st Street, and we committed to providing a formal response.

The suggestion we heard most frequently was for some type of pedestrian-activated signal or flashing beacon to enhance driver awareness of pedestrians crossing the intersection. I'm pleased to let you know that SDOT, through our Safe Routes to Schools program, will be installing a pedestrian-activated flashing beacon in the intersection. Our target for installation is this summer, prior to the start of the next school year.

SDOT and Seattle City Light are also following up on other suggestions made at the meeting, including parking restrictions to improve visibility and changes to street lighting. These are described on the following page. I've also attached information about our signal warrant review for the intersection, as requested at the February meeting.

Thank you for your help coordinating the flow of information and ideas between the neighborhood council and our department. This has meant a great deal in facilitating improvements to Stone Way North and North 41st Street.

If you or neighbors have questions regarding the pedestrian-activated flashing beacon or our Safe Routes to School program, a best person to contact would be Brian Dougherty. Brian's e-mail is brian.dougherty@seattle.gov and his phone number is 684-5124.

For questions about the signal warrant analysis work performed by SDOT, please contact Valerie Lee of our Signals Office. Valerie's e-mail is valerie.lee@seattle.gov and her phone number is 684-5246.

If you have other thoughts or questions in general, please feel welcome to contact me directly.

Sincerely,



Mike Morris-Lent
Traffic Operations Engineer
Seattle Department of Transportation
mike.morrislent@seattle.gov
(206) 684-5727

Stone Way North and North 41st Street Work to Date, Upcoming Work, and Potential Future Improvements

Work Completed by SDOT this Year

- Stop bars were placed in advance of the marked crosswalk, along with new “Stop Here for Pedestrians” signs.
- The crosswalk markings were refreshed.
- The tree near the existing pedestrian crossing sign on the east side of the crosswalk (facing south) was trimmed to improve visibility of the pedestrian crossing sign.
- To improve line-of-sight between drivers and pedestrians, parking has been removed:
 - on the west side of Stone Way North, south of the North 41st Street south roadway (about 20 feet).
 - on the west side of Stone Way North, north of the North 41st Street south roadway (about 35 feet).
 - on the east side of Stone Way North, between the North 41st Street north and south roadways (about 30 feet).
- “Stop for Pedestrians” signs have been placed in the street on the edge of the left-turn lane in advance of the marked crosswalk.
- Requests for additional traffic enforcement at the intersection have been submitted to Seattle Police.

Upcoming Work

To improve line-of-sight between drivers and pedestrians, parking will be removed on the west side of Stone Way, in front of and behind the curb ramp on the north side of the intersection. The existing load zone at this location will be relocated to the north. We are aiming to complete this work this summer.

City Light is upgrading the lighting at the intersection. This includes increasing the wattage of the existing lights. City Light will also be relamping this area with new LED lighting this year.

Other Potential Improvements

SDOT has identified the intersection of Stone Way North and North 41st Street as a potential candidate for the installation of curb bulbs. By widening out the sidewalk at intersection corners, bulbs would enhance lines-of-sight between pedestrians and drivers and would narrow the crossing distance for pedestrians. SDOT will review this location in 2014 to evaluate constructability and cost, and will make a decision in 2015 on whether curb bulbs will be built at this location.

Neighborhood members also suggested installation of a radar speed sign along this part of Stone Way North and a raised median island at North 41st Street. Given the other improvements completed and planned at the intersection, SDOT will continue to monitor the operation of the intersection to determine whether additional changes are needed.

Signal Warrant Analysis: Stone Way North and North 41st Street

Summary

Signal warrant reviews were performed for the marked pedestrian crossing across Stone Way N at N 41st Street. These reviews were according to standards in the Manual on Uniform Traffic Control Devices (MUTCD). The location was reviewed for three signal warrant cases:

- the Pedestrian Volume warrant (MUTCD Warrant 4).
- the Seattle Half-Signal warrant.
- the School Crossing warrant (MUTCD Warrant 5).

The location did not meet warrants for installation of a signal based on the general pedestrian volume warrant (MUTCD Warrant 4), nor the Seattle Half-Signal warrant. The marked pedestrian crossing did meet the School Crossing warrant (MUTCD Warrant 5). Based on this and MUTCD guidance, a pedestrian warning flasher (i.e., a pedestrian-activated rapid flashing beacon) would be appropriate at this location.

Warrant Reviews

Information about each of the three warrants is provided below, and the review standards and analyses are attached.

Pedestrian Volume Warrant (Warrant 4, Section 4C.05 of the 2009 MUTCD)

This warrant considers signalization based on general pedestrian volumes. It takes into consideration traffic volumes and pedestrian crossing volumes. Typically, intersections that meet this warrant are in busy downtown locations.

Finding: The general pedestrian volumes at the location were about one-third of the volumes needed to meet the warrant.

Seattle Half-Signal Warrant

This warrant is based on MUTCD standards for Hybrid Beacons. It takes into consideration traffic volumes, pedestrian crossing volumes and the length of the crosswalk.

Finding: The pedestrian volumes counted were roughly one-half of the pedestrian volumes needed to meet this warrant.

School Crossing Warrant (Warrant 5, Section 4C.06 of the 2009 MUTCD)

This review takes into consideration numbers of gaps in traffic and the number of school children crossing at the location. The gap reviews are for one-hour periods before school starts and when schools let out. There must be a minimum of 20 students crossing during the highest crossing hour. When there are one-hour periods of 20 or more children crossing the street per hour and fewer than 60 gaps in traffic, the location meets the warrant.

Finding: The crossing meets the warrant. There are more than 20 crossing students during the highest crossing hour, and it was found there are fewer than 60 gaps per hour for the before and after-school times of 8:00 – 9:00 AM; 2:00 – 3:00 PM; and 3:00 – 4:00 PM.

Warrant Review Standards and Analysis

The accompanying documents include:

- selected sections from the MUTCD that describe the signal warrants reviewed for Stone Way North-North 41st Street.
- the traffic count data used to support the review of these warrants for the intersection.
- a table presenting the school crossing gap analysis, from which it is recommended that a pedestrian-activated rapid flashing beacon be installed at the intersection.