



# CITY OF CONCORD

## REPORT TO THE MAYOR AND CITY COUNCIL

**FROM:** Robert J. Mack, PE, PTOE, Traffic Engineer  
Chair, Traffic Operations Committee

**DATE:** August 25, 2015

**SUBJECT:** Report from the Traffic Operations Committee in response to a referral from Councilor Matson regarding an employee's concern that cars don't fully stop at the Canterbury/Pembroke multi-way stop intersection and requesting increased enforcement or more prominent signage.

### **Recommendation**

Accept this report.

### **Background**

At issue is a concern by an employee of Community Bridges that cars don't fully stop at the STOP signs at the Canterbury/Pembroke intersection. Requested is increased enforcement or more prominent signage. Engineering Services reviewed intersection traffic operation and safety, and the Police Department conducted targeted enforcement at the intersection. The Traffic Operations Committee (TOC) discussed this request at its August 18, 2015 meeting.

### **Discussion**

The intersection is under multi-way stop control. Crosswalks are painted across the west leg of Pembroke Road and across both legs of Canterbury Road. The visibility of the stop signs, stop lines and crosswalks is appropriate and ample on all four approaches to the intersection. A street light is located on the southwest corner. An average of about two crashes per year has been reported at the intersection since 2010. Staff observed intersection traffic operation for about one-half hour during the afternoon commuter peak period on Wednesday, August 12, 2015. No unsafe movements were observed and there was no evidence of vehicles not reacting to the stop condition on any approach. In general, when multiple conflicting vehicles arrived at the same time, most vehicles came to a full stop and took turns proceeding through the intersection. However when no other conflicting traffic was present (commonly observed), the tendency for a driver to make a slow 'rolling stop' increased.

CPD conducted a total of six directed patrols (2.25 total hours spent) at the intersection from June 1 through August 20, 2015. During this directed patrols there were no citable violations. In the course of its regular patrols, CPD has issued three citations at this intersection since January 2015.

The Ordinance for the current multi-way stop control was implemented in 1997 when traffic conditions were considerably different than today. In 1999, Pembroke Road just west of the intersection carried about 8,900 vehicles per day. Since the 2004 opening of Regional Drive, this volume has substantially reduced, with about 3,300 vehicles per day counted in 2012. Other changes tending to reduce intersection traffic demands since 1997 include a substantial reduction in the number of employees at the former Sprague facility on Canterbury Road, as well as the relocation of regular school activity from the former Dame School site. Current intersection traffic volumes may now be below the Federal threshold for implementing multi-way stop control. As noted in the past, use of multi-way stop control at lightly-travelled intersections, or intersections below the Federal volume threshold, tends to increase driver disregard of the STOP signs.

TOC concurred that the intersection is operating reasonably and that there are no significant safety concerns. A potential option, if requested, is to reconsider the Federal traffic volume warrants for multi-way stop control at this intersection; if threshold levels are not currently met, stop signs on both Pembroke Road approaches might be removed and the intersection returned to its former two-way stop control. Staff will continue to monitor intersection operation and regular enforcement efforts.

RJM/rjm

cc: Traffic Operations Committee