



CITY OF CONCORD

REPORT TO THE MAYOR AND CITY COUNCIL

FROM: Robert J. Mack, PE, PTOE
Traffic Engineer

DATE: July 12, 2018

SUBJECT: Report from the Traffic Engineer on behalf of both the Traffic Operations Committee and the Transportation Policy Advisory Committee recommending a 25 mph speed limit on Rockingham Street.

Recommendation

Accept this report and set a public hearing to amend the Code of Ordinances; Title II, Traffic Code; Chapter 17, Vehicles and Traffic; Article 17-4, Operation of Motor Vehicles; Section 17-4-17, Alteration of Speed Limits.

Background

On June 19, 2018, Rockingham Street residents Anthony Tenczar and several neighbors presented a petition signed by 260 individuals supporting the lowering of the speed limit on Rockingham Street to 25 mph as well as other options to lower speeds along the street. This latest request, one of several since 2008, was considered by the Traffic Operations Committee (TOC) on June 19, 2018 and by the Transportation Policy Advisory Committee (TPAC) on June 28, 2018. The subject request was also submitted to the City Clerk on June 19, 2018 and was subsequently provided to City Council on July 9, 2018 where it was referred to TPAC.

Discussion

Rockingham Street residents' requests to TPAC and TOC to consider lower speeds and traffic calming began in 2008. Ensuing enhancements included construction of new sidewalk in 2010, several new painted crosswalks and signs, additional 30 mph speed limit signs, targeted enforcement and use of the Concord Police Department (CPD) speed-feedback trailer. Very positive feedback was received from the neighborhood regarding the sidewalk. Speeds along the street have been relatively unchanged over the past decade (about 30 mph average speed and 34 mph 85th percentile speed). Last fall, residents again asked if TPAC and TOC could consider additional traffic calming measures or speed limit reduction to help suppress apparent speeds. Earlier this year, TOC endorsed deployment of

a weeble at the Bow Street crosswalk, which also received positive feedback from residents. The option of adding street trees through available city programs was also suggested for resident consideration.

Concord's streets are functionally classified based on intended use as an arterial, collector or local street. Arterials are the trunk lines that carry high volumes of traffic at higher speeds across the city and through the capital region. Local streets on the other hand are low-volume and low-speed streets used predominantly to access abutting properties such as residential homes. Collector streets service local properties as well as the many local streets connecting to them; as such they function as moderate-volume facilities that consolidate and direct traffic through and out of dense residential or commercial areas to connections with the arterial street network. The city has historically maintained the statutory 30 mph speed limit on all of its collector and arterial streets, among them being Rockingham Street which is classified as a collector street. While most of the city's local-classified streets are posted at the state's statutory 30 mph for urban areas, about a hundred of these local streets (and generally in dense residential areas) had been selected for down-posting to 25 mph by City Council in 2005.

TPAC and TOC plan to reconsider speed limits city-wide to make a more consistent application of 25 mph as is currently is posted on some local residential streets. The Planning Division is in the process of planning for the next update to the City's Master Plan which will occur around 2020. This effort will include an update to the Transportation Component of the Master Plan including: review of existing and planned street network and street functional classifications; consideration of village/neighborhood areas and livability; and incorporation of elements of the city's bicycle and pedestrian master plans. It was suggested that consideration of speed limits city-wide would be appropriate as part of this effort. Furthermore, the master plan update process will include substantial public outreach with opportunity for public input including public meetings. TPAC concurred with this approach at its January 25, 2018 meeting and is looking forward to participating in the master plan update process. It is noted that TPAC did not exist when the current Master Plan 2030 was finalized in 2008.

The latest neighborhood request for a 25 mph speed limit on Rockingham Street was considered by TOC and TPAC at their June 19 and June 28, 2018 meetings, respectively. Residents also requested distinctive signage such as the oversized speed limit signs with distinctive borders as had been used in several other cities. Neighborhood concerns include a high volume of traffic going too fast, inadequate sight lines at the dip in Rockingham Street at Bow Street, high number of crashes and narrowness of the residential street. Residents would like the city to keep working with them with the goal of getting lower traffic speeds along the Street.

TOC has found (from its 2008 investigations onward) that overall speeds along the street have not been inappropriately high with CPD noting substantial enforcement efforts resulting in few reported violations. Sight lines along the street are appropriate for speeds

and crash history has been low along street segments, with most reported crashes occurring at the busier 4-way stop intersections at both Broadway and South Street. TOC felt that reducing the speed limit on a collector street like Rockingham Street would likely not affect speeds much, a result measured at other locations in the city where speeds had been reduced in the past. It was felt that speed reduction on Rockingham Street would require substantial and long-term enforcement efforts and that enforcement, not lower speed limit, would have a temporary positive effect. CPD noted that given the increasing level of resident request for a speed limit reduction here, that they would support working with a lower speed limit if approved by City Council.

Since TOC endorses planned discussions of speed-limits city-wide in conjunction with the upcoming Master Plan update, it was suggested that a lower speed limit on Rockingham Street now could act as a 'test' of such a restriction on a collector street which might be useful if the same is considered on other moderate-traffic through streets in the urban core. TOC concurred to endorse a speed limit reduction to 25 mph, coupled with follow-up assessment of speeds and enforcement efforts over the next year or two.

TOC suggested that a revised speed limit here could be highlighted for the first few weeks by the addition of two, diagonal-mounted red flags to each new speed limit sign panel to attract drivers' attention to the change. This application of red flags is consistent with the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices, and is preferred by both TOC and TPAC rather than setting a precedent of oversized, color-banded speed limit signs as requested by residents.

TPAC discussed two technical studies regarding the effects of lowering speed limits. A 1992 FHWA study of the effects of raising or lowering the speed limit by as much as 15 or 20 mph was conducted at about 100 test locations across 22 states. Findings indicated neither significant change in motorists' speeds nor accident reduction for speed reductions below the average running speed. On the other hand, 'technical violations' of the reduced speed limit increased significantly. It reported that a commonly-cited reason for posting overly-low speed limits was public and political pressure.

The second study, reported by the University of Missouri in 2005, evaluated speed-reduction case studies at several cities, and in particular Springfield, Missouri. In Springfield, a well-publicized speed-reduction demonstration project was developed for a grid network of local neighborhood streets (excluding the collector streets) where speed limits were reduced from 30 mph to 25 mph. A 'pace car' program as well as substantial enforcement was part of the program. A speed reduction of a few mph was initially noted along the local neighborhood street network following the speed reduction, with some 'spillover' reduction noted on nearby collector streets. As a result of this particular study, several of those cities reduced speeds to 25mph on all local residential streets.

TPAC's Bicycle-Pedestrian subcommittee recommended further consideration a 25 mph speed limit along Rockingham Street at its June 4, 2018 meeting, noting that potentially

lower vehicle speeds would be more compatible with a mix of pedestrian and bicycle traffic along the street. However, some TPAC and TOC members continued to express concern that 25 mph may be an unrealistically-low speed limit for a collector street like Rockingham Street. One concern is that by posting seemingly-low speed limits on busier through streets, lack of compliance may become not only an enforcement problem, but could contribute to driver disregard of posted speed limits. It was suggested that the city be cognizant of what might eventually be instituted along Rockingham Street in the name of reducing speed, be it special large signs, flashers, or enforcement efforts atypical of other similar city locations. What ultimately results on Rockingham Street could be considered as precedent for the rest of the city.

At its June 28, 2018 meeting, TPAC recommended that City Council consider reducing the speed limit on Rockingham Street from 30 mph to 25 mph, including appropriate signage as determined by staff. TPAC suggested that staff monitor speeds along Rockingham Street over the coming year, and with comparison to prior speed data here, ascertain the effectiveness of a lower speed limit posting along this collector street. The results may be helpful in the upcoming broader discussion of speed limits city-wide during the Master Plan update.

cc: Traffic Operations Committee; Transportation Policy Advisory Committee; A. Tenczar