



CITY OF CONCORD

REPORT TO THE MAYOR AND CITY COUNCIL

FROM: Karen Hill, P.E., Transportation Engineer, staff representative for the Traffic Operations Committee and Transportation Policy Advisory Committee

DATE: April 28, 2025

SUBJECT: Response to City Council Referral (2): Traffic signal request on N State Street in the area of Lake and Clarke and speed and pedestrian safety concerns in this area

Recommendation

Accept this report.

Background

On May 9, 2022, City Council referred a communication from Councilor Kretovic, on behalf of a constituent, requesting consideration be made for the installation of a traffic signal in the area of North State, Clarke and Lake Streets to the Traffic Operations Committee (TOC) and Transportation Policy Advisory Committee (TPAC) for review.

On December 9, 2024, City Council referred a communication from Councilor Brown, on behalf of a constituent, requesting consideration be given to implementing safety improvements to the crosswalk at the intersection of N State Street and Lake Street to the Traffic Operations Committee (TOC) and Transportation Policy Advisory Committee (TPAC) for review.

N State Street (US Route 3) is a major arterial street with approximately 15,000-16,000 average daily traffic (ADT) in this area and a posted speed limit of 30 mph. Although a US Route, the entire Route 3 corridor is within the City's urban compact, making it controlled and maintained by the City. In the area of Clarke and Lake Streets, N State Street is primarily bordered by the RN zoning district, Neighborhood Residential District.

The area of N State Street between the Lake/Clarke Streets intersection and Hutchins Street is one 12-foot travel lane in each direction (North-South) with 5-foot shoulders that act as bike lanes on both sides. There is one section of roadway that opens up to an 8-foot parking lane on the east side. There is a CAT bus stop on either side of N State Street near the Lake/Clarke intersection. There are three crosswalks across N State Street in this area.

N State Street has a long history of speed and safety concerns, dating back to January 2007 in which a full Route 3 Corridor Study was produced by Fay, Spofford & Thorndike. That study resulted in a phased multi-million dollar CIP project (CIP #35) that was constructed between 2008-2016. The City invested in this major corridor reconstruction project to improve multimodal safety and install traffic calming measures. The project also improved major

intersections, including installing traffic signals, realigning skewed intersections and improving crossing locations with the addition of bumpouts and other geometric modifications.

Discussion

Original Referral (Councilor Kretovic)

TOC discussed the original referral during its June 21, 2022 meeting. It was discussed that there have been zero accidents at the intersection of Clarke Street in the past five years and only 3 at the intersection of Lake. Prior to the meeting, the sight lines were analyzed at 5 intersections in the area, including Hutchins, Knight, Lake, Clarke, and Engel, all of which are adequate per AASHTO guidelines. Engineering performed an initial traffic signal warrant analysis for the intersection of Clarke/Lake/N State with the existing traffic data that was available; and, none of the warrants in the Manual on Uniform Traffic Control Devices (MUTCD) were met. The Committee suggested performing current traffic counts to verify and discuss at a future meeting.

The Committee also discussed the recent rollover accident; the Police Department representative for the Committee stated it was still under investigation, but it appeared the vehicle crossed over the centerline.

At the end of 2022, Councilor Kretovic followed up on the neighborhood concerns and added that there was heightened concern following a pedestrian fatality on N State Street.

TOC then continued discussions during its January 17, 2023 meeting. It was discussed that residents were concerned about speeding traffic on North State Street near Lake Street due to the recent pedestrian fatality. Engineering noted that traffic data collection and analysis of the intersection was ongoing; more information was requested from the Police Department on the fatality.

TOC continued discussions during its February 21, 2023 meeting. The Police Department representative for the committee confirmed that the pedestrian fatality was between the Hood Plant and the COMF and confirmed the pedestrian was not crossing in a crosswalk. The Committee discussed that bumpouts would not be appropriate in this area because the road is narrow with only 5-foot bike lanes/shoulders and no parking. Due to the difficulty of data collection in this area, Engineering added this area of N State Street to the list of locations for the Central New Hampshire Planning Commission (CNHRPC), or the Planning Commission, to collect counts in 2023.

Speeds

The Planning Commission noted issues with their collection efforts and were only able to provide data for one day. TOC reviewed that speed data collected during May 2023 for N State Street between Lake/Clarke and Hutchins, near #462 as follows:

Direction	Avg (mph)	85th (mph)
Northbound	36	39
Southbound	36	39

85th percentile speed is the speed at or below which 85 percent of the drivers travel on a road segment.

Avg = Average speed
mph = miles per hour

Due to complications with the above data collection efforts, speed data was also requested from the State's TomTom data during the month of May 2023 to compare to the data collected by the Planning Commission.

Direction	Avg (mph)	85 th (mph)
Northbound	36	39
Southbound	36	42

After analyzing the traffic data, Engineering engaged the Police Department to continue enforcement of the corridor. It was also suggested that when the area is re-paved, that the pavement markings be modified to reduce the lane widths in the area to help mitigate the speed concerns.

TPAC had a series of Bow-Concord focused meetings in 2023 and a few cancelled meetings, therefore the referral was not discussed by TPAC at that time.

Recent Referral (Councilor Brown)

TOC discussed the recent referral during its December 17, 2024 meeting, Trevor Berry of 7 Lake Street attended the meeting to discuss his concerns, see attached meeting minutes. The Committee acknowledged the concerns; however, until a crosswalk policy is established and funding is appropriated, the Committee felt it is premature to recommend installation of Rectangular Rapid Flashing Beacons (RRFBs) at this location, especially considering the low pedestrian crossing volumes compared to other locations in the City where RRFBs have been requested. This location can be added to the list for further evaluation in the future.

After the above meeting, the City's General Services Department installed additional flanking crosswalk signs at this location in December 2024, see attached photos. TOC also recommended that the street light on the west side be moved to the next utility pole to the south for better lighting at the crosswalk.

TPAC discussed the recent referral during its January 23, 2025 meeting. Councilor Brown discussed that her understanding is that a lot of families have recently moved into the area, with children wanting to access the nearby park or having to cross N State Street to get on the school bus, safety concerns are now heightened.

TPAC generally agreed with TOC's actions but also recommended relocating the crosswalk sign on the east side to the grass strip if it can be relocated without encroaching into the roadway, as well as shifting the crosswalk sign on the west side to improve visibility from both directions of travel. TPAC also recommended that in-conjunction with future paving of the corridor that the corner of Lake Street intersection be modified to better accommodate pedestrian access to the existing crosswalk.

In summary, recommendations from all referrals and committee meetings resulted in the following:

- Ongoing police enforcement within the corridor.
- In December 2024, the General Services Department installed flanking pedestrian crossing signage.

Looking ahead, the additional following actions will be pursued:

1. The Engineering Division will engage the Concord School District to review bus stop safety and logistics, as well as Unitil regarding potential relocation of existing street lights to better illuminate the crosswalk.
2. Subject to final review by the Engineering Division, potential relocation of existing crosswalk signage as suggested by TPAC may be implemented.
3. The following potential capital improvement projects shall be analyzed by the Engineering Division and, subject to future appropriations, incorporated into forthcoming paving projects in the area as part of the City's Annual Highway Improvement Program (CIP #78):
 - a. Restriping existing pavement markings to narrow vehicular travel lanes; and,
 - b. Potential modification of curbing and sidewalk at the intersection of Lake and North State Street to improve pedestrian connectivity with the crosswalk adjacent to the intersection.

cc: Traffic Operations Committee
Transportation Policy Advisory Committee