



CITY OF CONCORD

New Hampshire's Main Street™

MINUTES

Traffic Operations Committee

February 21, 2017, 12:00 PM
2nd floor Conference Room
City Hall, 41 Green Street, Concord, NH

Staff Present:

Rob Mack, Engineering Services (Chair)
Ed Roberge, Engineering Services
Jim Major, General Services
Rick Wollert, Fire Alarm Division

Guests:

1. Regular Discussion Items

a. Overview of City-Wide Crash Data

Crash data for January 2017 was reviewed. There were 101 reportable crashes in January 2017. This compares with 105 and 121 reportable crashes in January 2016 and 2015, respectively. 18 crashes resulted in total of 25 people injured. There were no fatalities.

There was one crash involving a pedestrian: a pedestrian aged 40 years crossing the Clinton/South/Broadway intersection against the 'Don't Walk' light and not in a crosswalk and being struck by a Clinton Street eastbound vehicle making a left turn (minor injuries, pedestrian under influence of alcohol, pedestrian at fault).

There were no crashes involving bicyclists.

b. City Council Meeting Update

No TOC items were considered.

c. Transportation Policy Advisory Committee (TPAC) Update

TPAC will be discussing the Storrs Street Extension North project (CIP 18) at its meeting later this week.

2. Ongoing Discussion and Action Items

a. None.

3. New Discussion and Action Items

- a. **Inquiry from Councilor Keach regarding a request from an East Side Drive resident to install a street light on East Side Drive at the northern Heritage Heights driveway (*Engineering: 1/30/17*).**

At issue is a request by Chuck Strata of 149 East Side Drive to install a street light on East Side Drive in the area of the northern driveway to Heritage Heights (#149) and approximately opposite the driveway to Faith Tabernacle/East Side Learning Center driveway (#164). Cited in the request is the current lack of street lighting along this segment of East Side Drive as well as a recent vehicle crash at the church driveway.

Current city street lighting along East Side Drive in the subject area between Portsmouth Street and Loudon Road includes lighting near existing street intersections only. One exception is a street light located near #150-154 which is roughly the location of a former driveway to Heritage Heights that was removed around 2015. In the vicinity of Heritage Heights, there is private driveway lighting at East Side Drive at the center and southern Heritage Heights driveways; there is no private lighting on the subject northern Heritage Heights driveway at East Side Drive. There also appears to be a private floodlight mounted on the next utility pole north facing the Faith Tabernacle Church (not the public way). This is likely a Unitil light with funding agreement with the church.

Concord Police Department reviewed reported crash history at this driveway location over the last three years. Only one crash was reported and occurred on January 24, 2017 at about 6:00 PM. A vehicle turning left from the Faith Tabernacle driveway collided with a southbound East Side Drive vehicle, after which the southbound vehicle was pushed into the path of an oncoming northbound vehicle. The operator of the left turning vehicle was found at fault and summonsed for failing to yield to oncoming traffic while turning left. TOC felt that in 'dark' conditions, a turning driver would have a clear view of approaching headlights from both directions, as is typical at most driveway locations in the city at night.

TOC noted it is current city practice to install street lighting at public street intersections. With three exceptions, this is the case for East Side Drive from Portsmouth Street to Loudon Road; the two southerly Heritage Heights driveways are privately lit; and there is a street light on a utility pole near #154. The latter street light location is in the vicinity of the former central driveway to Heritage Heights, since closed and relocated to a new location further south (with private driveway lighting). Engineering is in the process of reviewing street lighting city-wide. One objective of this review is to consider reducing the amount of unnecessary street lighting to lessen the significant cost of power consumption, with street lighting generally limited to key street intersections and other special locations determined on safety needs.

TOC members concurred in not recommending the addition of a city-funded street light at the subject northern Heritage Heights driveway. An option would be for the resident to approach Heritage Heights and/or the Faith Tabernacle Church with regard to coordinating with Unitil for the installation of a privately-funded street light at this driveway location. As previously noted, there is already one private floodlight mounted on a utility pole just to the north facing the church. TOC further recommended that the existing street light near #154 be discontinued as the former Heritage Heights driveway located here has since been relocated.

- b. **Potential signal phasing update at the Pleasant/Green/South intersection (*Engineering: 2/3/2017*).**

Traffic signal phasing at this intersection is timed to allow 'advance green' indications for both the Pleasant Street westbound and the Green Street northbound approaches. The use of the same round green signal faces to show either an advance green which gives left-turners a 'protected' left turn movement or a 'permissive' left turn period in which they must yield to opposing traffic can cause uncertainty for drivers. As such, current Federal standards require left-turn arrow indications to be

present where ‘protected’ movements are to be indicated. Use of protected left-turn phasing is most efficient where there are separate left-turn lanes to consolidate waiting left-turn traffic. This is not the case with the subject intersection where left turns are combined with heavier through traffic flows; space is not available to install left-turn lanes without substantial street widening and/or parking removal. When the fixed-time ‘advance green’ occurs, there is frequently no vehicle there to turn left as left-turners are mixed in with the line of through traffic. Thus the advance green times out (and holding opposing traffic on a red) for mostly through vehicles that don’t need the advance. Suggested is the removal of the two advance-green phases and conversion of the signal operation to a simple two-phase. The resulting two-phase signal operation (and driver expectations) would essentially remain the same as currently occurs at this intersection for the majority of the green time that follows the initial roughly 10-second ‘advance’ times.

The subject intersection is the last location in the city using this outdated form of ‘advance green’. A conversion of similarly-outdated signal phasing was done at the Main/Pleasant intersection as part of the Main Street Complete Street Project. After nearly two years of operation, it is apparent that removal of the outdated ‘advance greens’ had no significant effect on the ability of drivers to turn left during the green time allotted, and in fact, overall delays and queuing on other intersection approaches appear to have been reduced. Furthermore, this revision would also make operation at the subject intersection consistent with the rest of the nearby intersections in the downtown core such as Pleasant/Spring; Pleasant/State; Main/Peasant; N. State/Warren; N. State/School; N. State/Capital; and S. State/Perley.

This would be a no-cost change in signal operation that could be effected by staff. The four overhead signs noting “advance or delayed green” would be removed and the removal of the ‘advance green’ timings would be set in the control cabinet. It is recommended that message boards be deployed on the Pleasant Street northbound and Green Street northbound approaches for a week or so to inform drivers of discontinuance of the advance greens.

TOC members concurred on a recommendation to revise the signal operation to remove the outdated ‘advance green’ signal phases. Benefits to the city and travelling public include: bringing an outdated signal operation into compliance with Federal standards without significant cost; maintaining signal operation that is consistent with other nearby signals; and reducing unnecessary vehicle delays and queuing on the eastbound and southbound approaches. Staff will coordinate with Administration prior to proceeding with any changes.

c. Concern from an area resident on the deteriorated condition of the Hooksett Turnpike bridge over Bela Brook and continued truck travel over the bridge (*Engineering: 1/12/2017*).

At issue is a concern about the deteriorated condition of the subject bridge and a concern that there are too many heavy trucks continuing to use it. Ed Roberge noted that this bridge is on NHDOT’s ‘red list’ and in need of replacement which is currently programmed for FY2018. The bridge is inspected by NHDOT twice yearly and is currently posted for an E2 rating (less than 70,000 lbs.). Concrete deterioration is noticeable on the bridge side-walls, although the bridge deck is still acceptable for travel. Pursuant to prior staff discussions, GSD will make some short-term repairs to the side walls in spring.

Engineering staff deployed the radar traffic counters at the bridge location. About 1000 vehicles per day currently cross the bridge. A length classification of these vehicles indicated that the 16 longest vehicles that crossed the bridge in the two-day count period were 30 to 40 feet in length.

4. Open Discussion Items

a. Staff response to miscellaneous inquiries (refer to correspondence in agenda packet). – None.

Next meeting date: March 21, 2017