



CITY OF CONCORD

New Hampshire's Main Street™

MINUTES

Traffic Operations Committee

June 20, 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
John Stoll, Planning Division
Rick Wollert, Fire Alarm Division

Guests:

1. Regular Discussion Items

a. Overview of City-Wide Crash Data

Crash data for May 2017 was reviewed. There were 106 reportable crashes in May 2017. This compares with 93 and 96 reportable crashes in May 2016 and 2015, respectively. 15 crashes resulted in total of 16 people injured. There were no fatalities.

There was one crash involving a bicyclist: a bicyclist aged 6 years traveling southbound on Max Lane and pulled out onto Pekoe Drive and collided with a vehicle traveling eastbound along Pekoe Drive (minor injury, fault not determined, helmet use not noted).

It was noted that in 2017 thus far, there have been five crashes reported at the Pleasant/Langley intersection. Engineering will coordinate with CPD to further investigate crash history at this intersection and will report back to TOC next month.

b. City Council Meeting Update

At its June 12, 2017 meeting, there was a request referred to TPAC for a crosswalk on Storrs Street at Dixon Avenue (see Item 1.c below).

c. Transportation Policy Advisory Committee (TPAC) Update

TPAC will be discussing the Franklin Street referral from Council (Item 3a below). TPAC also received another referral from Council with a request to paint a crosswalk on Storrs Street at Dixon Avenue; staff noted that this crosswalk has just been painted per TOC recommendation last March. Engineering is still finalizing a response for a referral to TPAC requesting curb modification at the driveway to #224 N. State Street. TPAC-Bike/Ped cancelled its plan for a bike-lane demonstration project along Broadway this summer.

2. Ongoing Discussion and Action Items

- a. None.

3. New Discussion and Action Items

a. Referral from Councilor Champlin regarding a constituent concern on Franklin Street speeding (*Council: 5/8/17*).

Following up TOC's discussion last month, CPD conducted six directed patrols on Franklin Street in May and June at various times during the morning and afternoon commuter peaks. No citations or warnings were noted during these patrols. Speeds on over one hundred vehicles were observed, with average speeds being between 30 and 32 mph.

TOC members concurred that enforcement efforts were appropriate in this case. There was no support for the addition of multi-way stop signs for speed control at the requested Franklin street intersections. TOC noted strong support for the proposed Langley Parkway Phase 3 project which would make a long-term improvement to livability along this section of Franklin Street by diverting away a substantial volume of traffic, and particularly the daily commuter cut-through between I-393 and the medical campus area. Staff would share these recommendations with TPAC when it discusses this referral at its meeting this Thursday.

b. Pleasant Street Rezoning Proposal.

Rob Mack summarized the findings of a June 2017 Traffic Impact and Rezoning Study (TIRS) prepared by Stephen G. Pernaw & Company, Inc., regarding the proposed rezoning of a portion of the Route 202/9 corridor (Pleasant Street) from a residential to an institutional zone. The initial project at hand is Concord Orthopaedic's proposed redevelopment of a single-family house lot at 297 Pleasant Street to include a proposed ambulatory surgical center. While this is addressed, the primary purpose of the TIRS is to assess long-term traffic impacts of the potential rezoning of this and nearby lots along a segment section of Pleasant Street west of Langley Parkway.

The TIRS study area includes the segment of Pleasant Street about one-quarter mile west of the Langley Parkway intersection that is the subject of the proposed rezoning. The study area also includes the following key intersections: Pleasant Street/Proposed Surgical Center Driveway (stop sign); Pleasant Street/Langley Parkway (signal); Pleasant Street/Hospital East Driveway (signal); and Pleasant Street/Warren Street/Fruit Street (signal). Periods of analysis include the weekday morning and afternoon commuter peak hours during a 2018 opening year and a 2035 horizon year. The 2018 near-term analysis assumes the current street network and considers impacts of only building the proposed surgical center. The 2035 horizon-year analysis is multifaceted in that it considers various combinations of future area developments and/or roadway improvements, including: building (or not) the proposed surgical center; fully redeveloping (or not) the proposed rezoning area; and building (or not) the proposed Langley Parkway Phase 3 extension to Bouton Street/N. State Street.

The TIRS reports that the proposed rezoning area could support the additional development of up to about 262,737 square feet of the following uses: medical office space (116,484 sf assumed); general office space (49,922 sf assumed); educational/school space (39,331 sf assumed); and potential expansion of the existing assisted living facility (24 additional beds assumed). Potential development in excess of 262,000 sf of medical, office and educational uses could generate an additional traffic flow of about 500 (AM) to 600 (PM) peak-hour vehicle trips along this segment of the corridor, the majority of which would be to/from the east. While substantially less traffic would be generated at non-commuter-peak times, impacts at the peak-traffic periods typically define the operational characteristics and highway improvement needs of the corridor.

The section of Pleasant Street between the medical campus area and the Pleasant Street/Warren Street/Fruit Street intersection is not only the western arterial route for travel to the downtown area,

but also the focal point for direct access to the medical campus area, the state office park and hospital and Concord High School. Peak traffic flows along this corridor are significant and much of it traverses high-density residential streets in the West End neighborhood to access regional travel corridors such as I-93 north, I-393, Loudon Road and US 3 North. In 2008, the southern extension of Langley Parkway to Clinton Street diverted a substantial volume of traffic from this section of Pleasant Street bound for Clinton Street to the west and I-89; commuter-peak-period delays and queues were noticeably reduced at the Pleasant/Warren/Fruit intersection, as was commuter cut-through traffic along the residential Upper School Street corridor. Further substantial traffic-flow reductions along the subject section of Pleasant Street are anticipated following the completion of the Langley Parkway Phase 3 extension to Bouton Street. This new corridor would provide alternative access for trips to/from the aforementioned regional corridors to the north and east of the city. Additional traffic demand related to the build-out of the proposed rezoning area adds traffic growth to the subject section of the Pleasant Street corridor. While this potential added growth would be significant without Langley Parkway Phase 3, it would be reduced with Phase 3 in place.

Traffic Volume Changes

Pleasant Street west of The Birches. Current AM and PM peak-hour traffic volumes within the western section of the proposed rezoning area range from about 710 to 790 vehicles per hour. By 2035, with no new roadway improvements or zoning change (known background traffic growth, only) these peak-hour volumes will increase to about 1,190 to 1,250 vehicles per hour. The construction of Langley Parkway Phase 3 is expected to result in a reduction of about 70 vehicles per hour at this location, while the hypothetical 2035 build-out of the proposed rezoning area could add an estimated 160 to 190 vehicles per hour with Langley Parkway Phase 3 or an estimated 230 to 260 vehicles per hour without the Phase 3 project.

Pleasant Street west of Langley Parkway. Current AM and PM peak-hour traffic volumes in this area just east of the proposed rezoning range from about 770 to 870 vehicles per hour. By 2035, with no new roadway improvements or zoning change (only known background traffic growths) these peak-hour volumes will increase to about 1,190 to 1,270 vehicles per hour. The construction of Langley Parkway Phase 3 is expected to result in a reduction of about 70 vehicles per hour at this location, while the hypothetical 2035 build-out of the proposed rezoning area could add an estimated 340 to 440 vehicles per peak hour with Langley Parkway Phase 3, or 410 to 510 vehicles per hour without Phase 3.

Pleasant Street west of Warren and Fruit Streets. Current AM and PM peak-hour traffic volumes in this area range from about 1,070 to 1,140 vehicles per hour. By 2035, with no new roadway improvements or zoning change (only known background traffic growths) these peak-hour volumes will increase to about 1,180 to 1,560 vehicles per hour. The construction of Langley Parkway Phase 3 is expected to reduce peak-hour traffic here by about 310 to 460 vehicles per hour at this location. The hypothetical 2035 build-out of the proposed rezoning area could add an estimated 170 to 260 vehicles per peak hour with Langley Parkway Phase 3, or 220 to 300 vehicles per hour without Phase 3.

Long-Range Roadway/Intersection Improvement Needs

Pleasant Street west of Langley Parkway. Long-term redevelopment of the proposed rezoning area will require widening of this section of Pleasant Street to a three-lane section, with the center lane providing for left-turns (either individual left-turn lanes at major driveways or a two-way left-turn lane). Staff recommends that potential planning for such future widening consider gradual acquisition of additional right-of-way from redevelopment parcels for the lane widening, including space for bicycle shoulders, utilities and sidewalks. This three-lane section would extend from Langley Parkway westerly to either the limit of the redeveloped parcels, or more desirably, the entrance to St. Paul's School. Without the rezoning, the existing two-lane roadway would remain

sufficient. The implementation (or not) of Langley Parkway Phase 3 by 2035 does not affect either of these findings.

Pleasant Street/Langley Parkway intersection. This intersection was enlarged in 2008 as part of the Langley Parkway Phase 2 extension to Clinton Street. Under its current configuration, long but acceptable delays and under-capacity operation can be expected through 2035 assuming no additional corridor improvements are made and rezoning does not occur. Construction of the proposed Langley Parkway Phase 3 project would divert significant area traffic to the Langley Parkway approaches, requiring additional intersection improvements including the addition of right-turn lanes on both the Pleasant Street eastbound and westbound approaches. These improvements, outlined in the 2015 Phase 3 study, will allow the intersection to operate at or below capacity through 2035.

With the additional traffic generated by the potential build-out of the rezoning proposal (and with Langley Parkway Phase 3), an additional right-turn lane will be needed on the Langley Parkway southbound approach in addition to the two aforementioned right-turn lanes on the Pleasant Street approaches in order to maintain below-capacity operations in 2035. This same level of intersection improvement (three additional right-turn lanes) would also be required if the proposed rezoning area becomes redeveloped while the Langley Parkway Phase 3 project remains deferred.

Pleasant Street/East Hospital Drive intersection. This intersection was reconstructed in 2016 to provide for two-way traffic flow on the hospital drive as well as traffic signalization. The intersection as currently configured is based on the 2035 intersection improvement needs reported in the Langley Parkway Phase 3 study. This intersection will operate well at low to moderate delay through 2035, with or without the Langley Phase 3 extension, and with or without the proposed rezoning.

Pleasant Street/Warren Street/Fruit Street intersection. This intersection currently experiences operational difficulties during peak periods, and very long delays can be expected by 2035 if no additional corridor improvements are made. Past city studies, including the Langley Parkway Phase 3 study, conceptualized future reconstruction of this intersection into a roundabout configuration. As construction of Langley Parkway Phase 3 results in a substantial reduction in future traffic flowing through the intersection to/from the west on Pleasant Street, it had been determined that a single-lane roundabout could service 2035 traffic flows. The TIRS reports that this would still be the case with the additional traffic generated by the rezoning proposal. On the other hand, without Langley Parkway Phase 3, a substantially larger intersection improvement becomes necessary, such as a two-lane roundabout. Without such substantial improvements the added delays resulting from the rezoning proposal would be a significant concern at this intersection.

Other Findings

The TIRS also considers a traffic impact assessment for the initial redevelopment of #297 Pleasant Street to include a 20,000 square foot ambulatory surgical center and conversion of the existing house to 1,700 feet of office space. The TIRS estimates that this will generate 26 AM peak hour trips and 19 PM peak hour trips. The larger AM value generally amounts to about one additional car along Pleasant Street per two minutes. Such a low traffic volume would not have a significant impact on Pleasant Street traffic operations assuming an appropriate driveway design.

TOC members reaffirmed their support for the Langley Parkway Phase 3 project as a needed corridor improvement, rezoning or not. It was felt that providing appropriate transportation needs for area redevelopment under the rezoning proposal would be more viable with Langley Phase 3 in place. Without Langley Parkway Phase 3, travel along the Pleasant Street corridor would continue to deteriorate through the years without substantial lane widening and intersection improvements; this deterioration would be accelerated by potential additional traffic associated with the subject rezoned area.

4. Open Discussion Items

a. Staff response to miscellaneous inquiries (refer to correspondence in agenda packet).

TOC members discussed a new referral to CPD from the Woodcrest Heights Neighborhood Association with concerns on speeding along Woodcrest Heights Drive and requesting additional enforcement or speed bumps. Staff will be deploying radar speed counters to document actual speeds; data will be provided to CPD for follow-up enforcement.

Next meeting date: July 18, 2017