Engineering Services Division

Traffic Operations Committee

Meeting Minutes - November 15, 2011

Attendees:
Rob Mack, PE, PTOE, Engineering Services
Ed Roberge, PE, Engineering Services
Steve Henninger, Planning Division
Jim Major, General Services
Greg Taylor, Concord Police Department
Bill Dexter, Concord Police Department
Dave Florence, Concord Police Department
Rick Wollert, Concord Fire Department
Dick Lemieux, TPAC Chair
Jennifer Kretovic, TPAC Public Transit

Visitors:
Don Lyford, NHDOT (Item C.1)
Anthony King, NHDOT(Item C.1)
Peter Salo, NHDOT (Item C.1)
Bob Landry, NHDOT (Item C.1)
Gene McCarthy, McFarland-Johnson (Item C.1)
Mike McDonald, McFarland-Johnson (Item C.1)
Brian Colburn, McFarland-Johnson (Item C.1)
Allen Bennett, City Councilor Ward 6 (Item C.1)
Ginny Schneider, Community Action Program, Belknap and Merrimack County (Item C.2)
Jim Sudak, Capital Area Transit (Item C.2)
Kevin LeBlanc, Resident (Item D.2)

Regular Discussion Items

1) **Overview of city-wide accident data, including prior-month accident summary and discussion of select accident locations, circumstances and potential action.**

DISCUSSION / ACTIONS: Traffic accident data for October 2011 was reviewed. There were 94 reportable accidents in October 2011. This compares with 108 and 115 reportable accidents in October 2010 and 2009, respectively. 19 accidents resulted in total of 25 people injured, with 7 of those injuries occurring on Loudon Road. There were no fatalities.

There were two accidents involving pedestrians: a pedestrian aged 85 years walking along Bow Street and being struck by a vehicle backing out of the driveway at #14 (minor injury, driver at fault); and a pedestrian aged 15 years crossing Warren Street from Pizza Fina to the High School and being struck by an eastbound vehicle which had just stopped for a different group of pedestrians (minor injury, driver at fault).

There were no accidents involving bicyclists.

2) **City Council meeting update.**

DISCUSSION / ACTIONS: At their November 14, 2011 meeting, Council approved the No Parking, Standing or Stopping Ordinance on South Street near Conant School.

3) **Transportation Policy Advisory Committee (TPAC) update.**

DISCUSSION / ACTIONS: At TPAC's October 27, 2011 meeting, City Planning gave a presentation on the City's Transportation Impact Fees, and Central New Hampshire Regional Planning Commission presented the Mid-State Regional Coordinating Council and efforts to coordinate a volunteer driver ride program.

B. On-going Discussion and Action Items.

1) **None.**

C. New Discussion and Action Items

1) **Potential Exit 12 bridge replacement alternatives with presentation by NHDOT.**

DISCUSSION / ACTIONS: NHDOT staff and their design consultants from McFarland Johnson attended the meeting and presented alternatives for the potential reconstruction of the I-93 Exit 12 interchange. The NH Route 3A (NH 3A) structure over I-93 is one of NHDOT's 'red-listed' bridges for priority deck replacement. This project is planned for 2012 design and completed construction by 2014. It follows the 2010 reconstruction of the Exit 14 bridge over Loudon Road and the current bridge reconstruction at the I-93/I-89 Interchange. The design objectives include widening the bridge crossing to accommodate the future needs of I-93 (anticipated to be a 6-lane highway with capability to widen to 8-lanes if auxiliary lanes become needed to process the heavy movement of interstate traffic between the I-89 and Exit 13 interchanges). Another objective is to consider the future needs of the NH 3A / S. Main Street corridor. NHDOT presented two conceptual alternatives that meet these objectives for purpose of getting initial feedback from TOC.

Alternative A includes a two-span (200 ft long) bridge parallel to and offset from the existing bridge with a center pier in the median of I-93. The bridge would be wide enough for three travel lanes, shoulders and a sidewalk on the south side. The existing ramp configurations would be retained. Traffic capacity at the NH 3A/ramp intersections would become limited within about 10 years and would warrant future reconstruction to include signalization or roundabouts. Estimated construction cost is $4.0M. Advantages include: retention of the existing Exit 12 configuration; and retaining flexibility for future consideration of multiple reconfigurations for the Exit 12 ramps. Disadvantages include: requiring staged demolition of existing bridge in order to maintain traffic; requiring a new pier in the median of I-93; and maintaining a structure that angles across I-93 with higher long-term maintenance cost.

Alternative B includes a single-span (170 ft long) bridge perpendicular to I-93. The bridge would be narrower to support two travel lanes, shoulders and a sidewalk on the south side. Existing ramps would be revised to a new diamond configuration and would intersect NH 3A at two roundabout intersections, one on each side of the bridge. Roundabouts would be multi-lane and large enough to

accommodate the biggest interstate trucks. Estimated construction cost is $4.0M. Advantages include: constructing bridge and roundabouts off-line and without impacting existing traffic flows; not needing a pier needed in the I-93 median; with roundabouts, maintaining good intersection capacity and safety far in excess of the 20-year traffic projection. Disadvantages include: implementing a new interchange configuration and traffic patterns; complicating future bridge redecking due to narrower bridge; inflexibility for alternative future interchange design configuration; and potential objection to roundabouts by trucking industry.

The NHDOT expressed no particular preference for either alternative, although Alternative B's smaller bridge at right angle to I-93 and without center pier in the freeway medina was preferred by bridge engineers. TOC members noted that for the same $4M cost, Alternative B (roundabouts) provides for ample ramp-intersection capacity and safety well into the future, while Alternative A would require a future project and additional funding to build signals or roundabouts. In terms of land-use planning, the roundabouts in Alternative B are preferred as they can provide a physical separation/gateway along NH 3A between the highway-service land use to the south and the urban use to the north; Alternative A, on the other hand, would maintain NH 3A as a 'through road' in appearance between the two sides of the bridge. Maintenance and snow plowing of the bridge, ramps and any roundabouts would be NHDOT responsibility.

Based on the information presented, TOC members expressed their initial support for Alternative B (roundabouts) over Alternative A. NHDOT appreciated the feedback from TOC and planned to also present the project alternatives to TPAC on November 17, 2011. NHDOT would plan a public information meeting in the future to also gage the general public's support for the alternatives presented.

2) **Potential placement of new CAT bus schedule signs at bus stop locations.**

DISCUSSION / ACTIONS: Ginny Schneider presented a sample bus schedule sign proposed to be installed at about 109 CAT bus stops in the city. The 8"x20" sign has a metal frame (black preferred) and Plexiglas window behind which is placed a color-coded card showing a bus route map and time schedule. Proposed is the installation of the new sign assembly at all bus stop locations, preferably mounted below one of the No Parking - Bus Stop signs already at the stop location. CAT signs would be placed to face the sidewalk or other location facing prospective CAT patrons waiting at the stop. CAT has about $2,000 available for installation cost, and inquired if the City could assist with installation at the 109 locations.

TOC members concurred with the proposed signs, with one sign being located at each bus stop and preferably on an existing bus stop sign post nearest the location of the front door of the stopping bus. Ed Roberge offered to follow up with Ginny Schneider and General Services regarding details of installing the signs, cost of installation and potential for the City to assist with the installations.

3) **Follow-up discussion on Rockingham Street 9-foot lane markings.**

DISCUSSION / ACTIONS: Following completion of the sidewalk and curb work along Rockingham Street, General Services repaved Rockingham Street but did not yet replace the yellow centerline and white edge lines as were installed in 2009 to define 9-foot travel lanes and shoulder areas. In late 2008, TOC recommended a trial installation of the narrower lanes to: promote (visually) lower travel speeds as well as define some space for pedestrian and bicycle travel prior to the then-pending installation of sidewalk. Council approved TOC's recommendation in December 2008 and the lane

lines were painted later in 2009 with TOC to provide follow-up monitoring and assessment. Speed data compiled by Engineering after the markings were installed indicated a small reduction in travel speed of one to two miles per hour near the dip in the road west of Bow Street where higher speeds occur. TOC members noted receiving positive comments from the public including Rockingham Street residents regarding the narrower lanes; no negative complaints were noted. Also noted was the observation that the white edge lines had acted to reduce on-street parking that used to encroach well onto the street pavement. Rob Mack noted that a recent study published in the ITE Journal involved use of pavement markings to narrow travel lanes with significant speed reduction realized in areas higher travel speed. The use of the narrow lane markings on Rockingham Street was also recently discussed at a meeting of the Transportation Advisory Council of the Central New Hampshire Regional Planning Commission as a regional example of a low-cost municipal effort to better accommodate multi-modal ("complete streets") travel along a constrained existing roadway.

Rob Mack noted that Engineering had placed speed counters on Rockingham Street this week to get updated speed data now that the sidewalk and curb work is complete (but without pavement markings). Data will be available for continued discussion of this item at next month's meeting.

D. [redacted]

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

DISCUSSION / ACTIONS: None

2) **Other Business.**

Kevin LeBlanc of 2 Penacook Street (in Penacook) came to follow-up on TOC's October findings andrecommendations for Penacook Street that included: a recommendation to reduce the posted speed limit on Penacook Street from 35 mph to 30 mph; and to extend the double yellow centerline through the turn at the Penacook/Merrimack intersection when lines are repainted there. Mr. LeBlanc concurred with the line restriping but asked it the speed limit could be further reduced to 25 mph. Rob Mack noted that 30 mph was the statutory speed for local streets within the Urban Compact and that the engineering study of speeds along Penacook Street did not support a further reduction to 25 mph at this time. If approved by City Council, staff would monitor speeds along Penacook Street in the coming year to assess the effectiveness of the speed limit change to 30 mph.

Respectfully submitted,

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

The next Traffic Operations Committee meeting will be held on Tuesday, December 20, 2011 @ 12:00 PM in the 2ND Floor Conference Room.