16th Avenue ESR & Markham Road Widenings

Hi Veronica, thank you for the reply to our letter. In summary, we feel our concerns were not adequately addressed, and given the complexity of the issues we once again request a meeting with the project team. Here are some further supporting comments;

1. **Stakeholder Engagement**. We do recognise the work that was done, and accept your comment about exceeding minimum requirements. It should not however be necessary to be a Twitter or Facebook user, and "follow" York Region, in order to be engaged, and hope this is not a model for future EAs. Rather the stakeholder engagement process being used for the Kennedy Rd EA, with a formal engagement committee that includes resident associations should be a part of the model going forward for any significant EAs.

2. **Overall Strategic Case**. We are very concerned that the work assumed the TMP as the base case and followed on from there without reviewing and confirming the base case assumptions, and without taking into account issues that the TMP did not appear to address. Issues we highlighted in our letter for example such as changes in demographics, the impact of induced demand bringing forward the same congestion quickly anyway, and an assessment if the $150 million should be better spent on more strategic solutions as is now happening in other municipalities, as described by Mr. Iain Lockwood at the Markham DSC meeting on January 22nd. At the same meeting, York Region's Mr. Brian Titherington stated that this corridor will likely never be a major transit corridor with high bus frequencies and customer demand, due to the existing built form. We agree, so where is the overall cost benefit analysis that says that sufficient people will use the proposed 15 minute transit service to make the $150 million investment in road widening for transit/HOV worthwhile?

3. **Other Alternatives**. Here are just a few comments, sufficient only to explain why we feel these options still need further study, and best dealt with in more detail in the requested meeting.

> **a. Arterial Intersection Improvements Only**. 16th Ave intersects several major north-south arterials, each also carrying significant traffic volume. If we assume, for purposes of discussion, that only 50% of the time will be given to a green light for 16th and if, during that period, 3 lanes of traffic can move through the intersection, rather than 2, then the new capacity of the corridor would be 150% of the current capacity. This is a significant jump. We would be happy to share in a meeting our belief that there are also further opportunities for intersection design efficiency and pedestrian safety that should be considered.
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> The benefits of not widening the links include major cost and residential impacts, such as reduced construction cost, no need to widen bridges, street trees are saved, noise barriers not needed, transit queue jump lanes can be incorporated, etc.
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> The cost benefit study of improving intersections and links versus intersections only, was not, and needs to be, addressed.
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> **b. Improved Transit Priority.** Answer noted, thank you.
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> **c. Reversible Centre Bus Lane.** Thank you for your detailed response, however, we believe more discussion is needed. You cite 4 points against reversible lanes in general. These appear to relate

mostly to reversible general purpose lanes, similar to Jarvis Street. These are not relevant in the context of a reversible bus-only lane.

At the Markham DSC meeting on January 22nd, Mr. Ian Lockwood noted, in reference to HOV lanes, that Eugene, Oregon, uses a reversible median bus-only lane and that this would be a preferred way to advantage transit. There is considerable reputable literature available on this concept we can reference in the meeting, here are some examples (Article 1, Article 2, Article 3). Both bi-directional centre lanes (with signal control, as currently exists on Highway 7/Hwy 404) and reversible lanes (one direction in morning peak, another in evening) are cited in these documents. Eugene uses the first approach. Rouen, France uses a modified version of the bidirectional lane, where buses in opposite directions can pass each other at intersections, at what is called a "virtual busway".

These approaches work best for low bus frequencies, which is the predicted situation for 16th. The issues you cite (space for transit stops, confusion to riders) may or may not be significant depending on detailed design and vehicle type. But, as with all projects, the advantages need to be weighed against the disadvantages.

The advantages of reversible median bus lanes include lower construction cost, less need to widen bridges, fewer street trees removed, and excellent transit priority. A cost/risk/benefit study should be done on this option.

d. Alternative East/West Corridor. Notwithstanding the overall Transportation Master Plan, the effects of widening a parallel route (e.g. Major Mackenzie) on the Vehicle/Capacity ratio for 16th should also be studied. Has the actual usage on today's Highway 7 been compared with the forecasts, and lessons learned applied to the plans for 16th Ave? These actions would then enable prioritization of capital improvements for Major Mackenzie Drive versus 16th Avenue. This prioritization is not evident in the study.

Perhaps some of the less-intrusive alternatives suggested in our letter for 16th Avenue would then become viable. Bypasses have been used for decades by traffic engineers to reduce demand on a particular road. It seems from Appendix F that widening of adjacent corridors in lieu of 16th was not modelled. This should be studied.

e. Reduced Lane Widths. Thank you for the table summarizing proposed design criteria. However, it does not provide a rationale or risk-benefit analysis of reducing lane widths to the values suggested in our letter. We cited several benefits of narrower lanes, including, more room for active transportation options, easier crossings for pedestrians, less disruption to residents in terms of noise and vibration, fewer environmental issues (salt, storm water management), less cost to construct and maintain. A risk/benefit study is needed with respect to narrower lanes.

Again, given the complexity of the issues, we respectfully request a meeting with the project team.

Sincerely

Michael Gannon. Sent via email to veronica.restrepo@hdrinc.com January 28th 2020

Director Unionville Resident's Association