Ward 30 Bikes' Proposed Amendment to the 'Temporary Conditions' Recommendations

Monday, February 27, 2017

In the Review of Temporary Conditions for Cyclists and Improvements to Safety ¹; In Appendix A ²:

Under section '3.' "Consider Temporary Options for Bicycle Lane/Cycle Track in Work Zones"; Beside letter 'c.' (page 4) "Close the Bicycle Lane, Use Temporary Markings to Highlight Cycling Path of Travel in a Shared Lane";

Four bullet points mark recommendations:

- In shared traffic lanes which are less than 3.3 metres in width, shared use lane pavement marking "sharrows" may be installed
- at the middle of the traffic lane to provide a message that the lane is shared for limited periods.
- Shared use lane pavement markings should not be used on streets with posted speeds greater than 50km/h.
- Consider reducing posted speed on roadway to <40 km/h if only a shared use lane can be provided. City of Toronto and other municipalities have delegated authority under OTM to reduce speed limits through work zones.

Propose Amend fourth bullet point - YELLOW HIGHLIGHT - replace "<40 km/h" with "30 km/h".

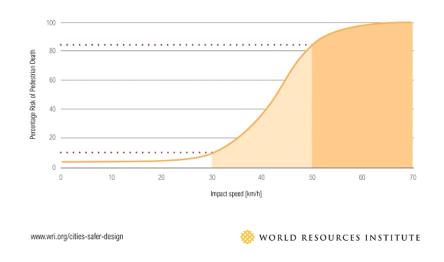
Rationale for this proposed amendment:

As the report notes, cyclists generally travel at about 20 km/h, therefore in a shared road condition - and especially one where the cycle lane is being temporarily discontinued and cyclists are required to merge with motor vehicle traffic in a shared lane - a posted speed of 30 km/h will create a relatively safe condition and good traffic flow for all modes; is a reasonable policy in the dense urban core (Toronto & East York); is within OTM Book 7 speed reduction guidelines ³; and conforms to Vision Zero recommendations ⁴.

As we know from the Vision Zero research, a person hit by a vehicle going 20 km/h has a MUCH better chance of surviving the collision than a person hit by a vehicle at say, the report's recommended, "<40 km/h" - not to mention the reduced likelihood of a collision happening at all, if the speed limit through construction zones on Major Arterials and Collectors in Toronto's dense urban core were a standard, 30 km/h.

On the chart below note how between 30 km/h and 40km/h the Percentage Risk of Pedestrian Death spikes as opposed to the relatively flat profile between 20 km/h and 30 km/h (and a 1% rise between 1 km/h and 20 km/h!):

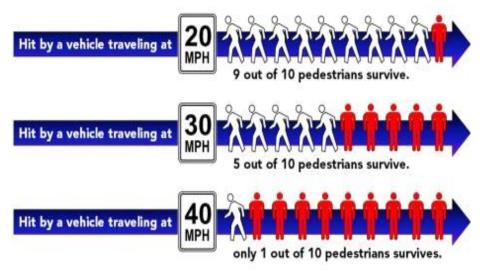
Pedestrian Death Risk Declines at Lower Vehicle Speeds



(Chart Image: Pedestrian Death Risk and Vehicle Speed |

https://raisethehammer.org/static/images/chart_pedestrian_death_risk_and_vehicle_speed_world_resources_institut e.jpg)

Graphic from NYC Vision Zero indicates survivability rates at different speeds:



(Image from TheUrbanist | ICYMI: New York City Implements 'Vision Zero' | https://www.theurbanist.org/2014/11/11/icymi-new-york-city-implements-vision-zero/)

Added to this is the benefit to the City over the long term in lower road maintenance cost if the liabilities that construction companies face while doing City of Toronto contracts are lower due to a marked decrease of on-the-job injury and death from worker/private motor vehicle collisions. Worker injury due to through-traffic is a major concern for the Province of Ontario and the Road Construction Industry ⁵.

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Footnotes

¹ Review of Temporary Conditions for Cyclists and Improvements to Safety http://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-101365.pdf

Appendix A - Guiding Principles for Cylcing Safety in Work Zones | http://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-101366.pdf

³ OTM Book 7 - Temporary Conditions, section 2.6, (page 48) | http://www.bv.transports.gouv.qc.ca/per/0980389/08_Book_7.pdf

⁴ World Resource Institute | Ross Center for Sustainable Cities | **Cities Safer by Design** - July 2015 (page 20 of 104) | http://www.wri.org/sites/default/files/CitiesSaferByDesign_final.pdf (source via Raise the Hammer - April 18, 2016 | **Why Vision Zero Calls for a 30 km/h Speed Limit** | https://raisethehammer.org/article/2919/?view=flat)

⁵ In 2012 Ontario Ministry of Labour conducted inspection blitzes at road construction sites to try and mitigate what the Ministry saw as an alarming trend in the increase in worker / private motor vehicle collisions at road-based construction sites (below, see quote from page 1, paragraph 3 - MOL Blitz Results 2012*):

Traffic control

In June, the MOL conducted an inspection blitz on the dangers of working around vehicles and large pieces of mobile equipment at construction sites, including roadwork projects. During this period, 944 orders were issued, 56 of which were stop-work orders. The orders were based on 573 field visits by inspectors. The orders issued most often were for

- · lack of protective headgear
- · failure to develop and use a traffic protection plan
- · failure to ensure workers and employer complied with the Occupational Health and Safety Act and regulations

The MOL chose this issue for its blitz because there had been so many injuries and fatalities in this kind of work. Between 2009 and 2011, four workers were killed or injured on construction sites and roadwork projects and fifteen workers were seriously injured.

* MOL Blitz Results 2012 | https://www.ihsa.ca/pdfs/magazine/volume_13_Issue_1/MOL_Blitz_Results_2012.pdf