



**MORE PEOPLE BIKING
MORE OFTEN**

December 7, 2017

Re Pembina Highway Speed Limit Review

Bike Winnipeg is opposed to the proposed speed limit change on Pembina Highway south of the La Salle River Bridges from 60km to 70 km/hr. Our reasons for opposing the speed increase are outlined below, along with discussion on the hazards we feel that the proposed speed increase will produce and counter measures we feel could be used to better manage speed and increase safety on this strip of Pembina Highway.

1. The most likely result of raising speed limits based on 85th percentile speeds is to raise the 85th percentile speed.
2. Rising speed limits tend to increase speeds, and the increased speeds tend to spill over into adjacent road segments and roadways.
3. Despite the reasonable assumption that the proposed speed increase will spill over into sections of Pembina Highway north of the La Salle Bridge, no analysis of collisions or speeds on road segments north of the La Salle River Bridge have been undertaken as part of this report.
4. Despite research showing the effectiveness of various counter measures to reduce speed (including 85th percentile speeds), the report fails to analyse any counter measures that might be used to reduce speeds to the desired, safer speed.
 - a. Counter measures such as speed feedback signs, landscaping, and pavement legends have been shown to reduce speeds in a consistent, cost effective manner.
5. The proximity to St. Norbert suggests slower speeds are desirable, not higher speeds. Spillover effects of the proposed speed limit increase could have unintended consequences for vulnerable road users north of the La Salle Bridges.
 - a. The Rue des Trappistes/Avenue de l'Église intersection is just 250m north of the proposed speed limit change (70 km/hr down to 50 km/hr)
 - b. The Pedestrian Corridor at St. Norbert Farmers Market is less than 550 m north of the proposed speed limit change (70 km/hr down to 50 km/hr).
 - i. Crossing 3 lanes of traffic in each direction, this pedestrian corridor already represents a safety concern.
6. Connections to Turnbull Drive
 - a. St. Norbert Heritage Park
 - b. Floodway Trail
7. Connections to Transit
8. Existing speeding in Urban Road Cross Section
9. Plans for a St. Norbert By-Pass
10. Future plans for additional residential development in Precinct L

Setting Speed Limits Based on 85th Percentile Speed is Not Evidence Based

Using the 85th percentile speed to rationalize an increased speed is a poor argument for a higher speed. It produces a circular argument that raised speed limits to match observed speeds only to see observed speed rise with the increase speed limit. At the same time, it ignores the very real safety issues associated with higher speeds, particularly with respect to vulnerable users such as people on foot and bike.

In its 2017 report, [Safety Study: Reducing Speeding - Related Crashes Involving Passenger Vehicles](#), the National Transportation Safety Board states the following with respect to using the 85th percentile to set speed limits:

“Using the 85th percentile speed to set speed limits on road segments may have unintended consequences. Raising the speed limit to match the 85th percentile speed may lead to higher operating speeds, and hence a higher 85th percentile speed. This generates an undesirable cycle of speed escalation and reduced safety (Donnell and others 2009). As a 2016 Insurance Institute for Highway Safety (IIHS) report stated, “The 85th percentile speed is not a stationary point. It is, rather, a moving target that increases when speed limits are raised” (Farmer 2016)”. –pg. 24

“The NTSB concludes that unintended consequences of the reliance on using the 85th percentile speed for changing speed limits in speed zones include higher operating speeds and new, higher 85th percentile speeds in the speed zones, and an increase in operating speeds outside the speed zones.” Pg. 28

“The safe system approach calls for road designers to move from the conventional design (in which the posted speed limit is determined by the anticipated operating speed) to a proactive urban street design approach (in which the posted speed limit is determined by a target speed based on a desired safety result).” Pg.28

“The Manual on Uniform Traffic Control Devices guidance for setting speed limits in speed zones is based on the 85th percentile speed, but there is not strong evidence that, within a given traffic flow, the 85th percentile speed equates to the speed with the lowest crash involvement rate on all road types.” Pg. 54

In effect, the proposed speed limit change puts a preference for reduced speeding infractions above a preference for safety. We find that unacceptable.

Speed Limits should be Set Using the Safe Systems Approach Recommended by the Manitoba Road Safety Plan: Road to Zero

On September 29th, 2017, the Province of Manitoba released its Road Safety strategy, [Manitoba Road Safety Plan 2017-2020: Road to Zero](#), which embraces the Safe Systems Approach. The safe system approach calls for road designers to move from the conventional design (in which the posted speed limit is determined by the anticipated operating speed) to a proactive urban street design approach (in which the posted speed limit is determined by a target speed based on a desired safety result).

As this report states,

“Safe speeds should suit the function and level of safety on the road. Setting speed limits is based on injury minimization within the Safe Systems Approach. This means speed limits are set according to collision types that are likely to occur, the impact forces that result from collisions, and the human body’s tolerance to withstand crash forces.” Pg. 15, Manitoba Road Safety Plan 2017-2020: Road to Zero

The Report Fails to Consider Spillover Effects North of the La Salle Bridges

When speed limits increase one segment of road, research shows that it will likely increase on adjacent road segments and roadways as well.

Counter Measures Proven to Reduce Speeds Have Been Ignored

Although speed management counter measures such as speed feedback signs, landscaping, and pavement legends have been shown to reduce speeds in a consistent, cost effective manner, the report from the city administration fails to consider any counter measures as a means to reduce overserved speeds on Pembina Highway to safe, desirable speeds. We see this as a major failing of the report, and view the lack of consideration of countermeasures on its own as a reason to reject the report and its recommendations.

Needs of People on Foot, Bike or Transit Ignored

Finally, we would like to point out that the needs of people on foot, on bike, or using transit seem to have been ignored by the report. No where do we see any mention of the need of transit users to cross Pembina Highway. For instance, transit stops are located approximately 300 metres south of the La Salle River Bridges. To avoid crossing Pembina Highway at this location, a person would have to travel 2 x 300m = 600m, far beyond the 400 m maximum set out in Winnipeg Transit Guidelines.

400 m is the greatest distance that any pedestrian should have to walk from their home or work to the nearest bus stop. [Winnipeg Transit’s Sustainable Transit Design Guidelines](#) Pg. 18

For those people wishing to bike on Pembina provides access to important destinations (St. Norbert Provincial Heritage Park and Turnbull Road, part of the city's proposed bike network linking in to the Floodway crossing of the Red River and the Floodway pathway) Turnbull Drive is often accessed via Pembina Highway.

Pembina Highway leading to Turnbull Drive has limited cycling facilities: a strip of pavement next to the curb in both directions. The condition of the pavement is not good: cracks, holes and maintenance is often poor with debris and gravel making riding on that strip hazardous.

The multi-use path on the east side of the road is not a reasonable option for people biking to destinations on or off of Turnbull Drive, especially for those who may travel at higher speeds because of potential conflicts with pedestrians and poor surface drainage on the path. Furthermore, access and egress to the path to roadway not well designed or developed.

Sincerely,

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