

The Regional Municipality of York

Committee of the Whole
Transportation Services
April 16, 2020

Report of the Commissioner of Transportation Services

2020 Speed Limit Revisions

1. Recommendations

1. Existing speed limits on Regional roads listed in Table 1 of this report be revised as detailed.
2. The Regional Clerk circulate this report to the Clerks of the Towns of Aurora, East Gwillimbury and Whitchurch-Stouffville, City of Markham and the Chief of York Regional Police.
3. The Regional Solicitor prepare the necessary bylaws.

2. Summary

This report seeks Council approval to implement speed limit revisions detailed in Table 1 of this report. The revisions reflect changing land use and increased urbanization, promote speed limit consistency and improve traffic operations.

Key Points:

- The Regional road network is monitored to balance traffic flow and safety
- Setting speed limits based on land use and operational justification encourages compliance and improves traffic operations
- Staff propose speed limit revisions detailed in Table 1 of this report

3. Background

The proposed speed limit revisions are based on principles defined in the Regional Speed Limit Policy

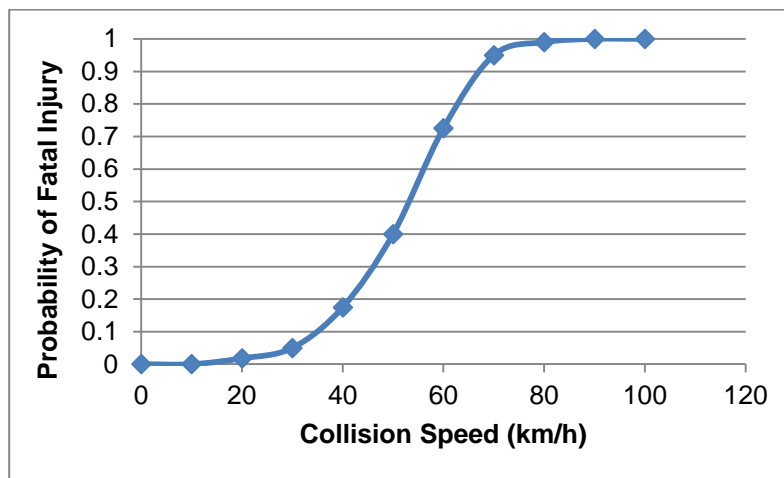
In 2011, Council approved a [Speed Limit Policy](#) that provides guidelines to assist in ensuring a consistent approach in setting speed limits on Regional roads. The guidelines reference industry standards that help the policy remain current as industry-accepted best practices evolve. The *Highway Traffic Act* gives a municipal council the authority, by bylaw, to revise speed limits under 100 km/h in its jurisdiction.

The Regional road network is monitored to balance traffic flow and safety

The Region's road network is a dynamic system. The critical characteristics of roadside environment, road geometry, adjacent land use and access frequency are considered when establishing speed limits. These characteristics may change over time due to new development, transit routes or road widening. Staff monitors and reviews the Regional road network to ensure speed limits are updated in accordance with the Region's speed limit policy and are set at appropriate levels to address risks to road users.

The Regional road network supports all modes of travel. As the Region continues to grow, traffic flow is increasingly interrupted by various factors, such as traffic volume, traffic signals, rail crossings and transit facilities. These may require motorists to come to a complete stop, which highlights the importance of travel speed in relation to the ability of motorists to stop safely. Motorists can stop approximately three car lengths or 18 metres shorter when driving at 50 km/hr compared to 70 km/hr. Driving slower increases a motorist's ability to stop in time to avoid hitting someone, causing serious injury or death. Figure 1 shows the relationship between vehicle collision speeds and the probability of a fatal pedestrian injury. Pedestrian fatality rates rise drastically in a pedestrian/vehicle collision as vehicle speeds increase.

Figure 1
Pedestrian Fatality Rate in Relation to Vehicle Travel Speed



Source: Wegman, F.C.M. & Aarts, L.T. (eds.) (2006). Advancing sustainable safety; National Road Safety Outlook for 2005-2020. SWOV, Leidschendam.

4. Analysis

Speed limits are set based on land use and operational rationale

Justifications for speed limit revisions are:

- Changing land use – Urbanization resulting from new development and infrastructure can include changing land uses and traffic patterns along a road corridor. When communities are built adjacent to Regional roads, operating conditions of these roads must change to reflect increases in volumes, intersections, driveway connections, turning movements, pedestrians, cyclists and transit activities.
- Promoting consistent speed limits – Speed limits that change frequently within short distances on the same road can result in driver confusion and low compliance. Limiting the number of speed zone changes encourages driver compliance.
- Improving traffic operations – Speed limits that match driver expectations for a given roadway improve traffic operations and increase compliance. An appropriate speed limit increases the amount of time a driver has to react to potential hazards. Speed limits are determined in accordance with existing roadway elements and characteristics.

Several Regional road sections have been identified for speed limit revisions

Proposed speed limit revisions on Regional roads are detailed in Table 1. Maps of these locations are included as Attachments 1 through 3.

Table 1
Speed Limit Revisions

Regional Road	Municipality	Existing Speed	Proposed Speed and Effective Date	Justification
1 St. John's Sideroad (Y.R. 26) from 700 metres west of Leslie Street (Y.R. 12) to 600 metres east of Leslie Street (Y.R. 12) (Attachment 1)	Town of Aurora	50 km/h	60 km/h June 9, 2020 (to coincide with capital construction program)	Consistent speed limit
2 St. John's Sideroad (Y.R. 26) from 600 metres east of Leslie Street (Y.R. 12) to Woodbine Avenue (Y.R. 8) (Attachment 1)	Towns of Aurora and Whitchurch-Stouffville	70 km/h	60 km/h April 30, 2020	Changing land use and consistent speed limit

Regional Road	Municipality	Existing Speed	Proposed Speed and Effective Date	Justification
3 Yonge Street (Y.R. 51) from Dutch Settler's Court to Olive Street/Beckett Avenue (Attachment 2)	Town of East Gwillimbury	60 km/h	50 km/h April 30, 2020	Improved traffic operations
4 Highway 7 (Y.R. 7) from 100 metres west of McCowan Road (Y.R. 67) to 200 metres east of Main Street Unionville (Attachment 3)	City of Markham	70 km/h	60 km/h April 30, 2020	Improved traffic operations

Citizens are notified of new speed limits through on-street signage

When speed limits are changed on Regional roads, a NEW sign is placed above each speed limit sign at the beginning of the speed zone. The NEW sign remains in place for approximately 60-90 days.

5. Financial

Costs associated with the manufacture and installation of new speed limit signs are included in the approved 2020 Transportation Services Operating Budget.

6. Local Impact

The proposed speed limit revisions detailed in Table 1 will help balance traffic flow and safety for all travellers. Staff has shared the revisions with the local municipal staff.

7. Conclusion

The proposed speed limit revisions on Regional roads detailed in Table 1 are based on principles defined in the Regional Speed Limit Policy. The revisions reflect changing land use and increased urbanization, promote speed limit consistency and improve traffic operations.

Bylaw amendments are required before speed limit revisions may be implemented. Subject to Council's approval, the Regional Solicitor will prepare the necessary bylaws and forward applicable copies to the Towns of Aurora, East Gwillimbury and Whitchurch-Stouffville, City of Markham and the Chief of York Regional Police.

For more information on this report, please contact Joseph Petrunaro, Director Roads and Traffic Operations, at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by: **Paul Jankowski**
Commissioner of Transportation Services

Approved for Submission: **Bruce Macgregor**
Chief Administrative Officer

March 19, 2020
Attachments (3)
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