

The Regional Municipality of York

Committee of the Whole
Transportation Services
April 8, 2021

Report of the Commissioner of Transportation Services

2021 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 Newmarket and Whitchurch-Stouffville, Cities of Markham and Vaughan and Chief of York Regional Police.
3. The Regional Solicitor prepare the necessary bylaws.

2. Summary

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

Key Points:

- Lowering speed limits is required to protect travellers as the Region continues to intensify
- Speed limit revisions are recommended based on principles defined in the Regional speed limit policy
- Staff propose speed limit revisions detailed in Table 1

3. Background

Speed limit revisions are recommended based on principles defined in the Regional speed limit policy

In 2011, Council approved and adopted a policy for [Establishing Speed Limits on Regional Roads](#) that provides guidelines in setting speed limits on Regional roads to assist in ensuring a consistent approach. 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 Province has introduced lower rates of speed and neighbourhood speed limits to complement growth

On May 30, 2017, the Province of Ontario passed Bill 65, the *Safer School Zone Act* that permits municipalities to enact neighbourhood speed limit reductions. The current default speed limit is 50 km/h, unless otherwise posted. The *Highway Traffic Act* now allows a municipality to pass a bylaw to set a speed limit less than 50 km/h for roads within a designated area.

Several municipalities in Ontario have initiated programs to systematically lower speed limits in priority areas including, but not limited to:

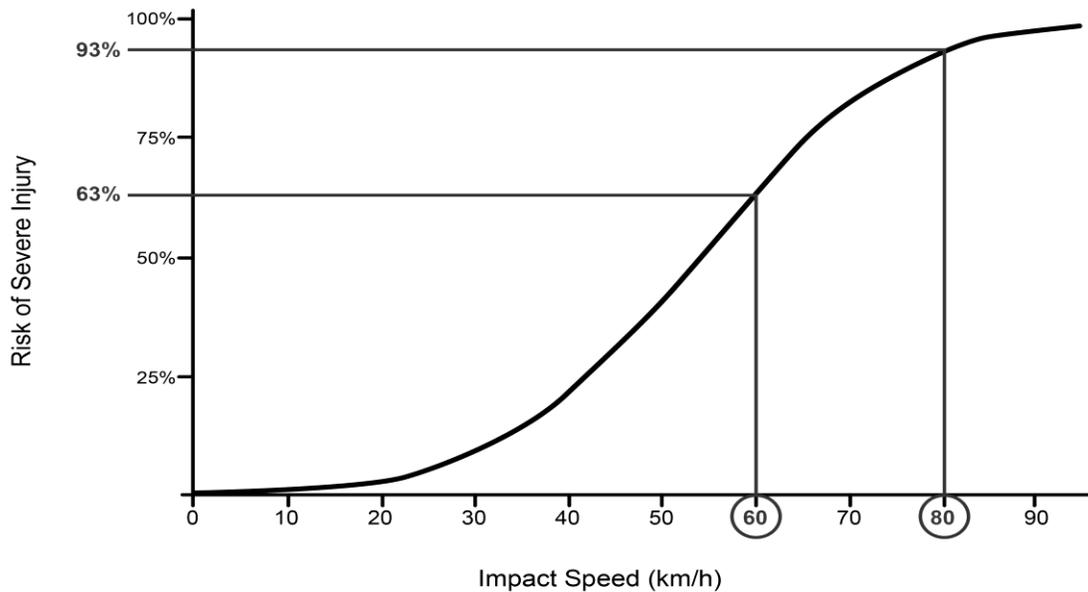
- In 2015, the City of Toronto implemented a 30 km/h speed limit policy on local roads and has also reduced nearly 250 kilometres of major arterial roadways from 60 km/h to 50 km/h based on criteria including a petition, road environment, school and cycling environment and pedestrian and traffic environment.
- In 2017, the City of Ottawa implemented a policy for posting 30 km/h speed limits on existing local roadways taking into account a number of criteria that needs to be met, including high pedestrian presence, limited transit service, traffic volumes and maximum roadway width.
- In 2019, the City of Mississauga began lowering speed limits in 11 different neighbourhoods as part of its Neighbourhood Area Speed Limit Project. In 2021, the City will expand the project to reduce speed limits in all of Mississauga's 150 neighbourhoods. This initiative includes lowering speed limits in front of elementary schools to 30 km/h, except when schools are located on major roads, where the speed limit will mostly remain 40 km/h.

Lowering speed limits is required to protect travellers as the Region continues to intensify

Between 2011 and 2016, the Region's population has grown by 7.5% to 1,109,650 residents. Growth is occurring in existing established communities increasing the built environment density or in greenfield areas using walkable communities planning principles. Since 2011, apartment units have been the fastest growing structure type, increasing by 31% by 2016. From 1996 to 2016, the total number of daily walking or cycling trips has increased 5% annually. The Region is expected to continue to grow to approximately 2.02 million people and 990,000 jobs by 2051.

Physical environment is a key driver in determining the most appropriate travel speed for a roadway. Where a physical environment encourages walking and cycling, pedestrians and cyclists must co-exist with vehicles, resulting in pressure to reduce speed limits. While 24% of vehicle-only collisions resulted in injury or fatality, almost all pedestrian (94%) and cyclist (82%) collisions resulted in injury or death. Figure 2 shows the relationship between the probability of a severe pedestrian injury and vehicle collision speed. As vehicle speed increases, pedestrian severe injury rates rise drastically in a pedestrian/vehicle collision.

Figure 1
Pedestrian Severe Injury Rate in Relation to Vehicle Travel Speed



Source: Adapted from TAC Geometric Guide for Canadian Roads, June 2017

4. Analysis

Setting speed limits consistently across the road network and complementing urbanizing land use encourages compliance and improves traffic operations

The Region's road network is a dynamic system. Staff monitor and periodically review 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 for the road.

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.

Speed limit revisions on several Regional road sections have been identified

Proposed speed limit revisions on Regional roads are detailed in Table 1. Maps of these locations are included as Attachments 1 through 6.

Benefits of reduced operating speeds outweigh the marginal travel time increases that would result from the recommended speed limit revisions.

Table 1
Speed Limit Revisions

| Regional Road | Municipality | Existing Speed | Proposed Speed | Justification |
|---|--|-----------------------|-----------------------|---|
| 1 Mulock Drive (Y.R. 74) / Vivian Road (Y.R. 74) from Leslie Street (Y.R. 12) to Woodbine Avenue (Y.R. 8) Attachment 1 | Towns of Newmarket and Whitchurch-Stouffville | 70 km/h | 60 km/h | Improved traffic operation and consistent speed limit |
| 2 Ninth Line (Y.R. 69) from 63 metres north of Reeves Way Boulevard to 180 metres south of Reeves Way Boulevard Attachment 2 | Town of Whitchurch-Stouffville and City of Markham | 70 km/h | 60km/h | Changing land use |

| Regional Road | Municipality | Existing Speed | Proposed Speed | Justification |
|---|-----------------|----------------|----------------|--|
| 3 Major Mackenzie Drive East (Y.R. 25) from Ninth Line (Y.R. 69) to York/Durham Line (Y.R. 30) Attachment 3 | City of Markham | 80 km/h | 70 km/h | Improved traffic operation and changing land use |
| 4 Langstaff Road (Y.R. 72) from Highway 50 (Y.R. 24) to Highway 27 (Y.R. 27) Attachment 4 | City of Vaughan | 80 km/h | 60 km/h | Improved traffic operation and changing land use |
| 5 Major Mackenzie Drive West (Y.R. 25) from Highway 50 (Y.R. 24) to 715 metres west of Barons Street Attachment 5 | City of Vaughan | 70 km/h | 60 km/h | Improved traffic operation and changing land use |
| 6 Major Mackenzie Drive West (Y.R. 25) from Pine Valley Drive (Y.R. 57) to Islington Avenue (Y.R. 17) Attachment 5 | City of Vaughan | 70 km/h | 60 km/h | Improved traffic operation and changing land use |
| 7 King-Vaughan Road (Y.R. 14) from Pine Valley Drive to 400 metres east of Weston Road (Y.R. 56) Attachment 6 | City of Vaughan | 70 km/h | 60 km/h | Improved traffic operation |

Citizens are notified of new speed limits through on-street signs and a range of communication tactics

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. Citizens are informed through a range of other communication tactics that include media alerts, social media and information posted on York.ca.

5. Financial

Costs associated with the manufacture and installation of new speed limit signs are included in the proposed 2021 Transportation Services Operating Budget.

6. Local Impact

The proposed speed limit revisions detailed in Table 1 will help reflect changes in land use, traffic operations and promote safety for all travellers. Lower speeds create a more comfortable environment for pedestrians and cyclists that encourages walking and cycling. Local municipal staff support the proposed speed limit revisions.

7. Conclusion

Lower speed limits are required to protect travellers as the Region continues to intensify.

Staff recommends implementing speed limit revisions on Regional roads described in this report. Setting speed limits consistently and complementing urbanizing land use across the road network encourages compliance and improves traffic operations. Bylaw amendments are required before speed limit revisions may be implemented. Pending Council approval, the Regional Solicitor will prepare the necessary bylaws and forward applicable copies to the Towns of Newmarket and Whitchurch-Stouffville, Cities of Markham and Vaughan and 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, 2021
Attachments (6)
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