



Corporate Services Regional Clerk's Office

April 20, 2018

Ms. Kimberley Kitteringham City Clerk City of Markham 101 Town Centre Boulevard Markham, ON L3R 9W3

Dear Ms. Kitteringham:

Re: 2018 Speed Limit Revisions

Regional Council, at its meeting held on April 19, 2018, adopted the following recommendations of Committee of the Whole regarding "2018 Speed Limit Revisions":

- 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 East Gwillimbury, Georgina and Newmarket, the Township of King, the City of Markham and the Chief of York Regional Police.
- 3. The Regional Solicitor prepare the necessary bylaws.

A copy of Clause 6 of Committee of the Whole Report No. 6 is enclosed for your information.

Please contact Joseph Petrungaro, Director, Roads and Traffic Operations at 1-877-464-9675 ext. 75220 if you have any questions with respect to this matter.

Sincerely,

Christopher Raynor Regional Clerk

/C. Clark Attachments



Clause 6 in Report No. 6 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 19, 2018.

## 6 2018 Speed Limit Revisions

Committee of the Whole recommends adoption of the following recommendations contained in the report dated March 23, 2018 from the Commissioner of Transportation Services:

- 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 East Gwillimbury, Georgina and Newmarket, the Township of King, the City of Markham and the Chief of York Regional Police.
- 3. The Regional Solicitor prepare the necessary bylaws.

Report dated March 23, 2018 from the Commissioner of Transportation Services now follows:

#### 1. Recommendations

It is recommended that:

- 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 East Gwillimbury, Georgina and Newmarket, the Township of King, the City of Markham and the Chief of York Regional Police.
- 3. The Regional Solicitor prepare the necessary bylaws.

#### 2. Purpose

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

# 3. Background and Previous Council Direction

# The recommended speed limit revisions are based on principles defined in the Council-adopted speed limit policy

In 2011, Council adopted a <u>Speed Limit Policy</u> that provides guidelines to assist in ensuring a consistent approach on 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, Section 128, 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 with safety

The Region's road network is a dynamic system. The critical parameters of roadside environment, road geometry, adjacent land use and access frequency are considered when establishing a speed zone. These parameters may change over time due to new development, transit routes or road widening. It is important speed limits be monitored and periodically reviewed to reflect changing parameters and address risks to road users.

Staff monitors and reviews the Regional road network ensuring speed limits are updated in accordance with the Region's Speed Limit Policy and set at appropriate levels for the road.

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 interruptions may require motorists to come to a complete stop, which highlights the importance of travel speed in relation to a motorist's ability to safely stop.

Figure 1 shows the relationship between vehicle collision speeds and the probability of a fatal pedestrian injury. Pedestrian fatality rates increase drastically in a pedestrian/vehicle collision as vehicle speed increases.

Pedestrian Fatality Rate in Relation to Vehicle Travel Speed 0.9 Probability of Fatal Injury 8.0 0.7 0.6 0.5 0.4 0.3 0.2

40

Figure 1

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

60

Collision Speed (km/h)

80

120

100

#### 4. **Analysis and Implications**

## Setting speed limits based on land use and operational justification encourages compliance and improves traffic operations

Justifications for speed limit revisions are:

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- Changing Land Use Urbanization resulting from new development and infrastructure can include changing land uses and traffic patterns along the 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. Urban areas, towns and villages with higher volumes of traffic, pedestrians, cyclists and children playing require special attention when setting speed limit.
- Promoting Consistent Speed Limits Speed limits that change frequently within short distances on the same road can result in driver confusion and low compliance of speed limits. Limiting the number of speed zone changes encourages driver compliance.

 Improving Traffic Operations - Credible speed limits that match driver expectations for a given roadway and its surrounding area improve traffic operations, increase speed limit compliance, provide a clear reminder to violators and reduce arbitrary enforcement and conviction tolerances. With the appropriate posted speed limit, the amount of time drivers have to react to potential hazards is also increased. Speed limits are determined in accordance with existing roadway elements, characteristics and surrounding environments.

# 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 9.

Table 1
Speed Limit Revisions

	Road	Municipality	Existing Speed	Proposed Speed (effective April 19, 2018)	Justification
1	Woodbine Avenue (Y.R. 8) from 300 metres north of Major Mackenzie Drive East (Y.R. 25) to 228 metres north of Victoria Square Boulevard North	City of Markham	70 km/h	60 km/h	Changing land use and Consistent speed limits
	(Attachment 1)				
2	Mount Albert Road (Y.R. 13) from 160 metres east of 2 <sup>nd</sup> Concession Road (Y.R. 34) to 280 metres west of Leslie Street (Y.R. 12)	Town of East Gwillimbury	70km/h	60km/h	Changing land use and Consistent speed limits
	(Attachment 2)				
3	Green Lane (Y.R.19) from Bathurst Street (Y.R. 38) to 100 metres west of Woodspring Avenue (Attachment 2)	Town of East Gwillimbury	80 km/h	70 km/h	Changing land use

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	Road	Municipality	Existing Speed	Proposed Speed (effective April 19, 2018)	Justification
4	Green Lane (Y.R.19) from 500 metres east of Yonge Street (Y.R. 1) to Woodbine Avenue (Y.R. 8)	Town of East Gwillimbury	80 km/h	70 km/h	Changing land use
	(Attachment 2)				
5	Holland Landing Road (Y.R. 83) from its intersection with Bathurst Street (Y.R. 38) to 215 metres north thereof	Town of East Gwillimbury	70 km/h	60 km/h	Improved traffic operations
	(Attachment 3)				
6	Leslie Street (Y.R. 12) from Doane Road (Y.R. 45) extending 860 metres north on Doane Road (Y.R. 45)	Town of East Gwillimbury	80 km/h	60 km/h	Changing land use and Consistent speed limits
	(Attachment 4)				
7	McCowan Road (Y.R. 67) from Mount Albert Road (Y.R. 13) to 100 metres north of Mill Road	Town of East Gwillimbury	80 km/h	60 km/h	Bylaw update only, signs installed
	(Attachment 5)				
8	Ravenshoe Road (Y.R. 32) from The Queensway South (Y.R. 12) to Thornlodge Drive	Towns of Georgina and East Gwillimbury	70 km/h	60 km/h	Changing land use
	(Attachment 6)				
9	Ravenshoe Road (Y.R. 32) from Thornlodge Drive to 450 metres east thereof	Towns of Georgina and East Gwillimbury	80 km/h	60 km/h	Changing land use and Consistent speed limits
	(Attachment 6)				
10	Ravenshoe Road (Y.R. 32) from 450 metres east of Thornlodge Drive to 230 metres west of Warden Avenue (Y.R. 65)	Towns of Georgina and East Gwillimbury	80 km/h	70 km/h	Improved traffic operations
	(Attachment 6)				

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	Road	Municipality	Existing Speed	Proposed Speed (effective April 19, 2018)	Justification
11	Ravenshoe Road (Y.R. 32) from 240 metres east of Ravencrest Road to 480 metres east of Ravencrest Road	Towns of Georgina and East Gwillimbury	80 km/h	60 km/h	Improved traffic operations
	(Attachment 6)				
12	Woodbine Avenue (Y.R. 8) from Glenwoods Avenue (Y.R. 33) to 360 metres south of Highway 404 off-ramp	Towns of Georgina and East Gwillimbury	80 km/h	70 km/h	Improved traffic operations
	(Attachment 6)				
13	Metro Road (Y.R. 78) from Salvation Army Road to South Drive	Town of Georgina	60 km/h	50 km/h	Improved traffic operations
	(Attachment 7)				and Consistent speed limit
14	Highway 27 (Y.R. 27) from King-Vaughan Road to 230 metres south of Oliver Emerson Avenue	Township of King	80 km/h	70 km/h	Improved traffic operations
	(Attachment 8)				
15	Highway 27 (Y.R. 27) from 230 metres south of Oliver Emerson Avenue to 315 metres south of King Road (Y.R. 11) (Attachment 8)	Township of King	80 km/h	60 km/h	Bylaw update only, signs installed
16	Mulock Drive (Y.R. 74) from Bathurst Street (Y.R. 38) to 200 metres west of Yonge Street (Y.R. 1)	Town of Newmarket	70 km/h	60 km/h	Changing land use and Consistent speed limits
	(Attachment 9)			<u>-</u>	

Benefits of reduced operating speeds outweigh the marginal travel time increases resulting from recommended speed limit revisions in this report.

#### Citizens are notified of the new speed limits through 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 signs remain in place for approximately 60-90 days.

#### 5. Financial Considerations

Costs associated with the manufacture and installations of new speed limit signs are included in the approved 2018 Transportation Services Budget.

### 6. Local Municipal Impact

Local municipal staff has been engaged in the recommended speed limit revisions in this report and are supportive.

#### 7. Conclusion

Staff recommends implementation of speed limit revisions on a number of Regional roads as described in this report. The recommended speed limit revisions will enhance traveller experience by ensuring speed limits are in accordance with existing roadway characteristics and surrounding environments.

Revisions to the bylaw are required before speed limit revisions can be implemented. Once the revised speed limits are approved, staff will prepare the necessary bylaws and forward a copy to the Towns of East Gwillimbury, Georgina and Newmarket, Township of King, City of Markham and the Chief of York Regional Police.

For more information on this report, please contact Joseph Petrungaro, Director, Roads and Traffic Operations, at 1-877-464-9675 ext.75220.

The Senior Management Group has reviewed this report.

March 23, 2018

Attachments (9)

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Accessible formats or communication supports are available upon request

