THE TOWN OF GEORGINA

SAFE STREETS ADVISORY COMMITTEE

AGENDA

Monday, April 24, 2017
7:00 PM
Committee Room

1. CALL TO ORDER

2. ROLL CALL

3. INTRODUCTION OF ADDENDUM ITEMS

   (1) Areas of Concern – Lake Side Public School drop off, on Shorecrest Rd,

4. APPROVAL OF AGENDA

5. DECLARATIONS OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF

6. ADOPTION OF MINUTES

   Pages 1 – 5

   (1) Minutes of the GSSC meeting held on December 12, 2016.

7. DELEGATIONS/SPEAKERS

8. PRESENTATIONS

9. CONSIDERATION OF REPORTS ON THE AGENDA

   Pages 6 - 18

   (1) Safe Streets Complaints, inquiries, tracker and follow-up (2016 & 2017). Regular update by Scott Edwards if available.
   A. Ravencrest Reports (pages 13 – 18)

   Page 19

   (2) Sidewalk concerns on the north side of Metro Road between De la Salle Park and Dalton Road

10. COMMUNICATIONS

Page 20

(1) Traffic Trailer and Traffic Counters.

Page 21

(2) 2017 Budget Adoption

Pages 22 – 26

(3) School safety zone images.

Pages 27 - 87

(4) York Region Transportation_Mobility_Plan_Guidelines_Version1.0

Pages 88 - 89

(5) By-Law 2002-0046 (TR-1). Section 1.0 (b) and section 9.0 (a) of the Traffic and Parking Control Bylaw – Regulations for Bicycles.

Page 90 - 92

(6) April 5, 2017 Council Resolution - correspondence from the Safe Streets Committee requesting Council declare Lake Drive South a Community Safety Zone and purchase/install a permanent radar board along Lake Drive South

RESOLUTION NO. C-2017-0185

That correspondence from the Georgina Safe Streets Committee requesting Council declare Lake Drive South a Community Safety Zone and purchase/install a permanent radar board along Lake Drive South, be received and refer to staff for submission of a comprehensive review of the entire lengths of Lake Drive and Hedge Road to include additional speed enforcement initiatives, speed studies conducted within the last five years, radar board data recording technology and potential costs, and potential start and end locations for safety zones, for further consideration by Council.

Carried.

11. OTHER BUSINESS

(1) Campaign suggestions.

(2) New area of interest for further investigation (ongoing agenda item).

A. Kennedy Road between Baseline Road and Metro Road
B. Queensway between Bayview Ave. and Pleasant Blvd.
C. Safety concern at intersection Ravenshoe Road and Victoria Road
D. Lake Side Public School drop off, on Shorecrest Rd,

12. CLOSED SESSION, IF REQUIRED

13. MOTION TO ADJOURN

Next meeting Monday, May 29, 2017.

THE TOWN OF GEORGINA

SAFE STREETS ADVISORY COMMITTEE

MINUTES

Monday, December 12, 2016
7:00 PM
Committee Room

1. CALL TO ORDER

The meeting was called to order at 7:00 PM

2. ROLL CALL

The following Committee members were present:
Councillor Naomi Davison, Chair
Marc Lavergne, Vice Chair
Cathy Hasted
Charlene Greig
Mike Roots, Sergeant
Tanya Hilton
Rob Bassie

The following staff members were in attendance:
Scott Edwards, Road Superintendent
Sarah Brislin, Committee Services Coordinator

3. INTRODUCTION OF ADDENDUM ITEMS - *None*

4. APPROVAL OF AGENDA

Moved by Rob Bassie, Seconded by Tanya Hilton

RESOLUTION NO. GSSC-2016-0047

That the agenda for the Georgina Safe Streets Committee for the December 12, 2016, be approved as presented.

Carried.

5. DECLARATIONS OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF – *None*

6. ADOPTION OF MINUTES

(1) Minutes of the GSSC meeting held on October 24, 2016.

Moved by Rob Bassie, Seconded by Charlene Greig

RESOLUTION NO. GSSC-2016-0048

That the Georgina Safe Streets Committee adopt the meeting minutes of October 24, 2016.

Carried.

7. DELEGATIONS/SPEAKERS - *None*

8. PRESENTATIONS - *None*

9. CONSIDERATION OF REPORTS ON THE AGENDA

(1) Safe streets complaints, inquiries, tracker and follow-up. Regular update by Scott Edwards if available.

Scott Edwards, Road Superintendent, noted the following updates:

Ravencrest Road:

- Since construction has stopped, people appear to be using Baseline.
- Another study planned next month.

YRP says there has been a lot of enforcement over the past few months.

Osborne Bouchard request for a 4 way stop:

- The study showed the request did not meet the warrants.

Queen Street and King Street:

- Did not meet the percentile warrant.

Mr. Edwards advised that the Roads Division Operations Technician plans to revise the tracker with

Moved by Rob Bassie, Seconded by Charlene Greig

RESOLUTION NO. GSSC-2016-0049

That the Georgina Safe Streets Committee receive the tracker and follow-up.

Carried.

(A) Another proposal for the budget (revisited from Oct 2015)

Request for shared road signs or 4 way stop signs and a speed bump.

The Committee discussed the following suggestions:

- Make it a scenic route and a one way.
- Community safety zone “fines increased”
- Stop signs where pedestrians cross the street
- Speed signs to register the signs
- Bendable speed signs- would have to be removed in winter (example used in Markham) – Scott Edwards to price
- Temporary speed bump – cost to transport and staff to – everyone will want.

Mr. Edwards suggested speed signs and share the road signs.

Moved by Rob Bassie, Seconded by Tanya Hilton

RESOLUTION NO. GSSC-2016-0050

That the Georgina Safe Streets Committee request that Council declare Lake Drive South become a community safety zone. And that a permanent radar board be purchased and be installed on Lake Drive South.

Carried.

(B) Lake Drive and Brule Lakeway hazardous opening in Hedge: follow up.

Mr. Edwards advised that this concern has been referred to The Parks Division. The Road’s Division requested to have a fence installed.

Moved by Marc Lavergne, Seconded by Charlene Greig

RESOLUTION NO. GSSC-2016-0051

That the Georgina Safe Streets Committee receive the update regarding Lake Drive and Brule Lakeway opening in Hedge.

Carried.

10. COMMUNICATIONS

(1) Council Resolution No. 2016-0515

(2) November 16th Council resolution

(3) Making Communities and School Zones Safer

Moved by Cathy Hasted, Seconded by Charlene Greig

RESOLUTION NO. GSSC-2016-0052

That the Georgina Safe Streets Committee receive the following Communications items.

1. Council Resolution No. 2016-0515
2. November 16th Council resolution
3. Making Communities and School Zones Safer

Carried.

11. OTHER BUSINESS

(1) Campaign suggestions.

The Committee reviewed and discussed various ideas. Committee members suggested they would refer ideas to the Committee Services Coordinator to suggest for use by Communications. Committee members also suggested they would send material on distracted driving to the Committee Coordinator prior to the February meeting.

(2) New area of interest for further investigation (ongoing agenda item).

The Committee suggested Kennedy Road between Baseline Road and Metro Road be added as an area of interest to discuss for the next meeting.

The Committee suggested Queensway between Bayview Ave. and Pleasant Blvd. be added as an area of interest to discuss for the next meeting. There are concerns relating speeding.

12. CLOSED SESSION, IF REQUIRED - *None*

13. MOTION TO ADJOURN

Next meeting Monday, February 27, 2016.

Moved by Marc Lavergne, Seconded by Charlene Greig

RESOLUTION NO. GSSC-2016-0053

That the Georgina Safe Streets Committee meeting for December 12, 2016, be adjourned 7:35 PM.

Carried

_____
Councillor Naomi Davison,
Chair

_____
C. Sarah A. Brislin, Committee
Services Coordinator

GEORGINA SAFE
STREET COMMITTEE

COMPLAINT TEMPLATE

DATE	STREET NAME	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	REASON NOT COMPLETED	Status			Contact YRP
							Pre	During	Post	
25-Jun-14	BRULE LAKEWAY	completeed	SUMMER SPEEDING	TRAFFIC STUDY ROADS DIV.	85th percentile 38					✓
23-May-14	LAKE DRIVE EAST	completed	SPEEDING TRAFFIC AND PEDESTRIAN SAFETY	TRAFFIC STUDY ROADS DIV.	85th Percentile 50					
07-Jul-14	Roselm Avenue	completed	Traffic volume and speeding vehicles as a result of Walmart/ Shopping Centre	Traffic Study ROADS DIV.	85th Percentile 39					
23-Jul-14	Arlington Drive and Richmond Park Drive	Contracted Service	Repaint in 2014	ROADS DIV.	Painted but to be redone					
18-Jul-14	Thornlodge Drive	Contracted Service	Zebra crosswalk	ROADS DIV.	Completed					
21-Jul-14	Shorecrest Road	Completed	Speeding traffic and safety of pedestrians and children playing.	ROADS DIV.	85th percentile 33km - No issue - Message left for resident					
29-Jul-14	Lake Drive East	Completed	Automated "Your speed" warning indicator not functioning properly	ROADS DIV.	Trimmed Trees					
06-Aug-14	Cronsberry Road	completed	Speeding traffic and pedestrian safety	ROADS DIV.	Low volume, 85th Percentile 54					
02-Sep-14	Biscayne	completed	Pedestrian Safety	Counts	Pedestrian Count Sept 3 /14. 85th percentile found to be 38 km/hr - With Trailer 85th percentile found to be 52 km/hr.		54	52	46	
02-Sep-14	Joe Dales	Pending Assumed	Pedestrian Safety	Road to be Assumed	85th Percentile 39 - Temporary stop sign study pending					
04-Sep-14	Riveredge	completed	Want Speed Humps	Traffic Study	YRP notified of speeding					

GEORGINA SAFE
STREET COMMITTEE

COMPLAINT TEMPLATE

DATE	STREET NAME	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	REASON NOT COMPLETED	Status			Contact YRP
							Pre	During	Post	
15-Sep-14	Thornlodge Drive	Completed	Speeding Traffic and pedestrian safety	Roads Div.	Completed 4-way stop and markings.					
08-Oct-14	Country Mile Lane	Completed	Speeding traffic and accident concerns	Traffic Study Roads Div.	Closed		65			
14-Oct-14	Church Street	completed	Speeding Traffic	Traffic Study Roads Div.	85th percentile found to be 62 km/hr					
	Biscayne	Completed	Speeding Traffic	Traffic Study	85th Percentile 46km					
31-Oct-14	The Queensway N.	completed	Speeding traffic Four-way stop requested	Traffic Study	traffic found to be travelling at a safe speed	Stop sign policy being reviewed				
08-Jan-15	Duclos Pt. Rd.	Completed	Speeding traffic	Traffic Study	Stop signs Installed					
19-Jan-15	The Queensway N.	Completed	Pedestrian Safety Crosswalk sign in place but no road markings.	ROADS DIV.	Was removed and School doesn't need					
17-Feb-15	Arlington and Iveagh	Completed	Cars go through this 4 way stop. Wants speed bumps and cameras put in.	Traffic Study	Traffic study found the intersection does not warrant this	To be reviewed				

GEORGINA SAFE
STREET COMMITTEE

COMPLAINT TEMPLATE

DATE	STREET NAME	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	REASON NOT COMPLETED	Status			Contact YRP
							Pre	During	Post	
20-Feb-15	Church Street	Pending	Intersection dangerous for crossing Queensway and Church Street - cars go through stop signs - Would like a stop light there	To be reviewed	Pending	To be reviewed				
23-Feb-15	Richmond Park Drive	Completed	People parking on both sides of narrow road - dangerous/ cant see/ people drive too fast she has almost been hit	Bylaws	Bylaws					
10-Apr-15	Lyons Lane	Completed	Very narrow street and with people parking on both sides she is worried emergency vehicles would not fit down the street.	Bylaws	Bylaws					
08-May-15	Riveredge Drive	completed	Concerns with pedestrian safety, adequate lighting, placement of speed bumps and to have the speed limit reinforce	traffic study	Notified Yrp		49		40	
	Biscayne	completed by June 15	would like 2 Stop signs	Traffic Study	Complted					
	Catering	Completed 2015	Paint Markings, Stop Sign	Larger Sign	Larger Stop Sign installed,Lines ongoing					
	John Link Way	Ongoing	Speeding wants Stop Sign	Traffic Study	Pending due to constrction					
	Smith Blvd	On Hold	TruckTraffic	Traffic Study	Pending					
June 17 2015	Oakcrest	completed	Speeding, concern for kids	Traffic Study for YRP	85th percentile 42 km/hr					
Sept 9 2015	Blackriver Rd	completed	Speeding	Traffic Study	Speed Dropped notify YRP of times		79	54		
Sept 22 2015	Bayview	Completed	Speeding,Wants Stop Sign	Traffic Study	Did not meet reqirements for an all way stop		47			
Oct 2 2015	Glasgow	Completed	Speeding ,cat injured	Traffic Study	Low percentile , speeding random	No need at this time	44			
Oct 19 2015	Irene	completed	Speeding	Traffic Study	yrp notified		57	57	62	

GEORGINA SAFE
STREET COMMITTEE

COMPLAINT TEMPLATE

DATE	STREET NAME	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	REASON NOT COMPLETED	Status			
							Pre	During	Post	Contact YRP
August 6 2006	Franklin Beach	Completed	Speeding Dead End St	Traffic Study	Speeding Minimal, put up No Exit Signs		42			
Nov 2 2015	Glenwoods	Completed	Speeding	Traffic Study	Informe YRP, Add Bus Signs		59			
Nov 23 2015	Lake Drive East	Completed	Speeding/Bus Stop	Traffic Study	School Board cannot accomadate	Software Issue,counter out	47			
	Wood River Bend	completed	Speeding	Traffic Study	Radar Trailer found to reduce speding	Background Research				
	Old Shiloh	completed	Speeding	Traffic Study	Yrp notified of speeding, placed speed radar trailer, Markings demonstrated minimal impact, to place signs	Explore Options / Speed sign out	76	73	84	Yes
	Sedore	completed	Speeding	Traffic Study	placed speed radar trailer, loactes in for extra speed signs					
	Hedge Road	completed	Speeding	Traffic Study	85th percentile 49					
May 16 2016	Lake Drive N	completed	speeding	traffic study	85th percentile 38					
May 18 2016	Church Street	completed	Speed Limit/ Cyclist Count	Traffic Study	85th persentile 60					
May 18 2016	Amberview	Completed	Stop Sign Requested	Traffic Study	Warrant 4 in Policy RD1 was not met					
May 24 2016	Joe Dales Dr	Completed	speeding, wants stop sign	Traffic Study	85th percentile found to be 45 km/hr					
May 24 2016	Morning Glory Rd	completed	Sepeeding	Traffic Study	Speed trailer was in place, yrp notified					
May 26 2016	Moring Glory Rd	completed	speeding	Traffic Study	Speed trailer was in place, yrp notified					
June 1 2016	Pefferlaw Road	Completed	Speeding	Traffic Study	85th percentile found to be 65km/h, Speed Trailer found to significantly reduce speeds in the area. Post count 85th percentile 63 km/hr. Resident has been contacted by Region, will reconsider speed limit to better suit the roads characteristics		65		63	
June 7 2016	River Beach Rd	completed	speeding	traffic study	Community Watch/YRP tabs placed in neighbourhood. Speed Radar sign installed.					
Jun-16		ongoing	Walking the wrong way, no sidewalks	to be determined						
June 7 2016	Clovely Cove	completed	speeding	traffic study	85th percentile found to be 62 km/hr					
Jul-04	Brule	completed	speeding	traffic study	85th percentile found to be 42 km/hr					

GEORGINA SAFE
STREET COMMITTEE

COMPLAINT TEMPLATE

DATE	STREET NAME	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	REASON NOT COMPLETED	Status			Contact YRP
							Pre	During	Post	
Jul-11	Lake Drive N	completed	speeding	traffic study	85th percentile found to be 44 km/hr					
Jul-19	Lake Dr N	completed	speeding	traffic study	85th percentile found to be 44 km/hr					
Jul-25	Wexford Dr	completed	speeding	traffic study	85th percentile found to be 54 km/hr					
Aug-08	McCowan Rd	completed	speeding	traffic study	85th percentile found to be 92 km/hr					
Aug-08	McCowan Rd	completed	Speeding	Traffic Study	85th percentile found to be 84 km/hr					
Aug-16	Ravencrest Rd	onging	speeding	traffic study	counter in place, had a bad count	bad count. 85th %: 18km/h Oct 3: bad count, tube split				
Aug-25	Riverglen	complete	speeding	traffic study	85th percentile 47 km/hr. (40km/hr)					
Aug-31	Riley Avenue	complete	speeding	traffic study	85th percentile 30km/hr. (40km/hr)					
Sep-06	Civic Center Rd	complete	speeding/volume over weekend	traffic study	85th percentile 75km/hr (60km/hr)					
Sep-21	Glenwoods	complete	speeding	traffic study	85th percentile 84km/hr (70km/hr)					
Sep-23	Wood River Bend	complete	speeding	traffic study	85th percentile 52km/hr (40km/hr)					
Sep-27	Dunkelman Dr	Complete. Daily volume does not meet requirements.	4 way stop sign request	traffic study (x2 streets)	Osbourne: 85th: 39km/hr (40km/hr) Bouchier: 85th: 47km/hr (40km/hr)	traffic count complete, pedistriant count complete.				
Oct-03	Queen Street	Complete. Daily volume does not meet requirements.	4 way stop sign request	traffic study (x2 streets)	King: 85th: 44km/hr (40km/hr) Queen: 85th: 47km/hr (40km/hr)	traffic count complete, pedistriant count complete.				
Oct-06	Huntley Dr	complete	speeding	traffic study	85th percentile 50km/hr (40km/hr)					
Oct-07	Baldwin Road	complete.	speed reduction, signage required	traffic study	85th percentile 68km/hr (70km/hr)					
Nov-01	Ravencrest Rd	complete. YRP notified.	Speeding. (Study of previous bad counter.)	traffic study	85th percentile 78km/hr (60km/hr)					Yrp Notified
Nov-14	Smith Blvd	Complete	Traffic Study	Traffic Study	85th percentile 62km/hr (50km/hr)					
Nov-14	Catering Rd	Complete	Traffic Study	Traffic Study	85th percentile 71km/hr (60km/hr)					
Dec-12		pending	4 way stop sign request	traffic study						

GEORGINA SAFE STREET COMMITTEE
COMPLAINT TEMPLATE

DATE	LOCATION	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	COMMENTS			Speeds			Contact YRP
									Posted	During	Post	
Aug-16	Ravencrest Rd	onging	speeding	traffic study	counter in place, had a bad count. 2 recounts done after.	bad count. 85th %: 18km/h	Oct 3: bad count, tube split	Dec 14: 85th% 81km/hr	60km/hr	84km/hr, 70km/hr, 80km/hr		Nov, Jan
Dec-08	Pollock Road	re-do	traffic study	traffic study	bad count. Need to re-do.	bad count.			70km/h			
Dec-12	Mount Pleasant Trail	signage	Cattle crossing	traffic study, signage	traffic study complete, signage to be put				60km/hr	80km/hr		
Dec-12	Osbourne/ Dunkleman	pending weather	4 way stop sign request	traffic study								
Jan-05	Spring/Queensway S	pending weather	4 way stop sign request	traffic study								
Feb-20	Country Mile/ Catering	pending weather	3 way stop sign request	traffic study								

GEORGINA SAFE STREET COMMITTEE
COMPLAINT TEMPLATE

DATE	LOCATION	TRAFFIC STUDY STATUS	ISSUE	ACTION REQUIRED	OUTCOME OF ISSUE	COMMENTS			Speeds			
									Posted	During	Post	Contact YRP
Aug-16	Ravencrest Rd (between Ravenshoe and Kennedy)	onging	speeding	traffic study	counter in place, had a bad count. 2 recounts done after.	bad count. 85th %: 18km/h	Oct 3: bad count, tube split	Dec 14: 85th% 81km/hr	60km/hr	84km/hr, 70km/hr, 80km/hr		Nov, Jan
Dec-08	Pollock Road	re-do	traffic study	traffic study	bad count. Need to re-do.	Dec 8: bad count.			70km/h			
Dec-12	Mount Pleasant Trail	signage	Cattle crossing	traffic study, signage	traffic study complete, signage to be put	Cattle crossing signage installed			60km/hr	80km/hr		
Dec-12	Osbourne/ Dunkleman	pending weather	4 way stop sign request	traffic study								
Jan-05	Spring/Queensway S	pending weather	4 way stop sign request	traffic study								
Feb-20	Country Mile/ Catering	in progress	3 way stop sign request	traffic study	Previous count batteries died due to weather. Second count started April 13.	Feb 20: bad count.	Apr 14: ongoing		Catering: 60km/h Country Mile: 70km/h			
Apr-04	Baldwin Rd/ Harmony Ranch	signage	speeding	traffic study	Study from May 16'16: 85th% 76km/h	May 16'16: 85th % 76km/h			70km/h	76km/h		
Apr-05	Lake Drive S/ Robert St	**COMPLETE**	Volume Report for Dog Park	Volume study	Volume report completed	Used tube counter due to weather.		AADT: 274	--	--	--	--
Apr-13	Lakeside Public School/ Shorecrest Road	pending	speeding	traffic study								

Town of Georgina

26557 Civic Centre Rd
Keswick

Site Code: 00000002
Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Combined

Date\Speed (KPH)	1-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	>105	Total
2016-12-08	2	1	1	0	7	10	9	7	4	4	0	0	0	0	45
12:00	0	0	0	0	4	5	11	16	2	8	0	0	0	0	46
13:00	0	1	1	3	5	8	7	11	8	2	2	1	0	0	49
14:00	0	0	1	2	3	5	13	20	7	3	2	0	1	0	57
15:00	0	0	2	2	3	7	8	16	8	3	3	2	1	0	55
16:00	0	0	1	4	7	6	22	23	5	9	6	3	2	2	90
17:00	0	0	0	3	3	24	32	46	18	11	0	0	1	0	138
18:00	0	1	0	6	5	14	29	37	12	5	2	1	0	1	113
19:00	0	0	2	1	4	10	8	20	9	3	2	0	0	0	59
20:00	71	4	7	4	4	9	2	3	4	0	0	0	0	0	108
21:00	37	0	2	7	5	3	1	0	0	0	0	0	0	0	55
22:00	2	1	3	3	0	6	3	2	0	1	0	0	0	0	21
23:00	1	0	1	2	2	3	2	1	0	0	0	0	0	1	13
Day Total	113	8	21	37	52	110	147	202	77	49	17	7	5	4	849
2016-12-09	0	1	1	0	2	4	2	0	0	1	0	0	0	0	11
01:00	1	0	2	4	1	2	1	0	0	0	0	0	0	1	12
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
05:00	1	0	1	0	0	3	2	0	0	0	1	0	0	1	9
06:00	0	0	0	3	5	6	5	6	2	1	2	2	0	0	32
07:00	2	0	3	6	8	6	10	15	3	3	0	1	0	0	57
08:00	1	0	1	5	13	26	23	8	2	2	0	0	0	0	81
09:00	0	0	5	8	14	25	16	10	2	0	0	0	0	0	80
10:00	0	0	2	5	12	21	12	14	2	1	0	0	0	0	69
11:00	1	0	1	4	5	13	7	10	0	3	0	0	0	0	44
12:00	11	0	0	1	4	10	12	12	5	0	0	0	1	0	56
13:00	1	3	1	1	3	9	11	13	6	2	2	1	0	0	53
14:00	0	0	1	2	1	6	8	21	9	3	3	1	2	0	57
15:00	1	1	1	3	3	8	12	20	10	5	2	1	0	0	67
16:00	0	0	0	4	10	14	18	27	16	7	2	0	1	0	99
17:00	0	0	0	2	4	9	25	30	13	10	6	2	1	0	102
18:00	0	1	1	4	13	15	23	27	15	3	1	0	0	2	105
19:00	3	3	4	6	8	15	11	7	5	1	0	0	0	0	63
20:00	0	5	1	4	4	10	11	5	1	1	2	0	0	0	44
21:00	0	0	1	4	4	5	4	3	1	0	1	0	0	0	23
22:00	1	0	0	3	3	7	3	7	0	0	1	0	0	0	25
23:00	0	0	2	5	5	2	1	3	2	1	0	0	0	0	21
Day Total	23	14	28	74	123	216	219	238	94	44	23	8	5	4	1113

Town of Georgina

26557 Civic Centre Rd
Keswick

Site Code: 00000002
Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Combined

Date\Speed (KPH)	1-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	>105	Total
2016-12-10	0	0	0	3	2	2	2	3	0	2	0	0	0	0	14
01:00	0	1	0	0	0	2	0	1	0	1	1	0	0	0	6
02:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	2	1	1	1	0	0	0	0	0	0	5
04:00	0	0	0	0	0	1	2	1	0	0	0	1	0	0	5
05:00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2
06:00	0	0	0	0	1	1	0	3	1	2	0	0	0	0	8
07:00	0	0	1	1	2	1	4	0	2	2	0	0	1	0	14
08:00	1	0	0	1	2	7	7	4	0	3	1	0	0	0	26
09:00	2	0	1	2	3	7	10	8	3	4	0	1	0	0	41
10:00	0	1	3	3	5	11	13	13	6	0	0	1	0	0	56
11:00	1	1	0	2	3	7	11	10	7	4	2	1	0	0	49
12:00	1	0	0	2	7	6	15	14	6	3	2	1	0	0	57
13:00	0	0	0	2	2	7	9	12	7	3	4	1	0	1	48
14:00	0	0	0	1	3	11	15	9	15	6	1	1	0	1	63
15:00	0	1	0	2	1	7	14	20	8	2	4	1	0	0	60
16:00	1	1	2	1	7	19	17	13	10	2	1	0	0	0	74
17:00	0	2	2	5	8	14	13	9	5	2	0	0	1	0	61
18:00	0	2	3	3	8	12	7	7	7	0	1	0	0	0	50
19:00	2	0	2	8	4	7	15	9	3	6	0	0	0	0	56
20:00	0	0	1	4	7	9	2	11	2	3	0	0	0	0	39
21:00	0	1	0	1	0	5	2	2	2	1	0	1	0	0	15
22:00	0	0	2	1	1	8	2	3	3	0	0	1	0	0	21
23:00	1	0	2	3	5	7	5	1	2	2	0	0	0	0	28
Day Total	9	10	19	45	75	154	166	154	89	48	18	10	2	2	801
2016-12-11	0	0	0	0	2	1	3	1	2	1	0	0	0	0	10
01:00	0	0	0	0	3	3	2	2	2	2	0	0	0	0	14
02:00	0	0	0	0	0	0	1	2	1	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
11:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00	1	0	0	0	2	2	3	0	0	1	0	0	0	0	9
13:00	1	0	1	0	0	2	0	0	1	1	0	1	0	2	9
14:00	0	0	1	0	0	1	2	3	0	0	0	0	0	0	7
15:00	0	0	0	1	3	1	1	2	1	0	0	1	0	0	10
16:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
18:00	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	2	1	3	1	11	13	15	14	9	5	0	2	0	3	79

Town of Georgina

26557 Civic Centre Rd
Keswick

Site Code: 00000002
Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Combined

Date\Speed (KPH)	1-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	>105	Total
2016-12-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
09:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
14:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
15:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
16:00	0	0	0	0	0	2	0	2	1	0	0	0	0	0	5
17:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
18:00	0	0	0	2	0	2	0	1	0	0	0	0	0	0	5
19:00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
20:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
21:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	0	1	0	6	5	7	3	5	2	0	0	0	0	0	29
2016-12-13	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
12:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	0	0	0	1	1	0	2	0	1	0	0	0	0	0	5

Town of Georgina

26557 Civic Centre Rd
Keswick

Site Code: 00000002
Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Combined

Date\Speed (KPH)	1-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	>105	Total
2016-12-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Combined Total	147	34	71	164	267	500	553	613	273	146	58	27	12	13	2878

85 percentile = 81

Town of Georgina

26557 Civic Centre Rd
Keswick

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Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Start	05-Dec-16		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	Direction 1	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction
12:00 AM	*	*	*	*	*	*	*	*	11	0	14	0	6	4	10	1
01:00	*	*	*	*	*	*	*	*	9	4	5	1	**9**	**5**	8	3
02:00	*	*	*	*	*	*	*	*	0	0	2	1	3	1	2	1
03:00	*	*	*	*	*	*	*	*	0	2	3	2	1	1	1	2
04:00	*	*	*	*	*	*	*	*	0	1	2	3	0	0	1	1
05:00	*	*	*	*	*	*	*	*	2	8	0	2	0	1	1	4
06:00	*	*	*	*	*	*	*	*	0	32	2	6	0	2	1	13
07:00	*	*	*	*	*	*	*	*	10	49	7	7	0	0	6	19
08:00	*	*	*	*	*	*	*	*	22	**63**	6	20	0	0	9	28
09:00	*	*	*	*	*	*	*	*	**25**	59	6	35	0	0	10	**31**
10:00	*	*	*	*	*	*	*	*	25	48	17	**41**	1	2	14	30
11:00	*	*	*	*	*	*	*	*	24	22	**21**	28	0	1	**15**	17
12:00 PM	*	*	*	*	*	*	22	26	25	31	23	**34**	5	4	19	**24**
01:00	*	*	*	*	*	*	28	21	27	28	29	19	**7**	3	23	18
02:00	*	*	*	*	*	*	32	25	38	21	32	33	4	3	26	20
03:00	*	*	*	*	*	*	32	25	44	23	34	26	4	**6**	28	20
04:00	*	*	*	*	*	*	61	31	65	**34**	**47**	27	1	0	44	23
05:00	*	*	*	*	*	*	95	**45**	75	29	41	22	1	1	**53**	24
06:00	*	*	*	*	*	*	91	22	**77**	28	33	17	1	1	50	17
07:00	*	*	*	*	*	*	42	19	43	22	36	22	0	1	30	16
08:00	*	*	*	*	*	*	**98**	10	31	13	30	9	0	0	40	8
09:00	*	*	*	*	*	*	13	42	20	3	12	3	0	1	11	12
10:00	*	*	*	*	*	*	19	2	14	11	12	9	0	0	11	6
11:00	*	*	*	*	*	*	11	3	15	8	23	5	0	0	12	4
Lane	0	0	0	0	0	0	544	271	602	539	437	372	43	37	425	342
Day	0		0		0		815		1141		809		80		767	
AM Peak	-	-	-	-	-	-	-	-	09:00	08:00	11:00	10:00	01:00	01:00	11:00	09:00
Vol.	-	-	-	-	-	-	-	-	25	63	21	41	9	5	15	31
PM Peak	-	-	-	-	-	-	20:00	17:00	18:00	16:00	16:00	12:00	13:00	15:00	17:00	12:00
Vol.	-	-	-	-	-	-	98	45	77	34	47	34	7	6	53	24

Town of Georgina

26557 Civic Centre Rd
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Station ID:

152 Ravencrest Rd
Near farm across 152 Ravencrest
Dec 8th - 20th 2016

Latitude: 0' 0.0000 South

Start	12-Dec-16		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	Direction 1	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction	Direction
12:00 AM	0	0	**1**	0	0	0	*	*	*	*	*	*	*	*	0	0
01:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
02:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
03:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
04:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
05:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
06:00	0	1	0	0	0	0	*	*	*	*	*	*	*	*	0	0
07:00	0	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
08:00	**1**	**2**	0	0	0	0	*	*	*	*	*	*	*	*	0	**1**
09:00	1	0	0	0	0	0	*	*	*	*	*	*	*	*	0	0
10:00	0	0	0	**1**	0	0	*	*	*	*	*	*	*	*	0	0
11:00	0	1	1	1	0	0	*	*	*	*	*	*	*	*	0	1
12:00 PM	0	0	0	**1**	0	0	*	*	*	*	*	*	*	*	0	0
01:00	2	0	0	0	0	0	*	*	*	*	*	*	*	*	1	0
02:00	1	0	0	0	**1**	**1**	*	*	*	*	*	*	*	*	1	0
03:00	2	0	0	0	*	*	*	*	*	*	*	*	*	*	1	0
04:00	3	**2**	0	0	*	*	*	*	*	*	*	*	*	*	**2**	**1**
05:00	3	0	0	0	*	*	*	*	*	*	*	*	*	*	2	0
06:00	**5**	0	0	0	*	*	*	*	*	*	*	*	*	*	2	0
07:00	3	0	0	0	*	*	*	*	*	*	*	*	*	*	2	0
08:00	0	1	0	0	*	*	*	*	*	*	*	*	*	*	0	0
09:00	1	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0
10:00	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0
11:00	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0
Lane	22	7	2	3	1	1	0	0	0	0	0	0	0	0	11	3
Day	29		5		2		0		0		0		0		14	
AM Peak	08:00	08:00	00:00	10:00	-	-	-	-	-	-	-	-	-	-	-	08:00
Vol.	1	2	1	1	-	-	-	-	-	-	-	-	-	-	-	1
PM Peak	18:00	16:00	-	12:00	14:00	14:00	-	-	-	-	-	-	-	-	16:00	16:00
Vol.	5	2	-	1	1	1	-	-	-	-	-	-	-	-	2	1

Comb. Total	29	5	2	815	1141	809	80	781

ADT ADT 468 AADT 468

Tuesday, December 13, 2016

A record of the sidewalk problems and years of frustration.

This is a summary of years and years of frustration as caused by not being able to go for a walk on the sidewalk in our area as seen through the eyes of a seventy-five-year-old grumpy old **man** trying to get in the walking time that years and years of chemotherapy had caused to be necessary to get back the muscle dexterity that is needed to carry on and by his seventy-five-year-old wife who is struggling with a brain tumor and the associated seizure meds and needs to walk often and briskly to keep the blood circulation in her whole body going to keep her on the road to recovery.

The location of the road and sidewalk that is in question is on the north side of Metro Road between De la Salle Park and Dalton Road. The dates and times that I will quote are not exact but will be plus or minus one year starting from back in the 80s when the Metro Road was simply two lanes of paved road. In the late 90s the road was slightly widened and a bicycle path put on either side of the road to accommodate a very rapidly growing pastime in the area. This seemed to work out well for everybody; the walkers will walk to the side of the road and on the bicycle path when no one was coming and it seemed like everyone could get along well together with one moving out of the way of another when need be.

It was a very unfortunate incident on Metro Road back at that time when an elderly couple were walking along at dusk and a car coming along this same road swerved to miss a raccoon and unfortunately ran into the both of them and killed them on the spot. The idea that came out of this incident was that we should have sidewalks on one side of the road. So rather than widen the road the sidewalks were placed in the area that had been designated for the bicycle path and then the northern bicycle path no longer existed. The sidewalks worked quite well for the pedestrians until the bicycle riders realized that their space had been taken up by the sidewalk and decided that it must be for their benefit as well. No one used the bicycle path on the other side in either direction from then on and all of the cyclers going east or west rode on the sidewalk. This new situation seemed to work out quite well for the cyclers but if you happen to be caught walking on the sidewalk with bicycles passing it could easily lead to tragedy. I myself was hit or pushed off the sidewalk three times by adults riding bicycles on the sidewalk and one time I was actually hit by a piece of ½ inch copper pipe 10 foot long as the cycler tried to maneuver the sidewalk hold onto the copper pipe and hold the bag of goodies that was to be used to install it. I was not badly hurt at the time but did suffer the slings and arrows of the cycling plumber who told me to “get out of my way old man”, “you are just a (line of expletives)” and continued on his way. On one occasion a young woman drove the bicycle straight at me and I had to grab the handle bars to keep her from running me over so with the front wheel between my legs and the woman right now in my face I continued to suffer the abuse from this foulmouthed young woman who told me I should of got out of her way. Not just as a way of explanation at this time I was recovering from six years of chemotherapy and was not walking too well at all, and at that part of the sidewalk you have two choices if you step off to your right you are in traffic on Metro Road and if you step off to your left there is quite a deep ditch that would cause you to fall down onto some jagged rocks that were placed by the town in the bottom of the drainage ditch. I hope you are able to help with this issue and although I will give any assistance you need I would not like my name to be let out. J[redacted]

Sarah Brislin

From: Carolyn Lance
Sent: December-23-16 11:41 AM
To: Sarah Brislin
Subject: traffic trailer/counters

Hi Sarah. This is to advise that Council at its December 14th meeting considered your memorandum on behalf of the Georgina Safe
Streets Committee, requesting Council support the Operations and Infrastructure Department's proposal for the purchase of a
traffic trailer and three traffic counters, and passed the following motion:

Moved by Regional Councillor Davison, Seconded by Councillor Harding

RESOLUTION NO. C-2016-0657

That the Georgina Safe Streets Committee's request for Council's support of the purchase of a traffic trailer and three traffic counters be received and referred to the 2017 budget discussions.

Carried.

Carolyn Lance
Council Services Coordinator
Clerk's Division | Town of Georgina
26557 Civic Centre Rd., Keswick, ON L4P 3G1
T: 905-476-4301 ext 2219
905-722-6516
705-437-2210
E: clance@georgina.ca
www.georgina.ca

Sarah Brislin

From: Rebecca Mathewson
Sent: February-06-17 3:59 PM
To: *Everyone (Internal & External) - Authorized Use Only
Subject: 2017 Budget Adoption

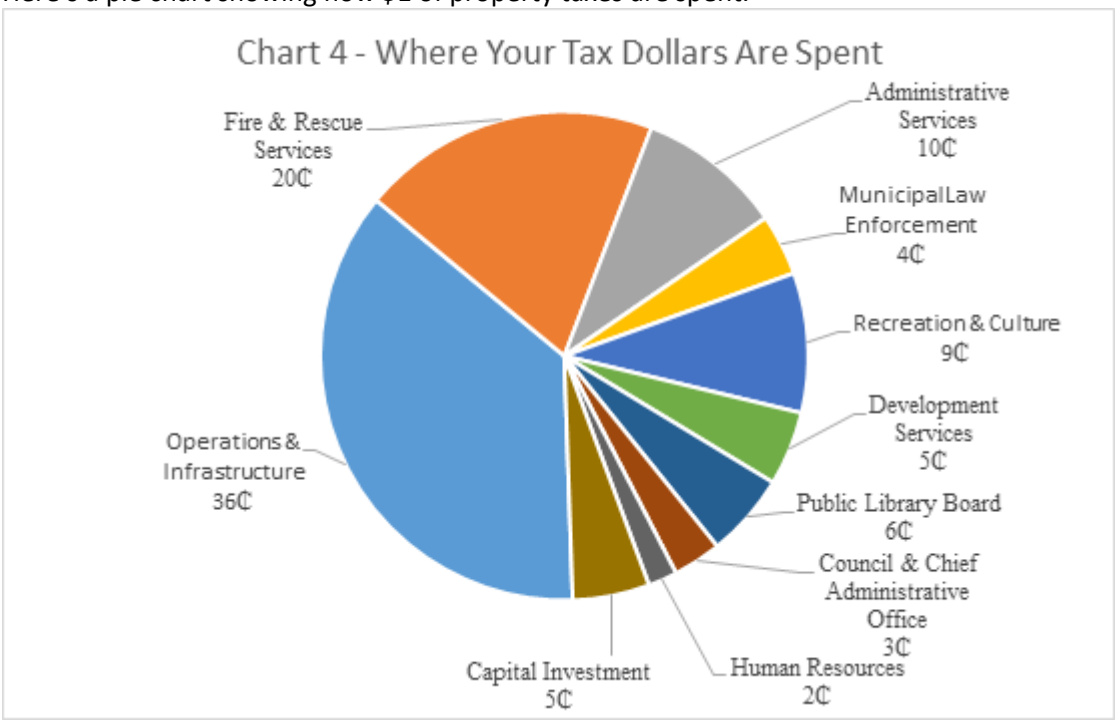
Good afternoon all,

Note: If you have received a previous version of this e-mail, please delete as the previous chart was incorrect. My sincere apologies.

I just wanted to send you a brief note to advise that Council adopted the 2017 Budget in principle at their last meeting. I anticipate final budget approval at Council's meeting of Wednesday, February 8th.

The Budget reflects an increase in the Town's annual budget of 4.5%. After blending the increase with the Region of York rates (2.87% increase) and school board rates (estimating 1.5% increase), it is expected that property taxes for an average home in Georgina will increase by 3.4%, about $126.00 per household.

Here's a pie chart showing how $1 of property taxes are spent.



The 2017 Budget also includes an increase of 10.1% to water rates and 6.0% to sewer rates.

Please let me know if you have any questions or speak with your Director/Manager/Supervisor. Thanks.

Rebecca Mathewson, CPA, CGA
Director of Administrative Services and Treasurer
Administrative Services | Town of Georgina
T: 905-476-4301, ext. 2201
905-722-6510


AHEAD
SCHOOL


SCHOOL


SCHOOL


SCHOOL ZONE

TRANSPORTATION MOBILITY PLAN GUIDELINES

for Development Applications




November 2016

York Region

Construction on the Davis Drive rapidway, Town of Newmarket

Executive Summary

The Regional Municipality of York (the Region) is located in the heart of the Greater Toronto Area (GTA) in Southern Ontario. York Region is comprised of nine local municipalities covering approximately 1,776 square kilometres, stretching from the City of Toronto in the south to Lake Simcoe and the Holland Marsh in the north, and bounded by Peel Region in the west and Durham Region in the east.

Growth in the Region

York Region is expected to grow to 1.79 million residents and 900,000 jobs by 2041. Given the significance of this growth, it is important to integrate land use with transportation planning to create complete and sustainable communities. This is consistent with the Regional and Municipal Official Plans and Transportation Master Plans.

As the Region matures towards a more urban environment, growth and development cannot be assessed solely on its impact on road capacity and intersection operations. Within many developed areas across the Region, the existing transportation network for automobile use has reached or is near capacity. For these reasons, traditional transportation impact studies must identify policy, program improvements, and the infrastructure requirements necessary to move people and goods across a multimodal (walking, cycling, taking transit, and driving) transportation environment.

The Regional Transportation Master Plan indicates that "The future success of York Region as the number one destination within the GTHA for people to live, work and play is dependent on the Region's ability to build an interconnected system of mobility."

Managing the demand for travel generated by new developments is a potentially powerful strategy for controlling costs, mitigating environmental impacts, and possibly permitting developments to proceed in road capacity constrained areas.

Land use and transportation

To address future requirements, the Region Official Plan (2010), as amended, requires that communities be designed to provide an enhanced mobility system using a "people and transit first approach". This would connect land use and transportation planning by balancing pedestrians, cyclists, public transit and automobile users, through the sustainability initiatives identified in the Transportation Master Plan Update and other development guidelines, such as the Region's New Communities Guidelines (2013). The New Communities Guidelines have been created to assist the nine local municipalities within York Region and the development industry in successfully implementing the sustainable building and new community areas policies in the Regional Official Plan.

Purpose of the guidelines

As part of the approval process, the Region and the nine local municipalities within York Region require development applications to provide a Transportation Impact Study to assess the impacts of the proposed development on the existing and future transportation network. This requirement will be even more important in the future because parts of the Region's transportation network are already constrained.

The Regional Official Plan and Transportation Master Plan contain strong policies and requirements emphasizing the goals of sustainability, alternative modes of transportation and mobility. The Transportation Mobility Plan Guidelines are the implementation tools, providing the bridges required to implement and connect the policies and requirements in the Official Plans and Transportation Master Plans. The Transportation Mobility Plan Guidelines also consolidate most of the Regional and local municipal requirements into one document.

A Transportation Mobility Plan is simply a combination of a multimodal mobility plan along with the traditional transportation impact study analyses. The Transportation Mobility Plan is required to support all development applications in York Region that have potential impacts on Regional and local transportation systems. The Transportation Mobility Plan focuses more on transit, active transportation and measures that will reduce the travel demand and minimize single-occupant vehicle trips to and from the proposed developments. The Transportation Mobility Plan Guidelines for Development Applications is an update to the Region's existing Transportation Impact Study Guidelines for Development Applications (2007) and builds on other documents to provide greater clarity and detail on appropriate data sources and methods related to active transportation and transit:

- New Communities Guidelines (2013)
- Transit Oriented Development Guidelines (September 2006)
- Access Guideline for Regional Roads

From a transportation planning perspective, a Transportation Mobility Plan will help expedite the development review process and provide benefits for both review agencies and applicants, including:

- *Reducing Regional and local municipal staff review time for supporting transportation studies as both staff and transportation specialists will follow the same set of guidelines*
- *Requiring fewer iterations and revisions to reports*
- *Reducing the number of technical issues related to transportation at Ontario Municipal Board hearings*
- *Providing guidance to proposed development applicants to comply with Regional and local municipal official plans, standards and requirements*
- *Consolidating general Regional and local municipal requirements in one set of guidelines*

The Transportation Mobility Plan Guidelines for Development Applications provides information about the development process in York Region, key transportation principles of a Mobility Plan, Transportation Mobility Plan process, Transportation Mobility checklist and a step-by-step process about how to complete a Transportation Mobility Plan report.

These Guidelines attempt to incorporate the requirements from the nine local municipalities in York Region; however there are localized issues and requirements that may not be covered under these Guidelines. For example, parking, loading, urban design and internal site circulation are under the jurisdiction of the local municipalities. As such, transportation specialists are encouraged to consult with local municipal and Regional staff to include all requirements prior to the commencement of a Transportation Mobility Plan.

A Transportation Mobility Plan is a specialized multimodal study that involves traffic and transportation engineering principles and practices. The Transportation Mobility Plan must be undertaken by transportation specialists. These requirements apply to all development applications

including Official Plan Amendments, Secondary and Development Area Plans, Draft Plans of Subdivision, Site Plans, and re-zoning applications. Prior to the commencement of a Transportation Mobility Plan, transportation specialists should contact York Region staff from the Development Engineering or Transportation Planning Divisions, as well as the municipality, to discuss the scope of work and requirements. York Region and the respective municipality may suggest that the transportation specialists attend an initiation or project scoping meeting with Regional and local municipal staff.

The Transportation Mobility Plan Guidelines for Development Applications is a living document and will be updated as required. To download the latest copy please visit ***york.ca***

When is a Transportation Mobility Plan required?

A Transportation Mobility Plan is required when the proposed development generates 100 or more person trips. This plan is prepared in support of the Official Plan Amendment, Secondary Plan, Block Plan, Zoning By-law Amendment, draft plan of subdivision and site plan applications.

If the proposed development generates fewer than 100 person trips, a Transportation Mobility Plan may still be required under the direction and consultation with Regional and local municipal staff to assess the impact of proposed access locations and operations, as well as to address any localized issues related to safety or operational concerns for other modes of transportation. A Transportation Demand Management Plan is required as a component of the Transportation Mobility Plan.

It is important that the applicant or transportation specialist contact Regional and local municipal staff to develop an appropriate scope of work for the proposed development. This will reduce review time and number of possible revisions to the final plan.

Guidelines organization

The Transportation Mobility Plan Guidelines for Development Applications is made up of five chapters:

Chapter 1 – Transportation Mobility Plan Process and Requirements: provides general information about the Transportation Mobility Plan Guidelines structure, process and a Transportation Mobility Plan checklist.

Chapter 2 – Transportation Mobility Plan Technical Guidelines: provides guidance on key elements, acceptable data sources and procedures for assessing the transportation impacts required to support development applications.

Chapter 3 – Transportation Demand Management Requirement and Implementation: provides general information, requirement and checklist for Transportation Demand Management.

Chapter 4 – Guideline Updates and Expectations: provides an overview of how this document will be updated and the professional judgment expected when applying these guidelines.

Chapter 5 – Contact Information and Reference Documents: provides agency contact information and links to reference documents.

It is recommended that transportation specialists use the checklist outlined in **Table 10** to ensure that all requirements are included or addressed in the Transportation Mobility Plan. Each requirement and expectation in the checklist is explained in **Chapter 2**. For further assistance, consult with York Region Transportation Planning staff.

For completeness and to fully understand the Transportation Mobility Plan requirements, all chapters included in these Guidelines should be consulted when evaluating the transportation requirements to support development applications.

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A graphic rendering of future Vaughan Metropolitan Centre, City of Vaughan

CHAPTER 1

Transportation Mobility Plan Process and Requirements

1.1 Transportation planning in York Region

Many of the communities within York Region and the Greater Toronto Area were planned around the use of automobiles. This traditional transportation planning practice has resulted in traffic congestion and places tremendous pressures on existing transportation systems as communities continue to grow and become more urbanized. As construction, maintenance and property costs continue to rise rapidly, it is more difficult to build and maintain new transportation infrastructure to support growth.

Today, the Region's approach to transportation planning is guided through policies in the Regional Official Plan (2010) and the recommendations in the Transportation Master Plan.

York Region policies and practices include infrastructure and strategies to increase walking, cycling and transit mode share to reduce single occupancy automobile trips.

1.2 Transportation policies in the Regional Official Plan

The Regional Official Plan (2010), as amended, directs the vision of city building, maintaining a dynamic economy, and providing integrated and responsive human services in a sustainable manner that enhances and protects the Regional Greenlands System. Policies of Regional Council aim to build more sustainable communities by ensuring communities are designed to:

- Prioritize pedestrians and cyclists
- Reduce single occupancy automobile use
- Support public transit and increase non-auto mode share

While a sample of transportation and transit-related policies have been referenced in this document, the policies of the Regional Official Plan must be considered together with other transportation policies to determine conformity.

Some of the notable policies in the Regional Official Plan related to transportation planning requirements include:

5.2.3 That communities be designed to ensure walkability through interconnected and accessible mobility systems. These systems will give priority to pedestrian movement and transit use, provide pedestrian and cycling facilities, and implement the York Region Pedestrian and Cycling Master Plan.

5.6.12 That mobility plans shall be completed to ensure that:

a. communities are designed to have interconnected and accessible mobility systems, with a priority on pedestrian movement, and on transit use and access
b. communities are designed to include a system of pedestrian and bicycle paths linking the community internally and externally to other areas, and providing access to the transit system
c. a transit plan is completed in consultation with York Region Transit, which identifies transit routes and corridors, co-ordinates transit with land use patterns and ensures the early integration of transit into the community
d. the distance to a transit stop in the Urban Area is within 500 metres of 90 per cent of residents, and within 200 metres of 50 per cent of residents
e. all schools and community centres shall be integrated into the community mobility system and provide the ability to walk, cycle, transit and carpool to these locations
f. the street network includes continuous collector streets that run both north-south and east-west and/or a grid system of streets linked to the Regional Street network
g. new community areas are designed to meet the York Region Transit-Oriented Development Guidelines

h. planned rapid transit corridors, and/or transit terminals that connect to a rapid transit corridor, are included in the community

i. parking standards, consistent with policy 5.2.10, encourage and support transit use and include reduced minimum and maximum parking standards

j. trip-reduction strategies consistent with the policies of Section 7.1 are promoted

7.2.53 To restrict vehicle access from developments adjacent to Regional streets to maximize the efficiency of the Regional street system through suitable local street access, shared driveways and interconnected properties. Exceptions may be made to this policy in Regional Centres and Corridors and mainstreets.

7.2.61 To require local municipalities to plan and implement, including land takings necessary for, continuous collector streets in both east-west and north-south directions in each concession block, in all new urban developments, including new community areas.

1.3 Transportation policies in local municipal Official Plans

Local municipal Official Plans contain policies and guiding principles for local interests and requirements; however, as required by the Ontario Planning Act, local Municipal Official Plans must conform with the Regional Official Plan. As such, both the local Municipal and Regional Official Plans share similar objectives and visions.

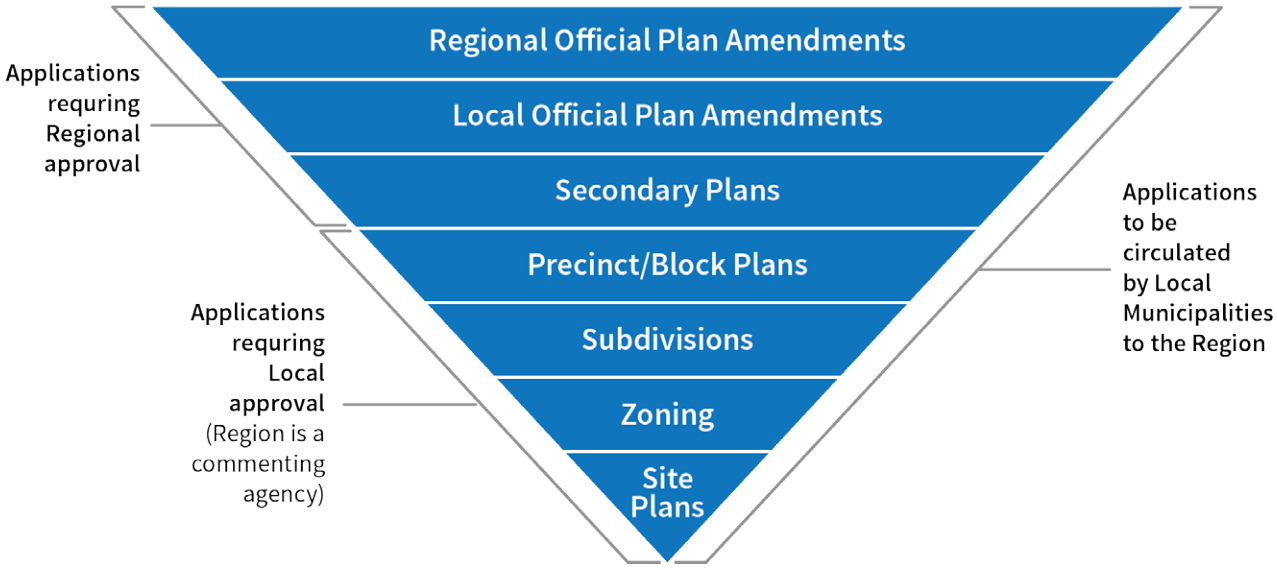
1.4 Development review process in York Region

The Development Review process within York Region follows the "One-Window" approach for providing Regional input, review, decision-making and approval. This approach streamlines and coordinates input across all Regional Departments and Branches, including:

- Corporate Services with Community Planning and Development Services Branch
- Environmental Services
- Transportation Services with York Region Transit and York Region Rapid Transit Corporation

Figure 1 below illustrates the approval process hierarchy in York Region.

Figure 1 – Development Approval Process Hierarchy



The Region is the approval authority for applications to amend the Regional Official Plan and amendments to local municipal Official Plans (unless the local Official Plan Amendments are exempted from Regional approval) and secondary plans. The Region is a commenting agency to the local municipalities on site plans, subdivision plans, condominium applications, zoning amendments, consents and minor and variance applications (the latter three only related to roads issues).

Regional staff also assist the local municipalities by participating in various technical and advisory committees for strategic land use studies (secondary plans), corridor studies and Environmental Assessments. As such, there is strong coordination between Regional staff and municipal staff on the assumptions and methodologies.

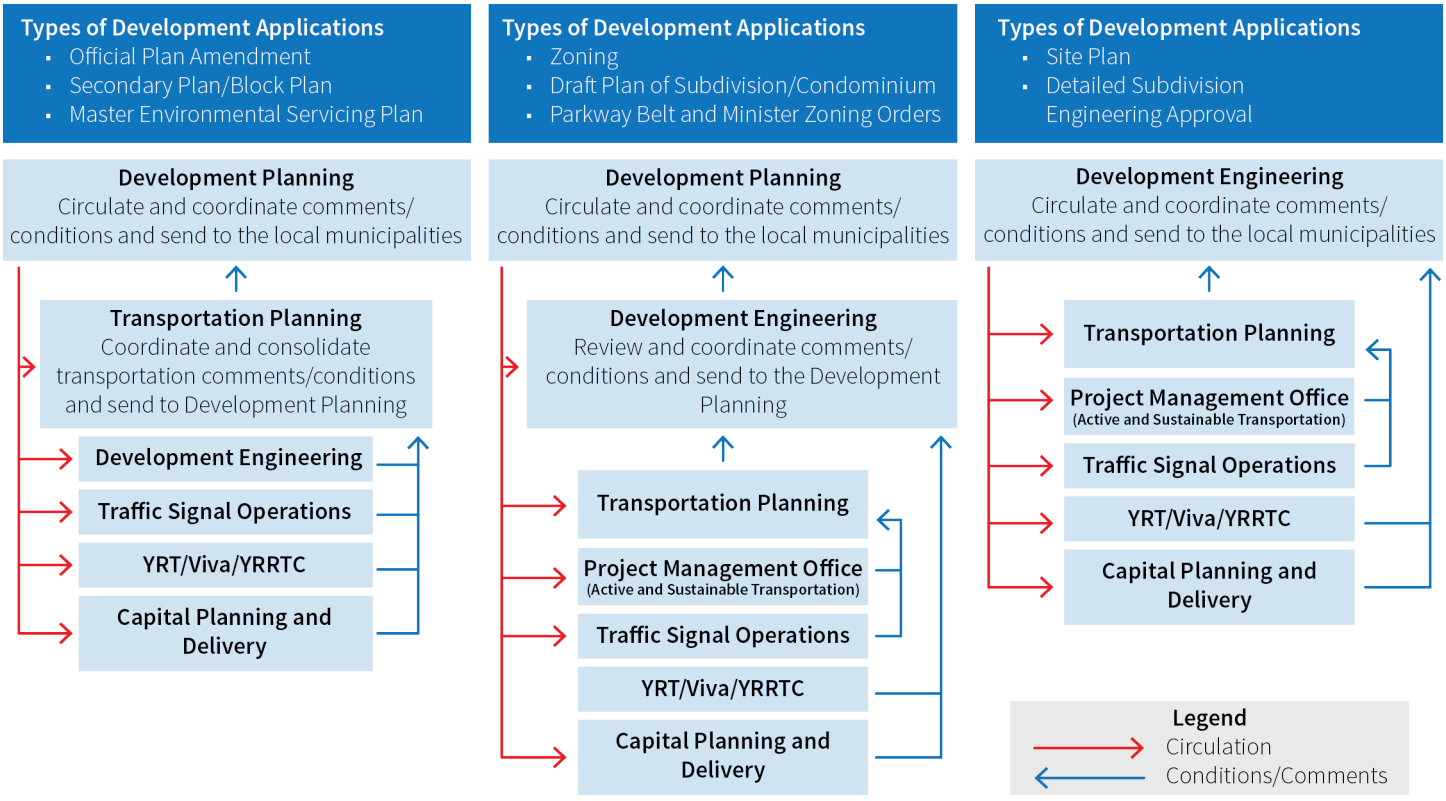
Under the current practice, the local municipalities in York Region are the approval authorities for subdivision plans submitted on or after March 28, 1995. The Region provides the local municipalities with conditions of draft plan approval, and a letter from the Region is required confirming the conditions have been met at the final approval stage. Some conditions, such as the requirement for a transportation impact study and transportation demand management (TDM) plan, are also coordinated between the Region and the local municipalities through pre-consultation, Development Review Committees or other specific meetings.

The Region has designated Community Planning and Development Services as a one-window contact for all development applications:

- Official Plan Amendment (OPA) - (local municipality and York Region
- Secondary Plan Area
- Re-zoning (ZBA)
- Subdivision and Condominium Draft Plans
- Site Plans
- Other (consent/minor variance)

Figure 2 illustrates the coordinated Regional transportation comments and conditions on development applications.

Figure 2 – Coordinated Regional Transportation Comments/Conditions Flow Chart



1.5 What is a Transportation Mobility Plan and why is it required?

A Transportation Mobility Plan is a combination of multimodal plans along with traditional traffic impact analyses.

A Transportation Mobility Plan is required to meet the objectives and requirements in the Regional Official Plan (2010) and nine Municipal Official Plans. The Transportation Mobility Plan Guidelines are the implementation tools required to implement the policies and requirements in the Regional Official Plan and Transportation Master Plan.

These Transportation Mobility Plan Guidelines build upon three documents to provide greater clarity and detail on appropriate data sources and methods related to active transportation and transit:

- New Communities Guidelines (2013)
- Transit Oriented Development Guidelines (September 2006)
- Access Guideline for Regional Roads

The Guideline purposes are to:

- Update the Transportation Impact Study Guidelines for Development Applications (August 2007)
- Provide guidance to transportation specialists in undertaking a Transportation Mobility Plan or Transportation Study in support of development applications to conform with requirements of the Regional Official Plan and Transportation Master Plan
- Become a reference document for Regional and local municipal technical staff in reviewing Transportation Mobility Plan studies

Since the Transportation Mobility Plan requirements include multimodal analysis, the capacity and operation of other modes of transportation, including automobiles, transit, walking and cycling, must be evaluated in the same way as the auto mode in order to identify physical mitigation measures and programs/strategies to manage congestion, and to accommodate the proposed development.

The following details must be documented in a Transportation Mobility Plan:

1. Existing and future performance analysis for each mode
2. Existing and future levels of service and deficiencies for each mode
3. A recommended list of mitigation measures/ programs to address any deficiencies identified in 1. and 2. above
4. A detailed implementation plan for each mode based on the recommendations identified
5. Functional designs of the proposed improvements
6. Illustrated compliance with the existing Regional and Local Municipal active transportation plans
7. Transportation Demand Management plan and implementation strategy

The existing and future levels of service for all four modes of transportation are to be summarized in a table format for comparison purposes. The table is to also include information such as the improvements considered to address deficiencies related to all four modes of transportation. If tabulating improvements is not possible or too complex, a brief description of the improvements should be included in the report.

1.6 When is a Transportation Mobility Plan Study required?

A Transportation Mobility Plan Study is required when the proposed development generates 100 or more person trips. This Study is prepared in support of the Official Plan Amendment, Secondary Plan, Block Plan, Zoning By-law Amendment, draft plan of subdivision and site plan applications.

If the proposed development generates fewer than 100 person trips, a Transportation Mobility Plan Study may still be required under the direction of and in consultation with Regional and local municipal staff. It would assess the impact of the proposed access locations and operations, as well as address any localized issues related to safety or operational concerns for other modes of transportation. A Transportation Demand Management Plan is required as a component of the Transportation Mobility Plan Study.

It is recommended that the applicant or transportation specialist contact the Region and local municipality for the proposed scope of work.

1.7 Transportation Mobility Plan and land use planning

The key elements of the Regional Official Plan related to transportation planning include:

- City building, focusing on Regional Centres and Corridors and including innovation in urban design and green building
- New community areas, designed to a higher standard that includes requirements for sustainable buildings, water and energy management, public spaces, mixed-use, compact development, and urban design
- York Region Transportation Master Plan (2016)
- Enhanced mobility systems using a "people and transit first approach" to connect land use and transportation planning

The objectives of the Regional Transportation Master Plan include:

- Create a world class transit system
- Develop a road network fit for the future
- Integrate active transportation in urban areas
- Maximize the potential of employment areas
- Make the last mile work

The Regional Official Plan and Transportation Master Plan have a common goal to building complete communities. Complete communities are places where people can live, work, play and learn without the need to travel long distances. Integrating a Transportation Mobility Plan and land use planning will offer communities with different travel choices including; convenient access to transit, walking, cycling or carpooling, which supports the economy with meaningful employment and opportunities for local businesses to thrive. The applicant's transportation specialists, planners and architects are encouraged to work together to integrate land use and a transportation mobility plan to achieve the objectives of a complete community.

To achieve this objective, the following transportation principles are applicable for all types of development applications including Official Plan Amendments, secondary and development area plans, draft plans of subdivisions, site plans and re-zoning applications:

- Transportation capacity will be assessed on the basis of congestion management linking improvements to all transportation modes (auto, bike, walk, transit and carpooling)
- Travel demand impacts of the proposed development will be mitigated with infrastructure and program improvements to shift a higher proportion of travel demand to transit and other non-auto modes and not increasing traffic congestion on adjacent Regional roads during peak periods
- Interconnections with and between adjacent developments for auto and non-auto modes are required, in consultation with the respective local municipalities
- A connected finer grid street network will be planned and implemented through the development approvals and phasing process, including the identification of additional street, pedestrian, cycling and transit linkages, in consultation with respective local municipalities
- Where necessary, triggers for each phase of development will include improvements and performance-based standards that are tied to road, transit and other sustainable transportation modes
- Parking supply and design will reflect and support the transit-priority policies through secondary plan area studies, and shall reflect parking rates consistent with mode share assumptions
- Increase sustainable transportation modal split including transit through initiatives such as Transportation Demand Management measures, strategies and programs, including cycling, walking, transit use incentives and ride-matching programs for residents/employees, will be required to mitigate the travel demand impacts of each phase of development
- A proponent should be identified for every recommendation in the Transportation Mobility Plan

1.8 Transportation Mobility Plan process

The Transportation Mobility Plan process is illustrated in **Figure 3** and further explained in **Chapter 2**.

1.9 Transportation Mobility Plan requirements for types of development applications

A Transportation Mobility Plan is required for all development applications that generate 100 or more person trips, including Official Plan Amendments, secondary and development area plans, draft plans of subdivisions, site plans and re-zoning applications. It is recommended that prior to starting a Transportation Mobility Plan study, the transportation specialists contact Regional and local municipal staff to discuss the scope of work and requirements.

1.9.1 Transportation Mobility Plan for Official Plan Amendment

An Official Plan Amendment application is required when policies and/or land use designations in the Regional Official Plan or local municipal Official Plans are changed. An OPA is the first application to determine the appropriateness of the change in land uses or policies. These changes will shape the development pattern and may require substantial transportation infrastructure improvements to accommodate the proposed land uses. The applicant's engineers, planners and architects must work together to achieve the key transportation principles identified in **Section 1.7**. The main objectives and requirements of a Transportation Mobility Plan to support an OPA application are:

- To provide sufficient details about the impact of the proposed land use or policy changes on the existing transportation system for all modes of transportation
- To identify what other transportation infrastructure improvements for all modes of transportation are required above and beyond those identified in the Regional and local Municipal Transportation Master Plans or the Region's 10-Year Roads and Transit Capital Construction Program, as well as municipal construction programs
- To identify high level Transportation Demand Management plans, measures and initiatives to achieve the non-auto modal split and to reduce single-occupant-vehicles. This level of analysis is similar to the secondary plan/block plan requirement
- To identify a realistic implementation plan in order to achieve complete community building objectives as required in the Regional and local municipal Official Plans.

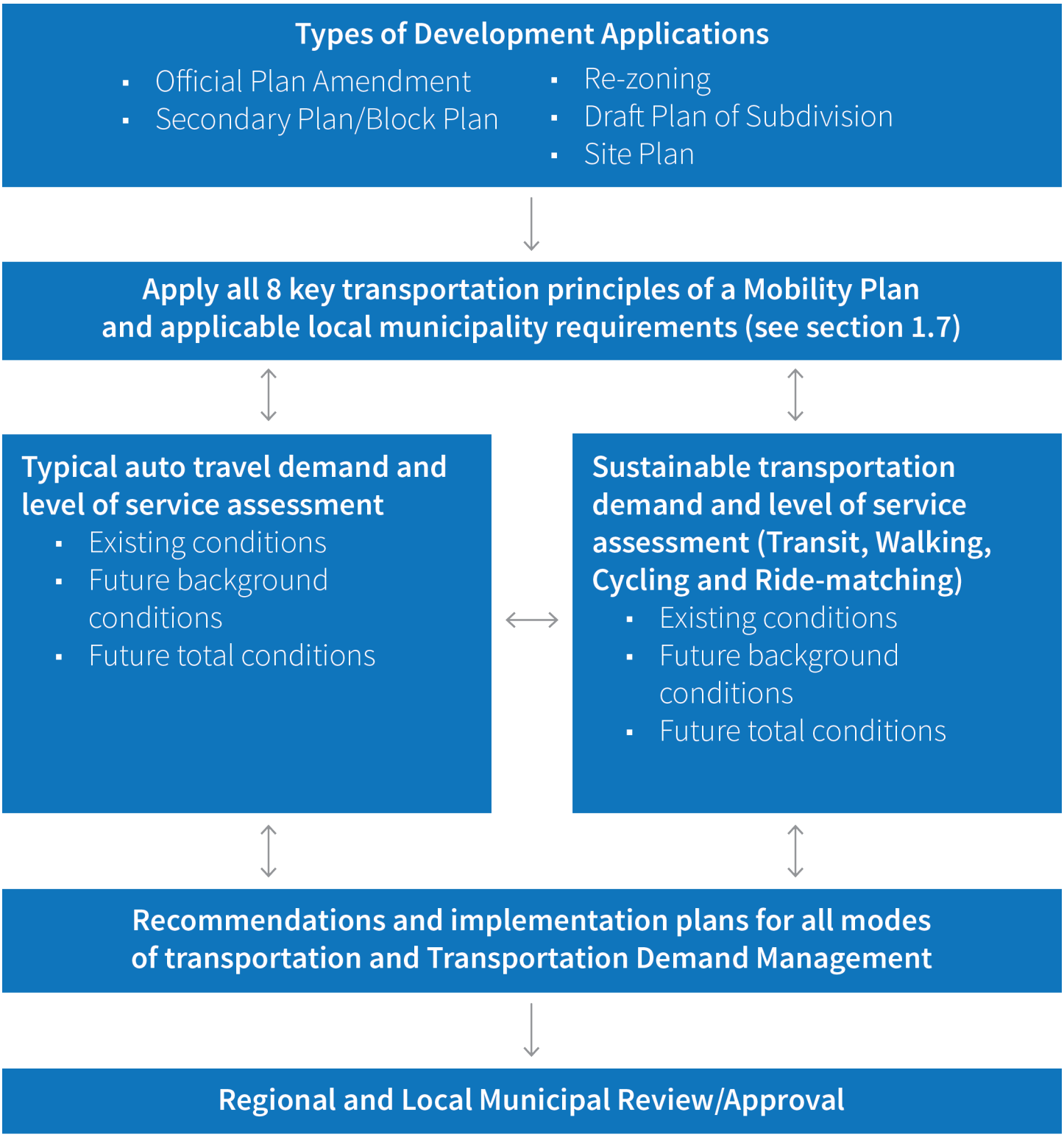
The requirements above will be reflected in the Transportation Mobility Plan report and Official Plan Amendment policies and will act as a framework to guide the secondary plans and block plans, as well as the final stage of the development such as draft plans of subdivision and site plans.

1.9.2 Transportation Mobility Plan for secondary plan and block plan

The secondary plan implements the objectives, policies and land use designations of the Regional and local Municipal Official Plans at the community and neighbourhood scale. Secondary plans provide a detailed policy framework and direction for a specific geographic area on topics such as land use, infrastructure, transportation, environment and urban design. A Secondary plan is one of the most important types of applications for the approval and reviewing agencies because it will designate the appropriate location for each type of land use and how the community will be built around it. The applicant's engineers, planners and architects must work together to achieve the key transportation principles identified in **Section 1.7**. The main objectives and requirements of a Transportation Mobility Plan to support a secondary plan application are:

- To provide sufficient details about the impact of the proposed land use or policy changes on the existing transportation system for all modes of transportation

Figure 3 – Transportation Mobility Plan Process



- To identify a more defined external and internal transportation network to accommodate all modes of transportation. This includes finer grid road network, active transportation network and detailed transit network in consultation with York Region Transit. The recommended transportation network must meet the objectives and requirements of the Regional and local municipal Official Plans, Transportation Master Plans, Region's New Communities Guidelines and the local municipal guidelines and requirements
- To identify other transportation infrastructure improvements and missing links for all modes of transportation required above and beyond those identified in the Regional and local Municipal Transportation Master Plans or the Region's 10-Year Roads and Transit Capital Construction Programs, as well as local municipal construction programs
- To identify development phasing plans based on the planned and scheduled proposed transportation infrastructure improvements
- To identify high level Transportation Demand Management plans, measures and initiatives to achieve the non-auto modal split and to reduce single-occupant-vehicles. This level of analysis is similar to the OPA requirement
- To identify a detailed implementation plan in order to achieve complete community building objectives

These requirements will be reflected in the Transportation Mobility Plan report, Secondary Plan report and schedules to guide the draft plans of subdivision and site plans.

1.9.3 Transportation Mobility Plan for site plan and draft plan of subdivision

As indicated in **Figure 1**, site plans and draft plans of subdivision are the last stage of the development application process where the development policies, principles and requirements of the OPA and secondary plan will be implemented. The applicant's engineers, planners and architects must work together to achieve the key transportation principles identified in **Section 1.7**. The main objectives and requirements of a Transportation Mobility Plan to support a site plan or draft plan of subdivision application are:

- To provide detailed impacts of the proposed development on the existing transportation system for all modes of transportation
- To identify a defined external and internal transportation network to accommodate all modes of transportation. This includes finer grid road network, active transportation network and detailed transit network in consultation with York Region Transit and municipalities. The recommended transportation network must meet the objectives and requirements of the Regional and local Municipal Official Plans, Transportation Master Plans, Region's New Communities Guidelines and municipal guidelines and requirements
- To apply the proposed development phasing plans based on the planned and scheduled proposed transportation infrastructure improvements identified in the secondary plan process
- To identify a site specific implementation plan for other transportation infrastructure improvements for all modes of transportation required as identified in the secondary plan
- To identify appropriate site access arrangements based on the Region's Access Guidelines and respective municipality's guidelines that will accommodate all modes of transportation
- To identify site specific and detailed Transportation Demand Management plans, measures and initiatives to achieve the non-auto modal split and to reduce single-occupant-vehicles in consultation with Regional and municipal staff. A TDM checklist is provided in **Chapter 3** of this report
- To identify site specific implementation plans in order to achieve complete community building objectives
- To meet the appropriate local municipal bylaws on parking, loading, urban design and internal site circulation requirements

The requirements above will be reflected in the Transportation Mobility Plan report.

1.10 York Region's multimodal level of service evaluation approach

York Region has developed its preferred multimodal level of service evaluation approach to address the performance requirements for each mode of transportation. These requirements are based on policies from the Region's 2016 Official Plan and recommendations from the 2016 Transportation Master Plan. Other guidelines such as the Context Sensitive Solutions Design for Regional Roads were also consulted and included in the evaluation approach.

The level of analysis and detail within a Transportation Mobility Plan will depend on the scale and location of the development and purpose of the study. Area wide studies for secondary plans and block plans will require an assessment of road, active transportation and transit network implications along with impacts at key intersections while subdivision plans and development site plans may concentrate more on immediate impacts of adjacent intersection operations and access arrangements.

The integrated multimodal approach analysis provides a snapshot of the levels of service for the entire corridor as a whole, which fits into the Transportation Mobility Plan context. It provides agencies with a better tool to understand the constraints and limitations to find innovative solutions beyond the traditional practices that address only traffic operational issues. The Regional and local Municipal Official Plans and Transportation Master Plans also contain policies and guidelines which require new community and intensification areas to accommodate all modes of transportation. These requirements should be included in, but not limited to, transportation studies undertaken for new communities, intensification areas and infill developments.

1.10.1 Travel mode performance and indicators

The Region requires the transportation specialist to provide both quantitative and qualitative evaluation approaches to assess each mode of transportation. The quantitative methods are used as a tool to evaluate urban street operations from an integrated multimodal performance perspective. The level of service provided for each travel mode is separately evaluated. The transportation specialist should determine the relative importance of each mode's level of service based on the purpose and objective of the analysis. The level of service for each mode should not be combined into one overall level of service for the street since the trip purpose, length and expectations for each mode are different. Each travel mode also has different performance indicators. These indicators are based on the policies, localized experience and professional judgment related to the built-form of the area. However, all modes should be reviewed together to ensure the interconnection and interaction between them are documented. The recommended mitigation measures and improvements should complement each other in a holistic manner.

Table 1 on **page 11** summarizes the typical quantitative and qualitative indicators for each travel mode that are applicable to most of the Regional corridors. These indicators should be evaluated and included in the Transportation Mobility Plan.

Target levels of service have been provided for each mode. Where existing or future target levels of service have not been met, it is expected that the transportation specialist will recommend reasonable mitigation measures and improvements to achieve the target level of service.

All modes should be reviewed together to ensure the interconnection and interaction between them are documented. The recommended mitigation measures and improvements should complement each other in a holistic manner.

Table 1 - Travel Mode Indicators

Travel Modes	Indicators
Automobile	▪ Intersection level of service (delay seconds/vehicle) ▪ Volume-to-capacity ratio (v/c) ▪ Queuing ▪ Storage capacity/auxiliary turning lanes ▪ Potential conflicts/weaving/safety issues
Pedestrian	▪ Facility and connectivity ▪ Designs, gaps and missing links ▪ Average crossing delay at signalized intersections ▪ Average crosswalk length/crossing distance ▪ Qualitative measure of pedestrian experience ▪ Traffic volume ▪ Traffic speeds ▪ Buffer between sidewalk and traffic lanes
Bicycle	▪ Bike lane facility and connectivity ▪ Designs, gaps and missing links ▪ Access to bikeways (distance and time) ▪ Potential barriers
Transit	▪ Access to transit stops, stations or transfer points ▪ Transit service frequency and boarding volumes ▪ Transit vehicle performance at the intersection approach

1.10.2 Automobile performance evaluation requirement

Capacity and Level of Service (LOS) analyses are conducted for interrupted-flow conditions in the form of signalized and unsignalized intersection operations assessment for motorists.

There are two criteria required for the automobile mode level of service performance: vehicle delay and volume-to-capacity ratio. Both of these criteria are to be completed and included in the Transportation Mobility Plan Study.

It should be noted that signalized intersections with high left turn and right turn traffic volumes, long exclusive right turn lanes, channelized right turn and significant width will have negative impacts on pedestrian and bicycle modes. As such, when conducting intersection capacity analysis, transportation specialists should consider and evaluate the pedestrian and bicycle modes to provide appropriate mitigation measures and improvements to address these impacts.

Automobile LOS and V/C Target: D (0.85) or better for urban area and LOS C(0.70) or better for rural area

Table 2 summarizes the level of service evaluation requirement for the automobile mode.

Table 2 - Automobile Level of Service Criteria (Signalized Intersection)

Level of Service	Delay (seconds/veh)	V/C
A	≤10	0 to 0.60
B	>10-20	0.61 to 0.70
C	>20-35	0.71 to 0.80
D	>35-55	0.81 to 0.90
E	>55-80	0.91 to 1.00
F	>80	>1.00

Table 3 illustrates an example of automobile level of service criteria for signalized intersections.

Table 3 - Automobile Level of Service Summary

Intersection	Existing Conditions LOS (delay in seconds) Critical Movement[1] [v/c ratio]	Future Conditions LOS (delay in seconds) Critical Movement[1] [v/c ratio]
Main Street/ Street A	C (22) SB T: [0.90] NB L: [0.95]	E (58) SB T: [1.11] NB L: [0.96]
Main Street/ Street B	B (15) No Critical Movement	C (23) No Critical Movement
Main Street/ Street C	A (3) No Critical Movement	E (70) SB T: [1.16] NB L: [0.98]

Note: SB T = Southbound Through
NB L = Northbound Left

It should be noted that all detailed analyses or supporting information related to the level of service calculations or observations for automobile mode should be included in the appendices.

1.10.3 Transit performance evaluation requirement

When performing the intersection capacity analysis, transportation specialists should also consider transit vehicles, especially when transit vehicles share the same facilities as automobiles. The intersection capacity analysis should consider the frequency of transit vehicle stops and whether the intersection would be able to accommodate the scheduled transit service frequency.

There are three required criteria for the transit mode level of service performance: 1) access to the transit stops, 2) transit headways and 3) transit vehicle performance at the intersection approach. Where there are more than one intersection within the study area, the most critical intersection approach should be identified and LOS indicated for each intersection. All of these criteria should be completed and included in the Transportation Mobility Plan Study.

Transit LOS Target: C or better for Access to Transit Stops and Transit Headways. LOS D or better for Intersection Approach.

Table 4 summarizes the level of service criteria for the transit mode.

Table 4 - Transit Level of Service Criteria

Level of Service	Access to Transit Stops	Transit Headways	Intersection Approach (transit or curb lanes)	
			Delay (seconds/ veh)	V/C
A	90% within ≤200 m	≤5 minutes	≤10	0 to 0.60
B	90% within ≤500m and 70% within ≤200	>5-10 minutes	>10-20	0.61 to 0.70
C	90% within ≤500m and 50% within ≤200m	>10-15 minutes	>20-35	0.71 to 0.80
D	100% within ≤600m	>15-20 minutes	>35-55	0.81 to 0.90
E	100% within ≤800m	>20-30 minutes	>55-80	0.91 to 1.00
F	100% >800m	>30 minutes	>80	>1.00

Definitions

Access: development's potential transit riders' straight line walking distance to transit stops

Stops: bus stops, rapid transit stations, subway stations, RER/GO Train/Bus stations

Transit headway: time interval between transit vehicles for a transit corridor

Intersection Approach: critical lane group or curb lane with transit vehicles approaching an intersection

Transit or curb lanes: general purpose lane or curb lane where buses will operate

Table 5 illustrates the example of transit level of service.

Table 5 - Transit Level of Service Summary

Transit Stop Location	Direction	Access to Transit Stops	Transit Headways	Intersection Approach (transit or curb lanes)
		LOS	LOS	LOS
Main Street/ Street A	Eastbound	C	D	D
	Westbound	C	D	D
	Northbound	C	C	C
	Southbound	C	C	C
Main Street/ Street B	Eastbound	B	D	D
	Northbound	B	C	C
	Southbound	B	C	C

All detailed analyses or supporting information related to the level of service calculations or observations for transit mode should be included in the appendices.

1.10.4 Pedestrian performance evaluation requirement

Walking can be a mode of choice for short trips such as going to transit stations, schools, running errands, and going to work. As pedestrians are more vulnerable than motorists, facilities and measures should be provided to separate pedestrians from vehicular traffic. Traffic control devices such as pedestrian signals, pedestrian only signals, zebra cross-walks, sufficient illumination, proper sidewalks and designated waiting areas can improve pedestrian safety.

In general, 1.2 metres per second walking speed can be used to calculate pedestrian clearance time at the signalized intersections. However, in school or senior resident areas, 1.0 metres per second walking speed should be used to calculate pedestrian clearance time at the signalized intersections.

There are two required criteria for the pedestrian mode level of service performance, at the segment (between two or more intersections) and at intersection (signalized or unsignalized) areas. Both of these criteria should be completed and included in the Transportation Mobility Plan Study.

It should be noted that signalized intersections with

high left turn and right turn traffic volumes, channelized right turn and wide intersection will have negative impacts on pedestrian mode. As such, when conducting intersection capacity analysis, transportation specialists should consider and evaluate the pedestrian mode to provide appropriate mitigation measures and improvements to address these impacts.

Table 6 summarizes the level of service criteria for pedestrian mode.

Pedestrian LOS Target: C or better for these LOS Categories

Table 6 - Pedestrian Level of Service Criteria

Level of Service	Segment	Intersection
A	≥2.0 m sidewalk with minimum 3.5 m buffer including planting and edge zone; or ≥3.0 m multi-use path	▪ ≥2.0 m sidewalk with minimum 3.5 m buffer including planting and edge zone; or ≥3.0 m multi-use path ▪ Pedestrian signal head with sufficient pedestrian clearance time ▪ Clearly delineated cross-walk
B	≥1.5 m sidewalk with minimum 1.0 m buffer including edge zone; or <3.0 m multi-use path	▪ ≥1.5 m sidewalk with minimum 1.0 m buffer including edge zone; or <3.0 m multi-use path ▪ Pedestrian signal head with sufficient pedestrian clearance time ▪ Clearly delineated cross-walk
C	≥1.5 m curb-faced sidewalk (no buffer)	▪ ≥1.5 m curb-faced sidewalk (no buffer) ▪ Pedestrian signal head with sufficient pedestrian clearance time ▪ Clearly delineated cross-walk
D	<1.5 m sidewalk	▪ <1.5 m sidewalk ▪ Pedestrian signal head sufficient pedestrian clearance time ▪ No clearly delineated cross-walk
E	Paved shoulder or no sidewalk provision	▪ Paved shoulder or no sidewalk provision ▪ No pedestrian signal head ▪ No clearly delineated cross-walk
F	No sidewalk provision	▪ No sidewalk provision ▪ No pedestrian signal head ▪ Not clearly delineated cross-walk

Definitions

Buffer: green or landscaped space separating the sidewalk and pavement street curb.

Curb-faced: the sidewalk is located adjacent to the pavement and street curb.

Delineated cross-walk: painted or special pavement to facilitate pedestrians.

Table 7 illustrates an example of pedestrian level of service.

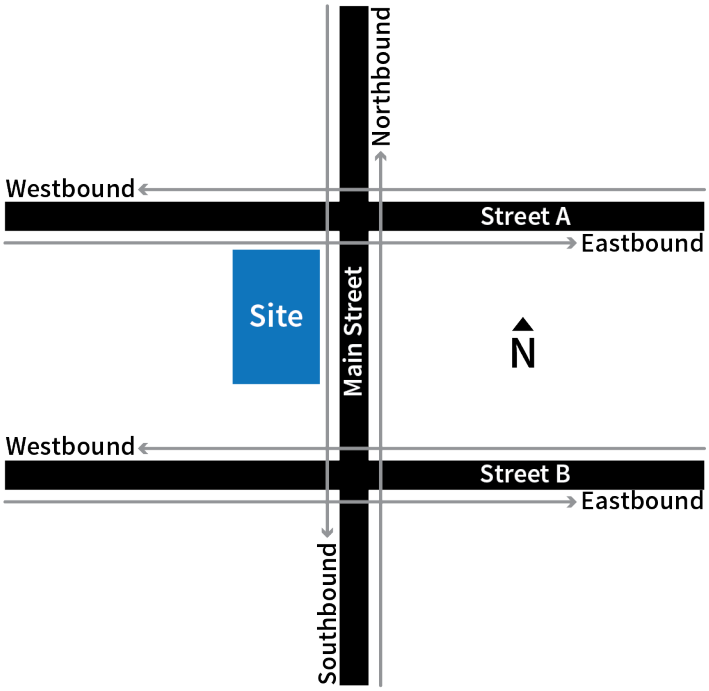
Table 7 - Pedestrian Level of Service Summary

Intersection	Direction	Segment		Intersection
		Description	LOS	LOS
Main Street/ Street A	Eastbound	Street A	C	B
	Westbound	Street A	B	A
	Northbound	Main Street	C	B
	Southbound	Main Street	B	B
Main Street/ Street B	Eastbound	Street B	A	A
	Westbound	Street B	B	B
	Northbound	Main Street	C	B
	Southbound	Main Street	C	B

It should be noted that all detailed analyses or supporting information related to the level of service calculations or observations for pedestrian mode should be included in the appendices.

Figure 4 illustrates an example of level of service assessment for pedestrian and bicycle modes.

Figure 4 - Example of Level of Service Assessment



1.10.5 Bicycle performance evaluation requirement

Cycling can also be a mode of choice for short to medium distance trips. A bicycle is defined as a vehicle under the Ontario Highway Traffic Act and cyclists must abide by the rules of the road. However, cyclists are more vulnerable than motorists so safety measures should be provided as much as possible. Bicycle signals, dedicated or separated cycling facilities, shared facilities, cross-rides and other pavement markings can improve cycling safety.

There are two required criteria for the bicycle mode level of service performance, at the segment (between two or more intersections) and at intersection (signalized or unsignalized) areas. Both of these criteria should be completed and included in the Transportation Mobility Plan Study.

Signalized intersections with high left turn and right turn traffic volumes, long exclusive right turn lanes, channelized right turn and wide intersection will have negative impacts on bicycle mode. As such, when conducting intersection capacity analysis, transportation specialists should consider and evaluate the bicycle mode to provide appropriate mitigation measures and improvements to address these impacts.

Bicycle LOS Target: C or better for these LOS Categories

Table 8 summarizes the level of service criteria for bicycle mode.

Table 8 - Bicycle Level of Service Criteria

Level of Service	Segment	Intersection
A	Separated cycling facilities (e.g. cycle tracks, multi-use path)	Separated cycling facilities Bicycle box or clearly delineated bicycle treatment or bicycle signal head
B	≥1.8 m dedicated cycling facilities (e.g. bicycle lanes with and without buffer)	>1.8 m dedicated cycling facilities (e.g. bicycle lanes with and without buffer), Bicycle box, clearly delineated bicycle treatment or bicycle signal head
C	<1.8 m dedicated cycling facilities with no buffer	<1.8 m dedicated cycling facilities with no buffer, Bicycle box, clearly delineated bicycle treatment or bicycle signal head
D	≤1.5 m bicycle lane with no buffer	≤1.5 m bicycle lane and no buffer Bicycle treatment
E	Shared facilities (e.g. signed routes, sharrows or paved shoulder with minimum 1.2 m in constrained area)	Shared facilities (e.g. signed routes, sharrows or paved shoulder with minimum 1.2 m in constrained area) No clearly delineated bicycle treatment
F	No bicycle provision	No bicycle provision

Definitions

Shared: Shared facilities include roadways or streets where cyclists and motorists use the same road space. Types of shared facilities include signed routes, bicycle boulevards or shared lanes (“sharrows”). Since cyclists and motorists share the same space, these facilities are appropriate on streets with low traffic volumes and/or low speeds.

Dedicated: Designated or dedicated facilities are those that provide space on the road intended for use by cyclists only. They are generally adjacent to motor vehicle lanes and defined by pavement markings. In urban areas, dedicated facilities typically include bike lanes and buffered bike lanes while paved shoulders provide dedicated space on rural roads.

Separated: Separated bikeways are separated from traffic by more than just a painted line. Separation may consist of bollards or delineators, mountable or barrier curbs, planters, concrete medians, etc. Types of separated facilities can include cycle tracks, raised bike lanes, or multi-use trails. These facilities improve safety and comfort for cyclists along higher-speed, busy roadways.

Buffer: a painted area or physical barrier that separates the bicycle lane from the adjacent traffic lane.

Bicycle box: A bike box is used at intersections with dedicated bike lanes or a cycle track to designate a space for cyclists to wait at a red light or to assist cyclists in making left turns. Cyclists stop in front of motorists and can proceed through the intersection first when the light turns green.

Paved shoulder: Paved shoulders are located next to the travelled portion of the roadway and used to accommodate cyclists on rural roads.

Table 9 illustrates the example of bicycle level of service.

Table 9 - Bicycle Level of Service Summary

Intersection	Direction	Segment		Intersection
		Description	LOS	LOS
Main Street/ Street A	Eastbound	Street A	C	B
	Westbound	Street A	B	A
	Northbound	Main Street	C	B
	Southbound	Main Street	B	B
Main Street/ Street B	Eastbound	Street B	A	A
	Westbound	Street B	B	B
	Northbound	Main Street	C	B
	Southbound	Main Street	C	B

It should be noted that all detailed analyses or supporting information related to the level of service calculations or observations for bicycle mode should be included in the appendices.

1.11 Alternate multimodal level of service evaluation methodologies

Recognizing that the multimodal level of service analysis methods are new, the Region will accept both the Region's multimodal level of service analysis approach, or quantitative methods that are recognized as the industry best practices including those found in the latest edition of the Highway Capacity Manual (HCM2010), Pedestrian Exposure to Traffic at Signalized Intersections (PETSI) or other published approaches that are appropriate to the York Region context. However, all referenced methodologies should be consulted and examined carefully for appropriateness.

*While engineering and professional judgment are required to interpret the results, all assumptions must be clearly documented. As illustrated in **Figure 3**, there are potential interactions between the automobile mode and non-auto modes of transportation. As automobile volume or speed increases, level of service for other modes may decrease due to potential conflict and other safety issues. If bicycle, pedestrian or transit flows increase, the level of service for the automobile traffic stream may decrease. As such, when preparing analysis and recommendations, the analyst must keep in mind that not all factors can be improved as level of service for one mode may affect the other modes. Typically, a combined level of service is not required or recommended.*

1.12 Software and input parameters

For intersection operational analysis, there are several tools and methods accepted, including:

- Highway Capacity Software based on the Highway Capacity Manual (HCM)
- Synchro software using HCM outputs
- InterCalc software based on the Canadian Capacity Guide for Signalized Intersections
- Micro-simulation software such as Vissim, Paramics and Sim-Traffic
- Other specialized roundabout analysis software (Rodel, Sidra, Arcady, etc…)

Other proprietary tools based on the Highway Capacity Manual and Canadian Capacity Guide for Signalized Intersections can be applied subject to approval by Regional and local municipal staff. Transportation specialists using proprietary software other than those mentioned above should consult with the Regional and respective local municipal staff prior to its application in the Transportation Mobility Plan. It is the Region's preference that transportation specialists apply the latest version of the analytics software, where applicable.

All input parameters and assumptions should be clearly documented. The transportation specialist should confirm that

inputs and assumptions comply with the Region's standards and current practices. The following are some examples of input parameters for conducting intersection capacity analysis:

- A default ideal saturation flow of 2,000 vehicles/hour/lane (vphpl) may be used for all movements. The Region will not accept any value above 2,000 vphpl unless it is approved by the Region and/or supported by field measurements for the existing conditions

  It should be noted that the saturation flow for local municipal roads may be less than 2,000 vehicles/hour/lane. As such, the transportation specialist should consult with the respective local municipality to obtain the appropriate saturation flow rates.
- Peak hour factors should be based on existing traffic counts. The future proposed intersection peak hour factors should be based on adjacent existing intersections
- Traffic signal cycle lengths, signal phasing and timing plans should be obtained from the Region/local municipality
- Lost Time Adjustment default is zero. Reasonable adjustment values of less than three seconds are permitted for critical movements. However, the Region may request field studies to support the adjustments
- Lane utilization for HOV lanes should not be more than 50% capacity of the adjacent general purpose lanes

It should be noted that these parameters may change over time. As such, the transportation specialist conducting the Transportation Mobility Plan should consult with Regional and respective local municipal staff to confirm these parameters prior to the commencement of the study.

1.13 Transportation Mobility Plan process confirmation and checklists

As illustrated in **Figure 3**, the Transportation Mobility Plan process is somewhat similar to a typical or traditional transportation study that supports the development application. Some notable differences are:

- The Transportation Mobility Plan requires the assessment of all four major modes of transportation. This approach is a requirement to conform to the Regional Official Plan policies
- The Transportation Mobility Plan also requires the following assessment for each horizon year
  - Mitigating auto demand
    - Identify/exhaust possible physical transportation improvements to address the development impacts without significantly impacting other modes
    - Recommend a list of physical improvements
  - Promoting non-auto demand
    - Identify and recommend active transportation requirements
    - Identify and recommend transit stops, routes and network requirements for each horizon year
    - Identify and recommend infrastructures and strategies to increase walking, cycling and transit mode share for each horizon year considered
  - A detailed implementation plan and functional design

Where unique land use or situations warrant, the Region encourages transportation specialists to use relevant experience/first principles or methodologies accepted by the industry to estimate multimodal trip generation and multimodal performance analysis for auto, walking, cycling and transit trips. In all cases, the methods used should be clearly documented in the study.

To better assist transportation specialists in preparing a quality Transportation Mobility Plan report, the following checklist provides a step-by-step guide to fulfill the Region's requirements. The information contained in **Table 10** is explained in more detail in **Chapter 3**.

*Regional and respective local municipal staff will be using the information contained in **Table 10** as a checklist for reviewing the Transportation Mobility Plan for completeness. If required elements are not included in the Transportation Mobility Plan without a detailed explanation in the document, the submitted Transportation Mobility Plan may be considered incomplete and staff may return it to the author for further revision.*

Table 10 – York Region Transportation Mobility Plan Checklist

	Report Elements for Various Types of Development Applications	Have these requirements been included in the report?	Chapter 2 Reference	▪ Official Plan ▪ Secondary Plan ▪ Major Area Plans	▪ Rezoning ▪ Draft Plan of Sub- division ▪ Site Plans
1	Title page including company name and project title	☐	2.1	✓	✓
2	Cover letter or signature page	☐	2.2	✓	✓
3	Table of contents	☐	2.3	✓	✓
4	Executive Summary - summarizes the assumptions and findings of the study	☐	2.4	✓	✓
5	Introduction	☐	2.5	✓	✓
6	Summary of transportation planning policies and how they have been addressed	☐	2.6	✓	-
7	Summary of consultation with agencies	☐	2.7	✓	✓
8	Study area	☐	2.8	✓	✓
9	Existing transportation system characteristics and performance	☐	2.9	✓	✓
10	Peak periods of analysis	☐	2.10	✓	✓
11	Input parameters and assumptions	☐	2.11	✓	✓
12	Existing multimodal data and performance analysis	☐	2.12	✓	✓
13	Existing automobile mode performance	☐	2.12.1	✓	✓
14	Existing pedestrian mode performance	☐	2.12.2	✓	✓
15	Existing bicycle mode performance	☐	2.12.3	✓	✓
16	Existing transit mode performance	☐	2.12.4	✓	✓
17	Horizon years analysis to be consistent with the requirement in **Figure 5**, **Chapter 2** of the guidelines	☐	2.13	✓	✓
18	Provide a list and brief description of each background development in the study area	☐	2.14	✓	✓
19	Background development multimodal trip generation	☐	2.15	✓	✓
20	Background development multimodal trip distribution and assignment	☐	2.16	✓	✓
21	Background multimodal growth rates	☐	2.17	✓	✓

	Report Elements for Various Types of Development Applications	Have these requirements been included in the report?	Chapter 2 Reference	▪ Official Plan ▪ Secondary Plan ▪ Major Area Plans	▪ Rezoning ▪ Draft Plan of Sub- division ▪ Site Plans
22	Transportation demand forecasting model (used in growth area where appropriate)	☐	2.18	✓	-
23	Future transportation improvement	☐	2.19	✓	✓
24	Future background multimodal volumes and performance and recommendations	☐	2.20	✓	-
25	Site trip generation	☐	2.21	✓	✓
26	Auto site trip generation	☐	2.21.1	✓	✓
27	Transit site trip generation	☐	2.21.2	✓	✓
28	Walking and cycling site trip generation	☐	2.21.3	✓	✓
29	Site multimodal trip distribution and assignment	☐	2.22	✓	✓
30	Total multimodal forecast volumes and performance	☐	2.23	✓	✓
31	Automobile mode impact	☐	2.24	✓	✓
32	Mitigation measures for auto mode	☐	2.24.1	✓	✓
33	Transit mode impact	☐	2.25	✓	✓
34	Active transportation mode impact	☐	2.26	✓	✓
35	Transportation demand management	☐	2.27	✓	✓
36	Safety analysis	☐	2.28	-	✓
37	Recommendations		2.9	✓	✓
38	Implementation plan	☐	2.30	✓	✓
39	Conclusions	☐	2.31	✓	✓

Report Submissions: If submission of a Transportation Mobility Plan Study is required, please follow the process outlined in Figure 2 and send the report to Development Planning or Development Engineering for circulation depending on the type of application. Please do not send the report to individual Regional departments. Report re-submissions should also follow this process.

CHAPTER 2

Transportation Mobility Plan Technical Guidelines

General requirements

These requirements should be provided as part of a Transportation Mobility Plan study:

- Three hard copies of the report plus an electronic copy. In some cases, electronic copies of the analyses (i.e. Synchro files, drawings) may be requested.
- Pre-consultation meeting minutes and correspondence should be included in the appendices
- If the Transportation Mobility Plan is prepared in response to the comments provided by the Region or respective local municipality, a response matrix should be provided as part of the report to indicate how these comments are addressed
- A Transportation Mobility Plan study should be submitted through a normal development application submission process
- If a Transportation Mobility Plan study is an addendum or revised study, it can be submitted to the respective local municipality and York Region's Development Planning/Development Engineering staff

Detailed requirements

The following detailed requirements must be provided as part of a Transportation Mobility Plan study:

2.1 Title page

The title page should include the following information:

- Company name
- Project name/title
- Municipal address/Concession block
- Landowner/Applicant name
- Date

2.2 Cover letter or signature page

The cover letter or signature page should include the following information:

- Company name
- Date
- Project name/title
- Municipal address/Concession block
- A brief project description and purpose of the report
- Report revision number (if applicable) and titles/dates of related reports
- Overall study conclusions/recommendations
- Contact information of the qualified transportation specialist
- Signature of the transportation specialist conducting and recommending the results of the study

2.3 Table of contents

A table of contents is required for all Transportation Mobility Plan studies and should include the following information:

- Table of contents
- List of exhibits and tables
- List of appendices

2.4 Executive summary

An executive summary is required for all Transportation Mobility Plan studies and should include the following:

- A summary of the proposed development: location, statistics, phasing type of development and other background information to help the reviewer understand the context of the development
- A summary of the study/analysis process
- Key findings and recommendations of the study
- A summary of the implementation plan for the report recommendations

2.5 Introduction

The introduction section should include the following:

- Identification of the applicant
- Site location
- Type or nature of the application (Official Plan Amendment, Rezoning, Draft Plan of Subdivision, Site Plan or others)
- Proposed land use
- Proposed study area

It is recommended that the study area be confirmed with Regional and local municipal staff before commencing data collection and analyses. Relevant maps should be included to show the study area. Typically, the study area should include all local Municipal, Regional and Provincial roads, expressways, intersections, interchanges, transit services and facilities that will be affected by the proposed development.

Maps or plans should be provided and illustrate:

- Location and extent of the proposed development
- Existing land use of the subject site and its adjacent lands
- Relevant Secondary Plan studies, approved and pending subdivisions, as well as the site plans within the study area boundaries for the subject development, assumptions should be documented in the Transportation Mobility Plan

A description of the type of land uses proposed, including the size of the individual land use components expressed in units related to transportation analysis (e.g. floor area, number of residential units, population, employment, number of parking spaces, etc.). Special attention should be paid to gross vs. net floor area definitions.

The following information may be included as part of the introduction:

- A site plan or concept drawing that shows site layout and proposed accesses
- Identification of any phasing schemes and schedule of implementation with associated land use statistics
- The expected dates of completion and full occupancy of the ultimate development and any interim phases, if known

Condo construction on Davis Drive, Town of Newmarket

2.6 Summary of transportation planning policies

A summary of the key Regional and respective local municipal transportation related policies in Official Plans and/or Secondary Plans specific to the development site or area should be provided. These policies will provide transportation specialists and reviewers with a better understanding of the context for the proposed development relative to a corridor, urban growth centre or other planning areas.

2.7 Summary of consultation with agencies

It is recommended that the transportation specialists consult with Regional and respective local municipal staff when preparing a Transportation Mobility Plan. A summary of the pre-consultation comments provided by Regional and local municipal staff should be included in the final report appendices. Examples may include a summary of pre-consultation discussions, identification of network assumptions or identification of the study area. If applicable, copies of any formal correspondence/meeting minutes should also be included.

2.8 Study area

A study area must be established prior to the data collection process. Under current practices, the study area is selected based on the impact of the vehicle and pedestrian traffic generated by the proposed development. For example, the intersections or roadways that will carry five percent or more of the site generated traffic should be included in the analysis. The Transportation Mobility Plan should include all major and minor arterial roads, collector roads, Provincial highway interchanges, intersections and transit services/stations that will be affected.

Since every development is unique due to the proposed land use and strategic location, it is recommended that the transportation specialist consult with Regional and local municipal staff to establish the study area prior to starting the Transportation Mobility Plan.

2.9 Existing transportation system

The existing transportation system should be summarized through either maps and/or tables, including, but not limited to:

- Key roads, jurisdiction, number of lanes, posted speed limits
- Intersection traffic controls, lane configuration, turning restrictions
- Railway crossings, specifically where parking facilities are provided such as GO Train stations
- Transit routes and service frequencies
- Transit stops and stations
- Higher order transit including transit priority lanes, high occupancy vehicle lanes and bus rapid transit networks
- Pedestrian facilities
- Cycling facilities
- Locations with critical horizontal and vertical grades
- Other traffic controls, restrictions on travel movements
- Heavy vehicle (truck) restrictions
- Adjacent and opposite driveways and other site accesses including spacing between driveways and accesses
- Other large scale traffic generators such as schools, parks, stadiums, shopping centres and parking facilities
- Other features of importance

2.10 Peak periods of analysis

Time periods for analysis are critical for certain types of land use applications. The peak hours will be identified on the basis of the “worst-case” combination of site-generated trips plus background traffic/transit volumes across the study area. Other peak hours, such as weekday noon hour, Saturday/Sunday afternoons or Friday evenings for retail/commercial uses, should be reviewed to see if they will result in a “worst-case” situation.

A noon time peak hour may have to be analyzed for developments containing food establishments, particularly fast food outlets.

If the proposed development generates a significant amount of truck traffic, the analysis periods and volumes should be specified and included in the analysis.

Table 11 summarizes typical requirement for time periods based on land use type. It is recommended that the analysis time periods be confirmed with Regional staff before starting the Transportation Mobility Plan.

For mixed-use developments, the predominant trip generation and "worst case" combination should be reviewed for impact to the surrounding transportation system.

Table 11 – Typical Peak Periods for Analysis

Land Use Type	AM Peak	PM Peak	Weekend/ Saturday	Site Specific
Retail, Commercial (e.g. shopping centre, restaurant, specialty store, super market)	No	Yes	Yes	No
Residential (e.g. single family, townhouse, condominium, apartments, senior homes)	Yes	Yes	No	No
Employment (e.g. business park, industrial park, office, warehouse)	Yes	Yes	No	No
Institutional (e.g. school, church, banquet hall, entertainment centre, community centre)	-	-	-	Yes
Centres and Corridors (mixed-use developments area)	Yes	Yes	Yes	No

2.11 Input parameters and assumptions

All assumptions concerning saturation flows, peak hour factors, lost times, lane utilization, traffic signal cycle lengths, signal phasing and signal timings should be documented. The transportation specialist should confirm that assumptions are in conformance with Regional and local municipal standards and current best practices. The following are some examples for input parameters for conducting intersection capacity analysis:

- Saturation flows above the ideal saturation flow of 2,000 vehicles/hour/lane will not be accepted unless substantiated through surveys of existing conditions or approved by the Region

  It should be noted that the saturation flow for local municipal roads maybe less than 2,000 vehicles/hour/lane. As such, the transportation specialist should consultant with respective local municipalities to obtain the appropriate saturation flow rates.
- Peak hour factors should be guided by existing traffic counts
- Traffic signal cycle lengths, signal phasing and timing plans should be obtained from the Region and respective local municipality, where appropriate
- Lane utilization for HOV lanes should not be more than 50% capacity of the adjacent general purpose lanes

It should be noted that these parameters may change over time, and the transportation specialist conducting the Transportation Mobility Study should consult with Regional and respective local municipal staff to confirm these parameters prior to starting the Transportation Mobility Plan.

2.12 Existing multimodal data and performance analysis

A multimodal review of existing active transportation (walking and cycling), transit and traffic volumes for links, intersections, and major transit stops/stations in the study area should be shown on appropriate figures.

- Volumes should be based on the most recent traffic counts available from the Region or local municipalities. The transportation specialist should conduct additional counts where existing count data is more than two years old or where existing data appears to be anomalous or insufficient. Since 2011, the Region has supplemented the Turning Movement Count program to include both cyclists and pedestrians.
- Transit routes should be based on the peak points of the routes involved. It should be noted that existing ridership data can be obtained from York Region Transit.

If recent counts are not available, new data must be collected to cover at a minimum the following time periods:

On a typical weekday (Tuesday through Thursday)

- 7 a.m. - 10 a.m.
- 11 a.m. - 2 p.m. (as applicable)
- 4 p.m. - 7 p.m.

In addition, the transportation specialist should review any other relevant peak periods. It may include extended morning and afternoon peak periods (e.g. 7 a.m. to 10 a.m., Friday evenings or Saturday/Sunday afternoons) for certain type of developments.

Existing conditions should be analyzed using existing Regional offset, signal timing and phasing parameters. These can be obtained from the Region's Traffic Signal Operations Division and the respective local municipality. Any recommendations to improve existing traffic operations should be documented and approved by Regional and respective local municipal staff, where appropriate, before being used in the analysis to reference the 'Existing' scenario.

All modes should be reviewed together to ensure the interconnection and interaction between them are documented. The recommended mitigation measures and improvements should complement each other in a holistic manner.

2.12.1 Existing automobile mode performance

The automobile mode includes all motor vehicle traffic using a roadway. Capacity and level of service analyses are conducted for interrupted-flow conditions in the form of signalized and unsignalized intersection operation assessment for motorists. These intersections are typically located within the study boundary. In many instances, pedestrians, cyclists and transit vehicles are not included in the intersection operations analysis. This assessment is considered insufficient and does not provide a full picture of the intersection operations as a whole.

When assessing the automobile mode performance, the transportation specialist should include the requirements listed in **Section 1.10**.

Both the delay and volume-to-capacity (v/c) ratios are acceptable parameters used in assessing the operational performance of an intersection for motorists. These parameters are usually translated into level of service. Delay is widely used in the Highway Capacity Manual method while the v/c ratio is the selected measure in the Canadian Capacity Guide for Signalized Intersections. These parameters should be considered in the assessment of an intersection at various levels including at the individual movement level, the approach level, and the whole intersection level.

For intersection operational analysis, there are several tools and methods accepted including:

- Highway Capacity Software based on the Highway Capacity Manual
- Synchro software
- InterCalc software based on the Canadian Capacity Guide for Signalized Intersections
- Micro-simulation software such as Vissim, Paramics and Sim-Traffic
- Other specialized roundabout analysis software (Rodel, Sidra, Arcady)

Other proprietary tools based on the Highway Capacity Manual and Canadian Capacity Guide for Signalized Intersections can be applied subject to approval by York Region staff. Transportation specialists using proprietary software other than those mentioned above should consult with York Region staff prior to its application in the Transportation Mobility Plan.

Historically, York Region has identified a v/c ratio threshold of 0.85 for critical movements and intersections in urban areas, or 0.7 in rural areas (Region's Transportation Impact Study (TIS) Guideline for Land Development Applications (August 2007). Since centres and corridors can experience greater levels of congestion, critical movement V/C ratios are not the only indicators that should be considered to address the impacts of the developments.

As the Region and local municipalities experience more traffic congestion, developments within the urban area, particularly on transit priority and rapid transit corridors, the transportation specialist will need to consider alternative access arrangements for vehicular traffic including consolidation of accesses and/or right-in/right-out accesses only. Where additional capacity is required through signalization of an intersection, a signal warrant analysis should be carried out for the location and should be included in the appendices.

For developments with impacts on signalized intersections with spacing at or near the minimal distance, a queuing analysis should be carried out to demonstrate that there is adequate storage length in the turning lanes and that queue spillback will not create adverse conditions. This can be demonstrated through micro-simulation modelling or analysis tools indicating the critical queue length (95th percentile) at the intersection approaches.

York Region's Access Guideline for Regional Roads (September 2007) specifies that the absolute minimum signalized intersection spacing on arterial roads is 215 metres and desirable spacing is 300-400 metres.

While the use of micro-simulation is considered appropriate for detailed operational analysis including intersection capacity, queuing, weaving and other access implications, the application of macro-scopic and meso-scopic simulation can also be used to assess sub-areas. Regional and respective local municipal staff should be consulted on the appropriateness of the tools prior to its application.

2.12.2 Existing pedestrian mode performance

From a transportation planning perspective, the 2016 York Region Transportation Master Plan provides guidance connecting and integrating pedestrian facilities between local municipalities within York Region, and surrounding municipalities to help create a seamless and comprehensive pedestrian network. From the traffic engineering perspective, the Region and local municipalities are undertaking a comprehensive design guideline. This guideline will be available online in 2017 at york.ca.

When assessing the pedestrian mode performance, transportation specialists should include the key indicators for the pedestrian mode as outlined in **Table 1**, **Chapter 1**. The Transportation Mobility Plan should provide the following analysis:

- Assessment of existing facilities and connectivity
- Identify substandard designs, substandard operations, gaps and missing links
- Assessment of average crossing delay at signalized intersections
- Assessment of average crosswalk length/crossing distance
- Qualitative assessment of pedestrian experience based on:
  - Potential impact of high left and right turn traffic volumes
  - Traffic speeds
  - Buffer between sidewalk and traffic lanes
  - Potential impact of channelized right turn
  - Availability/quality of pedestrian realm
  - A cursory review of the pedestrian collision data for intersections and mid-block locations
- Identify potential mitigation measures for the existing conditions, if applicable

Recognizing that these methods are new, York Region and local municipalities are willing to accept all evaluation methods that are identified by the industry as best practices, such as the new edition of the Highway Capacity Manual (HCM2010) and Ontario Traffic Manual Book 15. While engineering and professional judgment are required to interpret the results, all assumptions must be clearly documented.

2.12.3 Existing bicycle mode performance

From the transportation planning perspective, cycling facilities are being implemented with guidance from York Region and the municipality's Transportation Master Plans and guidelines. Bike lanes/cycle tracks are considered for urban cross-sections, while paved shoulders with adequate width for cycling are considered for rural road cross-sections. From the traffic engineering perspective, the Region and local municipalities are currently undertaking a comprehensive design guideline.

Similar to walking, cycling is encouraged as a viable mode of transportation in urban areas. When assessing the bicycle mode performance, the transportation specialist should include the requirements in **Section 1.10**. The Transportation Mobility Plan should provide the following analysis:

- Assessment and identification of bicycle facility crossing types including bicycle signals and cross-rides
- Assessment of existing facilities and connectivity
- Potential impact of the long right turn lane
- Potential impact of high left and right turn traffic volumes
- Identify substandard design, substandard operations, gaps and missing links for the existing conditions
- Assessment of accessibility to cycling facilities by distance and time
- Identify potential mitigation measures for the existing conditions, if applicable
- Origin/destination information

As indicated, the Region and local municipalities recognize that these methods are new and are willing to accept all evaluation methods that are identified by the industry as best practices such as the new edition of the Highway Capacity Manual (HCM2010) and Ontario Traffic Manual Book 18. While engineering and professional judgment are required to interpret the results, all assumptions must be clearly documented.

2.12.4 Existing transit mode performance

Besides auto mode, transit is one of the most frequently used modes of transportation in urbanized areas, especially in the southern parts of York Region.

As part of the transit mode analysis, the transportation specialist should summarize the transit connections available to the potential transit riders and document the interactions between the service operators (YRT/ Viva, TTC, GO Transit and adjacent municipal transit) and any special arrangements for encouraging ridership. The surrounding transit corridors and/or transit hubs should be described in the evaluations to inform the reader of available services and providers under the existing and the future conditions.

From the transit network planning perspective, York Region's Transportation Master Plan (2016) allows the Region to address future transportation needs in an efficient and integrated manner, while meeting Provincial and Regional policies that support sustainable development. York Region's Transportation Master Plan process has resulted in a set of progressive transit, roadway and policy recommendations that support the Region's vision of a more sustainable transportation system. The fast pace of growth projected in York Region between now and 2041 must be complemented by a transportation system that preserves the environment, enhances York Region's economic viability, seamlessly integrates with new and existing developments and offers more reliable travel choices for residents and employees. The Region's Transit Oriented Development Guidelines also provide recommendations about how the development should be designed to maximize the usage of public transportation.

From an engineering perspective, York Region Transit has developed design guidelines with regard to facility design. It is recommended that the transportation specialist contact York Region Transit staff to discuss the facility design.

When assessing transit mode performance, the transportation specialist should include the requirements in **Section 1.10**. The Transportation Mobility Plan should provide the following analysis with regard to the transit mode:

- Assessment of existing routes, ridership, connections to transit facilities and the designs of the facilities
- Assessment of the existing transit modal split
- Identify substandard designs, substandard operations, gaps and missing links to the transit facilities under the existing conditions
- Transit service frequency and boarding volumes
- Relative transit speed – average transit speed/ average traffic speed (mixed traffic, HOV, dedicated transit lane)
- Rapid transit connectivity

The Transportation Mobility Plan should identify potential mitigation measures for the existing conditions, if applicable. Since these requirements are new and may have some challenges, the Region will accept all evaluation methods that are recognized by the industry as best practices, subject to confirmation and approval from York Region Transit. While engineering and professional judgment are required to interpret the results, all assumptions must be clearly documented.

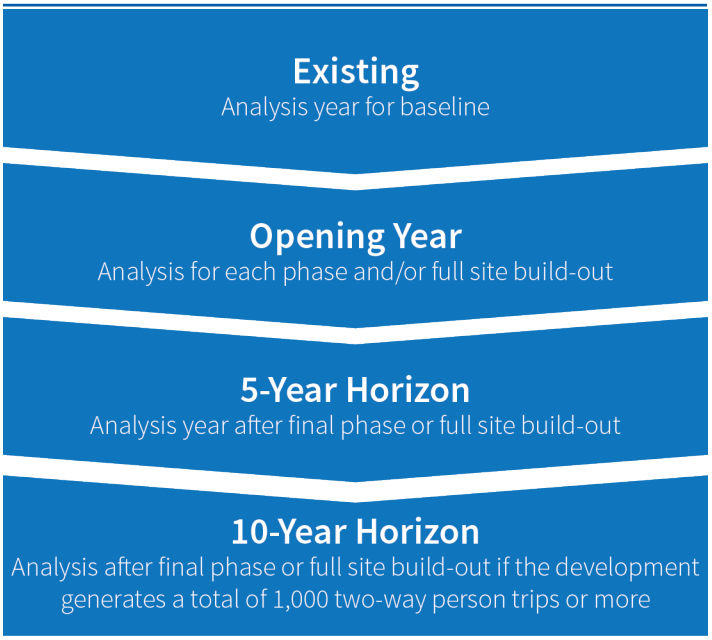
2.13 Analysis horizon years

The Region requires several horizon years to be analyzed when preparing a Transportation Mobility Plan. The analysis years should include but not be limited to:

- Existing Analysis Year for Baseline: Transportation Mobility Plan commencement year
- Opening Year Analysis: opening year is the last phase and/or full build-out of construction and occupancy of the proposed development. If the proposed development consists of more than one phase, each phase must be analyzed based on the anticipated/scheduled opening year of that phase.
- Five-Year Horizon Year Analysis: it is required that an assessment be carried out for the conditions five years after the last phase and/or full build-out of the proposed development. For example, if the last phase of the proposed development is anticipated to be in 2016, the 5-Year horizon analysis should be carried out for the 2021 horizon.
- Ten-Year Horizon Analysis: projects involving multi-phased development or projects that generate more than 1,000 peak total two-way person trips (including pass-by trips) will require an additional analysis of the conditions 10 years after the last phase or full build-out of the proposed development. For example, if the last phased or full build-out of the proposed development is anticipated to be in 2016, the ultimate horizon year is 2026.

Figure 5 below illustrates typical analysis year requirements as part of a Transportation Mobility Plan.

Figure 5 - Typical Analysis Years



Large multi-phase development proposals should analyze all phases of the development, as part of the development application for the first phase of development. The

Transportation Mobility Plan should be updated as the development progresses and more accurate information becomes available. If separate Transportation Mobility Plan studies are conducted for future phases then the traffic generated by previous phases of the development should not be added to background traffic, but should be considered as part of development traffic.

It is recommended that analysis years should be confirmed with Regional and respective local municipal staff before starting the Transportation Mobility Plan.

2.14 Background developments in the study area

All background developments in the study area should be identified and included in the analysis. It is recommended that this section be accompanied with a map and table summarizing the development applications within the study area to be included in the review.

The transportation specialist should obtain details on these background developments from the municipal Planning Department. All the sources should be clearly documented.

2.15 Background development multimodal trip generation

In some cases, the trip generation may be available for background developments from other transportation planning studies. However, when this information is not readily available, the methodologies outlined in **Section 2.21** can be used to estimate the trip generation.

2.16 Background development multimodal trip distribution and assignment

In some cases, the trip distribution may be available for background developments. However, when this information is not readily available, the methodologies outlined in **Section 2.22** can be used to estimate the trip distribution and assignment.

2.17 Background multimodal growth rates

Background multimodal growth rates can be estimated by the following methodologies:

1. Historical traffic counts (AADT and cordon counts)
2. Transportation demand forecasting model (strategic planning model or sub-area model)
3. Recent background transportation studies (Class Environmental Assessment, secondary plan or other transportation studies)

Although each of the methodologies noted above are generally applicable to the auto mode, Method 1 (historical counts) can be applied to walking and cycling and Method 2 (modelling) can be applied to transit mode. York Region will accept any combination of the methodologies noted for all four modes of transportation considered. However, all assumptions and calculations must be clearly documented, explained and included in the final report for reference purposes.

2.18 Transportation Demand Forecasting Model

York Region's Travel Demand Forecasting Model is a macro-scopic morning peak period model using the EMME software platform. It is a strategic transportation planning model encompassing the entire Region and surrounding Greater Toronto and Hamilton Area (GTHA) based on the 2006 Transportation Tomorrow Survey (TTS) data. The Region has a 2006 base network model, 2011, 2021, 2031 and 2041 forecast models using road and transit network data consistent with the 2016 York Region Transportation Master Plan and Regional Council adopted population and employment land use data for each of the future horizons. The Regional strategic transportation planning model only provides a high level measure of the transportation implications resulting from growth in the traffic zones. For most Transportation Mobility Plan studies, it may not be appropriate to apply the results of the model directly to traffic operational impacts without conducting a sub-area analysis. A sub-area model should be considered for Secondary Plans, Block Plans and major developments that will have larger area impacts. The model may need to be calibrated and validated with the most up-to-date TTS data and current traffic counts.

Transportation specialists using the Region's forecasting model as the basis for sub-area analysis or other model refinements are required to acknowledge in writing prior to receiving the model database and agree to take full responsibility for all assumptions with respect to land use, networks, and any other input parameters. York Region's strategic transportation planning model is intended for overall Regional transportation planning and has limitations on direct application to specific area analyses.

Other modelling tools are at the meso-scopic level which combines both the strategic and operational aspects of transportation modelling. It requires more intersection and network input details such as signal timing plans, turning lane configurations, lane widths, and saturation flow rates, while its output includes average speed, delays, queue lengths, turning volumes, etc. For sub-area analyses of major developments, meso-scopic modelling is considered appropriate.

Operating conditions and analyses should be carried out for weekday peak hours of the adjacent street traffic for land uses, such as residential and office/commercial. Other peak periods may be appropriate depending on the land uses. For retail uses, such as shopping centres, the peak periods could be weekday afternoon and Saturday early-afternoon depending on local characteristics. Consideration should also be made about the type of vehicles to be generated by the site. Where heavy trucks are expected for deliveries during the street peak or off-peak, appropriate analysis should be carried out to address the queuing and impacts of the heavy vehicles at the intersections and access points.

Particularly for secondary plans, block plans, and larger developments, the travel demands between intersections and mid-block capacities should be reviewed and assessed to determine if transportation infrastructure or additional capacities are required to accommodate the future background and total demands. Assessments could include screenline analysis by identifying traffic volumes, person trips and/or transit ridership.

When physical improvements are required on Regional roads, consideration should be made with respect to

Construction equipment at a residential development, Town of East Gwillimbury

York Region's policy on road widening from four lanes to six lanes. In accordance with the Regional Official Plan, all future road widening from four lanes to six lanes should only be made to accommodate transit or High-Occupancy-Vehicle lanes along with bicycle lanes within the right-of-way. With the High-Occupancy-Vehicle lanes or centre median rapid transitways, the analysis should appropriately reflect the lane configurations and effects of the transit facilities and capacity implications in the Transportation Mobility Plan documentation. The assumptions and methods used in the Transportation Mobility Plan to address the transit and High-Occupancy-Vehicle facilities should be fully documented in the report such as lane utilization adjustment factor or other methodologies.

2.19 Future transportation improvement

The Regional Official Plan (2010) contains maps which guide the implementation of the Region's road and transit network based on the Transportation Master Plan (2016) and other sources of planning information. Road and transit network information should be reviewed and considered in the preparation of a Transportation Mobility Plan for a specific development.

Depending on the study horizon and location, the available sources of transportation network planning information include:

- York Region's Transportation Master Plan (2016)
- Municipal Transportation Master Plans
- York Region and local Municipality's 10-Year Road Construction Program
- York Region Transit (YRT/Viva) - 5 Year Service Plan
- Local Municipal Pedestrian and Cycling Master Plans
- Road and Rapid Transit Project Environmental Assessment Studies
- Metrolinx Regional Transportation Plan ("The Big Move")
- Adjacent area municipalities' and other development transportation planning studies

As part of the Transportation Mobility Plan, future background and total traffic conditions should examine the need for the transportation infrastructure in order to accommodate both background and site generated traffic. This review should include both planned infrastructure and additional improvements recommended through the analysis. Available transportation studies from other developments in the vicinity or adjacent municipalities should be reviewed for any pertinent information to form the background conditions. This review should also recommend revisions to the phasing of the planned infrastructure and/or other operational improvements for consideration in the next update to Regional and local municipal plans.

Transportation Master Plans provide the most comprehensive combination of road, active transportation and transit network plans for the long term along with anticipated phasing. Official Plans reflect these network elements in more generality and leaves the Transportation Master Plans and Class Environmental Assessment studies to address the details on needs, justification and implementation.

The Transportation Mobility Plan should recognize the network improvements that are proposed or recommended in the Transportation Master Plans and/or the 10-Year Roads Capital Construction Program. York Region's 10-Year Roads and Transit Capital Construction Program is reviewed and adjusted each year by the Region's Transportation Services Department based on priorities and needs within the Region. Environmental Assessment (EA) studies are typically scheduled on the basis of project timelines identified in the 10-Year Program. Where available, the EA study should be referenced for more details on recommended road/transit improvements in the study area that may impact on the development generated traffic.

York Region Transit publishes a Five-Year Service Plan that provides information on the routes and local transit improvements anticipated within the communities. Details on specific routes, services objectives, and future transit services are documented in the annual Transit Service Plan.

For larger area studies, such as Secondary Plans or development applications located in the Regional Centres

and Corridors, Metrolinx's "The Big Move" and the Regional Transportation Plan update are also reference documents that could provide information on the rapid transit network plans. Metrolinx's "The Big Move" has identified a set of priority projects including the Spadina and Yonge subway extensions into York Region along with the VivaNext projects on Yonge Street, Highway 7, and Davis Drive. The Big Move contains a recommended set of transportation network improvement projects for the Greater Toronto and Hamilton Area including those as part of the 15 year plan, 25 year plan, and beyond 25 year plan.

2.20 Future background multimodal volumes and performance

Future background multimodal volumes should be estimated based on the addition of the following layers:

- Existing multimodal volumes
- Background developments multimodal volumes
- Background growth rates for multimodal volumes

Since the background development and rates for multimodal volumes may be difficult to estimate, the Region will accept the following methodologies, or combination of these methodologies in consultant with respective local municipalities:

- Background growth based on existing multimodal volumes and non-auto modal split for background developments
- Planned active transportation facilities and non-auto modal split targets based on the Region and respective local municipality's plans for the study area
- Outputs from transportation demand forecasting models or other background studies in the study area

Future background multimodal figures should be provided in the report.

Future background multimodal performance analysis should be based on the following requirements for each horizon year considered for all four modes:

- Assessment of future background conditions.

  A table should be provided to summarize the performance results for the four travel modes
- Identify substandard design, problematic operations, gaps and missing links potential mitigation measures for the future background conditions
- Identify potential mitigation measures such as new bus routes, expansion of the facilities, route realignment and frequencies

2.21 Site trip generation

One of the Transportation Mobility Plan requirements is to identify the total multimodal volumes generated by the proposed development. Site multimodal trip generation can be estimated using one or some of the following methodologies and data sources, subject to confirmation and acceptance by Regional and respective local municipal staff:

- Institute of Transportation Engineers (ITE) Trip Generation Manual (latest edition)
- Existing site trip generation surveys
- Proxy site surveys
- Other transportation studies in the area

Site trip generation for each mode of travel is discussed in greater detailed below.

A goal of the Transportation Mobility Plan is to identify all trips generated from the site including all transit and non-auto trips. Historically these trips have been identified as reductions to the ITE trip generation rates. Using professional judgment, including but not limited to first principles approach, the Transportation Mobility Plan must identify, as appropriate, the total transit and non-auto trips generated from the site.

2.21.1 Auto site trip generation

Primary auto trip generation

Automobile trip generation is the cornerstone of a traditional Transportation Impact Study (TIS) since it provides an estimation of the expected number of trips produced and attracted by a development. Data sources and trip generation procedures vary depending on the type of land use and scope of the study.

Most commonly applied, the ITE Trip Generation Manual provides a comprehensive resource for typical land uses based on surveys and procedures established collaboratively in North America with most of the information from United States cities. It should be noted that ITE trip rates mainly account for auto trips generated by developments, however, trips generated by other modes such as transit, walking and cycling are not known. Other data sources and a first principles approach must be used in order to complete the multimodal trip generation estimates.

Application of the ITE trip rates should be undertaken using professional judgment recognizing the differences between York Region development context and major U.S. cities. This would include assessment in the early stages of transit accessibility in York Region's Centres and Corridors versus other urban areas, as well as the wide range of maturity in the Regional communities.

This review must recognize that trip rates contained in the ITE Trip Generation Manual for condominium uses are based on surveys of existing developments in major U.S. cities and have a large amount of transit and alternative trip modes reflected in the vehicle trip rates. Until York Region's transit network matures, it may not be appropriate to reduce the trip rates to any greater extent in the short to medium term (less than 5 years) to account for high transit modal split targets. This can be confirmed in consultation with Regional and local municipal staff.

Justification and assumptions should be documented in the Transportation Mobility Plan for any additional reductions or adjustments to the ITE trip rates in order to reflect local circumstances and influences.

The most representative source of trip rate data for development applications in the Region is through surveys and studies of similar uses within York Region or the Greater Toronto and Hamilton Area (GTHA). Peak period trip rates can be determined through site access counts or cordon counts around an existing development or isolated area. Counts and

An example of a multi-use development serviced by transit, City of Markham

surveys are most reliable for uses that can be isolated such as office building complexes, residential block and shopping centres. For multi-use developments, the challenge is to identify the trips associated with each use and the potential synergies between the uses. Consultation with Regional and respective local municipal staff is required in advance of the use of prior studies and surveys of proxy sites to confirm agreement of their applicability to the current application.

For land uses that are not contained in the ITE database or well established in the Greater Toronto and Hamilton Area (GTHA), sufficient detailed information should be gathered to estimate the trip generation from a first principles approach. Based on the anticipated characteristics of the trip makers and parameters in the development such as the number of employees, auto occupancies, modal splits, visitors, or directional splits, the trip generation of the site can be estimated. The assumptions and methods should be consulted with Region and respective local municipal staff prior to its application and fully documented in the Transportation Mobility Plan.

It should be noted that the Transportation Tomorrow Survey (TTS) data is not appropriate for proxy auto trip generation rates due to limited sample size. The Region will not accept this approach for a Transportation Mobility Plan Study.

Traditionally, the analyses contained in a Transportation Impact Study are based on vehicle or auto trip generation mainly to serve intersection operational assessments. However, since the Region is providing more sustainable choices in travel including High-Occupancy-Vehicle lanes and rapid transit services, the need to assess mid-block capacity effects and impacts on a person-trip level should be considered. Person-trip generation rates may be appropriate for mid-block capacity and transit impact analyses to better represent the multimodal requirements of the Transportation Mobility Plan.

Pass-by trips

Pass-by trips are trips attracted from the traffic passing the site on adjacent streets. Although pass-by trips are not part of the new trip generation, pass-by trips will impact trip assignments at site accesses and adjacent intersections, therefore it should be included in the analysis. It should also be noted that pass-by trips are only applicable to retail/commercial developments such as shopping centre, fast-food restaurants or gas stations.

Synergy/internal trips

If a proposed development consists of several types of land uses such as retail/commercial, residential or employment, then there is a potential for internal trip interaction between the uses. For example, residents can walk or ride a bicycle to a place of employment. Employees can also walk or ride a bicycle to the stores within and adjacent to the site without the need to drive onto the Regional or local road network.

In York Region, synergy or internal captured trips are typically estimated through proxy site surveys or existing data. Transportation specialists should document all methodologies and background information to support the proposed synergy or internal captured trips within the development.

2.21.2 Site transit trip generation

Site transit trip generation can be estimated by using the appropriate transit modal split for the proposed development. Typically, transit modal split can be obtained through various data sources and estimation methodologies such as the TTS data, existing and surrogate site surveys, strategic transportation planning model and first principles.

Transit is a key component in the Region's move towards sustainability and the Official Plan has set ambitious 2041 peak period transit modal split targets of:

- Up to 50% in Regional Centres and Corridors
- Up to 30% in urban areas

The Regional Official Plan (2010) has defined transit modal split as the percentage of person trips made by public transit relative to the total number of person trips made by all modes of travel including automobile, transit, walking and cycling.

While transit modal split serves as an important indicator of our mobility system, it is the priority of the Region to develop a multimodal transportation system that would include active transportation modes such as walking and cycling that can benefit from convenient access to transit, and built form that provides for live-work opportunities within walking distances.

The site transit trip generation of a development will depend on the type of land use and the location of the development. The highest propensity of transit use is expected in the rapid transit corridors and York Region's four designated urban growth centres: Markham Centre, Richmond Hill-Langstaff Gateway Centre, Vaughan Metropolitan Centre, and Newmarket Urban Growth Centre. The type of transit technology and accessibility will also have an influence on the likelihood of people choosing to use the transit system. Transit technologies and services can range from subway, bus rapid transit, light rail transit, GO train and bus, conventional bus and local community buses. The Region is also developing transit priority measures that consist of initiatives including, but not limited to, High-Occupancy-Vehicle/transit lanes, queue jump lanes, and/or transit signal priority on the arterial system.

The range of acceptable transit modal splits for a specific development will depend on the maturity of the transit system within the study area for a particular horizon year. It is recommended that transportation specialists use sound engineering judgment and practices to estimate the transit modal split for the particular development. Sources of data and approaches to develop the transit modal split include:

- Existing published surveys such as the Transportation Tomorrow Survey (TTS) for proxy traffic zone household travel information with similar transit service characteristics
- Surveys of surrogate land uses with similar transit service characteristics and site context
- Previous transportation planning studies prepared for the study area

Pre-consultation with Regional and respective local municipal staff is recommended to confirm approaches and assumptions to estimate future modal splits and the planned transit infrastructure. In all cases, the assumptions and methodologies used in the study should be documented within the report.

The application of the TTS is most suitable when dealing with larger community or area transportation studies which can indicate transit modes and trip making at a traffic zone level. Since the TTS is undertaken every five years, caution should be used in areas of high growth or redevelopment since the transit and travel characteristics may change significantly over the five year window. For a particular growth area, a critical review of the existing development pattern vs. observed development pattern at the time of the TTS is required. The local traffic zones, sample size and land use characteristics (e.g., residential, commercial, institutional and industrial) within the study area should also be considered. The Transportation Mobility Plan should provide details about how the TTS is applied along with justification of the traffic zone area.

It is expected that the Region's rapid transit and transit priority initiatives will increase transit modal splits significantly over the medium (2021) to long term (2031). When producing a Transportation Mobility Plan for a development, the transportation specialist is required to provide justification for the transit modal split assumptions presented in the Transportation Mobility Plan.

The justification and recommendations in the Transportation Mobility Plan should include, but not be limited to, the following:

- Review of the Regional and local Official Plan policies and objectives related to public transit and transit modal split for the development area
- Identification of existing and planned public transit service and phasing
- Identification of existing transit modal split using best practice methodologies
- Recommendation of an appropriate modal split for each development horizon and an ultimate modal split based on site design and anticipated level of transit infrastructure required
- Recommendation of a non-auto trip rate reduction to be used in the trip generation analysis, as appropriate
- Opportunities for expansion of existing alternative transportation systems including cycling, trails, sidewalks and pedestrian connections
- An examination of the mix of land uses within the development area may also give an indication of the opportunities to reduce vehicle trips (because of proximity to services).

It is important to note that, local Official Plans, Secondary Plans, and development area plans may identify site specific transit modal split objectives that are more prescriptive than overall Regional and respective local municipal targets. The Transportation Mobility Plan should provide adequate recommendations reflecting the transit infrastructure requirements to achieve the target modal splits for background and site traffic including any phasing of infrastructure improvements in coordination with development in the area.

2.21.3 Walking and cycling site trip generation

Site walking and cycling trip generation can be estimated by using the following methodology or data source:

- York Region or respective local municipality collected data if available for the particular site or study area
- Smart Commute data for the area (if available)
- Transportation Tomorrow Survey (TTS) data (should be used carefully due to incompatible urban characteristics)
- Proxy site surveys (must have similar built-forms and characteristics)

At this time, York Region has many different types of land uses and developments located throughout different areas. For this reason, it is recommended that transportation specialists undertake surveys at proxy sites that have similar characteristics as the proposed development such as size, land use types, transit service frequency and road network. The surveys can collect information on different modes of transportation at the same time. For example, the following proxy site survey was conducted for a site's multimodal trip generation. **Table 12** summarizes the survey results.

Table 12 – Sample Survey for Proxy Site Multimodal Trip Generation

Survey Period Weekday Peak Periods	Inbound					Outbound				
	Total Person Trips	Car (%)	Passenger (%)	Transit (%)	Walk/Cycle (%)	Total Person Trips	Car (%)	Passenger (%)	Transit (%)	Walk/Cycle (%)
AM 7:30-8:30	373	74	18	5	3	87	70	20	4	6
PM 4:30-5:30	252	72	17	5	6	449	74	18	4	4

If a proxy site survey is not possible, similar to transit modal split, walking trip percentage can be extracted from the most up-to-date TTS data. However, TTS data should be used carefully due to incompatible urban characteristics.

Any assumptions and methodologies used to estimate site walking and cycling trip generation should be clearly documented and included in the final report for further review and future reference. A table that summarizes the estimation of the walking and cycling trip generation is also required.

2.22 Site multimodal trip distribution and assignment

Multimodal trip distribution

Trip distribution generally determines the direction of approach and departure for trips to and from a development. Similar to the traditional auto mode, the multimodal trip distribution also utilizes surveys and studies to establish the trip distribution pattern to/from the proposed development.

Below are some of the accepted methods that can be used for multimodal trip distribution. Transportation specialists may combine these methods to yield better distribution patterns for different types of land uses.

- For larger retail and commercial land uses, the use of marketing studies identifying the catchment area of the proposed development is acceptable. The

study could include a review of similar sites and the population/employment within the catchment area served by the development. Since this method may not contain multimodal information, it should be used in conjunction with some of the methods listed below

- The use of the Transportation Tomorrow Survey (TTS) data for origin-destination patterns of trip generators or attractors at a traffic zone level. This information is mostly applicable to mature proxy residential neighbourhoods or business areas with similar land uses throughout the zone
- If the proposed development is located within a stable neighbourhood, the use of existing traffic counts or observed volumes at accesses and surrounding intersections is acceptable. This data can be collected through license plate traces or manual observations to determine the general direction of approach and departure of existing site traffic on the adjacent streets
- If the Transportation Mobility Plan is conducted for a larger study area, the use of simulation/ forecasting tools which form part of a travel demand model using methods such as the Gravity Model or Fratar Model may be required. This can be applicable to sub-area or larger area analyses

The resulting trip distribution as a percentage of total trips should be illustrated on a road network figure or tabulated format identifying the directions of travel for site traffic along with the road segments involved. The methodology selected should be fully documented in the Transportation Mobility Plan along with the assumptions applied. Details of the methodology and supporting calculations should be included as part of the technical appendices of the Transportation Mobility Plan.

Multimodal trip assignment

Similar to traditional auto mode trip assignment, multimodal trip assignment can be established by several methods. Any combination of these methods is acceptable given that the main objective is to establish better trip assignment for different types of land uses on the proposed development site. The following are some of the common multimodal trip assignment methods:

- Existing traffic routing patterns can be used to establish multimodal trip assignment
- Access configuration and design (for example, the walking and cycling trips can be assigned to the access that connects to Regional and local facilities)
- Existing and future restrictions at the boundary intersections
- Existing and future facilities such as rapidways, cycling lanes, sidewalks and other destinations (for example, transit trips can be assigned to the nearby transit stops or station within reasonable walking distance of 5-10 minutes)
- Other methodologies in consultation with Regional staff

The resulting site generated total multimodal trips assigned should be illustrated on a road network figure or tabulated format identifying the directions of travel for site traffic. The methodology selected should be fully documented in the Transportation Mobility Plan along with the assumptions applied. Details of the methodology and supporting calculations should be included as part of the technical appendices of the Transportation Mobility Plan.

2.23 Total multimodal forecast volumes and performance

Total multimodal forecast volumes should be estimated based on the addition of the following two layers:

- Total background multimodal volumes (Section 2.20)
- Site multimodal trip assignment (Section 2.22)

Total multimodal forecast volume figures should be provided in the report.

All modes should be reviewed together to ensure the interconnection and interaction between them are documented. The recommended mitigation measures and improvements should complement each other in a holistic manner.

Total multimodal performance analysis should include the requirements in **Section 1.10** for each horizon year considered, where appropriate. A comprehensive summary table should be provided to summarize the performance results for each travel mode to compare the existing conditions, future background conditions and total traffic conditions.

In areas where major improvements to the transportation system are planned, a minimum of two scenarios must be included to review the impact of the development with and without these major transportation system improvements. It should be noted that the "without" scenario will cover situations where risk factors such as funding and necessary permits that may not be available within the horizon year are considered. In order to avoid delay and potential costs, it is recommended that the transportation specialist consult with Regional and local municipal staff to determine the appropriateness and requirements of these scenarios.

When conducting multimodal analysis, the transportation specialist should review and follow the eight key transportation principles of a Transportation Mobility Plan as outlined in ***Section 1.7****.*

2.24 Automobile mode impact

All site access locations and all relevant signalized and major unsignalized intersections in the study area should include the requirements in **Section 1.10**. The operational analysis for proposed signalized intersections should be conducted using the intersection capacity analysis software listed in **Section 1.12**. The printouts of the summary results should be included in the final Transportation Mobility Plan appendix.

It should be noted that when there are more than two signalized intersections being considered in the intersection capacity analysis, Synchro software is preferred and the results of the Synchro' analysis should be supplemented with the results of 'Sim-Traffic' analysis. The 'Synchro' and 'Sim-Traffic' evaluations should be supplied to the Region and respective local municipality as part of the Transportation Mobility Plan submission, both in digital and hardcopy summary format for review.

Should these software applications be unavailable to the transportation specialist, then the transportation specialist is required to contact the Region and respective local municipal staff to discuss possible alternatives. For the analysis of unsignalized intersections, in addition to 'Synchro', the current version of the Highway Capacity Software (HCS) may be used. The analysis of unsignalized intersections should

The intersection of Buttonfield Road and 16th Avenue, City of Markham

be supplemented by field studies, including: gap survey and queuing survey. In addition, in high collision locations, historical collision statistics should be analyzed to determine whether the proposed development and access locations will aggravate the existing problems.

When analyzing background and future development conditions, some degree of optimization in signal timing design is permitted as long as it falls within accepted Regional constraints and parameters. Any changes in lane configuration and signal phasing (e.g. advance left turn phases) must require clearance by Regional and respective local municipal staff, where appropriate.

For all intersections and for all critical turning movements, volume-to-capacity (v/c) ratios, level of service indicators and 95th percentile queue lengths should be clearly tabulated. Critical intersections and movements should be highlighted. Critical intersections and movements include:

- An intersection where the overall volume-to-capacity ratio (v/c) will exceed 0.85 in urban areas or 0.7 in rural areas
- An individual movement volume-to-capacity ratio will exceed 0.85 in urban areas or 0.7 in rural areas
- An exclusive turning movement which will result in queues exceeding the available storage space
- Exclusive left and right turn lanes that are inaccessible due to the length of queues in the adjacent through lanes

This information should be presented for each peak period for the:

- Existing traffic condition
- Existing traffic condition plus background growth for each horizon year
- Existing traffic condition plus background growth plus the site-generated traffic for each horizon year
- Queuing assessment along with summary tables for the requirements above

All intersections or individual movements identified as 'critical' should be discussed in terms of contribution of the development proposal to the situation, possible remedial measures, a recommended solution and the effectiveness of the solution towards resolving the situation.

All exclusive turning lanes used by site-generated traffic should be examined to ensure adequate storage space.

All proposed new traffic signals should be evaluated in terms of signal warrants, intersection and signal spacing, queuing, effects on existing signal coordination, corridor progression, timing of implementation and sight lines.

All proposed adjustments to cycle lengths, signal phasing and signal timing should be evaluated in terms of pedestrian crossing time, effect on queue lengths and adequacy of existing storage, modifications required to existing signals and controllers and effects on existing signal coordination.

These adjustments must consider additional phases, pedestrian requirements, any special phasing such as railway pre-emption and transit priority. All methodologies and assumptions should be documented including source of information and justification for their use.

2.24.1 Mitigation measures for auto mode

2.24.1.1 Finer grid road network

A finer grid transportation network provides permeability and options for different modes of travel such as transit and active transportation. It also provides relief to congested areas and eliminates unnecessary critical movements at key intersections. The Transportation Mobility Plan should identify all potential opportunities to protect a finer grid transportation network which includes a series of public roads, direct pedestrian and cycling connections, midblock collectors, mid-block crossings over major barriers (i.e. 400 series highway) and other planned improvements identified in the approved plans and planning documents (e.g., Transportation Master Plans, Official Plans, Environmental Assessment Studies and Provincial Studies). Transportation specialists are encouraged to consult with Regional and respective local municipal staff on the recommendations, implications and cost estimates of the identified finer grid transportation network.

2.24.1.2 Auxiliary lanes

The Transportation Mobility Plan should identify all movements at signalized intersections that may result in exclusive left or right turn lanes. The warrant criteria for auxiliary lanes could be volume, volume-to-capacity ratio

(v/c), delay or other factors such as safety or potential conflict. Auxiliary lanes warrant analysis should also be conducted at unsignalized intersections based on the criteria outlined in the Ontario Ministry of Transportation Guidelines and Warrants.

The Transportation Mobility Plan Study should identify all exclusive left turn or right turn lanes that are required as part of the development proposals but do not meet the Regional's and respective local municipal's design criteria (e.g., parallel lengths). Mitigation measures must be identified to ensure safety and maintain effective intersection operation.

York Region's current experiences and practices do not support new double left turn lanes as a remedial measure. Double left turn lanes will require allocation of additional green time that will affect other directions and pedestrian crossing time. The consultant should discuss the analysis of any existing double left turn lanes and its impacts on the pedestrian realm, including pedestrian mobility and pedestrian safety with Regional and respective local municipal staff.

2.24.1.3 Traffic signals

For each proposed traffic signal, on a local or Regional road, a traffic signal warrant analysis is required. Should a traffic signal not meet warrant requirements, but is close to the requirements, a detailed justification should be provided as to why a traffic signal should be permitted. The minimum signal spacing requirement should be consistent with York Region's Access Guidelines and respective local municipality's guidelines. In general, the preferred traffic signal spacing is 300 to 400 metres. In the Centres and Corridors, a minimum traffic signal spacing of 215 metres may be acceptable, however, it depends on the existing and future traffic operating conditions to ensure safety and effective corridor operation. Queuing and progression analysis will be required to demonstrate that the proposed new signal will not negatively impact the corridor or adjacent intersections.

2.24.1.4 Site access and circulation

Site access location and design should be determined with an operational analysis undertaken and in conjunction with York Region's Access Guideline for Regional roads, and applicable guidelines from the respective local municipality. At minimum, the following requirements should be included in the analysis:

- All site access points on Regional and local roads should be evaluated in terms of capacity, corridor operation, safety, sight distance and adequacy of queue storage capacity along the corridor. This evaluation should be similar in scope to that for signalized and unsignalized intersections described previously
- Proposed access points should be evaluated with possible mutual interference with adjacent access points and intersections, on- street weaving problems, need for acceleration or deceleration lanes and safety related to walking and cycling
- On-site parking and circulation systems should be evaluated to demonstrate a high safety factor with respect to the possibility of queues spillback on to Regional and local roads (clear throat distance)
- Sight lines should be evaluated to ensure safe conditions in accordance with York Region's Access Guideline for Regional Roads and guidelines from respective local municipalities
- Proposed truck/courier loading facilities and access to these facilities should be evaluated to ensure that they are adequately designed and provided with suitable access so that they will not adversely affect traffic and transit operations on Regional and local roads
- Any required turning or other restrictions should be identified
- Based on the Regional Official Plan (2010) policies, the number of private site accesses to Regional roads will be minimized and consolidated to ensure the integrity and operation of the arterial road network
- Site access should be provided via the local road network and adjacent development sites, where appropriate, to promote inter-connectivity and a complete community for all modes of transportation. Benefits and potential impacts to the Regional road network should be demonstrated when an access is proposed onto Regional roads
- Any additional accesses should be justified as described in York's Region's Access Guideline for Regional Roads

2.24.1.5 Parking

Parking requirements are typically under the jurisdiction of local municipalities. As such, the transportation specialist should consult with the enforced bylaw and specific requirements from the respective local municipality.

Since the number of parking spaces provided on site may have some direct impact on the effectiveness of the Transportation Demand Management measures and incentives, the transportation specialist is encouraged to review and provide recommendations to properly manage the parking requirement. This will support other modes of transportation in order to reduce the numbers of single-occupant-vehicle trips to and from the proposed development. The transportation specialist is encouraged to consult with respective local municipal staff to meet their requirements.

2.24.1.6 Loading area

Loading area requirements are typically under the jurisdiction of local municipalities. As such, the transportation specialist should consult with the enforced bylaw and specific requirements from the respective local municipality.

It should be noted that the Region will not permit service vehicles backing into or out of loading areas onto Regional roads. All loading accesses must be provided via internal roads or local roads, subject to applicable local municipal bylaws and specific requirements by the respective local municipalities.

In general, the proposed loading areas should not be located within areas where it may impact pedestrian, cycling or vehicle turning movements.

The transportation specialist is encouraged to consult with the respective local municipality on the design and requirement for loading areas.

2.25 Transit mode impact

All major development applications, Secondary Plans, Block Plans, draft plans of subdivision and site plans should include a conceptual transit route plan to demonstrate how the development will connect with existing services and help achieve the Regional Official Plan (2010) and local municipal official plan targets for transit accessibility and transit coverage.

Transit mode level of service should include the requirements in **Section 1.10**. The need for new transit services should be evaluated if the development is of significant scope and would impact the existing transit network. The transportation specialist should coordinate with York Region Transit (YRT/Viva), York Region Rapid Transit Corporation (YRRTC) and York Region staff, as well as local municipal staff regarding potential transit impacts and mitigation measures.

Pedestrian and cyclist access to transit services from the proposed development should be evaluated and improvements to the site plan to facilitate access to transit services and facilities should be recommended.

Any impacts on transit operations caused by site-generated traffic should be identified and appropriate mitigation measures should also be recommended. New or relocation of transit facilities, such as bus stops, should be identified and alternative locations determined and evaluated regarding their effect on traffic and transit operations.

The Region's Official Plan (2016) has policies which require new community and intensification areas to include transit accessibility and connectivity in its mobility plans. It states that the distance from a transit stop should generally be no more than 500 metres (a five to 10 minute walk) for 90% of the residents, and no more than 200 metres for 50% of the residents in the urban area. For new communities and large developments, particularly those within Centres and Corridors, this is important for making transit a sustainable mode. By locating developments within a reasonable walking distance to transit routes and stops, residents and riders find public transit more attractive.

At the Secondary and Block Plan level, a conceptual transit route plan should be recommended in the supporting Transportation Mobility Plan to demonstrate how it can connect with existing services and provide the appropriate level of transit coverage. York Region Transit staff should be consulted along with their transit service plans during the study. The transit coverage should be quantified through scaling off the proportion of development covered by a 500-metre and 200-metre bandwidth distance from the road centre line of a transit route or radii distance from existing or reasonably assumed future bus stop locations. The analysis should also identify service levels (frequency of service) for each recommended service and the staging and implementation of proposed transit services, as well as potential bus stop locations.

For subdivision and site plan applications where conceptual transit routes have been recommended and established through earlier studies in the Secondary Plan process, the site plan layout should detail the pedestrian and cycling access and connections to the transit service including sidewalks and pathways.

Similarly, for site plan applications within areas of congestion or where no previous studies have established future transit service, appropriate connections to existing and future services should be identified and protected as part of the supporting studies and plans for the application to ensure that the required transit coverage is met. For detailed information on Transit Service Planning in
York Region, refer to the YRT/Viva's Transit Service Guidelines.

At signalized intersections, intersection capacity that impacts transit vehicles should be evaluated. Appropriate mitigation measures such as queue jump lanes and transit signal priority should be identified and implemented.

2.26 Active transportation mode impact

All major development applications, Secondary Plans, Block Plans, draft plans of subdivision and site plans should include a detailed pedestrian and cycling plan to demonstrate how the development will connect with the existing services such as schools, community centres, major employment and shopping centres in the area. This will help support the non-automotive modal split targets and walkability policies in the Regional and local Municipal Official Plans and the implementation of the pedestrian and cycling components of the Transportation Master Plans.

Pedestrian and bicycle level of service should include the requirements in **Section 1.10**. The need for new active transportation networks, intersection performance from walking and cycling perspectives, should be considered. Ontario Traffic Manual (OTM) Books 15 and 18, along with Regional and local municipal standards and guidelines should be consulted regarding the design recommendations for these facilities.

Pedestrian and cyclist access to transit services from the proposed development should be evaluated and appropriate improvements to the site plan to facilitate access should be recommended.

Transportation demand management, active transportation and alternative modes of transportation are critical to support future growth in York Region. To ensure these modes provide viable and safe alternatives to residents and employees, the study should identify any pedestrian and bicycle safety concerns, and evaluate the impacts of the additional traffic on pedestrian and cycling mobility. As a component of the study, the transportation specialist should review the existing and planned pedestrian and cycling facilities and corridors to support the development. This review should include, but not limited to, whether the existing pedestrian and bicycle facilities are sufficient to support the proposed development, a preliminary safety audit of the existing and planned infrastructure should be considered to ensure that the proposed recommendations support the urban environment.

Walking and cycling mode share of a development will depend on the type of land use and the location of the development. The highest propensity for active modes of travel is expected in the rapid transit corridors, schools and the Region's four designated urban growth centres: Markham Centre, Richmond Hill-Langstaff Gateway Centre, Vaughan Metropolitan Centre, and Newmarket Centre. The type of trip will also have an influence on the likelihood of people choosing to use transit.

The transportation specialists and architects working on behalf of the proposed development are encouraged to consult with Region and local municipality streetscaping and urban design staff at the early stages of the proposed development to establish design concepts and principles.

2.27 Transportation Demand Management

Please refer to **Chapter 3** - Transportation Demand Management Requirement and Implementation for guidelines to support new developments.

It should be noted that a Transportation Demand Management plan is required as a component of the Transportation Mobility Plan study.

2.28 Safety analysis

If the proposed development is located within an area that has a history of safety related issues due to road geometry or other conditions affecting transportation operation, safety analysis should be included in the Transportation

Mobility Plan study. The identification of potential safety or operational issues associated with the following elements should be conducted:

- Geometric design for existing arterial road and proposed site accesses
- State of Good Repair (pavement condition)
- Potential weaving (access close to major intersections)
- Merging/diverging of site traffic and adjacent accesses
- Collision history in the area related to access or turning movement conflict
- Sightline and stopping distance
- Potential access conflicts
- Any other issue identified by Regional staff or by the transportation specialists

These are only a few examples. Regional and local municipal staff may ask for additional criteria or analysis depending on the nature of the application, location and study area.

2.29 Recommendations

A summary of the key findings with respect to the transportation impact of the proposed development should be presented along with a summary of the recommended improvements. As traffic congestion continues to build throughout the Region, there is a need to assess transportation impacts of major developments with a comprehensive study to develop a Transportation Mobility Plan.

- The goals of sustainable communities are embedded throughout the Regional and local Municipal Official Plans. With regards to transportation, sustainability is achieved in part, by requiring that new developments be walkable, bikeable, transit-supportive, and integrated into existing communities with high-quality urban design

2.30 Implementation plan

Provide a realistic implementation plan for the proposed recommendations in **Section 2.29** that should address the following requirements:

- How these recommendations will be implemented?
- What are the cost estimates for these recommendations?
- Who is responsible for the implementation?
- What is the timing of the implementation?
- How will it be monitored?

2.31 Conclusions

Provide an overall conclusion of the Transportation Mobility Plan findings, recommendations, implementation plans and next steps based on the results of the multimodal analysis. The conclusion should indicate the following requirements:

- Physical improvements to the intersections, such as turning lanes, sufficient storage lengths and other improvements such as concrete centre medians and new traffic signal equipment
- Signal timing plan optimization and coordination are required to accommodate four modes of transportation
- All signalized intersections considered in this analysis must be monitored for further improvements in the future
- Transportation Demand Management programs and measures that are applicable to the proposed development will be required to reduce the use of auto mode and encourage a shift to other modes of travel
- Bicycle and pedestrian facilities and circulation within the proposed development
- Streetscaping to enhance pedestrian safety and movements
- Shared pedestrian and cycling connections from the proposed development to adjacent developments and transit stops to accommodate other modes of travel

CHAPTER 3

Transportation Demand Management Requirement and Implementation

3.1 Why is Transportation Demand Management required?

To achieve the sustainability goals of the Regional Official Plan (2010) and local Municipal Official Plans, communities are required to employ the highest standard of urban design which follows York Region's Transit-Oriented Development Guidelines, and reduce automobile dependence by enhancing opportunities for residents and employees to walk, cycle, take transit and rideshare. Further, the Regional Official Plan (2010) has policies (as outlined in the Executive Summary) to require that appropriate Transportation Demand Management measures be identified in transportation studies and in development applications in order to reduce the number of single-occupant automobile trips.

Managing the demand for travel generated by new developments is a powerful strategy for controlling costs, mitigating environmental impacts, and permitting developments to proceed in road capacity constrained areas.

Effective application of Transportation Demand Management measures should be viewed as a cost-effective means to reduce the need for additional road infrastructure typically associated with new developments. Transportation Demand Management strategies and objectives complement and reinforce other policies such as use of alternative modes of transportation and non-auto modal split targets. Any policy or program that reduces single occupant vehicle trips during peak travel periods can be considered a Transportation Demand Management strategy.

3.2 When a Transportation Demand Management Plan is required?

A Transportation Demand Management Plan is required as a component of the Transportation Mobility Plan. It is suggested that the transportation specialist consult with Regional or respective local municipal staff to develop a detailed scope of work for a Transportation Demand Management Plan. The following are the general guidelines to determine when a Transportation Demand Management Plan is required:

- Location of the proposed development such as Regional centres and corridors, employment centres, multimodal mixed-use areas, congested areas, mobility hub area
- Type of land use: office, institutional, residential, commercial, mix-used
- Numbers of trips: 100 or more total person trips
- Number of employees: 100 or more employees
- Number of residential units: 50 or more residential units
- Square footage (e.g. developments that exceed 50,000 sq. ft.)
- Parking: developments that will add more than 20 non-residential parking spaces

3.3 Transportation Demand Management Plan component

Below are general requirements to conduct a Transportation Demand Management Plan:

1. Project description
2. Description of the existing conditions affecting non-auto mode
3. Existing performance analysis for each mode
4. Non-auto trip forecast
    - Volumes (see **Chapter 2**)
    - Modes (see **Chapter 2**)
    - Origins/destinations (if known)
    - Description/documentation of the methodologies used above
5. Review required performance targets by the Region and local municipalities
    - Non-auto modal split recommendation in the Transportation Mobility Plan study to accommodate the proposed development
    - Non-auto modal split target in the Regional and Municipal Official Plans for the centres/corridors and key development areas
    - Non-auto modal split target in the secondary plan

6. Future conditions analysis and mitigation measures (see Checklist in **Table 10**)
    - Site design and physical infrastructure for active transportation
        - Examine and recommend an enhanced pedestrian and cycling network within the site
        - Demonstrate how site design will ensure a comfortable, connected pedestrian and cycling environment
        - Demonstrate how the pedestrian and cycling facilities within the site can be integrated with the York Region Transportation Master Plan active transportation network, local municipal master plans, and adjacent municipal transportation systems
    - Parking strategy
        - Opportunities to provide short and long term bicycle parking within buildings, shared parking between different uses, and/or carpool parking spaces
        - Opportunities to reduce and unbundle parking spaces
        - Opportunities for shared parking
    - Transit incentives
        - Explore transit incentives, information dissemination, and incentives to encourage people to use different modes of transportation to and from the development
    - Trip reduction strategy
        - Identify trip reduction opportunities with the Region, local municipalities, Smart Commute Transportation Management Associations, and any other agencies
        - Technical analysis of the recommended TDM program impact including an appropriate estimate of a trip generation reduction rate
        - Opportunities for telecommuting or shared office space
    - Community-based social marketing, incentives, education and liaison strategy (Regional initiative)
    - Identify the role and responsibilities of the landowner for each recommended program and its implementation
    - Identify the operational and financial responsibilities of the landowner. This should include, but not be limited to, program development, implementation, operations and on-going management/monitoring of the TDM programs
    - Identify TDM measures that would be compatible with the development area
7. Performance monitoring and adaptive management plan (Regional initiative)
    - The TDM Plan should include a plan for annual performance monitoring, specific to the proposed development application. This includes when and how travelers to and from the site will be surveyed and the frequency of the monitoring report
    - The TDM Plan should propose additional TDM actions to achieve the non-auto modal split targets and be evaluated and implemented if interim recommendations of the mode share targets are not achieved

3.4 Transportation Demand Management checklist

York Region, in consultation with local municipalities, has developed a Transportation Demand Management checklist to assist the transportation specialist in the development of a comprehensive Transportation Demand Management Plan. York Region and local municipalities will consider other recommendations beyond the requirements outlined in the checklist, as long as it meet the objectives of the Regional and local municipal Official Plans and policies.

This checklist should be completed and included as part of the Transportation Demand Management Plan report for further review by Regional and respective local municipal staff. The TDM checklist is summarized in **Table 13**.

*It is required that all proposed development applications complete the TDM Checklist outlined in **Table 7** of this report and include it in the Transportation Mobility Plan study report.*

Table 13 – Transportation Demand Management Checklist

TDM Measures	For Residential Developments		For Non-Residential Developments	
	Requirement	Responsibility	Requirement	Responsibility
Transit incentives (i.e. PRESTO cards)	Yes	York Region to consider	Yes	Applicant
Information packages (YRT/Viva maps, GO schedules, cycling maps)	Yes	York Region to consider and could be distributed at the sales office	Yes	Applicant
Communication strategy and physical location to deliver PRESTO cards and information packages	Yes	Applicant	Yes	Applicant
Outreach programs	Yes	York Region to consider	Yes	Applicant
Pedestrian connections	Yes	Applicant	Yes	Applicant
Cycling connections	Yes	Applicant	Yes	Applicant
Ped/cycling connections to transit facilities	Yes	Applicant	Yes	Applicant
Internal ped/cycling circulation	Yes	Applicant	Yes	Applicant
Active transportation network/fine-grid	Yes	Applicant	Yes	Applicant
Bicycle parking/shelter	Only applies to condos	Applicant	Yes	Applicant
Bicycle repair station	As per local bylaw	Applicant	As per local bylaw	Applicant
Bicycle parking	As per local bylaw	Applicant	As per local bylaw	Applicant
Benches/receptacles	Case by case	Applicant/ Municipality	Case by case	Applicant
Illumination of ped/cycling connections	Case by case	Applicant/ Municipality	Case by case	Applicant
Carpool parking	No	-	Yes	Applicant
Car share	Only applies to condos	Applicant	Case by case	Applicant
Shared-parking between land uses	Case by case	Applicant	Yes	Applicant
Parking reduction	Where appropriate	Applicant/ Municipality	Where appropriate	Applicant
Real time TV screen	Only applies to condos	Applicant	Where appropriate	Applicant
Trip end facilities (i.e. showers)	No	-	Where appropriate	Applicant
Membership with Smart Commute	Where appropriate	Applicant	Yes	Applicant
School travel planning	Where appropriate	Applicant/School Board/ Municipality	No	-
Telecommute	No	-	Where appropriate	Applicant
Monitoring program/report	Yes	York Region to consider	Yes	Applicant

CHAPTER 4
Guideline Updates and Expectations

4.1 Regular updates of the document

As York Region progresses along its path of city building, requirements to support development applications will mature and evolve. To this end, the Transportation Mobility Plan Guidelines for Development Applications should be considered a living document and subject to continuous update and refinement. The updates to these Guidelines will be published and made available on the Region's website (york.ca).

Some of the key factors that may trigger an update to the Guidelines could include:

- Changes in Regional and local Municipal Official Plan policies
- Changes in Provincial policies or regulations
- New or revised policies of Regional and local Municipal Council
- New best practices

4.2 Pre-consultation with Regional and local municipal staff

The Region encourages a pre-consultation meeting between the developer representatives, Regional and respective local municipal staff. The requirement for this meeting is dependent on the size and complexity of the development application. This meeting is typically used to convey staff expectations to the developer related to supporting documentation requirements.

As part of the pre-consultation, developers and their transportation specialists are encouraged to arrange a meeting with the Region and the respective local municipality early in the preparation of the Transportation Mobility Plan to discuss and confirm the various parameters to be used in the subject analysis.

4.3 Where to use the Guidelines

The Guidelines apply to any scale of development or type of application from site plans for higher density developments within urban York Region, to the development of secondary plans in greenfield areas. The scope of the Guidelines will apply in different ways depending on whether it is a large, medium or small development. For example, the extent or range of policy options for implementing a Transportation Demand Management program within the urban areas of southern York Region may differ significantly, compared to the urban fringes in northern York Region. However, both development applications would be required to review and consider Transportation Demand Management as a cost-effective means to reduce the need for additional road infrastructure typically associated with new developments (**Chapter 3**).

As such, the scope of the Transportation Mobility Plan will depend significantly on the application type, and on the location, scale, and Regional impact of the proposed development. It should be the responsibility of the transportation specialist to review the Official Plan policies related to mobility plans and these Guidelines.

4.4 Application of professional judgment and experience expected

These guidelines are intended to assist transportation specialists in understanding the transportation requirements of the Regional Official Plan and provide guidance in developing Transportation Mobility Plan and background reports to support development. They are not intended to be prescriptive or to eliminate professional judgment or experience.

As a Region of nine municipalities, these guidelines and the transportation solutions identified for each development may vary across each geographic area. The role of the Transportation Mobility Plan will differ between Centres and Corridors and to an even greater degree, within the rural communities and villages across the Region. As such, York Region expects that transportation specialists will:

- Provide detailed documentation of assumptions, and methodologies utilized in the study
- Conduct professional quality work
- Present acceptable up-to-date technical methods and procedures in the transportation planning and traffic operations fields

CHAPTER 5
Contact Information and Reference Documents

5.1 Contact information

The Regional Municipality of York

Transportation Services Department
17250 Yonge Street
Newmarket, Ontario L3Y 6Z1
transportationservices@york.ca

Access York
Hours of operation: Monday to Friday: 8:30 a.m. to 4:30 p.m.
Phone: 1-877-464-9675
TTY: 1-866-512-6228 or 905-895-4293
(for deaf and hearing impaired)
accessyork@york.ca

York Region Transit (YRT)
50 High Tech Road, 5th Floor
Richmond Hill, ON L4B 4N7
Phone: 905-762-2100 or 1-866-MOVE YRT (668-3978)
www.yrt.ca

York Region - Development Engineering Section

Manager of Development Engineering
Community Planning & Development Services Branch
Corporate Services Department
The Regional Municipality of York,
17250 Yonge Street,
Newmarket, ON L3Y 6Z1
Tel: 1-877-464-9675

York Region - Roads and Traffic Operations

York Region - Traffic Data, AADT,
Signal Timing Request
traffic.data@york.ca
Website

York Region - Transportation Planning Section

Manager of Transportation Planning
Infrastructure Management & PMO Branch
Transportation Services Department
The Regional Municipality of York,
17250 Yonge Street,
Newmarket, ON L3Y 6Z1
Tel: 1-877-464-9675

York Region - Development Planning Section

Manager of Development Planning
Community Planning & Development Services Branch
Corporate Services Department
The Regional Municipality of York,
17250 Yonge Street,
Newmarket, ON L3Y 6Z1
Tel: 1-877-464-9675

Local Municipalities

Town of Aurora
P.O. Box 1000
100 John West Way
Aurora, ON L4G 6J1
www.aurora.ca

Town of East Gwillimbury
Community Programs & Infrastructure
19000 Leslie Street
Sharon, ON L0G 1V0
www.eastgwillimbury.ca

Town of Georgina
Operations & Engineering
26557 Civic Centre Road, R.R. 2
Keswick, ON L4P 3G1
www.georgina.ca

Township of King
Engineering & Public Work's
2075 King Road
King City, ON L7B 1A1
www.king.ca

City of Markham
101 Town Centre Boulevard
Markham, ON L3R 9W3
www.markham.ca

Town of Newmarket
395 Mulock Drive, P.O. Box 328
Newmarket, ON L3Y 4X7
www.newmarket.ca

Town of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, Ontario, L4B 3P4
www.richmondhill.ca

City of Vaughan
2141 Major Mackenzie Drive
Vaughan, ON L6A 1T1
www.vaughan.ca

Town of Whitchurch-Stouffville
111 Sandiford Drive
Stouffville, ON L4A 0Z8
www.whitchurch-stouffville.ca

Other Agencies

407 ETR
General Information
6300 Steeles Ave. West
Woodbridge, ON L4H 1J1
Phone: 1-888-407-0407
www.407etr.com

City of Toronto
City Services Information Hotline
Phone: 416-392-2489
www.toronto.ca

Ministry of Transportation
MTO Info, General Information Line
Phone: 1-800-268-4686
www.mto.gov.on.ca

Region of Peel
10 Peel Centre Drive, Suite A and B
Brampton, ON L6T 4B9
Phone: 905-791-7800
Toll-free: 1-888-919-7800
www.peel.ca

Simcoe County
110 Highway 26
Midhurst, Ontario L0L 1X0
Phone: 705-726-9300
Toll-free: 1-866-893-9300
www.simcoe.ca

Metrolinx
97 Front Street West
Toronto, ON M5J 1E6
Phone: 416-874-5900
www.metrolinx.com

Toronto Transit Commission (TTC)
1900 Yonge Street
Toronto, ON M4S 1Z2
Wheel-Trans Reservations: 416-393-4222
Phone: 416-393-INFO (4636)
www.ttc.ca

Region of Durham
605 Rossland Road East
Whitby, ON L1N 6A3
Phone: 905-668-7711
Toll-free: 1-800-372-1102
www.durham.ca

GO Transit
20 Bay Street, Suite 600
Toronto, ON M5J 2W3
Phone: 1-888-GET ON GO (438-6646)
www.gotransit.com

5.2 Relevant documents/websites

Regional Official Plan
Regional Transportation Master Plan
New Communities Guidelines
Transit Oriented Development Guidelines (September 2006)
Access Guideline for Regional Roads
Transportation Fact Book
York Region Transit
York Region Rapid Transit Corporation (vivaNext)
York Region Transportation Services Department
York Region Cycling
York Region Transportation Demand Management

CORPORATION OF THE TOWN OF GEORGINA

IN THE

. REGIONAL MUNICIPALITY OF YORK

BY-LAW NO. 2002-0046(TR-1)

BEING A BY-LAW TO REGULATE TRAFFIC AND TO GOVERN AND CONTROL THE PARKING OF VEHICLES IN THE TOWN OF GEORGINA

WHEREAS the Municipal Act as amended authorizes a municipality to pass by-laws for regulating traffic on highways;

AND WHEREAS the said Act authorizes a municipality to pass by-laws for the prohibiting of unauthorized parking on private or municipal property;

AND WHEREAS the said Act authorizes a municipality to pass by-laws for prohibiting parking on private roadways designated as fire routes;

AND WHEREAS the said Act authorizes a municipality to pass by-laws to regulate or prohibit the parking, standing or stopping of vehicles in designated disabled parking spaces and to provide an exemption from such regulations or prohibitions for owners and drivers of vehicles displaying a valid disabled person parking permit.;

AND WHEREAS the said Act authorizes a municipality to pass by-laws for requiring the owners or operators of parking lots or other parking facilities to which the public has access, to provide designated parking spaces for the sole use of vehicles operated by or carrying a disabled person;

AND WHEREAS the said Act authorizes a municipality to pass by-laws for regulating and controlling the use, including the use for parking purposes, of untravelled portions of highways;

AND WHEREAS the said Act provides that fines may be charged for offenses created by vehicles left parked, stopped or standing.

AND WHEREAS the said Act authorizes a municipality to pass by-laws for prohibiting or regulating the obstructing, encumbering, injuring or fouling of highways or bridges.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF GEORGINA ENACTS AS FOLLOWS:

GENERAL PROVISIONS:

1.0 DEFINITIONS:

In this By-law;

(a) " authorized sign" means any sign, or marking on a roadway, or curb or sidewalk, or other device placed or erected on a highway under the authority of this By-law for the purpose of regulating, warning or guiding traffic;

(b) "bicycle" includes a tricycle having a wheel or wheels of more than 60 centimeters in diameter;

(c) No person shall play or take part in any game or sport upon a roadway; no person upon roller skates, or riding in or by means of any coasting toy vehicle or similar device shall go upon a roadway except for the purpose of crossing the roadway, and when so crossing such person shall have the rights and be subject to the obligations of a pedestrian.

(d) The highways set out in Column 1 of Schedule 'XV' at the locations set out in Column 2 of the said Schedule are designated as pedestrian crossovers and shall be indicated as such as prescribed by the regulations made under the Highway Traffic Act.

9.0 REGULATIONS FOR BICYCLES:

(a) No person shall ride a bicycle upon a sidewalk on any highway.

(b) No person shall ride a bicycle on the highways set out in Column 1 of Schedule 'XVI' between the limits set out in Column 2 of the said Schedule.

10.0 PROHIBITED PEDESTRIAN CROSSINGS:

(a) Where an authorized sign to that effect is displayed, no pedestrian shall enter on or cross the roadway of the highways set out in Column I of Schedule 'XVII' at the locations set out in Column 2 of the said Schedule.

11.0 RESTRICTED WIDTH OF VEHICLES:

(a) The highways set out in Column 1 of Schedule 'XVIII' between the limits set out in Column 2 of the said Schedule are hereby designated pursuant to the relevant provisions of The Municipal Act, and no person shall drive a vehicle thereon having a greater width than that set out in Column 3 of the said Schedule.

(b) Each designation made under subsection (a) shall be effective upon the erection of authorized signs at each entrance to the highway indicating the limitation of the width of vehicles permitted on the highway.

12.0 ONE-WAY TRAFFIC:

(a) The highways set out in Column 1 of Schedule 'XIX' between the limits set out in Column 2 of the said Schedule, are, during the times or days set out in Column 3 of the said Schedule, hereby designated for one-way traffic only in the direction set out in Column 4 of the said Schedule.

(b) The highways set out in Column 1 of Schedule 'XX' having been divided into clearly marked lanes for traffic between the limits set out in Column 2 of the said Schedule, each of the said lanes indicated in Column 3 of the said Schedule, is, during the times or days set out in Column 4 of the said Schedule, hereby designated for traffic moving in the particular direction set out in Column 5 of the said Schedule.

(c) Each designation made by subsections (a) and (b) above shall be effective upon the erection of official signs indicating such designation.

GEORGINA

The Clerks Division

Memo

To: Council

From: Sarah Brislin, Committee Services Coordinator

C.C.: John Espinosa, Town Clerk

Date: 03/03/2017

Re: RESOLUTION NO. GSSC-2016-0050

On December 12, 2016, the Georgina Safe Streets Committee (the "Committee") reviewed an inquiry (attached) related to concerns on Lake Drive South. Staff conducted studies in accordance with the policies, and found the request was not warranted. The Committee discussed various alternative options that might address the inquirers concerns.

RESOLUTION NO. GSSC-2016-0050

That the Georgina Safe Streets Committee request that Council declare Lake Drive South become a community safety zone. And that a permanent radar board be purchased and be installed on Lake Drive South.

Carried.

Please note the comments and resolution are provided from the un-adopted draft minutes. Thank you.

Sarah Brislin

From: Naomi Davison
Sent: October-05-15 10:41 AM
To: Rob Wheater; Sarah Brislin
Cc: Margaret Quirk
Subject: FW: another proposal for the budget

Hi Rob and Sarah,

Will you add the following to the 2015 budget discussion and the next agenda for the Safe Streets Committee?

Thanks in advance,

Naomi

From: [redacted] on behalf of [redacted]
Sent: Monday, October 05, 2015 10:23 AM
To: Margaret Quirk; Naomi Davison; [redacted]
Subject: another proposal for the budget

Good Morning Madam Mayor, Counselor Davison,

As you are aware I have had some concerns about the safety of Lake Dr South for both pedestrians and cyclists. Not to mention the risk to drivers as well. The area of most concern is between Ravenshoe Rd and Glenwoods Ave in Keswick.

Lake Drive South is very narrow. An old "cottage" street although we are no longer a cottage community. It is dark when the sun goes down and not really wide enough to accommodate the amount of traffic, especially when cars are parked along the route. In winter it is a disaster. The snow reduces the width even further.

Please race along that strip like it is a race track. I walk that road often and it is frightening. I've spoken with other pedestrians that feel the same way. I recall last winter wearing reflective clothing, flashing light on myself and on the dog I was walking. Please still came right at us. More than once I have pulled a dog into a ditch in order for us to avoid being hit. There is little concern for those of us on foot it seems when the driver is in a hurry to get home.

There is one stop sign on that stretch of road, at Young's Harbor. One. There are no signs reminding drivers that is is a shared road and no signs reminding people that Pedestrians walk left and cyclists ride right. Since so many people do not follow these simple guidelines it becomes even more confusing for the driver that IS trying to be conscientious and drive safely.

I am not asking that you widen the road. Not even asking for sidewalks, although in this day it sure would be nice to have them... I am asking for signs like those on Lake Dr North. I am asking for stop signs that will force drivers to slow down. Many people I have spoken with would also like to see a speed bump or two sure wouldn't hurt.

I request that Council allows some room in the budget for at least those signs and Stop signs? I believe this would help to slow down the traffic a little. Also more Police patrol along there. Not at Glenwoods and Lake Dr or at Youngs Harbor. That only really serves to catch those rolling through the stop sign, not catch those racing.

The residents in the older portion of Ward 1 would like to be able to go for a walk without being hit by a car. This area is not accessible for people requiring mobility scooters, wheel chairs, pushing baby strollers or even just going for a walk

with our dog. [redacted] on Annshiela Dr. Another raceway. The subdivisions enjoy sidewalks. I am asking for space in the budget to improve the safety, accessibility and comfort of the Lake Dr South community.

Thank you for your consideration.

[redacted]

[redacted] website!

[redacted]

Sarah Brislin

From: Naomi Davison
Sent: February-10-17 9:22 AM
To: Sarah Brislin
Subject: Safe streets agenda

Hi Sarah,

Can we add an item to the next agenda? Safety concern at intersection ravenshoe road and Victoria road.

Thanks!

Naomi

Sent from my BlackBerry 10 smartphone on the TELUS network.