

TRAFFIC CONCERNS



PAUL MARSHALL

NOT LOCAL STREETS?



Sources: Esri, Airbus DS, USGS, NOAA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

CONSTRUCTION 2021-2030

Overlapping construction projects will increase congestion dramatically & heighten the anger of residents



	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Dundas BRT (Metrolinx)						East - West Metrolinx on time? >>				
Tomken						North-South				
Dundas Peel Pj 18-1310 C					East - West					
Bloor & Cawthra Sewer Pj#16-2300C2					East - West					
Bloor IP				East - West						
Burnhamthrope (Cawthra to Golden Orchard) Peel Pj 22-2254				East - West						
QEW (Cawthra to Etobicoke Ck)		East - West								
Dixie Road (N-South)	North - South									
Hurontario (Hazel McCallion Line)	North - South									
Burnhamthorpe (Widening to 6 lanes)										Starting 2041



Exhibit 3-5: Predictive Analysis – Overall Excess Collisions (2015 to 2019)

Location Type	Excess Collisions		
	Fatal/Injury	PDO	Total
Intersection*	-1.72	16.87	15.15
Midblock	-5.36	-6.48	-11.84
Study Area Total	-7.08	10.39	3.32

As shown in Exhibit 3-5:

- In terms of location type, the intersections within the study area are experiencing more PDO collisions than predicted by the models, while the midblock segments are experiencing fewer collisions than similar midblock segments;
- In terms of severity, the study area has comparatively good safety performance in terms of fatal and injury collisions. However, the study area does experience an excess of PDO collisions;

Memorandum to Jeffrey Reid from
Matt Colwill, IBI Group, April 2022.

*PDO =Property Damage only

- For the 2041 PM Pk Hr - Bloor St 2 Lanes, Burnhamthorpe Rd 4 Lanes and Dundas St 4 Lanes the model is forecasting volumes approaching Cawthra experiences the highest capacity constraints as this area experiences the highest volume increases between 2016 and 2041 scenar

Volume to Capacity Ratios

	2041 PM Pk Hr - Bloor St 2 Lanes, Burnhamthorpe Rd 4 Lanes, Dundas 4 Lanes	
	EB	WB
Burnhamthorpe Rd East of Dixie Rd	0.64	0.65
Bloor Rd East of Dixie Rd	0.88	0.77
Dundas St East of Dixie Rd	0.84	0.97
Total	0.76	0.80
Burnhamthorpe Rd East of Tomken Rd	0.56	0.76
Bloor Rd East of Tomken Rd	0.52	0.63
Dundas St East of Tomken Rd	0.48	0.73
Total	0.52	0.73
Burnhamthorpe Rd West of Cawthra Rd	0.80	1.05
Bloor Rd West of Cawthra Rd	0.81	1.03
Dundas St West of Cawthra Rd	0.73	0.93
Total	0.77	1.00

From:
To:
Subject:
Date:

[Norbert Orzel](#)
[Jeffrey Reid](#)
Bloor St Integrated Program - V/C Ratios for Screenlines
Thursday, October 6, 2022 4:12:09 PM

For the 2041 PM Pk Hr - Bloor St 2 Lanes, Burnhamthorpe Rd 4 Lanes and Dundas St 4 Lanes the model is forecasting volumes approaching and exceeding capacity across the three screenlines, specifically in the WB direction. The screenline West of Cawthra experiences the highest capacity constraints as this area experiences the highest volume increases between 2016 and 2041 scenarios.

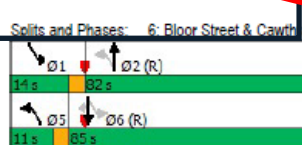


Appendix B – Synchro Outputs

MOE Reports SimTraffic Reports

Lane Group	EBL	EBT	EBB	WBL	WBT	WBB	NBL	NBT	NBB	SBL	SBT	SBB
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize												
Vehicle Extension (s)												
Recall Mode												
Walk Time (s)												
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	1	1		14	14		0	0		1	1	
Act Effct Green (s)	50.5	35.7	37.7	59.6	40.8	42.8	85.4	72.4		91.4	75.4	77.4
Actuated g/C Ratio	0.32	0.22	0.24	0.37	0.26	0.27	0.53	0.45		0.57	0.47	0.48
v/c Ratio	0.39	0.96	0.67	1.04	0.41	0.30	0.86	0.94		0.93	0.89	0.06
Control Delay	38.8	85.1	42.6	113.0	51.1	10.9	78.2	53.5		91.4	46.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	38.8	85.1	42.6	113.0	51.1	10.9	78.2	53.5		91.4	46.7	0.6
LOS	D	F	D	F	D	B	E	D		F	D	A
Approach Delay	69.0		60.3				55.2		49.2			
Approach LOS	E		E				E		D			

Intersection Summary	
Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	134 (84%), Referenced to phase 2:NBTL
Natural Cycle:	110
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.04
Intersection Signal Delay:	57.2
Intersection Capacity Utilization:	107.1%
Analysis Period (min):	15



Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 134 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 57.2

Intersection Capacity Utilization 107.1%

Arterial Level of Service: EB Bloor Street

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (km)	Arterial Speed	Arterial LOS
Mississauga Valley B	III	50	49.2	4.6	53.8	0.62	41.7	B
Cawthra Rd	III	50	28.8	71.8	100.6	0.37	13.1	F
Rymal Rd	III	50	28.5	7.1	35.6	0.36	36.5	C
Tomken Rd	III	50	38.0	13.9	51.9	0.48	33.4	C
Private Driveway	III	50	42.6	8.4	51.0	0.54	38.1	C
Golden Orchard Dr	III	50	34.5	2.8	37.3	0.44	42.2	B
Dixie Road	III	50	23.7	61.7	85.4	0.30	12.7	F
Havenwood Dr	III	50	26.7	5.5	32.2	0.34	37.8	C
1560 Bloor Street	III	50	22.5	0.3	22.8	0.29	45.1	B
Fieldgate Dr	III	50	22.5	13.0	35.5	0.28	28.9	C
1750 Bloor Street	III	50	17.1	0.2	17.3	0.20	40.7	B
Bridgewood Dr	III	50	18.0	2.9	20.9	0.22	37.3	C
Total	III		352.1	192.2	544.3	4.43	29.3	C

Arterial Level of Service: WB Bloor Street

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (km)	Arterial Speed	Arterial LOS
Bridgewood Dr	III	50	18.8	4.4	23.2	0.23	34.9	C
1750 Bloor Street	III	50	18.0	0.3	18.3	0.22	42.6	B
Fieldgate Dr	III	50	17.1	49.0	66.1	0.20	10.7	F
1560 Bloor Street	III	50	22.5	0.4	22.9	0.28	44.8	B
Havenwood Dr	III	50	22.5	6.5	29.0	0.29	35.5	C
Dixie Road	III	50	26.7	70.5	97.2	0.34	12.5	F
Golden Orchard Dr	III	50	23.7	6.0	29.7	0.30	36.5	C
Runningbrook Dr	III	50	34.5	16.7	51.2	0.44	30.7	C
Tomken Rd	III	50	42.6	34.1	76.7	0.54	25.4	D
Rymal Rd	III	50	38.0	41.0	79.0	0.48	21.9	E

3 LANE ROAD DIET – PEAK HOUR PER DIRECTION

*A peak hour volume below 750 vehicles per hour per direction (phpd) is likely feasible for a 3-lane road diet. **Peak hour volumes between 750 to 875 vehicles phpd should be reviewed cautiously.*** U.S. DEPARTMENT OF TRANSPORTATION

Source: Aquitaine Avenue Road Safety Pilot 2023 PDF



IBI GROUP TRAFFIC REPORT
BLOOR STREET INTEGRATED ROAD EA
Prepared for City of Mississauga

Appendix A – Traffic Data

Turning Movement Counts
Lane Configurations
Volumes Diagram

October 1, 2021

AADT less than 20,000 vehicles per day show minimal or no increase in traffic congestion with a 4-lane to 3-lane road diet conversion.

A peak hour volume below 750 vehicles per hour per direction (phpd) is likely feasible for a 3-lane road diet. Peak hour volumes between 750 to 875 vehicles phpd should be reviewed cautiously.

- U.S. DEPARTMENT OF TRANSPORTATION FHA



Location..... BRIDGEWOOD DR @ BRIDGEWOOD DR

Municipality..... Mississauga

Road 1 BRIDGEWOOD DR

Road 2 BLOOR ST

Count Date..... Tuesday, February 12, 2013

959 7.2

North Approach South Approach East Approach West Approach

Time Period	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT
07:00 07:15	8	0	3	1	11	6	1	8	1	15	1	58	1	3	60	1	135	6	5	142
07:15 07:30	4	1	3	0	8	15	1	11	2	27	3	65	4	8	72	2	222	5	7	229
07:30 07:45	8	2	7	1	17	9	1	18	2	28	5	83	7	1	75	1	275	8	12	282
07:45 08:00	7	1	12	2	20	7	3	15	1	25	1	103	7	5	111	3	301	2	8	306
08:00 08:15	6	1	8	1	15	7	3	3	0	13	2	114	13	5	129	6	216	6	6	228

Location..... BLOOR ST @ CEDAR CREEK DR

Municipality..... Mississauga

Road 1 CEDAR CREEK DR

Road 2 BLOOR ST

Count Date..... Tuesday, October 08, 2019

North Approach South Approach East Approach West Approach

Time Period	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT	LT	TH	RT	Heavy	TOT
07:00 07:15	8	0	2	1	10	0	0	0	0	0	1	79	0	11	80	2	112	0	8	114
07:15 07:30	6	0	2	0	8	0	0	0	0	0	0	94	3	6	97	0	132	0	6	132
07:30 07:45	11	0	10	0	21	0	0	0	0	0	0	129	13	8	142	0	207	0	9	207
07:45 08:00	14	0	13	0	27	0	0	0	0	0	0	197	9	9	206	3	330	0	12	333
08:00 08:15	11	0	9	0	20	0	0	0	0	0	1	201	19	7	221	3	277	0	15	280
08:15 08:30	18	0	8	0	26	0	0	0	0	0	0	153	11	6	164	4	236	0	11	240
08:30 08:45	13	0	7	0	20	0	0	0	0	0	0	157	11	5	168	6	226	0	11	232
08:45 09:00	21	0	8	0	29	0	0	0	0	0	0	149	7	4	156	7	243	0	11	250
11:00 11:15	2	0	1	0	3	0	0	0	0	0	0	88	8	5	96	2	75	0	5	77
11:15 11:30	3	0	0	1	3	0	0	0	0	0	0	105	1	3	106	1	101	0	8	102
11:30 11:45	4	0	3	1	7	0	0	0	0	0	0	118	9	7	127	4	109	0	4	113
11:45 12:00	2	0	2	0	4	0	0	0	0	0	0	103	5	8	108	6	120	0	5	126
12:00 12:15	7	0	9	0	16	0	0	0	0	0	0	112	3	4	115	2	137	0	8	139
12:15 12:30	1	0	2	1	3	0	0	0	0	0	0	133	7	2	140	5	130	0	8	135
12:30 12:45	5	0	2	3	7	0	0	0	0	0	0	114	8	8	122	4	95	1	5	100
12:45 13:00	3	0	9	0	12	0	0	0	0	0	0	120	12	9	132	3	132	0	9	135
13:00 13:15	3	0	6	0	9	0	0	0	0	0	1	110	9	11	120	7	111	1	7	119
13:15 13:30	5	1	5	0	11	0	0	2	0	2	0	121	10	10	131	9	129	0	6	138
13:30 13:45	7	0	3	0	10	0	0	5	0	5	0	114	6	10	120	6	121	0	13	127
13:45 14:00	5	0	6	0	11	0	0	0	0	0	0	128	9	7	135	11	128	1	10	140
15:00 15:15	7	0	4	1	11	0	0	0	0	0	0	138	16	8	154	0	116	0	9	116
15:15 15:30	2	0	1	0	3	0	0	0	0	0	0	177	16	10	193	2	133	0	15	135
15:30 15:45	12	0	18	4	30	0	0	0	0	0	0	181	8	7	189	3	127	0	8	130
15:45 16:00	6	0	10	0	16	0	0	0	0	0	0	263	19	11	282	6	162	0	4	168
16:00 16:15	3	0	5	2	8	0	0	0	0	0	1	233	19	14	253	0	112	0	6	112
16:15 16:30	6	0	10	0	16	0	0	0	0	0	0	318	12	9	330	2	117	0	1	119
16:30 16:45	5	0	6	0	11	0	0	0	0	0	0	432	17	7	449	4	192	1	8	197
16:45 17:00	4	0	9	0	13	0	0	0	0	0	0	414	17	10	431	3	145	0	7	148
17:00 17:15	4	0	5	0	9	0	0	0	0	0	0	415	15	10	431	1	148	0	8	149
17:15 17:30	4	0	5	0	9	0	0	0	0	0	0	404	11	10	415	5	139	0	8	144
17:30 17:45	5	0	6	0	11	0	0	0	0	0	0	418	14	10	432	4	148	0	7	152
17:45 18:00	6	0	1	0	7	0	1	0	0	1	0	387	9	10	396	7	153	0	0	160
Total	213	1	187	14	401	0	1	7	0	8	5	6303	333	274	6641	122	4843	4	248	4969

7:00am to 8:00am
West Approach total: 959

5:00 pm to 6:00 pm
East approach total:
1674

Memorandum

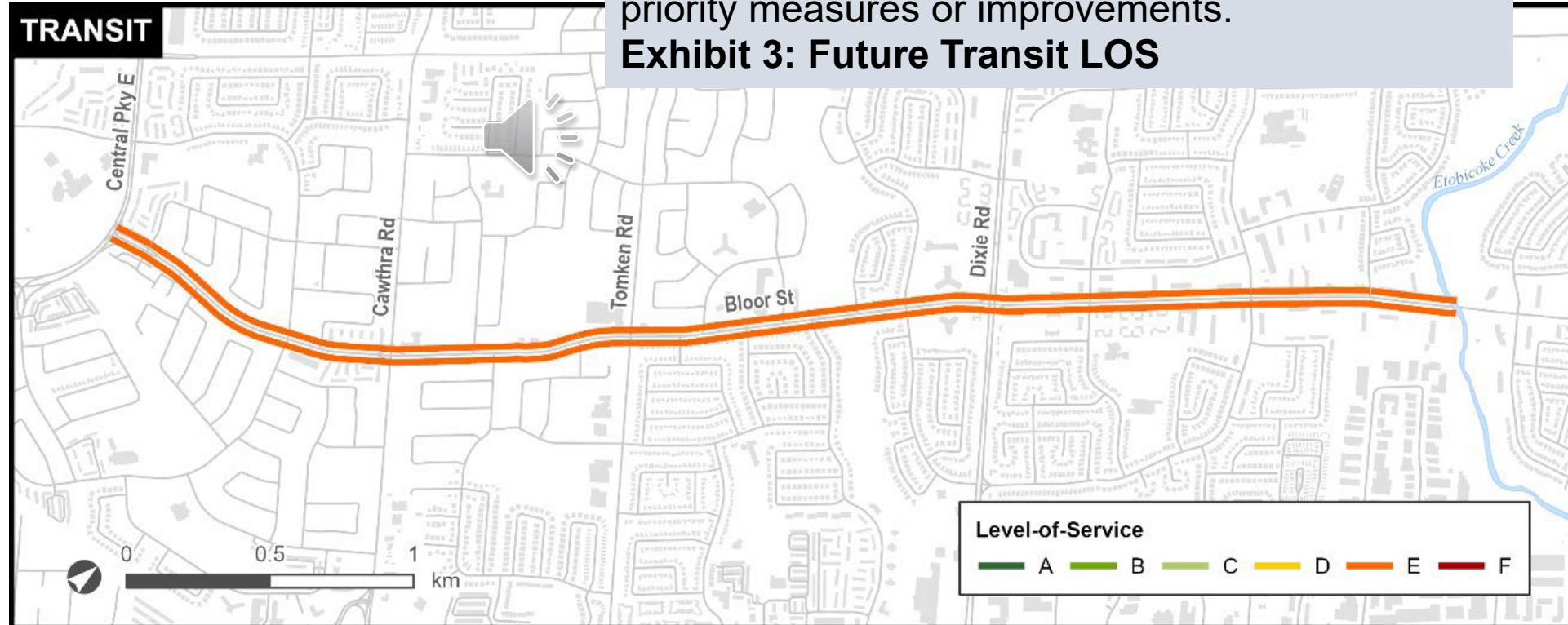
To/Attention City of Mississauga
From Zibby Petch, IBI Group
cc Margaret Parkhill, Scott Johnston
Date April 5, 2022
Project No 134154
Subject Bloor Street MMLOS Review: Future Conditions

The purpose of this memorandum is to summarize the Multi-Modal Level of Service (MMLOS) evaluation of future conditions along the corridor compared to targets set for each mode in a September 2021 memorandum.

Levels of Service Conclusions:
Cyclists w separated track = A
Pedestrians = C

Transit = E

The transit LOS, shown in **Exhibit 3**, remains at **Level E** along the corridor into the future, as the future roadway design does not include any transit priority measures or improvements.
Exhibit 3: Future Transit LOS



SUSTAINABLE URBAN MOBILITY PLANNING FOR MISSISSAUGA

Supervised Research Project, June 2020

Submitted in partial fulfillment of the Master of Urban Planning degree,
School of Urban Planning, McGill University

Submitted by - Yathartha Singh;
Supervised by - Ahmed El-Generdy

Recommendations and Policy relevance

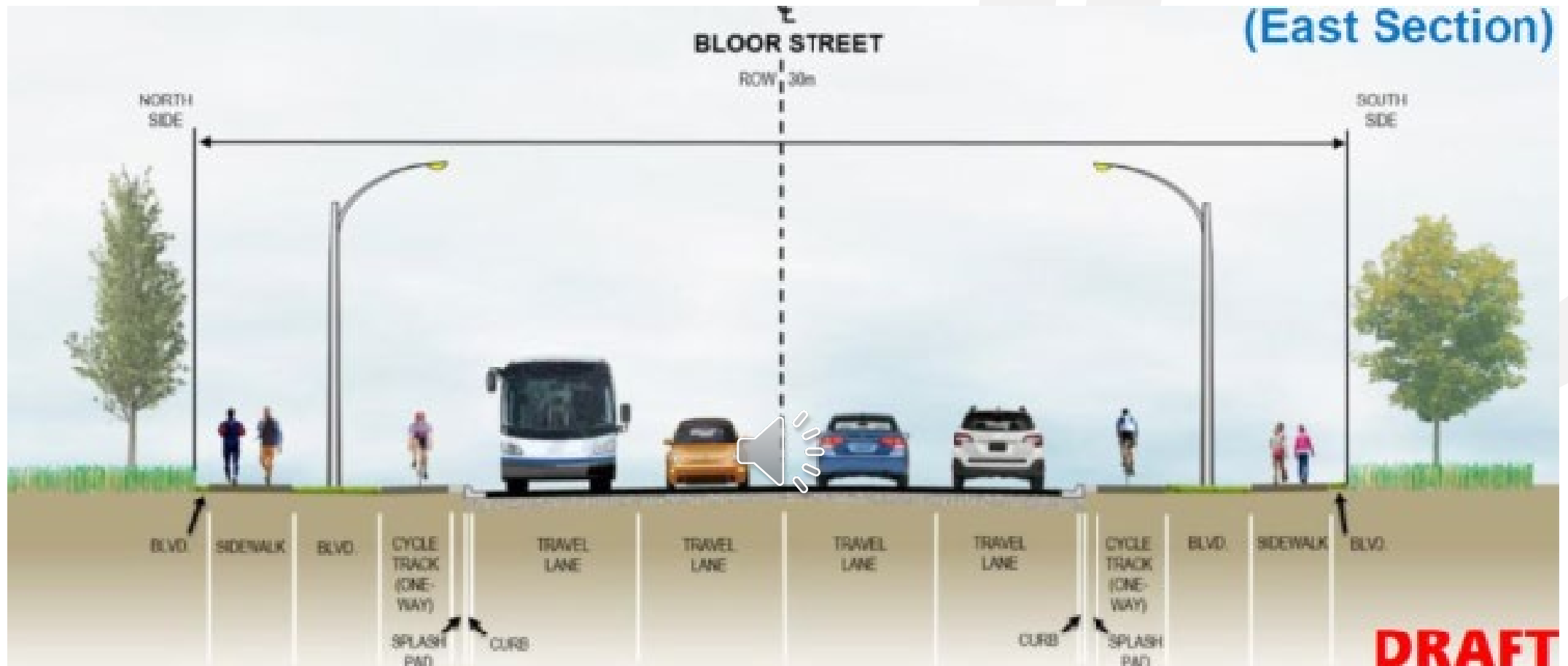
It is recommended that Mississauga increase the presence and frequency of transit services and consider providing feeder services to GO stations in the identified intervention areas.

This study finds that, to minimize the usage of cars, transit services are not the only consideration. Transit must be complemented with improvements in zoning, land use, employment density, and population density.

The transit LOS, shown in **Exhibit 3**, remains at Level E along the corridor into the future, as the future roadway design does not include any transit priority measures or improvements.

Exhibit 3: Future Transit LOS





Thank you