



MEMORANDUM

To: Mayor and Members of Council

From: Brian Lee, Director, Engineering, Ext. 7507

Prepared by: Loy Cheah, Senior Manager, Transportation, Ext. 4838
David Porretta, Manager, Traffic Engineering, Ext. 2040

Date: November 9, 2020

Re: Traffic Operations Projects Update

RECOMMENDATIONS:

1. That the memorandum entitled, "Traffic Operations Projects Update" be received; and
2. That staff work with key stakeholders including the Cycling and Pedestrian Advisory Committee to develop an annual Open Streets program and to report back to Council prior to implementation; and
3. That the temporary parking prohibition on the west side of Main Street Unionville, between Station Lane and Carlton Road, be maintained on a permanent basis; and
4. That the temporary 30 km/h speed limit on Main Street Unionville, between Station Lane and Carlton Road, be made permanent as described in the attached by-law amendment; and
5. That the speed limit on Markham Main Street North between Bullock Drive/Parkway Avenue and Highway 7 be reduced from 50 km/h to 40 km/h, as described in the attached bylaw amendment; and further,
6. That staff be directed to do all things necessary to give effect to this resolution.

PURPOSE:

This memorandum provides Development Services Committee with an update on the City-wide traffic operations improvements that were implemented as directed by Council at its June 9, 2020 meeting. A number of next steps are recommended by staff.

BACKGROUND:

The COVID-19 pandemic has resulted in the closure of many businesses, schools and other public institutions. While operations at some sectors of the economy continue to be suspended, others were able to operate at a significantly reduced capacity, or have allowed their staff to work remotely. These changes have resulted in significant impacts on traffic and travel patterns.

In late April and early May 2020, as part of the City's annual traffic data collection program, data were collected on 57 individual road segments of the City's collector and arterial road system. When compared to data collected prior to the pandemic on the same road segments, traffic volumes saw a significant reduction between 22% and 93% depending on the location, or a 56% average reduction overall. Operating speeds were more highly variable and inconsistent, but with an average increase of 4% (or +2.2 km/h).

At the June 9, 2020 Council meeting, staff was directed to implement a series of traffic operations measures to support local businesses and encourage active modes of travel, while maintaining physical distancing guidelines during the COVID-19 pandemic. Initiatives were funded from account #640-101-5699-20032 (Active Transportation Awareness Program) to a maximum of \$65,000. This report provides an update on the following measures implemented:

- Close Enterprise Boulevard from Andre de Grasse Street to Main Street Unionville on Sundays and statutory holidays to provide additional space for active transportation, in consultation with Downtown Markham business owners
- Restrict access to local traffic only on Main Street Unionville between Fred Varley Drive and Carlton Road until October 31, 2020 in consultation with the Unionville Business Improvement Area (UBIA);
- Implement the Villages and Valley Walking and Cycling Loop proposal, in consultation with the relevant Ward Councillors;
- Explore additional opportunities for similar walking and cycling loop routes and potential weekend street closures for cycling activity in Thornhill and Milliken Mills.

DISCUSSION:

Attachment 'A' shows pictures of the aforementioned initiatives that have been implemented.

Enterprise Boulevard Closure attracted relatively high numbers of users

Enterprise Boulevard is a 4-lane major collector roadway. Due to the COVID-19 Pandemic, traffic volumes on Enterprise Boulevard decreased by approximately 70%. This afforded the City with an opportunity to promote active modes of travel along the corridor that currently has no dedicated cycling facility. This was accomplished through a full road closure of Enterprise Boulevard, between Andre de Grasse Street and Main Street Unionville, on every Sunday and statutory holiday between July 1st (Canada Day) and September 7th (Labour Day), a total of 13 closure days. Information about this initiative was made available on the City's web portal (www.markham.ca/getactive).

With limited opportunities due to public health guidelines, the Sunday and statutory holiday closures of Enterprise Boulevard were animated only by a bike tune-up booth and an active transportation information booth near the Andre de Grasse Street intersection. Markham Cycles staff and volunteers, supported by City staff, operated both booths. Statistics related to the bike tune-up booth between July 1 and September 7, 2020 inclusive are as follows:

No. of sessions*	No. of visits to the booth	No. of bikes turned up	No. of volunteer hours contributed
11	360	203	132

*13 planned, two cancelled due to inclement weather or Metrolinx construction

Following the end of the Enterprise Boulevard closures and due to demand for the service, staff worked with Markham Cycles to continue the bike tune-up program by operating the booth at various City parks on Saturdays from September 12 to October 17 inclusive.

Pedestrian and cyclist volumes were collected for a sampling of the closure dates and are summarized below.

Table 1: Enterprise Blvd, east of Andre de Grasse Street

TIME	Eastbound		Westbound	
	Bicycles	Pedestrians	Bicycles	Pedestrians
Wednesday, July 1	115	77	124	77
Sunday, July 5	127	74	167	81
Sunday, August 2*	54	34	49	35
Monday, August 3	102	65	168	58
Sunday, August 23	253	108	282	95
Sunday, September 6	231	101	300	117
Monday, September 7	52	84	54	65
AVERAGE	133	78	163	75

*Lower volumes due to inclement weather

Table 2: Enterprise Blvd, west of Main St Unionville

TIME	Eastbound		Westbound	
	Bicycles	Pedestrians	Bicycles	Pedestrians
Wednesday, July 1	95	55	92	58
Sunday, July 5	75	49	121	65
Sunday, August 2*	33	24	20	20
Monday, August 3	80	64	147	64
Sunday, August 23	131	36	185	50
Sunday, September 6	137	59	206	70
Monday, September 7	34	56	34	59
AVERAGE	84	49	115	55

*Lower volumes due to inclement weather

Enterprise Boulevard closures are effective demonstrations of an “Open Streets” event

Such a road closure to promote and encourage active transportation and active lifestyle is commonly called “Open Streets” and is implemented in major cities around the world. For example, City of Toronto has an annual Open Streets event on Yonge Street (<https://www.openstreetsto.org>) and the City of Mississauga has implemented Open Streets during the pandemic.

In spite of the limited promotion and special attractions provided at the Enterprise Boulevard closures, the turnout was relatively high. Staff anticipates higher levels of public participation in an Open Streets event if it is planned with supportive agencies, local businesses and local community groups and promoted accordingly.

Given the direction from Council for staff to explore other opportunities for street closures for cycling in Thornhill and Milliken, staff recommends working with key stakeholders including the Cycling and Pedestrian Advisory Committee to develop an annual Open Streets program and to report back to Council prior to implementation.

Traffic and parking restrictions on Main Street Unionville were effective

In an effort to reduce traffic volumes on Main Street Unionville (Fred Varley Drive to Carlton Road) and to create a more pedestrian friendly environment, staff developed a traffic management plan in consultation with the Ward Councillor and Unionville BIA. This plan incorporated a number of measures to discourage non-local (or through traffic) from using this section of Main Street Unionville. Measures included the following:

- Restricted parking on both sides of Main Street Unionville, allowing more space for pedestrians to maintain physical distancing;
- Implemented temporary road narrowings (or bump-outs) and “Road Closed – Local Traffic Only” signs at Fred Varley Drive and Carlton Road to discourage through traffic and reduce speeds entering the village core;
- Temporarily reduced the posted speed limit to 30 km/h;
- Implemented a detour plan to direct non-local traffic to use the parallel laneway to the east of Main Street Unionville; and further,
- Implemented road narrowings (or bump-outs) adjacent to the Unionville Arms and Starbucks establishments to facilitate patio extensions into the municipal boulevard and to act as additional traffic calming measures.

Information about this initiative was made available on the City’s web portal (www.markham.ca/getactive).

Prior to the implementation of these measures, the average daily traffic (ADT) volume and operating speed were 5,500 vehicles and 37 km/h, respectively. Since the implementation of these measures, average daily traffic (ADT) volume has decreased by 31% to 3,800 vehicles while the average operating speed has also decreased by 5% to 35 km/h.

Recognizing that it is not practical to fully prohibit or enforce the non-local traffic restriction, not all motorists complied with the restriction or utilized the detour. However, the data does indicate that the measures implemented were effective in reducing traffic volumes and vehicle speeds, thereby creating a more conducive environment for pedestrians.

Staff will work with key stakeholders to define the traffic restriction measures on Main Street Unionville going forward

Engineering and Operations staff will work with the Ward Councillor, UBIA and local businesses employing the patio extension bylaw (if it is still applicable) to develop a new traffic management plan for Main Street Unionville for the 2021 Summer season.

Maintaining the parking prohibition and 30 km/h speed limit on a permanent basis is recommended on Main Street Unionville

This section of Main Street Unionville has several unique characteristics. Namely, a narrow road width, a boulevard that has competing uses, high pedestrian volumes and numerous private entrances that create the risk of conflicts among all road users. As such, staff recommend that the parking prohibition on the west side of Main Street and the temporary 30 km/h speed limit be made permanent, in order to enhance safety for all road users. The proposed speed limit by-law amendment is appended as Attachment 'B'.

Staff recommend a 40 km/h speed limit on Main Street Markham, between Bullock Drive & Highway 7

Main Street Markham, between Bullock Drive and Highway 7, has somewhat similar operating characteristics as Main Street Unionville. No temporary traffic calming measures were deployed here as part of the City's pandemic response. This section of Main Street Markham was redesigned and reconstructed to its current configuration in 2014. The current speed limit is 50 km/h, with an operating speed of 49 km/h near Highway 7 and 53 km/h near Bullock Drive. Due to the high pedestrian volume, active street-parking activity and numerous private entrances through this corridor, staff are recommending that the speed limit along this portion of Main Street Markham be reduced to 40 km/h. The proposed speed limit by-law amendment is appended as Attachment 'B'.

Development & Implementation of Walking & Cycling Loops

In September 2020, staff implemented a new 12 km active transportation loop, named the Villages & Valley Loop (see Attachment "B"). This loop connects Main Street Unionville to Main Street Markham, making it easier and safer for cyclists and pedestrians to travel in between these two village hubs by using portions of the Rouge Valley Trail system, Carlton Road and Raymerville Drive. Both Main Streets are also connected to the trails of the Rouge Valley Trail System, effectively allowing users to travel between the old villages of Markham and Unionville while enjoying natural areas and neighbourhoods in the City. Information about this initiative is available on the City's web portal (www.markham.ca/getactive)

Cycling Loops in the Milliken and Thornhill communities are currently in development. Subject to 2021 budget approval, branding, pavement markings and signage of these loops will be implemented in 2021.

FINANCIAL IMPLICATIONS:

The different initiatives summarized within this memorandum cost a total of \$61,350, inclusive of HST, which came under the approved \$65,000 budget, and is described below:

- Main Street Unionville initiatives - \$9,200
- Enterprise Road Closure - \$38,600
- Villages & Valley Walking & Cycling Loop - \$9,400
- Traffic Counts & Monitoring - \$3,100
- Mobile Sign Advertisements - \$1,050

Financial impacts associated with changing the posted speed limits on Main Street Unionville and Main Street Markham will not exceed \$1,000, can be absorbed through existing capital budgets and has no operational impacts.

ATTACHMENTS:

- A – Pictures of Initiatives
- B – Speed Limit By-law Amendment

C – Villages & Valley Walking & Cycling Loop