Traffic Congestion – City of Toronto's 10 Most Congested Locations

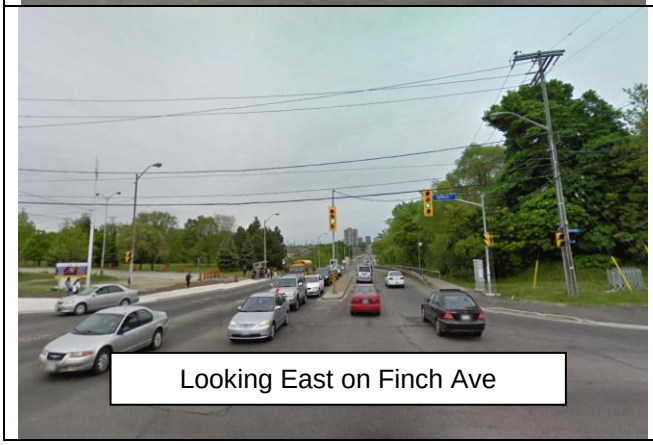
Dufferin Street and Finch Avenue West

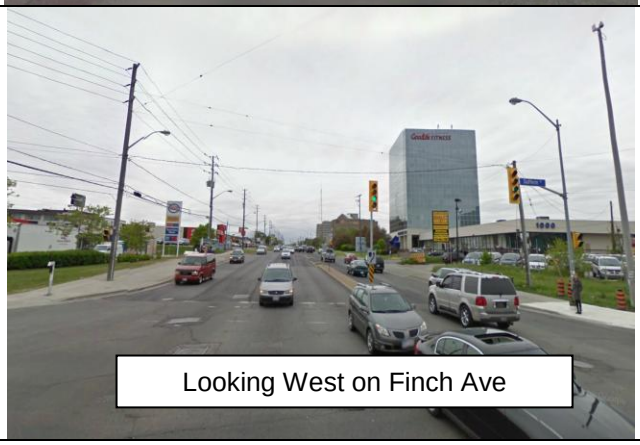
The intersection of Dufferin Street and Finch Avenue West is located in the North York District. The existing speed limit approaching the intersection is 50 km/h. Dufferin Street and Finch Avenue West operates under restricted traffic flow.

Dufferin Street is one of the major north/south arteries that leads into the City from the 905 Region and also to Highway 401 and Allen Road.


Looking North on Dufferin St


Looking South on Dufferin St


Looking East on Finch Ave


Looking West on Finch Ave

Discussion of Issues

This signal is equipped with the TransSuite System. Northbound/southbound and eastbound/west left turn signals are callable/extendable by 5m setback loop.

The intersection currently experiences significant delay for northbound, southbound and westbound traffic during morning and afternoon peak periods, specifically for northbound/ southbound left turn, through movements, and westbound left turn movements.

The Vehicle Volume Statistics indicate that this intersection has a higher volume of traffic than other roadways with similar geometry.

It should be noted that due to the proximity to the Oil/Petroleum Tank Farms, there is a high number of B Train Tanker Trucks that conduct a northbound to westbound left turn

History of Actions / Background

The traffic volumes at this intersection have remained constant over the last ten years.

Within the last five years the intersection has undergone significant changes;

- Installation of Red Light Camera
- Re-configuration of the northbound lane alignment (widening of roadway to facilitate a dedicated Bus Only Lane
- Removal of the n/b and s/b HOV lane and dedication of a Bus Only Lane

Collision patterns at this intersection indicate that:

- The n/b and s/b approaches experience a higher number of collisions in comparison to the e/b and w/b direction.

The n/b left turn volumes are very high and have been provided with 12 seconds of advance green.

Recently installed a westbound left turn transit callable/extendable phase to operate at all times and also increased pedestrian walk time to the newly adopted standard.

Westbound Left Turn Green Advance is not feasible given the opposing traffic flow and impact on intersection delay.

Data and Analysis

Traffic Volume Information – 8 Hour Summary

Study Date	Northbound				Eastbound				Southbound				Westbound			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
May 25, 2010	**2072**	**10179**	**1322**	**13573**	**853**	**5290**	**2571**	**8714**	**1955**	**9832**	**513**	**12300**	**1294**	**5982**	**1427**	**8703**

Total 8 hour vehicle volume: **43290**

Total 24 hour vehicle volume: **86580**

Note: **A factor of 2 was used to convert the 8 hr total to a 24 hour total**

Options for Consideration & Potential Benefits

Immediate Option

- Increase the cycle length by ten seconds and provide additional time to northbound left turn and westbound left turn movements (5 Seconds per movement).

Near term option

- Review the signal co-ordination along Dufferin Street from Steeles Avenue West to Transit Road.
- Increase the westbound left turn green arrow time at Finch Avenue West and Wilmington Avenue (minor arterial).

Longer Term option

- The redistribution of the B Train Tanker Trucks (double tankers), if possible be restricted from using Dufferin Street during the peak times.
- Create an alternate truck route
- Prohibit left turn movements for trucks during peak times
- Widen Dufferin Street, north of Finch Avenue to Steeles Avenue to six lanes and remove the Bus Only Lanes or increase lane usage by converting to an HOV Lane (2 or more occupants)

Costs	Funding Source (Operating/Capital)
Immediate	2012 Operating Budget
Near Term	2013 Operating Budget
Mid Term	N/A
Long Term	Capital