

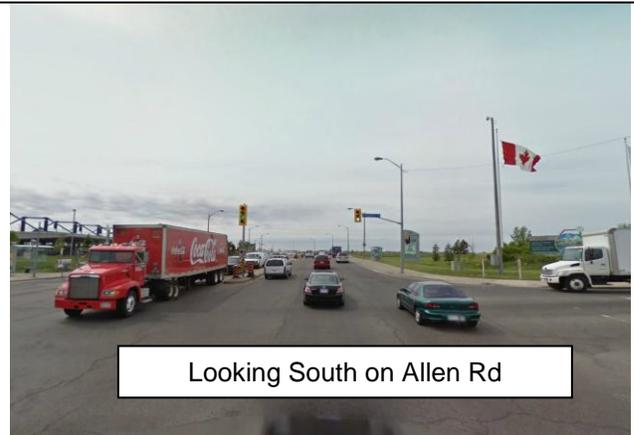
### Allen Road and Sheppard Ave West

The intersection of Allen Road and Sheppard Ave West is located in the North York District. The existing speed limit on Allen Road approaching the intersection with Sheppard Avenue West is 60 km/h. Allen Road and Sheppard Avenue West operates under restricted traffic flow. The posted speed limit approaching the intersection from north, east and west is 60 km/h.

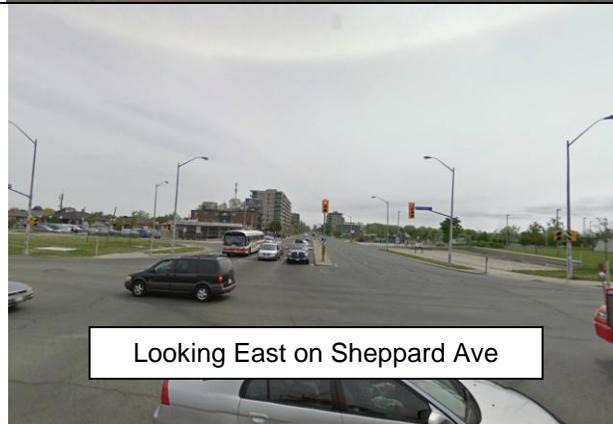
Allen Road/Dufferin Street is one of the major n/s arteries that leads into the City from the 905 Region and also to Highway 401 and Allen Road. It should be noted that due to the proximity to this intersection to Highway 401 and given that it is essentially an extension of the off ramp and on ramp to the Highway the traffic volumes are higher than most intersections.



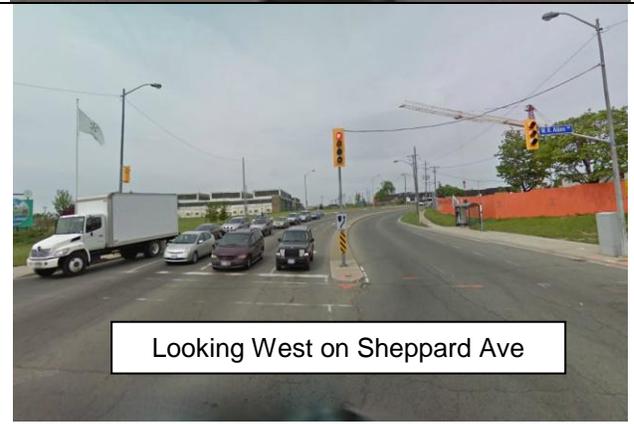
Looking North on Allen Rd



Looking South on Allen Rd



Looking East on Sheppard Ave



Looking West on Sheppard Ave

### Discussion of Issues

This signal is equipped with the TransSuite System. Northbound, southbound, and eastbound left turn signals are protected and permissive.

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

## History of Actions / Background

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

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

- New Traffic control signals installed to the north and south of Sheppard Avenue, which have impacted the n/b and s/b progression
- Installation of a Red Light Camera for northbound traffic
- Removal of the HOV lane and implementation of a Bus Only Lane for northbound traffic north and south of the intersection.
- Removal of the third traffic lane south of the TTC Commuter Parking Lot.

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

- The e/b right turn volumes are very high and spills over into the westbound through lanes during the peak periods.
- The n/b to w/b left turn movement is also very high and spills over into the northbound through lanes during the peak periods.
- The w/b left turn movement is also very high.

Transit priority installed on Allen Road.

Eastbound Left Turn Green Advance cannot be installed based on studies that show significant impact on competing /heavier traffic movements.

Currently reviewing the coordination of traffic control signals along Allen Road.

## 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
<b>April 14, 2010</b>	<b>2734</b>	<b>10298</b>	<b>1060</b>	<b>14092</b>	<b>362</b>	<b>4590</b>	<b>4920</b>	<b>9872</b>	<b>1573</b>	<b>11038</b>	<b>365</b>	<b>12976</b>	<b>1514</b>	<b>5167</b>	<b>1474</b>	<b>8155</b>

Total 8 hour vehicle volume: **45095**

Total 24 hour vehicle volume: **90190**

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

## Options for Consideration & Potential Benefits

### Actions already implemented

- Traffic Signal Timing Upgraded on May 8, 2012 to new City Standard.
- The signals along Dufferin Street and Allen Rd have been coordinated with the update TransSuite timing plans. The control area is separated into two parts. Dufferin Street from Steeles Avenue W. to Martin Ross Avenue. Allen Rd. from York University Busway to Transit Rd.

### Immediate options

- Increase the cycle length by ten seconds and provide an additional 5 seconds of time to northbound left turn, which will benefit both the northbound left turn and eastbound right turn movements and 5 seconds to the westbound left turn movement.
- Review the co-ordination of the cycle lengths along Allen Road.

## Near term options

- Review the feasibility of signing Wilson Heights as an alternate southbound route to the Allen Road/Hwy 401
- Provide better connectivity to Wilson Heights Boulevard, which is currently designated as a Minor Arterial roadway (under-utilised).
- Remove the Bus Only Lane for northbound traffic and reinstate either an HOV lane or general purpose lane
- Increase the eastbound right turn storage lane at Sheppard Avenue West and Allen Road or create a right turn channel/slip lane at this location

## Longer Term recommendations

- As part of the Allen Road EA, Parc Downsview Park and Build Toronto Lands the traffic in this area will be redistribution to two new north/south roadways.
  - Transit Road will be extended north to Sheppard Avenue West and connecting with Chesswood Avenue
    - This should provide relief to the eastbound right turn lane at Sheppard Avenue West and Allen Road, and also some relieve to the northbound left turn movement at the intersection.
  - As Part of Build Toronto, a new north south roadway will be constructed to the east of the Allen Road, providing an alternate access to Sheppard Avenue West.
    - This should reduce the vehicle demand on the wblt movements at Sheppard Avenue West and Allen Road
- The redevelopment of the lands on either side of Allen Road will alter the current usage of the roadway as an extension of the expressway system to more of an arterial roadway.
  - In addition to the above new north/south roadways it is envisioned that there will be additional east /west roadways that will intersect with Allen Road and be controlled by a Traffic Control Signal.

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