

PUBLIC MEETING AND OPEN HOUSE

Royal York Road Safety Audit From Ashley Road to Mimico Creek

Tuesday, January 11th, 2005

The City of Toronto

WHAT IS THE PURPOSE OF THIS PUBLIC MEETING AND OPEN HOUSE?

- To present results of a safety audit study for Royal York Road from Ashley Road to Mimico Creek

WHAT IS A ROAD SAFETY AUDIT?

- A road safety audit is a formal and independent safety performance review of an existing roadway or of a new road transportation project, by an experienced team of safety specialists. It addresses the safety of all road users

WHERE IS THE STUDY AREA?

- The focus of the study is Royal York Road from Ashley Road to Mimico Creek. The study area is shown below:



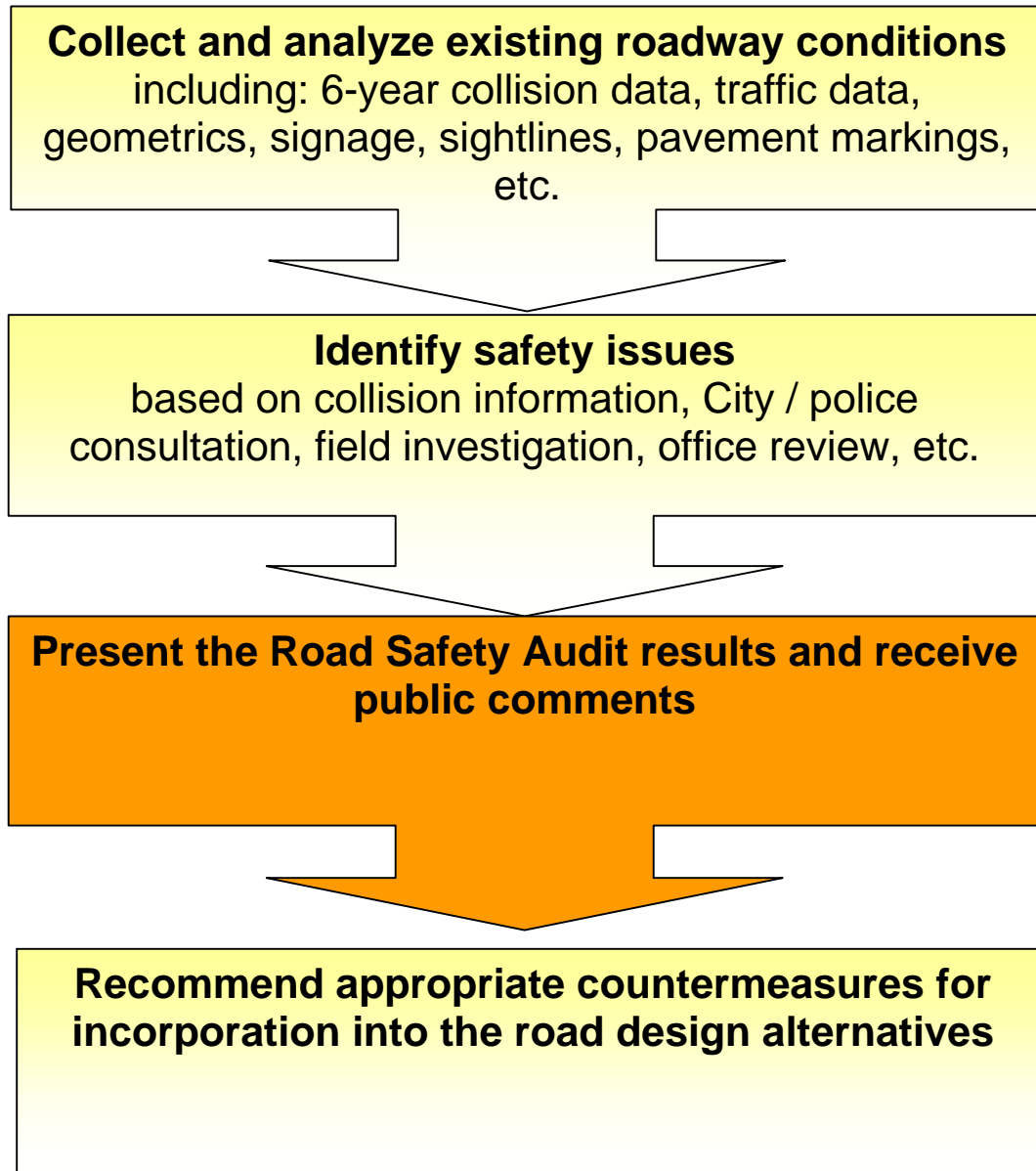
WHY UNDERTAKE A ROAD SAFETY AUDIT FOR THIS CORRIDOR?

- Royal York Road from Ashley Road to Mimico Creek is scheduled for reconstruction in 2005.
- Any improvements to enhance safety and operations along the corridor will be considered in the reconstruction project.

WHAT ARE THE STUDY OBJECTIVES?

- The objectives of a Road Safety Audit are to:
 - minimize the frequency and severity of preventable collisions;
 - consider the safety of all road users, including vulnerable road users;
 - ensure collision mitigation measures that may eliminate or reduce identified safety problems are considered fully;
 - minimize potential negative safety impacts beyond the project limits that may inadvertently increase the collision risk elsewhere on the road network.
- To assist in the preparation of the road design alternatives based on the results of the Road Safety Audit.

WHAT ARE THE MAIN TASKS OF THE STUDY?



WHAT HAVE WE DONE TO DATE?

- Collected, reviewed and assessed:
 - collision records (1998 to 2003),
 - traffic volumes,
 - traffic operations, including buses,
 - speed data,
 - roadway characteristics,
 - roadside hazards,
 - land use characteristics,
 - signage, pavement markings, and sight line clearances,
 - queuing,
 - driver behaviour,
 - pedestrian crossing,
 - parking locations, etc.
- Reviewed previous City reports relating to traffic and road operation issues within the study corridor
- Consulted with City of Toronto
- Consulted with Toronto Police Services
- Conducted site visits of the corridor (daytime/night time) where right-of-way characteristics were collected and traffic conditions observed
- Conducted traffic signal / PXO (pedestrian crossing) warrant analysis
- Prepared plans to present the collected data and identified safety issues

WHAT HAVE WE FOUND TO DATE?

Collision Summary

- Six-year (1998 to 2003) collision data for the study corridor, by severity

	Fatal	Injury	PDO	Total
Intersection	0	79	176	255
Midblock	0	37	115	152
Total	0	116	291	407

- The collision history along the corridor falls below the expected collision history for similar 2 lane arterials
- Of the total collisions, 38 were angle, 198 rear-end, 42 sideswipe, 86 turning, 24 pedestrian related, and 19 others
- The weekday, PM peak is the time period most collisions have occurred
- The majority of the collisions occurred under dry conditions

Locations that Required Detailed Collision Investigation

- Collisions on Royal York between Birchview Blvd and Meadowvale Dr account for **42%** (169 / 407) of the total collisions in the study area:
 - 39 collisions from Birchview Blvd to Bloor Street
 - 92 collisions within the Bloor St. intersection, and
 - 38 collisions from Bloor Street to Meadowvale Dr.
- 68 collisions occurred within the Dundas Street Interchange area between Government Road and Lambeth Road (account for **17%** of the total – 68/407), these include:
 - 28 collisions at the Government Road ramp terminal
 - 20 collisions on Royal York Rd between Lambeth Rd and Dundas St
 - 10 collisions at the Dundas Street West Ramp / Royal York Road northbound intersection
 - 5 on Government Road to Dundas East Ramp segment
 - 5 at Dundas East Ramp / Royal York S. Ramp intersection
- Mid-block collisions are mainly angle collisions and related to driveways.

Please refer to the collision diagrams for details.

...WHAT HAVE WE FOUND TO DATE?

Sight Distances at Intersections

- Sightline restrictions exist at approximately 60% to 70% of the intersections along the corridor
- Boulevard trees, utility poles, retaining walls, stopped buses, contribute to the sightline restrictions
- There is no identified significant correlation between sightline restrictions and collisions

Pavement Conditions

- Surface is deteriorating, particularly at intersections
- Road shoulders have expanded into roadside ditches

Sign Conditions

- A number of signs are obstructed by trees or roadside objects
- Some signs have faded line work and faint reflectivity

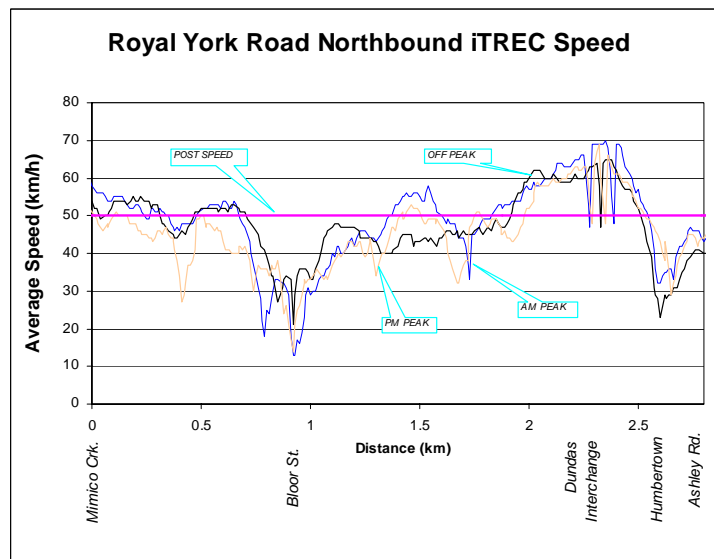
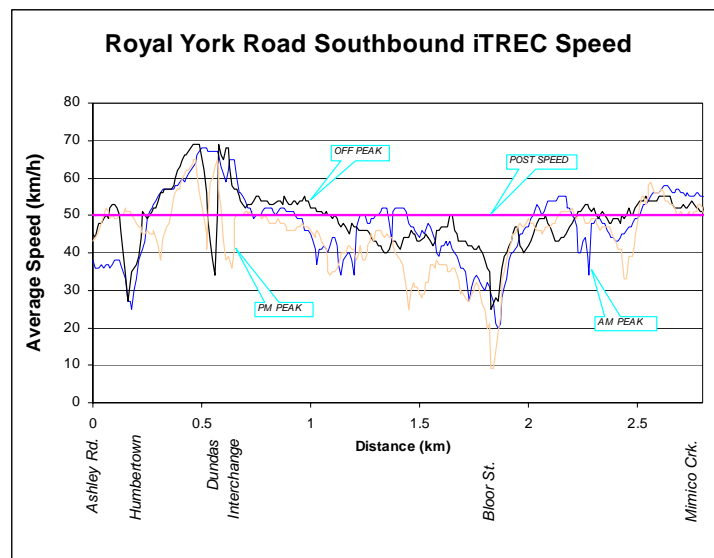
Observed Operational Issues

- Vehicles observed making use of the opposing lane to manoeuvre around stopped vehicles, generally throughout the 2-lane section of roadway – potential for head-on collisions
- Vehicles observed making use of shoulder to overtake left-turn waiting vehicle, generally throughout the 2-lane section of roadway – unsafe for vehicles and pedestrians
- Vehicles reversing from driveways interrupt traffic flow and can cause sudden change in speed of oncoming traffic – potential for rear-end collisions

...WHAT HAVE WE FOUND TO DATE?

Travel Speeds

- Average travel speeds are greater than the 50 km/h posted speed limit within the Dundas Street Interchange, and at the Mimico Creek Bridge



...WHAT HAVE WE FOUND TO DATE?

Peak Hour Traffic Operations

- Peak hour traffic operating within 30% to 40% of capacity at intersections
- Vehicle movements that exceed typically acceptable delays of up to 50 seconds for minor street movements:
 - Ashley Road eastbound left turn
 - Humbertown Access northbound shared through/left turn
 - Royal York Court westbound shared left/right
 - Kingsgrove Boulevard eastbound and westbound
- The Bloor Street northbound through and westbound through/right turn movements are approaching capacity

Pedestrian Crossing and Traffic Signal Warrants

- Daytime and school hour pedestrian crossing safety guards are in place at existing PXO locations at Kingsgrove Blvd., King Georges Road and Meadowcrest Road
- Existing PXO locations at Kingsgrove Blvd., King Georges Road and Meadowcrest Road do not meet signal warrants
- The PXOs are located within the areas of high pedestrian demands
- The Meadowcrest Road PXO may not be ideally located, given the location of the adjacent Church driveway.

...WHAT HAVE WE FOUND TO DATE?

Roadside Safety

- No established clear zone
- No barrier curbs within the corridor (which reduces the required roadside clear zone)
- No collision history related to the roadside clear zone, however, if the roadside can be improved from a safety perspective, this should be investigated

Night Time Investigation

- Generally one line of streetlights exist on the east side of Royal York Road
- Streetlights exist on both sides of the road from Ashley Road to Usher Avenue, including the Dundas interchange
- No enhanced illumination provided at the Bloor subway area on Royal York Road (location with high collision frequency)
- The night time visibility for drivers on Royal York Road from Usher Avenue to Meadowcrest Road is impaired by the canopy effect of the roadside trees; streetlights are obstructed by tree branches
- Poor reflectivity of some roadside signs
- Visibility of PXO at Meadowcrest Road is better than PXO locations at King Georges Road and Kingsgrove Blvd.; pedestrians are not visible because of the tree canopy effect and large tree trunks

...WHAT HAVE WE FOUND TO DATE?

Particular Safety Issues by Locations

- Ashley Road intersection - Southbound through and westbound right turn driver confusion where additional lane begins
- Royal York Road south of Ashley Park Road (South) - Northbound “lane ending” advisory sign is blocked by tree branch
- Lambeth Road intersection - Southbound right turn radius and channel width are tight relative to operating speeds
- Issues with Dundas Street Interchange area
 - Excessive travel speeds
 - Vertical curves and bridge abutments restrict sightlines on the ramps and mainline
 - Bus stop locations – potential safety issues for passengers crossing street
 - Poor lane markings
- The lane configurations, pavement markings and advisory signs for the southbound “Left Turn Only” lane and the merging points of southbound Royal York Road at Usher Avenue need improvement
- Issues with Bloor Street / Royal York Road Intersection
 - Taxi queues, manoeuvres and illegal u-turns conflict with vehicle and bus operations
 - Illegal on-street parking / stopping
 - Vehicle queues blocking bus entrances
 - Pedestrian J-walking
 - Pavement marking deficiencies
 - Many bus stop locations
 - Insufficient left-turn storage lengths (northbound and southbound)
 - Limited effectiveness of enforcement

YOUR INPUT IS IMPORTANT

- We invite you to speak with any project team member here tonight, and / or fill in a comment sheet with your comments or questions regarding the study findings.
- The next open house and public meeting is scheduled for 6:00 p.m. on Wednesday, February 16, at Etobicoke Collegiate Institute. That meeting will include a presentation of preliminary roadway design alternatives.
- If you require further information, or have additional questions, please contact David Nagler of the City of Toronto at:

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