Attachment 18 - Scarborough District Safety Action Plan

TORONTO’S VISION ZERO ROAD SAFETY PLAN

June 2019
The Scarborough District has the highest rate of fatal collisions amongst the four Districts. There are factors that contribute to making collisions more deadly in Scarborough. The Scarborough District Safety Action Plan provides a summary of a rigorous data analysis exercise in identifying these factors. Moreover, the plan outlines components of the Vision Zero plan that will help address road safety issues in this area of the City.
# Districts at a Glance

Scarborough has the highest rate of fatalities per 100,000 population.

<table>
<thead>
<tr>
<th>Scarborough</th>
<th>North York</th>
<th>Toronto &amp; East York</th>
<th>Etobicoke York</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District Population</strong></td>
<td><strong>644,680</strong></td>
<td><strong>865,140</strong></td>
<td><strong>589,860</strong></td>
</tr>
<tr>
<td><strong>Population of Older Adults</strong></td>
<td><strong>192,810</strong></td>
<td><strong>109,055</strong></td>
<td><strong>115,340</strong></td>
</tr>
<tr>
<td><strong>Average Household Income</strong></td>
<td><strong>$119,490</strong></td>
<td><strong>$111,260</strong></td>
<td><strong>$90,795</strong></td>
</tr>
<tr>
<td><strong>Percentage of Immigrant Population</strong></td>
<td><strong>52%</strong></td>
<td><strong>57%</strong></td>
<td><strong>35%</strong></td>
</tr>
<tr>
<td><strong>Daily Auto Trips</strong></td>
<td><strong>1.35 mil</strong></td>
<td><strong>1.20 mil</strong></td>
<td><strong>1.16 mil</strong></td>
</tr>
<tr>
<td><strong>Length of Wide Arterials</strong></td>
<td><strong>326 km</strong></td>
<td><strong>231 km</strong></td>
<td><strong>189 km</strong></td>
</tr>
<tr>
<td><strong>Distance Between Crossings</strong></td>
<td><strong>231 m</strong></td>
<td><strong>231 m</strong></td>
<td><strong>231 m</strong></td>
</tr>
<tr>
<td><strong>Fatality per 100,000 Pop</strong></td>
<td><strong>2.05</strong></td>
<td><strong>0.06</strong></td>
<td><strong>2.06</strong></td>
</tr>
<tr>
<td><strong>KSI per 100,000 Pop</strong></td>
<td><strong>81</strong></td>
<td><strong>127</strong></td>
<td><strong>94</strong></td>
</tr>
</tbody>
</table>

**MODESHARE**

- **73%**
- **22%**
- **5%**

**TRAFFIC FATALITIES**

1. Roadways with more than 4 lanes of traffic. 2. Roads with posted speed limit at or above 60 km/hr. 3. Annual average based on 2014-2018 data.
Scarborough in Review – Key Findings

• Collision outcome is a function of amount of risks and amount of exposure to those risks. Higher risks and higher exposure make collisions in Scarborough most deadly.
• Actions will be focused on arterial roads since 90% of fatalities and 85% of Killed and Serious Injury Collisions in Scarborough occur on these roads.
Scarborough in Review – Key Findings

Overall Collisions by District per 100,000 Residents
Traffic Fatalities by District per 100,000 Residents

- Scarborough: 2488 (2.05)
- Other Districts: 2066 (3.04)

Scarborough has the highest ratio of pedestrian collisions resulting in fatalities, compared to 20% in the other Districts.

- Rate of fatal collisions over the past 10 years has been increasing more rapidly in Scarborough compared to the other Districts.

Scarborough in Review

68% of traffic fatalities in Scarborough involve pedestrians, compared to 56% in the other Districts.

44% of fatal collisions happen during dark conditions in Scarborough compared to 40% in other Districts.

43% of the City’s mid-block pedestrian fatalities occur in Scarborough.

22% pedestrian hit by left turning or right turning vehicle at signalized intersection.

80% of KSI collisions amongst school-aged children in Scarborough occur on arterial roadways.

34% of pedestrian and cyclist fatal and serious injury collisions among school-aged children occur in Scarborough, while only 26% of school-aged children reside in Scarborough.

90% of fatalities happen on arterial roadways in Scarborough, compared to 63% in other Districts.

85% of KSIs in Scarborough occur on arterial roadways.
Scarborough in Review – Key Findings

23%
of residents in Scarborough believe road safety is the most important issue in Toronto, compared to 12% in the remainder of the city.

Retail and TTC Stops
Retail destinations and TTC stops are the most common types of attractors in the vicinity of mid-block pedestrian KSI's in Scarborough.

Longest length of high speed⁠¹ arterial roads
Scarborough has the longest length of high speed arterial roads contributing to more deadly mid-block collisions.

- 326km - Scarborough
- 231km - North York
- 189km - Etobicoke
- 66km - Toronto & East York

Longest walking distance between protected crossings
Scarborough has the longest distance between protected crossings compared to other districts.

- 870m - Scarborough
- 738m - North York
- 726m - Etobicoke
- 454m - Toronto & East York

Scarborough residents have to walk up to 6 additional minutes to use a safe crossing compared to residents of Toronto & East York. Infrequent safe crossing opportunities contributes to higher likelihood of mid-block crossings.

Longest length of wide⁠² arterial roads
Scarborough has the longest length of wide arterial roads.

- 146km - Scarborough
- 144km - Etobicoke
- 110km - North York
- 43km - Toronto & East York

¹ High speed roads are defined as roads with posted speed limit of or above 60 km/hr. ² Wide roads are defined as roads with more than 4 lanes of traffic.
Scarborough in Review – Key Findings

A number of factors contribute to high likelihood of fatal mid-block crashes in Scarborough

It takes up to 6 additional minutes of walking to use a signalized crossing in Scarborough compared to Toronto & East York. Road users typically do not go out of their way to walk to a signal and instead risk crossing mid-block.

Scarborough has several kilometres of wide, multi lane arterials. These roadways are more risky to cross and increase exposure time to fast-moving vehicles.

long waits at suburban traffic signals make them less attractive and less worthy of a longer walk.

Image source: Walkability in Toronto’s High-Rise Neighbourhood (2010), Paul Hess and Jane Farrow
Key Vision Zero Actions in Scarborough
Summary of Key Vision Zero Actions in Scarborough

A. Additional Mid-Block Crossing Signals at Priority Locations
B. Road Design Improvements
C. Targeted Reductions in Posted Speed Limit
D. Targeted Police Enforcement Blitz Pilot
E. Proactive Deployment of Watch Your Speed Signs
F. Expansion of the Red Light Camera Program
G. Other City-wide Initiatives with Impacts on Scarborough
Additional Mid-Block Crossing Signals at Priority Locations

• With new enhancements to the traffic control signal warrant process and application of a contextual approach additional signalized crossing opportunities will be introduced in Scarborough. This will reduce distance between signalized crossing opportunities and encourage safer crossings.

• Immediate actions in 2019
  • 10 mid-block crossing installations in 2019 including:
    • McCowan Rd south of Steeles
    • Morningside Ave and Morningside Park entrance
    • McCowan Rd/ Savarin St
    • Heather Rd west of Shilton Road
    • Galloway Rd/Coronation Dr
    • Greenbrae Circuit East/Sedgemount Dr. Dearham
    • Wood/Schubert Drive
    • Brimorton Dr/Dolly Varden Boulevard
    • Greencedar/Daphne
    • Benshire/Bellechasse
  • 3 mid-block crossing signal studies in 2019 including:
    • 771 Midland Avenue
    • 90 Borough Drive
    • 1312 Military Trail
Additional Mid-Block Crossing Signals at Priority Locations

• Accessing mid-block TTC stops is one of the main motivations for mid-block crossing behaviour.

• In addition to introducing additional mid-block crossing opportunities, stop consolidation and relocation can be utilized as an approach to reduce the need for mid-block crossings.

• Under Vision Zero 2.0 Areas of Scarborough with long spacing between signalized crossing opportunities and high frequency of mid-block transit stops will be prioritized as a part of a systemic city-wide review.

• Immediate actions in 2019:
  • 19 potential TTC stop relocations in 2019 including:
    • Danforth Avenue Road resurfacing
    • Huntingwood Drive and Brimley Road resurfacing
  • TTC has identified up to 14 mid-block stops to be relocated to new traffic signals as new signals are built.
Road Design Improvements

• Road design improvement are planned for 7 intersections in 2019 including:
  • Steeles Ave/Birchmount Rd
  • Kingston Rd/Lawrence Ave
  • Danforth Rd/Kennedy Rd
  • Danforth Rd/Warden Ave
  • Danforth Rd/St. Clair Ave
  • Danforth Rd/Birchmount Rd
  • Lawrence Ave E east of Canlish Rd

• Medium-term Actions:
  • Prioritize recommendations from past In-Service Road Safety Reviews on the following road segments:
    • Lawrence Avenue East, Curlew Drive to Tower Drive
    • Sheppard Avenue East, west of Kennedy Road and Kennedy Road, north of Sheppard Avenue East
  • Review potential interim / permanent geometric improvements on the following KSI hotspots:
    • Eglinton Avenue East, east of Kennedy Road
    • Finch Avenue East, west of Warden
Targeted Reductions in Posted Speed Limit

As a part of the speed management strategy speed limits on the following road segments are proposed to be reduced by 10 km/hr. Proposed Speed limit reductions on major arterial roadways in Scarborough are also displayed on the map attached to this action plan.

- Birchmount Road from Eglinton Avenue East to Steeles Avenue East
- Brimley Road from Eglinton Avenue East to Progress Avenue
- Brimley Road from Sheppard Avenue East to Steeles Avenue East
- Danforth Road from Brimley Road to McCowan Road
- Eglinton Avenue East from Brentcliffe Road to Kingston Road
- Eglinton Avenue East from Kennedy Road to Kingston Road
- Ellesmere Road from Morningside Avenue to Victoria Park Avenue
- Kennedy Road from St. Clair Avenue East to Lawrence Avenue East
- Lawrence Avenue East from Railside Road (west intersection) to Port Union Road
- Markham Road from Kingston Road to Progress Avenue
- Markham Road from Milner Avenue to Steeles Avenue East
- McCowan Road from Danforth Road to Progress Avenue
- McCowan Road from Milner Avenue to Steeles Avenue East
- Morningside Avenue (SC) from Kingston Road to Tams Road/ Pan Am Drive
- Morningside Avenue (SC) from Milner Avenue to McLevin Avenue/ Casebridge Court
- Sheppard Avenue East from Yonge Street to Kingston Road
- St. Clair Avenue East from Kingston Road to Birchmount Road
- Steeles Avenue East from Brimley Road to McCowan Road
- Steeles Avenue East from Yonge Street to Warden Avenue
- Victoria Park Avenue from O’Connor Drive to York Mills Road
- Victoria Park Avenue from Dawes Road to O’Connor Drive/Eglinton Square
- Victoria Park Avenue from Consumers Road to Steeles Avenue East
- Warden Avenue from St. Clair Avenue East to Metropolitan Road
- Warden Avenue from Arkona Drive to Steeles Avenue East
Targeted Police Enforcement Blitz Pilot

- Under Vision Zero 2.0 Transportation Services capital budget puts forward a business case to pay Toronto Police Services to run a two year pilot for additional officers in the Traffic Services Unit that will target priority areas, including areas of Scarborough.

- Enforcement efforts will focusing on the big four offences of:
  1. Speeding/ stunt driving offences
  2. Driving with a hand held device/ distracted driving
  3. Impaired driving offences
  4. Aggressive driving offences
Proactive Deployment of Watch Your Speed Signs

- There are currently 42 mobile Watch Your Speed Signs in Scarborough rotating every 3 weeks.
- Under Vision Zero 2.0 about half of these signs will be proactively placed at locations with known speeding issues while the remaining half will continue to be placed based on Councillor requests.
Expansion of the Red Light Camera Program

• The Red Light Camera program will be increased from 149 to 298 locations with roll out starting in the first quarter of 2020

• While locations are still being determined, there will likely be a concentration of new locations in Scarborough based on higher number of red light running offenses recorded in this District
Other City-wide Initiatives with impacts on Scarborough

- Automated speed enforcement
- Strategic implementation of right turns on red prohibitions
- Proactive implementation of pedestrian head start signals (a.k.a. Leading Pedestrian Interval) with plans for 25 additional locations in each District in 2019
- Targeted education and engagement efforts
- Enhanced visibility through street illumination
- Senior Safety Zone in-service road safety reviews
- Expanding the toolkit
  - Left turn calming pilot
  - Protected turn study
  - Review of traffic signal wait times for pedestrians
Scarborough Overall
Killed and Seriously Injured
Heat Density Map
2014 to 2018

Legend
Average Annual KSI

1 2 3 4 =>5

• Person Killed

Scale
1:64,777
Arterial Speed Limit Status

- **Expressways**
- **Retain at 60+ km/h**
- **Proposed Reduction to 50 km/hr**
- **Existing 50 km/hr and under**

Data Source: City of Toronto
Projection: NAD 1927 MTM 3
City of Toronto
Date: June 2019