Annual Pedestrian Crossover Program Update

Background:

In May 2016, a report entitled "Pedestrian Crossover Facilities" was presented to Operations Committee. The report provided an overview of this new tool and recommended that an annual report prioritizing the installation of pedestrian crossovers (PXOs) based on existing and anticipated pedestrian volumes be presented to the Committee. This report has been prepared to fulfill that commitment.

Starting in 2017, the annual <u>Pedestrian Crossover Program Update</u> report was presented to the Operations Committee highlighting new crossovers to be installed, as well as reporting on monitoring and compliance of previously installed PXOs. As part of that report, staff committed to bring forward future reports to highlight results of analysis conducted to determine whether pedestrian crossovers requested by members of the public were warranted.

New Pedestrian Crossover Locations

In 2020, staff received 12 requests for pedestrian crossovers to be installed throughout the community. As all traffic studies were suspended in 2020, these requests will be reviewed in 2021, as they require the completion of pedestrian traffic counts.

Based on previously collected data, staff completed the warrant process for two specific crossings to determine whether they met the guidelines outlined in Book 15 of the Ontario Traffic Manual. Analysis concluded that two pedestrian crossovers were warranted; one on Minto Street, just south of Medina Lane and one on Hill Street at Lamothe Street in Wahnapitae. The pedestrian crossover on Minto Street was installed as part of the 2020 rehabilitation project. The Hill Street pedestrian crossover will be installed in 2021 as part of a planned rehabilitation project.

2019 Pedestrian Crossover Locations:

Howey Drive at Somerset Street

In 2019 staff reviewed a PXO request on Howey Drive at Somerset Street. The location did not qualify for a PXO due to low pedestrian volumes. There were 30 pedestrian crossing counted in the 8 peak hours. For a location to qualify there must be at least 100 pedestrians in the 8 peak hours.

During the presentation of the PXO 2020 Update, it was brought to staff's attention that crossings near playgrounds that have been identified in the Playground Revitalization Report should be reviewed after the revitalization work has been completed due to the expected increased volume of pedestrians who will be trying to walk to these facilities. Since Lonsdale playground was part of that project, staff committed to conduct another study at Howey Drive at Somerset Street.

Due to the Covid-19 pandemic, staff was unable to complete the study. To determine the potential impact of the work done at Lonsdale Playground, staff looked at the demographics of the surrounding area to determine potential volumes of pedestrians crossing at Howey Drive and Somerset Street.

To determine the potential number of crossings staff used the following analysis:

- Establish a catchment area that Lonsdale Playground would draw from using walking distances and the proximity of other playgrounds in the area.
- Establish the number of potential users in the catchment area using census demographic data.
- Calculate the number of crossings using the factor definitions identified in the PXO warrant

In establishing boundaries of the catchment area that would draw users to Lonsdale Playground, staff used two criteria. The first was a 10 minute walk time to the intersection of Howey Drive and Somerset Street from the East and West. The second was to identify other parks in the vicinity that residents in the area would be using due to their proximity. Figure 1 below shows the catchment area based on those two criteria



Figure 1: Catchment Area for Lonsdale Playground

The smallest area that contains demographic information within the census data are dissemination areas. Dissemination areas give a breakdown of the population by age range. The catchment area for Lonsdale Playground covers two different dissemination areas as shown in Figure 2 below.



Figure 2: Dissemination Areas Near Lonsdale Playground

For this study staff looked at the number of residents under the age of 14 and made the assumption that each child would have an adult accompanying them to the park.

To determine the number of residents below the age of 14 the ratio of households in each portion of the catchment area to the related dissemination area were calculated. Then the percentage of households in the catchment area were multiplied by the total number of residents under age 14 in the dissemination area.

Dissemination Area	Total Population Under 14 years old	Proportion of households in the Catchment Area	Proportion of Population under 14 years old
35530064	25	20%	5
35530063	110	24%	26
		Total	31

The pedestrian crossover warrant requires 100 equivalent adults cross the road during the eight busiest hours of the day. Equivalent adults are calculated by multiplying the total number of children, seniors or persons with a disability by a factor of two and summing that total with the number of adults counted. Therefore, the potential number of crossing for Howey Drive is based on the following calculation:

Number of children x 2	61
Number of adults	31
Total	92
Multiply by 2 for each crossing	184

While there were a number of assumptions that were used to arrive at the 184 crossings, it shows the potential for more activity based on the work done at Lonsdale Playground. It is important to note that for a PXO to be warranted, 100 of these potential crossings must occur during the eight busiest hours of the same day. Potential crossing numbers alone do not justify installing a traffic control device, however they do indicate the need to complete an additional evaluation when facilities that will draw pedestrians are constructed or rehabilitated. To more accurately reflect what is happening at the intersection, staff recommends performing another study in 2021 using the pedestrian crossover warrant.

Van Horne Street at Shaughnessy Street

In the 2019 Annual Pedestrian Crossover Program Update a pedestrian crossover was proposed at Van Horne Street and Shaughnessy Street. The decision to approve the location was deferred due to the pending Junction East project. At this time, insufficient progress has been made on the Junction East project to determine what impact the project may have on the intersection of Van Horne Street and Shaughnessy Street. Staff recommends continuing to defer the installation of this pedestrian crossover until more information regarding the Junction East project is available.

New PXO Requests:

Requests for pedestrian crossings received since implementation of the initial program launch continue to be reviewed by staff on an ongoing basis. Staff regularly conducts sight line analyses and complete traffic counts to determine if PXOs are warranted at any of the requested locations. Staff will continue to bring forward an annual update report which will outline any additional warranted pedestrian crossovers.