

**TO:** CHAIR AND MEMBERS  
TRAFFIC SAFETY COMMITTEE

**DATE:** 2016 November 25

**FROM:** DIRECTOR ENGINEERING

**FILE:** 38000 20  
*Ref: Traffic Safety*

**SUBJECT: MID-BLOCK CROSSINGS ALONG WILLINGDON AVE BETWEEN  
KINGSWAY AND KINGSBOROUGH ST**

**PURPOSE:** To recommend the installation of a centre median fence along Willingdon Ave to discourage pedestrian mid-block crossings.

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**RECOMMENDATION:**

1. **THAT** the Committee recommend that Council approve the installation of a fence in the median along Willingdon Ave between Kingsway and Kingsborough St as described in this report to discourage mid-block pedestrian crossings at an estimated cost of \$25,000 to be funded from the 2016 Capital Budget (Minor Traffic Management Project EMF.0051)

**REPORT**

**1.0 BACKGROUND**

The section of Willingdon Ave between Kingsway and Kingsborough St has been monitored by staff due to concerns about pedestrian safety. This was prompted by a pedestrian fatality that occurred in late 2015 where mid-block crossing was a contributing factor. Figure 1 shows the subject 6000 block of Willingdon Ave. At this location, a bus stop is situated on the west side of Willingdon Ave just north of Kemp St. Kemp St is stop-controlled and intersects with Willingdon Ave to create a T-intersection. To the north is the signalized intersection of Willingdon Ave and Kingsway, and to the south is the signalized T-intersection of Willingdon Ave and Kingsborough St. The surrounding area is comprised of a variety of land uses including low and high density residential, office, and commercial. Most notable is Crystal Mall on the east side of Willingdon Ave.

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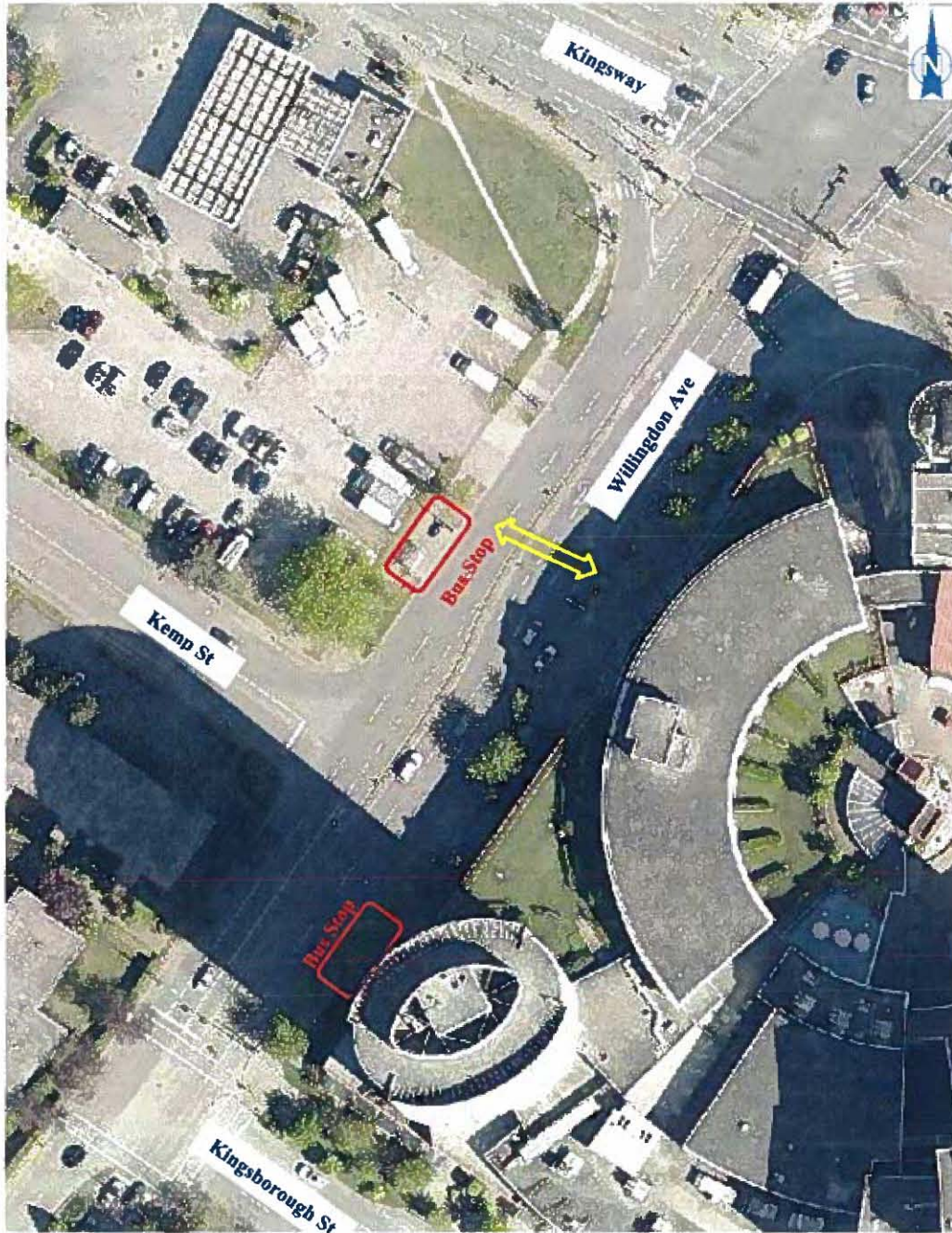


Figure 1: Willingdon Ave 6000 block, location of pedestrian crossing



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## 2.0 PEDESTRIAN CROSSING DEMAND

Field observations confirm a strong east-west pedestrian desire line across Willingdon Ave. The majority of pedestrians use the signalized intersection at Kingsway and at Kingsborough St where designated signalized crosswalks are provided. A recent weekday count conducted between noon and 1:00 pm recorded a total of 15 pedestrians crossing Willingdon Ave in the vicinity of Kemp St. Of these, 13 were mid-block crossings between Crystal Mall and the bus stop on the west side of Willingdon Ave, and the remaining two were crossing at the T-intersection of Willingdon Ave and Kemp St. In many instances, crossing pedestrians had to cross Willingdon in two phases because they had to wait within the center median for a gap in traffic. The existing center median on Willingdon is narrow and not intended to serve as a pedestrian refuge island.

From a design and operational point-of-view, a marked or signalized crosswalk at Kemp is not recommended because pedestrians would traverse across a left turn bay that extends across the intersection, and because there are two existing nearby signalized crossings (approximately 90 m to the north and 70 m south) that provide a good alternative. Also, a pedestrian signal at Kemp will increase traffic congestion due to its close proximity to existing signals, and a marked crosswalk will not necessarily deter pedestrians from crossing midblock.

## 3.0 DISCUSSION

A review of the crash history along the 6000 block of Willingdon Ave did not reveal any unusual patterns with one reported pedestrian crash within the last five years (2011 to 2015). Despite this, pedestrians wishing to cross between the two signalized intersections must do so with caution due to the volume and speed of traffic, the crossing distance, the interactions at the bus stops, and the southbound left turn queue lane at Kingsborough St. Mid-block pedestrian crossings are a particular concern to staff and the RCMP, and options to address this are discussed below.

- a) **Status Quo:** This scenario is least desirable because of the continuation of mid-block crossings at this location despite education and enforcement efforts by the RCMP. Although there is no historical trend of pedestrian crashes, observations indicate that the potential exist because of the many pedestrians crossing mid-block.
- b) **Crossing Prohibited Sign Only:** As a simple measure, regulatory traffic signs facing the road and sidewalk can be installed on both sides of Willingdon at the subject location. These would prohibit pedestrians from crossing at this location. Typically, this approach has low effectiveness. Another similar approach would be to provide signs directing pedestrians to the nearest crosswalk. Again this measure will likely be ignored by the majority of pedestrians who may be accustomed to crossing mid-block at this location.

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- c) **Localized Fencing with Sign:** In addition to Scenario 'b', a small section of pipe rail fence could be added on the center median on Willingdon Ave at the subject location. This would reinforce the crossing prohibition message and improve effectiveness, but could be easily circumvented by pedestrians walking around it.
- d) **Full Block Median Fencing:** This measure would introduce a fence along the existing road center median between Kingsway and Kingsborough St. This approach is most effective because it provides a physical barrier to mid-block crossings, as well as deters pedestrians from crossing at Kemp which is also challenging. A similar treatment has been used successfully along Nelson Ave between Kingsway and Bennett St (see Figure 2). One disadvantage is the potential maintenance needs if damaged by errant vehicles.



Figure 2 – Existing median fencing along Nelson Ave.



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#### 4.0 CONCLUSION

Based on the review above, the installation of a 1.2 m high median fence along Willingdon Ave between Kingsway and Kingsborough St is recommended to effectively prevent mid-block crossings. This treatment would be similar to the existing fence along Nelson Ave between Kingsway and Bennett St. The estimated cost of implementing this is \$25,000 including taxes. Funding is available from the 2016 Capital Budget (Minor Traffic Management Project EMF.0051). Cost sharing opportunities with ICBC will be pursued to offset some of the cost.



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