

From: Danny Budimirovic, Acting Manager - Traffic Operations (District 1)
To:
Date: 3/8/04 12:52PM
Subject: Re: Intersection: Spadina/Burton/Kilbarry

In response to your e-mail we can offer the following comments:

Collisions:

There is a typo in our letter, which states that there were 11 collisions at this intersection over a three-year period. However, the actual number of collisions should be 10. The number of collisions potentially preventable by the installation of signals is correct and it is 4.

To get 100 % collision hazard warrant, 15 collisions potentially preventable by the installation of signals must occur over a three-year period. 4 out 15 gives us 27 %. This warrant is based entirely on collisions and not vehicle or pedestrian volumes. This warrant is based on all types of collisions involving all road users.

The purpose of the traffic signals is to safely and efficiently control the right of way between competing flows of traffic (motor vehicle, pedestrian and bicycle traffic). Collisions potentially preventable by the installation of signals generally involve "right angle" collisions where signals would have controlled the competing directions of traffic and the collisions could have been prevented.

The four collisions potentially preventable by the installation of signals are as follows:

EBT (eastbound through) and NBT (northbound through) vehicles (01-11-12-13) (year, month, day, hour),
WBT and SBT vehicles (01-08-21-12),
WBT and NBT vehicles (00-11-16-21); and
WBT and NB pedestrian crossing Kilbarry (00-10-20-16).

The remaining 6 collisions such as the NB rear-end, two collisions involving parked vehicles, EBL (eastbound left) rear-end are not collisions potentially preventable by the installation of signals.

Traffic volumes:

Our Data Ctr. has forwarded the 8-hour traffic volumes to you. The following is a summary of the total 8-hour counts:

WBL = 250
WBT = 326
WBR = 284
Total approach volume = 860
EB traffic east of Spadina (total departing volume)= 876 (NBR = 233, SBL = 267 , EBT = 376)

EBL = 74
EBT = 376
EBR = 303
Total approach volume = 753
WB traffic west of Spadina (total departing volume) = 649 (SBR = 91, WBT = 326, NBL = 232)

To get the 24-hour volumes just multiply the above-noted numbers by a factor of 2.

The 1700 vehicle daily volume in our letter could be a bit misleading. It is just the total 8-hr WB and EB total volumes ($860 + 753 = 1613 =$ approximately 1700 by rounding up). To get the actual totals on each leg of the intersection just add up the total approach volume and the total departing volume.

The "peds" column indicates the total pedestrians crossing a particular leg of the intersection and the totals are as follows:

N leg = 1 pedestrian

S leg = 123 pedestrians

E leg = 164 pedestrians

W leg = 53 pedestrians

Total pedestrian 8-hr volume is 341.

The first two signal warrants are based entirely on motor vehicle, pedestrian and bicycle traffic volumes.

With respect to increased volumes the only thing that I can say is to quote our letter which states "signals might increase traffic volumes".

If you have any questions or need any assistance in your consultation process please e-mail me back or call me at 416-392-5209.

Danny Budimirovic