

**From:** ["Mochrie, Paul" <Paul.Mochrie@vancouver.ca>](mailto:Paul.Mochrie@vancouver.ca)  
**To:** ["Direct to Mayor and Council - DL"](#)  
**CC:** ["City Manager's Correspondence Group - DL"](#)  
["LaClaire, Lon" <lon.laclaire@vancouver.ca>](#)  
**Date:** 5/28/2021 4:07:19 PM  
**Subject:** Memo - RTS 13981 - Streamlined Process for Residents to Submit input on Road Safety Improvements  
**Attachments:** Memo - RTS 13981 - Streamlined Process for Residents to Submit input on Road Safety Improvements.pdf

---

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire. A short summary of the memo is as follows:

- ☐ The memo is in response to a Council motion for staff to report back on a streamlined process for resident to make requests for road safety upgrades.
- ☐ The memo focuses on reducing the wait time for citizens to receive a response.
- ☐ The City has a target of 3-5 days to get back to residents with a response, but its taking longer to get back to them.
- ☐ The City received 2,300 requests for road safety in 2019 from residents. Cases have increased 80% over the last 6 years.
- ☐ Pedestrian crossing improvements is the most popular type (40%, 600 requests) and growing the fastest, with 200% more cases compared to 6 years ago.
- ☐ Road safety upgrades identified (requested by residents, requested through external partners or identified through safety data analysis) are prioritized annually according to the City's Vision Zero Strategy principles and current allocated budget.
- ☐ Issues of lack of funding relative to resident demand exist for pedestrian crossing requests and other types of safety cases, which means cases at a location requested previously are re-opened again.
- ☐ The following are initiatives proposed to improve response times to residents:
  - Develop a citizen self-service website residents have already flagged
  - Focus on high priority cases
  - Improve case allocation
  - Improve case response processes
  - Dedicated staff to ensure timely response to residents

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or [lon.laclaire@vancouver.ca](mailto:lon.laclaire@vancouver.ca).

Best,  
Paul

**Paul Mochrie** (he/him)  
City Manager  
City of Vancouver  
[paul.mochrie@vancouver.ca](mailto:paul.mochrie@vancouver.ca)



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməŋ̱əm̱ (Musqueam), ḵʷəḵʷəḵʷ (Squamish), and səliłwətał (Tsleil-Waututh) Nations.

## MEMORANDUM

May 28, 2021

TO: Mayor and Council

CC: Paul Mochrie, City Manager  
Karen Levitt, Deputy City Manager  
Katrina Leckovic, City Clerk  
Lynda Graves, Administration Services Manager, City Manager's Office  
Maria Pontikis, Director, Civic Engagement and Communications  
Anita Zaenker, Chief of Staff, Mayor's Office  
Neil Monckton, Chief of Staff, Mayor's Office  
Alvin Singh, Communications Director, Mayor's Office  
Paul Storer, Director, Transportation

FROM: Lon LaClaire  
General Manager, Engineering Services

SUBJECT: Streamlined Process for Residents to Submit input on Road Safety Improvements

RTS #: 13981

---

This memo is in regards to the Council motion asking staff to report back on a streamlined process for residents to identify and submit input on road safety improvements, such as the need for pedestrian crossings and signage in residential areas, near schools and at bus stops. The memo will focus on several strategies to reduce the wait time for citizens to receive a response.

### Background

In 2019, the City of Vancouver received 2,300 road safety related requests from residents and the volume of cases has been rapidly growing. Between 2014 and 2019, the number of requests increased by 80% (see Figure 1). In 2020, due to the COVID-19 pandemic, case counts reduced back to 2014 levels, however, going back to the previous trend is expected post-pandemic, based on early 2021 data.

Currently, residents can submit feedback through many portals, including email, 311, VanConnect App, City of Vancouver website, Mayor and Council feedback and social media channels. The City has a target of three to five business days to respond to requests; however, due to high volumes and complexity, some cases take longer.

When a request or comment is received, staff assigns the case to the appropriate group. Depending on the topic and complexity of the case, this could take some time to find the right subject matter expert and often involves multiple groups to coordinate a joint response.

Once a case is allocated, staff use a number of tools to resolve the case. These include a review of previous cases on the same topic and location, review of existing data, new data collection, site visits, and engineering analysis. Based on the review, staff determine whether a request requires a change to the street.

In parallel, staff identify potential road safety improvements based on safety data and other data such as land use, presence of community amenities, traffic volumes, pedestrian volumes, demographics, existing infrastructure, and planned major City-led construction projects.

Every year, all potential road safety improvements (identified via resident requests, external partner organizations, or through data analysis) are ranked and top priority projects are moved forward for implementation. The number of projects selected is based on the funding available under the various Vision Zero sub-programs. A summary of current programs and typical cost of infrastructure is described in Appendix B.

This approach is consistent with the principles outlined in the City's Vision Zero action plan adopted by Council in 2016, including making data-driven decisions based on safety data, conducting detailed studies at high-risk fatality and serious injury locations and prioritizing vulnerable road users (e.g. seniors, children, people with mobility challenges).

### **Pedestrian Crossing Improvements Case Challenges**

Road safety requests are generally related to the following topics:

- Pedestrian crossing improvements (e.g. marked crosswalks, flashing beacons, pedestrian actuated signals);
- Full traffic signals and signal modifications (e.g. more time to cross for pedestrians, turn arrows, audible signals);
- Street signage (e.g. corner clearances, all-way stops, rush- regulations, tree trimming);
- Street markings;
- School safety;
- Truck /rail safety; and
- Temporary street closures due to construction/special events.

Figure 2 shows a breakdown of cases by type. The most popular category is pedestrian crossing improvement requests, encompassing 40% of safety cases and representing the fastest-growing category with a 200% increase between 2014 and 2019 (see Figure 3). In 2019, 600 citizen requests were made for pedestrian crossing improvements.

The high number of requests requires staff to do an annual prioritization exercise to ensure the intersections with the most pressing need move forward. The current funding levels for signals and prioritization factors considered are shown in Figures 4, 5, and 6. This is consistent with Transportation 2040 and Vision Zero goals and ensures the selection of priorities is data-driven to follow engineering best practices, equitably distributes upgrades throughout the City, utilizes

funds to maximize safety benefits, and delivers results efficiently by coordinating with other projects.

When a resident reaches out to the City with a pedestrian crossing request, staff begin the investigation by conducting a pedestrian crossing study to understand what action is warranted (see Figures 7 and 8). This could be upgrading signage or road markings, a crosswalk, flashing beacon, pedestrian signal, or no upgrade based on the situation. If an upgrade is warranted, the location is placed in a list of unfunded projects. This same process occurs for pedestrian crossing requests coming from other sources, such as feedback from external organizations, and priorities from other City initiatives, such as Community Plans or active transportation corridors. Throughout the year, locations are ranked based on the criteria described above and top locations are installed the following year. Unfortunately, this results in the majority of requests for pedestrian crossings staying in the list of unfunded projects for several years and quite often, residents will re-open cases for the same location.

A recent initiative that helped reduce the wait time for citizens is the flashing beacons pilot launched in 2016. Initially, the flashing beacons pilot included three intersections per year, but given its high demand, this was expanded to twelve as of 2020. Flashing beacons cost about one tenth that of a pedestrian signal, and can substitute the need for a pedestrian signal for locations with one vehicle travel lane per direction. However, locations on multi-lane arterials will still need to be addressed with a pedestrian signal.

Similar issues of lack of funding relative to resident demand exist for other types of safety cases.

### **Ongoing Work to Improve Resident Experience**

To improve response times to citizen requests, the following strategies are being pursued:

#### **A. Develop a Citizen Self-Service Website**

The self-service website will provide residents with more detailed information on the City's options under the Vision Zero Program. While a Vision Zero webpage already exists, the current focus of the site is on the high-level strategy to reach the City's goal of zero, key safety trends in Vancouver, general information on sub-programs (e.g. school, rail, etc.), and safety tips for residents.

The new self-service page will include details on the types of safety upgrades available, how many of each can be installed annually under the Vision Zero budget, how projects are prioritized, and typical timelines for installation once approved. The website will also contain a map of existing safety measures, where requests have already been made, and planned projects underway and expected dates of completion.

Additionally, a road safety toolkit will be developed. It will include details on the benefits and disadvantages of each type of safety improvement available and a self-assessment tool for residents to determine when a specific upgrade applies for their situation or concern.

The self-service page is not intended to replace the current avenues that residents use to reach out to the City, such as 311 or VanConnect. The purpose of the page is to provide residents with additional resources before they decide to open a case. For example, a

resident can learn that their request will be addressed by an already planned project or is not a service the City provides. For concerns not addressed by an existing project, it gives guidelines to evaluate the feasibility and need for their request. Furthermore, it will help manage resident expectations on what tools are available, what factors are used to prioritize projects, and how soon they can see an upgrade completed once it's approved.

## B. Focus on High Priority Cases

Given the volume of requests and limited staff resources, cases need to be ranked by priority based on the merits of the case.

Staff have revised our framework for quickly identifying priority cases. Appendix C shows the framework for some of the most popular infrastructure types: pedestrian crossings, all-way stops, and corner clearances. By performing this exercise, staff time can be used to apply more detailed criterion to the remaining cases.

From here cases are ranked as low, medium or high priority. High priority cases are those:

- Where there is an urgent safety concern that needs to be addressed immediately.
  - E.g. a signal malfunctioning, a knocked-down traffic sign, or foliage covering a critical sign
- Where a documented safety concern exists.
  - E.g. intersections showing a higher than average collision history compared to similar intersections or where a recent fatality/injury has occurred.
- In areas with a high presence of vulnerable road users.
  - E.g. Areas adjacent to a school, senior home, bus stops, or other community amenities.

Additionally, cases where there has already been an investigation and a recommendation from staff will not be re-evaluated unless there is a change in the land use or three years have passed since the previous evaluation (unless it's clear something has changed in the interim). Furthermore, the focus will be placed on responding to residents who have not received a response first, before responding to people who have frequent requests.

## C. Improving Case Allocation

Recently, Engineering staff have been collaborating with 311 in the "311 Transformation Project". One goal of this project is to unify the different methods by which residents can submit cases and thus provided a more consistent and informative experience for all citizens.

The other goal of the project is to improve the accuracy of case allocation. By revisiting the questions residents are asked about their concern, cases can be more accurately assigned to the appropriate City team. This avoids cases being sent to various groups in error or being returned to 311 for proper re-allocation, which increases the wait time for residents to receive a response. This project will be launching in fall of this year.

#### D. Improving Case Response Processes

Staff have been working on improving the processes to review and respond to requests from citizens.

One method is the development of a standard response library for each of our request types. These responses can be customized based on the details of the case; but, will save time by providing a solid starting point. Also included will be past responses for some of our reoccurring infrastructure requests. This library will allow for consistent messaging, improved response times, and allow for the most accurate information to be provided, as these responses will be developed collaboratively based on the knowledge and experience of the whole team.

We are also implementing processes to work on each case type systematically and at pre-defined intervals (rather than in an ad-hoc approach). Instead of responding to each case in order and as time allows, staff will periodically work through all of the cases of a specific type in a batch. This method will allow for increased efficiency in investigation, design, and documentation.

#### E. Dedicated Staff to Ensure Timely Responses to Residents

Currently, senior technical staff are responsible for reviewing and responding to each request. However, they are not solely dedicated to this task. They are also in charge of safety data analysis; planning and designing road safety projects; managing budgets; supervising staff; collaborating with external safety partners; and more. Balancing these duties with investigating each case the public submits constitutes a significant challenge – one that is becoming more difficult as the volume of cases increases.

To fill this gap a Resident Request Coordinator position is being advanced. The new position will work in collaboration with technical staff to help inform the content of responses and follow up on requests in a more timely fashion. Additionally, the position will support developing the contents of the proposed citizen self-service webpage, tracking metrics on the number of cases and average response times, and reviewing current processes to identify and improve inefficiencies. The position will be funded from re-allocation from existing safety capital programs.

If you have any questions or concerns with regards to this approach on streamlining these requests, please do not hesitate to contact me directly.



Lon LaClaire, M.Eng., P.Eng.  
General Manager, Engineering Services

604.873.7336 | [lon.laclaire@vancouver.ca](mailto:lon.laclaire@vancouver.ca)

## Appendix A – Resident Feedback Metrics

Figure 1 – Number of Road Safety Requests

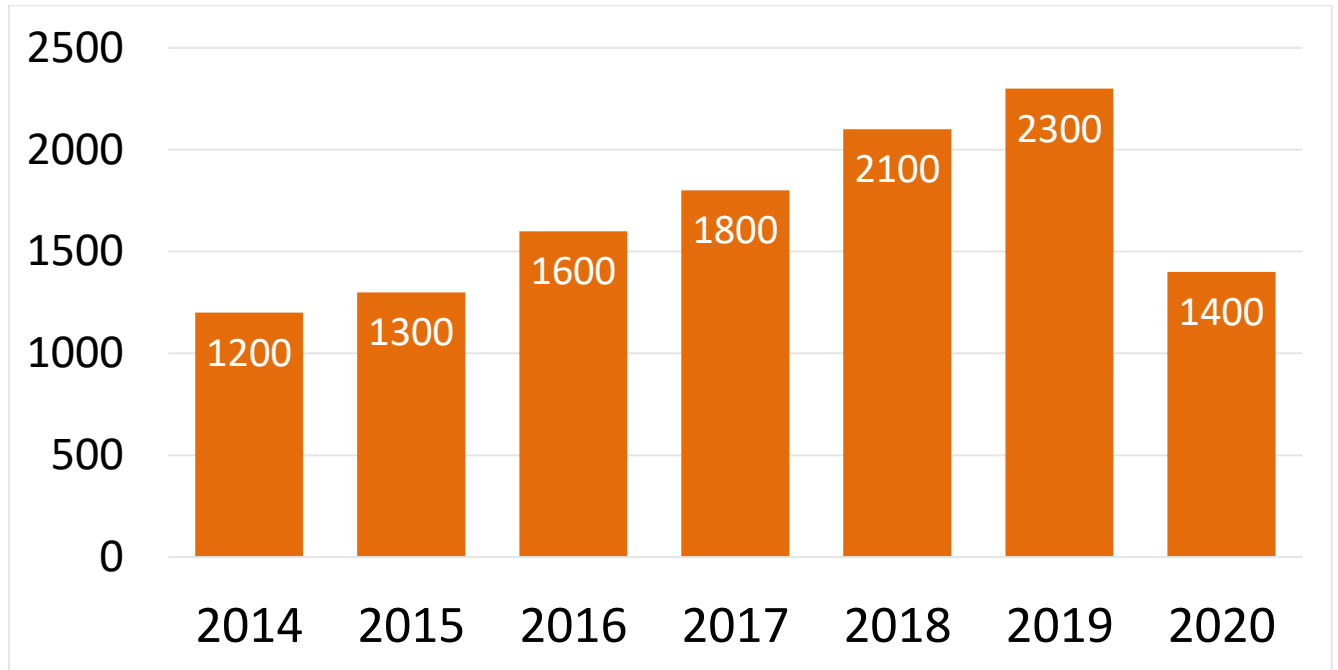


Figure 2 – Number of Road Safety Requests by Type

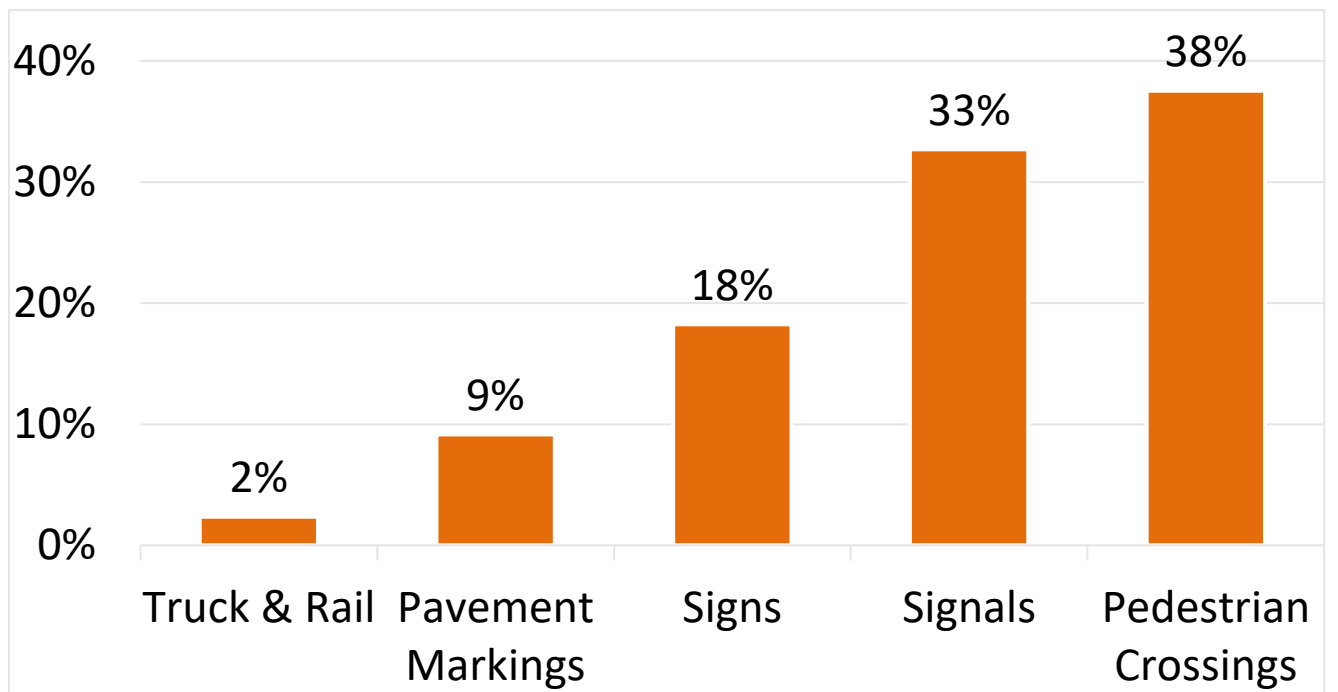




Figure 3 – Number of Pedestrian Crossing Requests

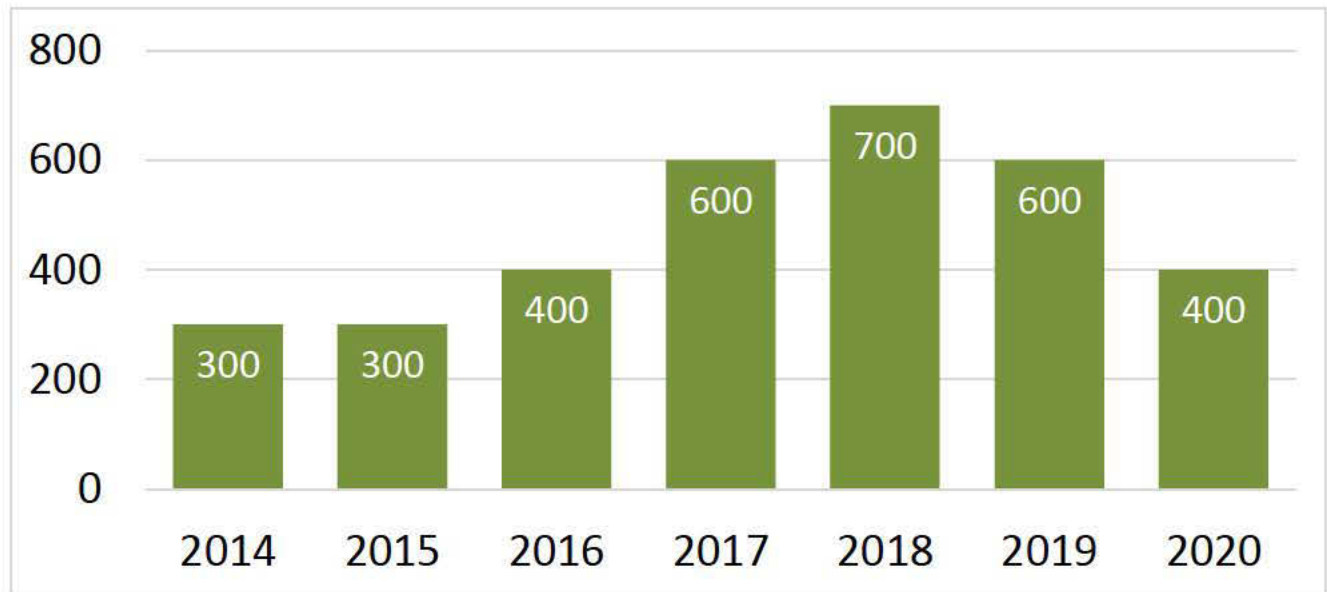
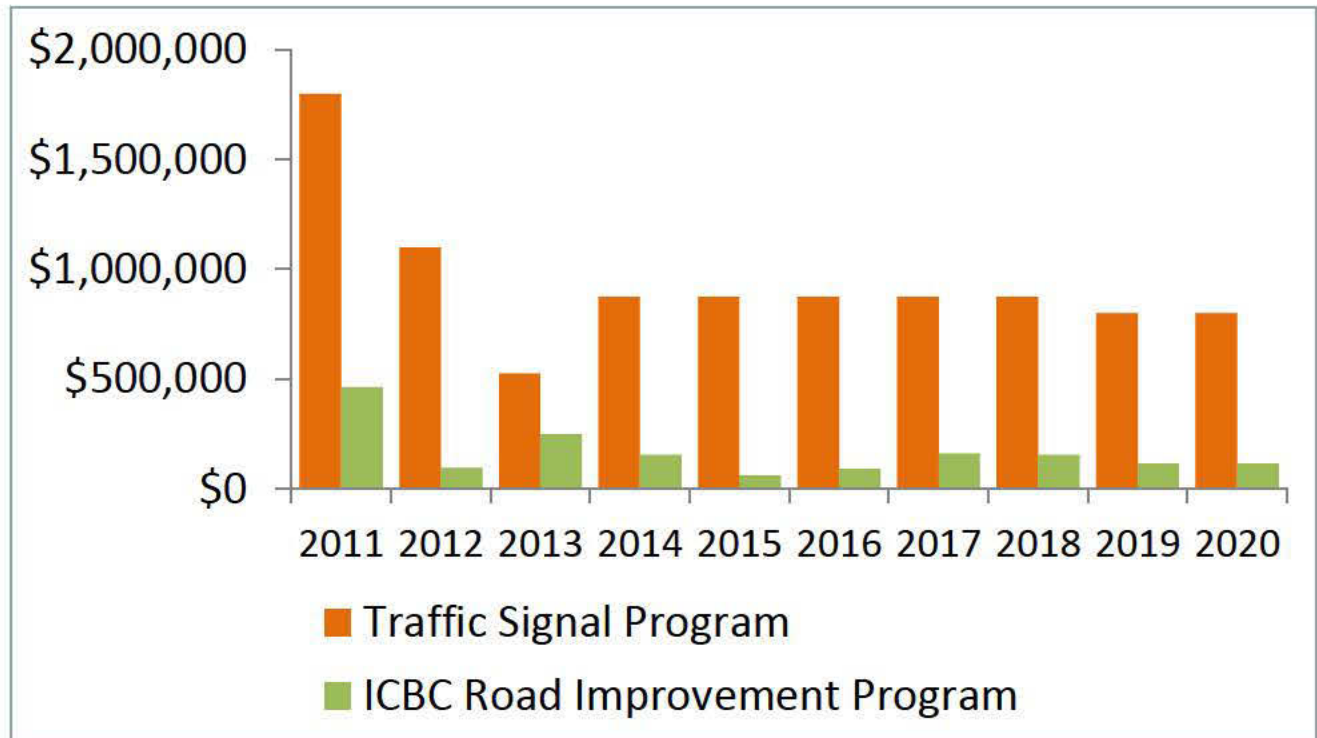
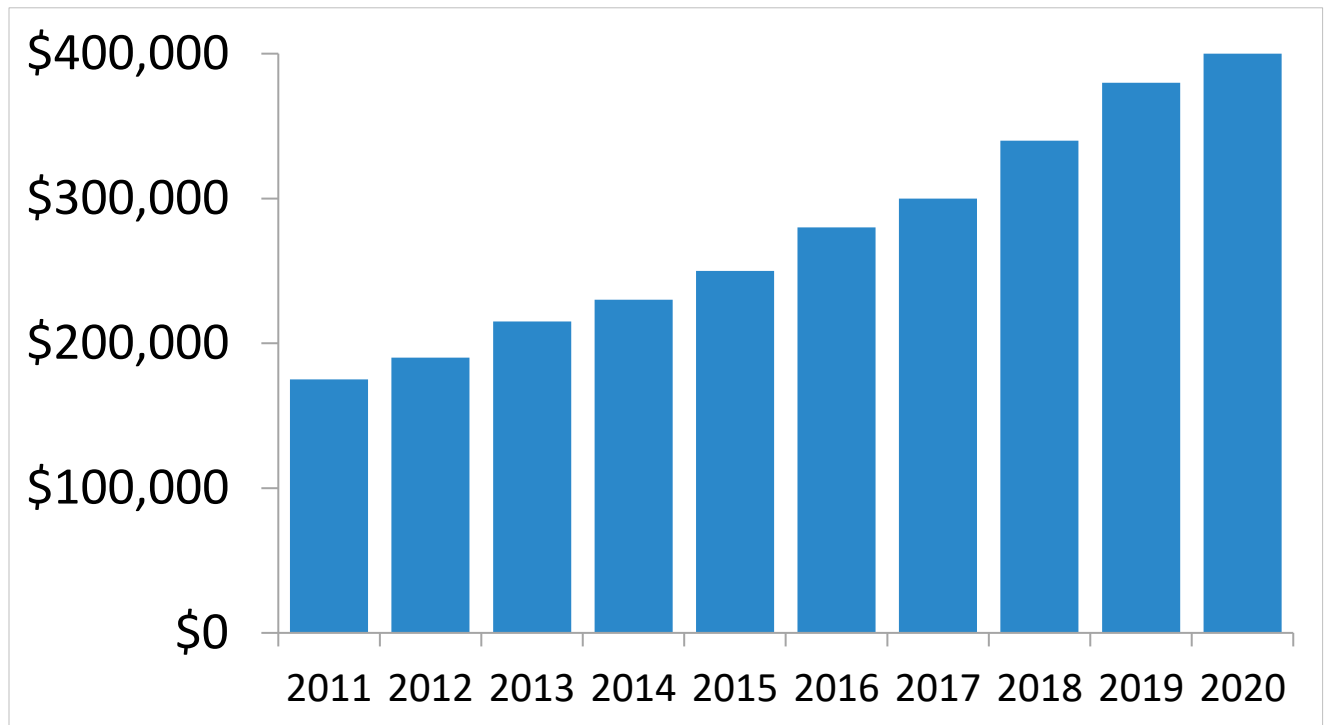



Figure 4 – Funding Sources for Pedestrian Signals



**Figure 5 – Average Cost per Pedestrian Signal**

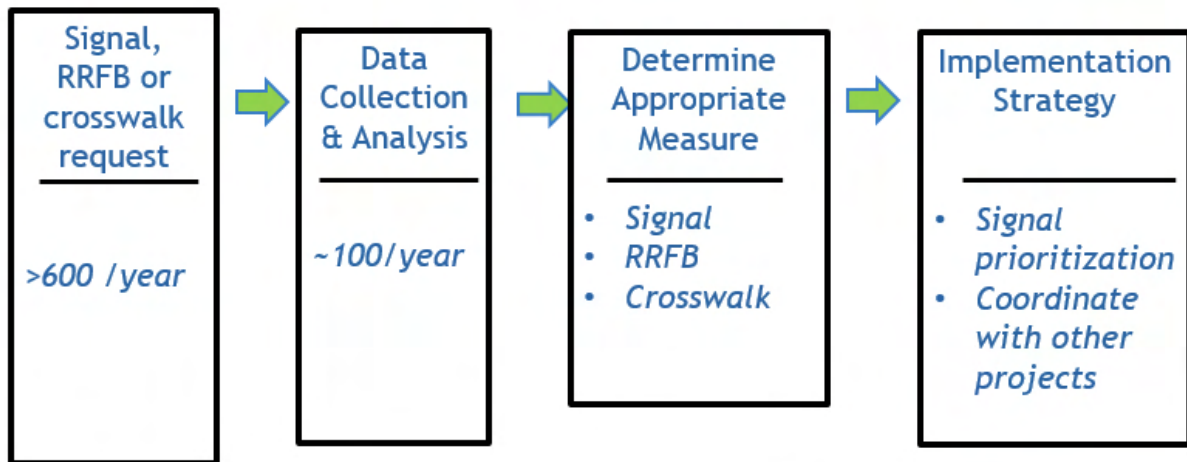


**Figure 6 – Pedestrian Crossing Improvements Ranking Criteria**

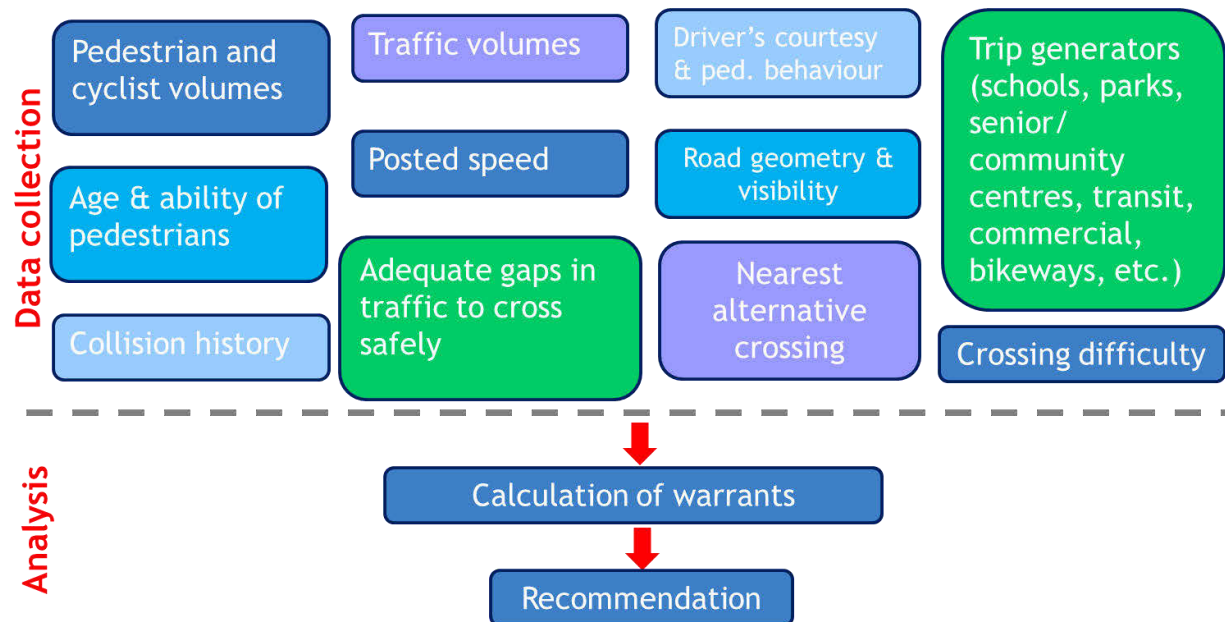


Transportation 2040	Ranking Criteria
Zero Traffic Related Fatalities	Collision history (ped. & bike)
Invest wisely	Signal warrants to asses greatest benefit
Address gaps in the pedestrian network	Distance to closest signal
Prioritize vulnerable road users (children, seniors, disabilities)	Age & ability of pedestrians/ cyclists
Major trip generators	Number of trip generators
Support other City plans and initiatives	Priority locations for Active Transportation corridors and Community plan priorities.
Make the city easy to navigate on foot	Crossing difficulty & width
Public input	Number of 311 requests
Be opportunistic	Coordinate improvements with other projects

**Figure 7 –Pedestrian Crossing Request Process**



**Figure 8- Pedestrian Crossing Study Components**



## Appendix B– Annual Transportation Safety Capital Programs

For the capital program 2019-22 the Vision Zero budget is \$800,000 per year:

- 2 Staff positions: Engineering Assistants, as well as training;
- 12 RRFBs;
- Minor safety projects (e.g. accessible pedestrian signals, turn bays/phases, curb bulges, signage, crosswalks, etc.);
- Safety studies; and
- Traffic safety campaigns

Additionally, there are three other related transportation related safety budgets: School Active Travel Planning Program, Traffic Signal Program and At-Grade Rail Crossing Upgrades.

The current School Active Travel Planning Program budget is \$625,000 per year:

- 3 Staff positions: VSB Coordinator, SATP Coordinator and an Engineering Assistant
- Infrastructure for 3 to 6 schools participating in the program, depending on the type of infrastructure required.
- Minor projects: support for other schools not in the program with minor safety upgrades (e.g. signage and crosswalks).
- Education: youth skateboarding education, Grandma on the move campaign, walking safe routes web application pilot.

For 2021, an additional \$500,000 was allocated through the Climate Emergency Action Plan. Of this, \$400,000 will be dedicated to infrastructure and \$100,000 will be for education (e.g. School Streets Pilot, School Walking Bus Pilot).

The New Pedestrian Signal budget is \$800,000 per year, which funds two new pedestrian signals.

The At-Grade Rail Crossing Upgrades budget is \$1,500,000:

- Three Staff positions, two engineers and one engineering assistant;
- Upgrades at the 30+ rail crossings; and
- Safety studies and education campaigns.

There is the potential to cost-share this work with ICBC with remaining funding coming from the various transportation safety programs.

**Table 1:** Summary of Annual Transportation Safety Programs

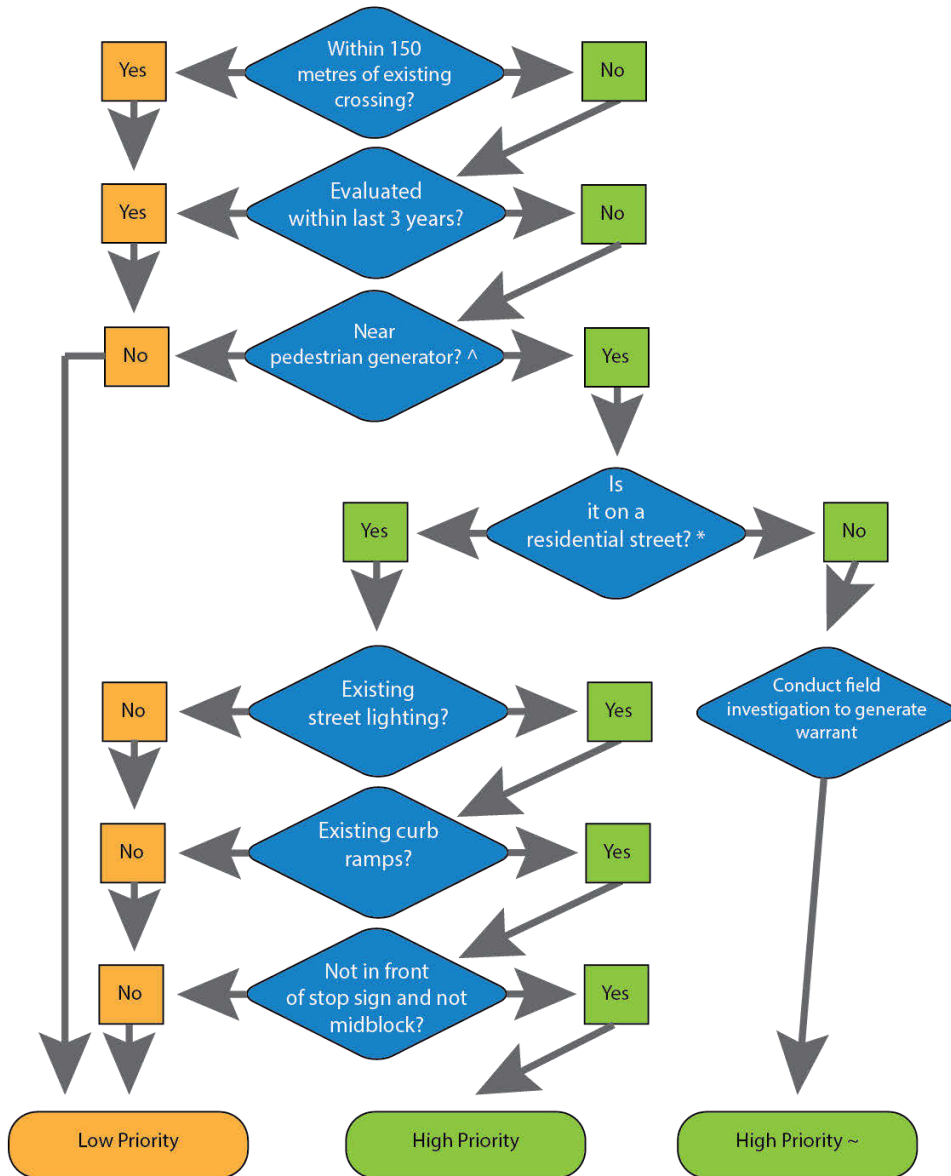
Program	Summary	Annual Budget
Vision Zero Program	Safety improvements with the goal of zero traffic related fatalities and serious injuries. Priorities are identified based on ongoing review of safety data, as well as other sources of data.	\$0.8M ~12 flashing beacons /year and other minor safety improvements

School Active Travel Planning Program	Infrastructure improvements to encourage walking and cycling to school. (e.g. Bulges, crosswalks, speed humps, new sidewalks, raised crosswalks, flashing beacons, etc.).	\$0.6M Various minor safety improvements around 3-6 schools per year
New Pedestrian Signal Program	Identifies and prioritizes locations for new pedestrian signals.	\$0.8M ~2 signals/year
At Grade Rail Crossing Upgrades Program	Improvements to upgrade 30+ rail crossings.	\$1.5 M/year

**Table 2:** Cost of Typical Transportation Safety Improvements

<b>Safety Measures</b>	<b>Average Cost</b>
Signage	\$500 to \$2,000 per intersection/block
Minor signal modifications (e.g. leading pedestrian interval, slower walking speeds)	\$500 to \$1000 per intersection
Painted crosswalk	\$3,000 per crossing
Curb ramps	\$8,000 per corner
Speed humps	\$5,000 to \$10,000 per block
LED lighting	\$10,000 to \$20,000 per intersection
Curb bulge, median or raised crosswalk	\$60,000 to \$150,000 per unit
Sidewalk or curb/gutter	\$70,000 to \$200,000 per block
Signal modifications (e.g. turn arrows)	\$20,000 to \$300,000 per intersection
Flashing beacons	\$40,000 to \$70,000 per intersection
Pedestrian Signal	\$300,000 to \$600,000 per intersection

## Pedestrian Crossing Evaluation Flowchart



\* Does not have a centre line and is not a lane / alley

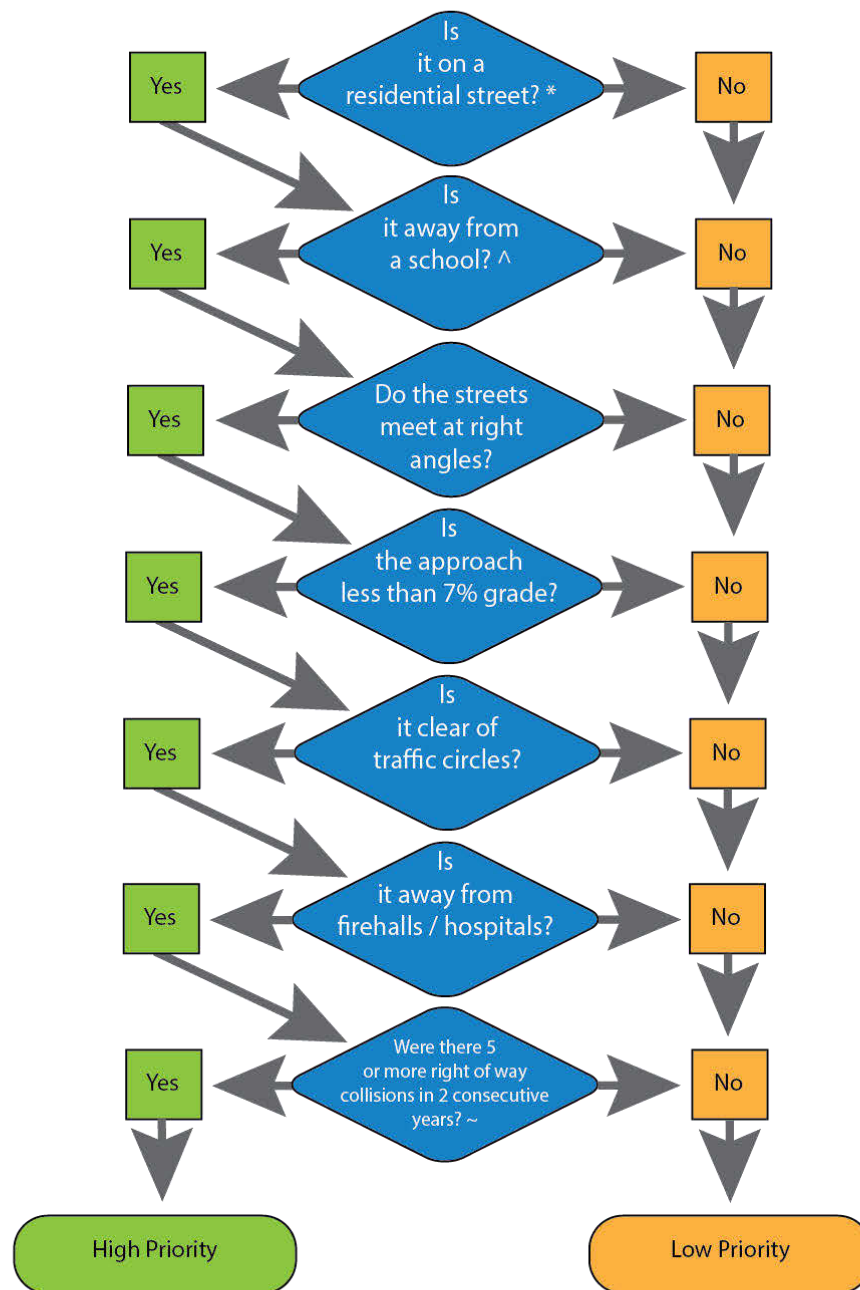
^ Park, school, community centre, etc

~ Ranked in priority list based on warrant, highly limited number per year

## Appendix C –Framework for Prioritizing Cases

Figure 9- Pedestrian Crossing Framework

# All Way Stop Evaluation Flowchart



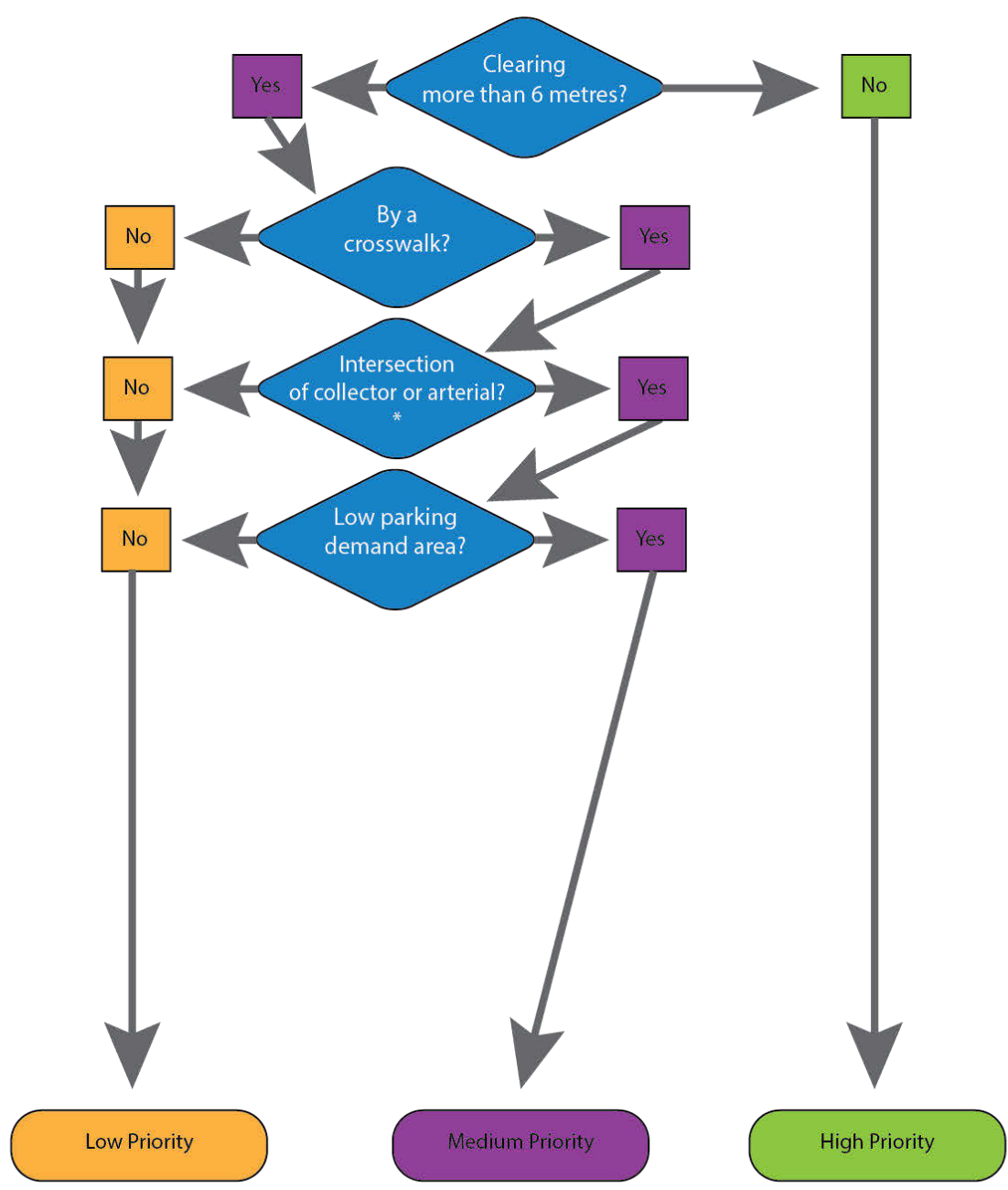
\* Does not have a centre line and is not a lane / alley

^ Due to driver focus on correct right of way, all way stops have been shown to increase risk for pedestrians

~ ICBC's website (link) can estimate this number but CoV will look at details of incidents

**Figure 10-** All-way Stop Framework

# Corner Clearance Evaluation Flowchart



\* Has a centre line

Figure 11- Corner Clearance Framework