

Research Update: Perceptions of Comfort and Safety for Non-Motorized Road User Interactions in Vancouver

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Objectives




Determine concerns for **pedestrians** in navigating the rebuilt portion of 10th Ave (**Interviews, Survey**)



Determine frequency & types of road user interactions (**Video data**)



Determine frequency of uncomfortable and unsafe interactions (**Survey**)



Examine differences in the perceptions of interactions among stakeholders: general public, evaluation committee, and traffic safety professionals (**Interviews, Survey**)

Data Collection and Timelines

Video Data (Sept-Dec 2018)

- 11 sites (7 on 10th Ave + 4 comparison sites) during weekday peak hours (8-10hr, 11-13hr, 16-18hr)
- Pedestrians, cyclists, motor vehicles counts; interactions between them

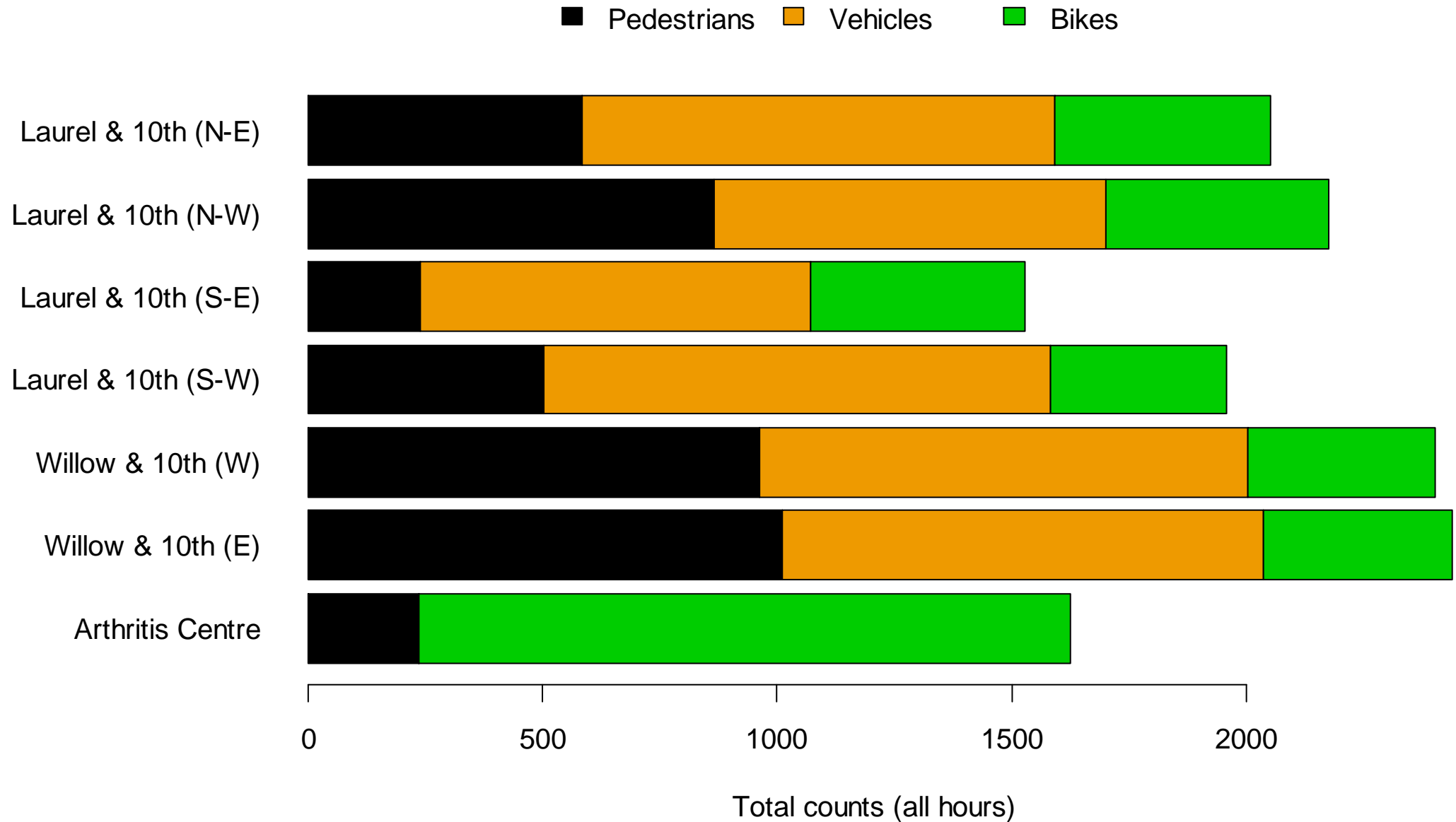
On-site Interviews (March 2019)

- Along the corridor with 10th Ave Evaluation Committee members
- Gather general feedback and perceptions of safety, comfort, and yielding

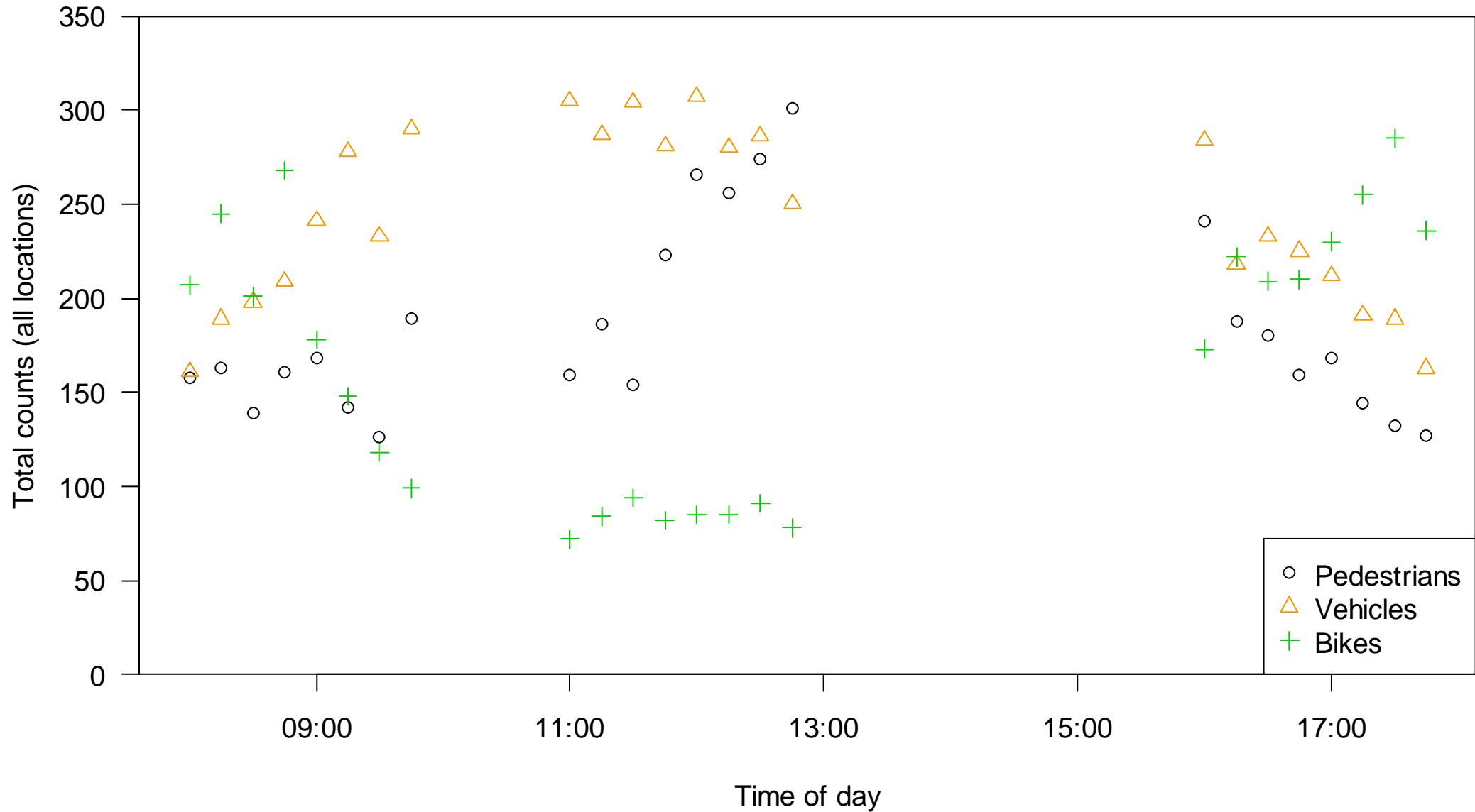
Survey (March-April 2019)

- Conducted with diverse stakeholders to assess the compliance, safety, and comfort of the interactions obtained from the Video data

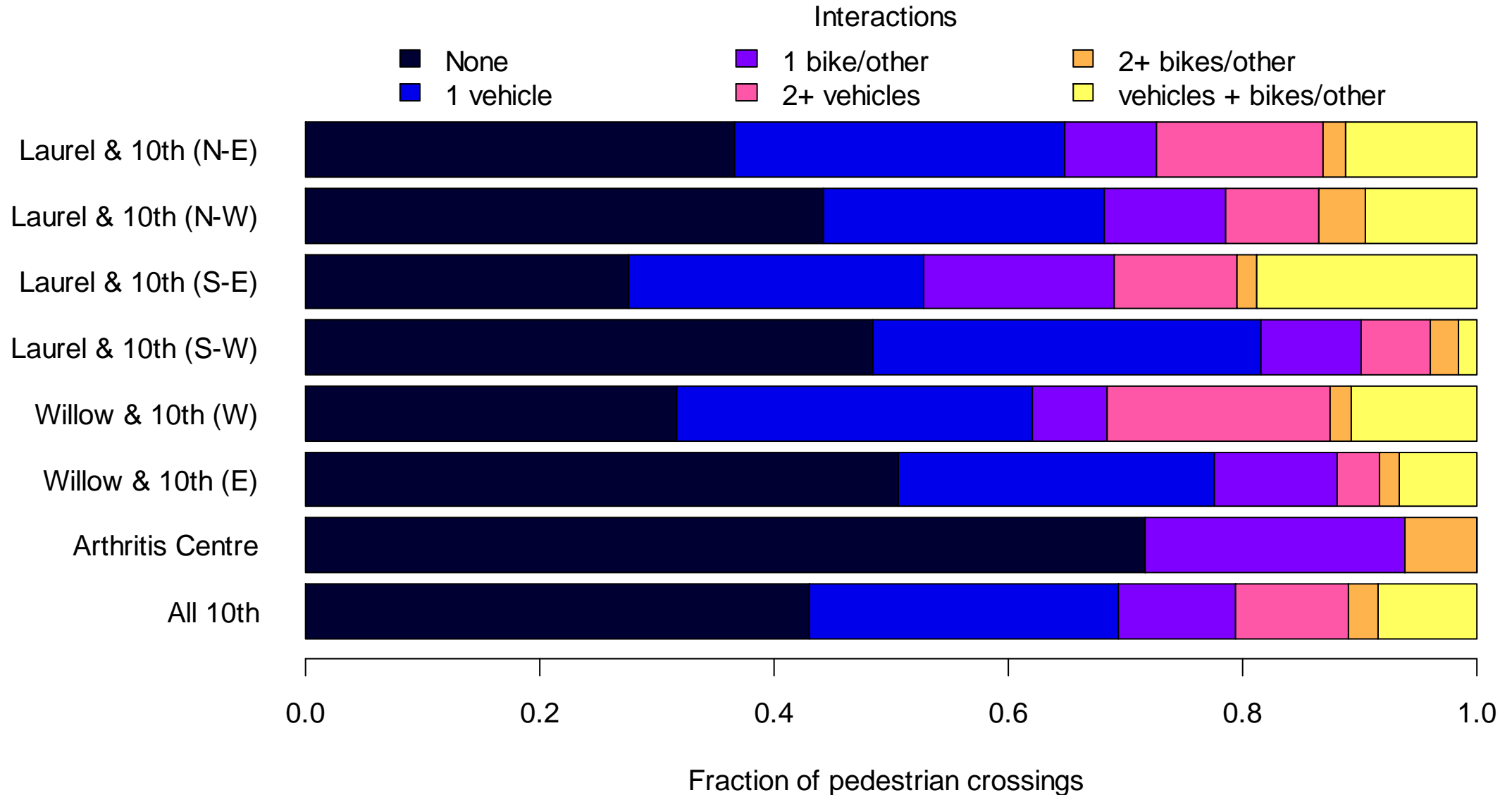
Preliminary Video & Survey Data Analysis



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Preliminary Video & Survey Data Analysis



Preliminary Video & Survey Data Analysis

Survey data analysis is underway

- 84 video clips from all locations, divided among interaction types and proximity
- Respondents rated a subset of 15 of the videos on:
 - Yielding to the pedestrian
 - Pedestrian comfort
 - Pedestrian risk of injury

Complete responses (after cleaning):

- 321 from the general public
- 17 from the 10th Ave. evaluation committee
- 6 from traffic safety professionals

Full results will be shared with the committee in upcoming meetings

Interviews

Conducted by:

- Meghan Winters, Marie-Soleil Cloutier, Kate Hosford (notes)

Feedback from 9 10th Ave Eval Committee Members:

- 7 onsite, 1 phone, 1 e-mail
- Diverse perspectives including transport experts, citizens/advisory committee members, health care employees, patients, and frequent and infrequent users along the corridor
- Different modes of travel on the corridor: walking, cycling, driving

Interview content:

- General feedback about 10th Ave corridor changes, specific areas of concern, and perceptions on yielding, comfort, and safety for pedestrian crossings

General Feedback (1)

- **Overall improvement**, more awareness and delineation of where people should be, perceived slower speeds
- **Wayfinding** is good, nicely done, and helpful especially for out of town visitors
- **Complexity**- a lot going on on the street (design, road users, signage), but changes are an improvement and for the most part clear where people are supposed to go
- **Many of the challenges inherited** (VGH emergency access, street geometry @ Laurel), but feeling the new design accommodates as best it can
- During **construction** flaggers were exceptional (with the exception of a comment about smoking)... a model for future city projects

General Feedback (2)

- Acknowledge **inherent conflicts** in design needs for different users (people using wheelchairs, people with seeing eye dogs)
- **Phased approach** taken by the city creates problems in and of itself
- Concerns about reduction of **on-street parking** for patients attending clinics
 - Reports from doctors at Diamond Centre saying patients late or don't show up because of difficulty in finding parking
 - Also heard employees and regular patients were aware of and used off-street options
 - Time to see action on the parking lot at 10th and Ash
- Pedestrian jaywalking may suggest need for **mid-block crossings**. May also need additional crossings for pedestrians with mobility limitations

Oak St & W 10th Ave



Laurel St (South) & W 10th Ave



Laurel St (North) & W 10th Ave



Access to VCH Cycling Centre



Willow St & W 10th Ave



Observations of Yielding, Comfort, and Safety

- Importance of **eye contact/non-verbal** communication in negotiating complex road user environment
- Many pedestrians **giving way** to bikes and cars at crossings
- Virtually all the interactions we saw were **considerate**
- Very **slow travel speeds** at mid-day time periods
- **Pick up/drop** off zones seemed to be working well
- **Driveways** are interaction zones (in addition to the intersections)

Themes

- **Visitors to the area vs. staff**
- **Separation of travel modes**
 - Overall good
 - Cues for blind are not consistent in some parts, surfaces inconsistent
 - Grade separation between bike lane and sidewalk – maybe should be larger – more distinction for road users/guide dogs
- **Interactions**
 - Concerns remain for more vulnerable pedestrians and patients, visitors
 - “Before improvements, as a cyclist I was worried about cars. Now there is a change... as a cyclist I am worried about pedestrians!”
- **Phased approach of the project**



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