

Pedestrian Scramble Pilot

Transportation Division

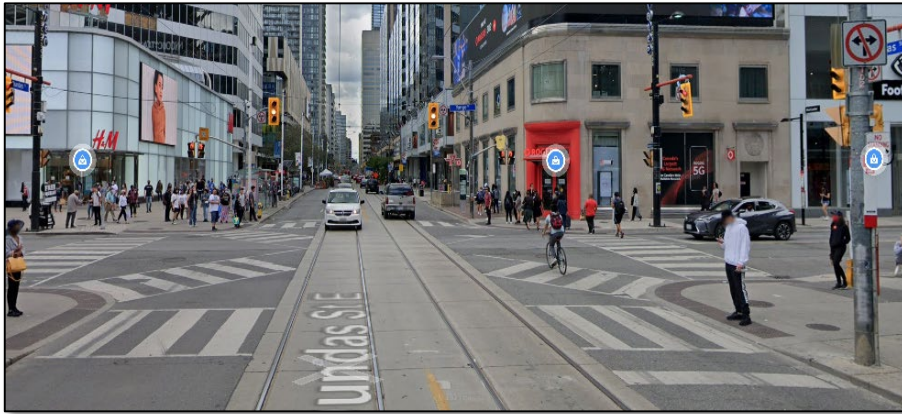
October 17, 2023



THAT Council direct staff to report back by the end of Q3 2023 with recommendations and potential location options for a traditional pedestrian scramble crossing pilot that includes diagonal crossing, inclusive of a range of appropriate intersection examples in the city with high levels of pedestrian traffic in order to assess the effectiveness of scramble crossings in the local Vancouver context and determine their value in terms of the City's pedestrian and traffic safety best practices and enhanced mobility objectives.

- Traditional Pedestrian Scramble
 - All walk phase
 - Diagonal crossing
- High Pedestrian Volumes
- Pilot to learn from
 - Improve safety
 - Increase walkability
 - Enhance mobility

Peer City Experience with Ped Scrambles



Toronto: Yonge & Dundas

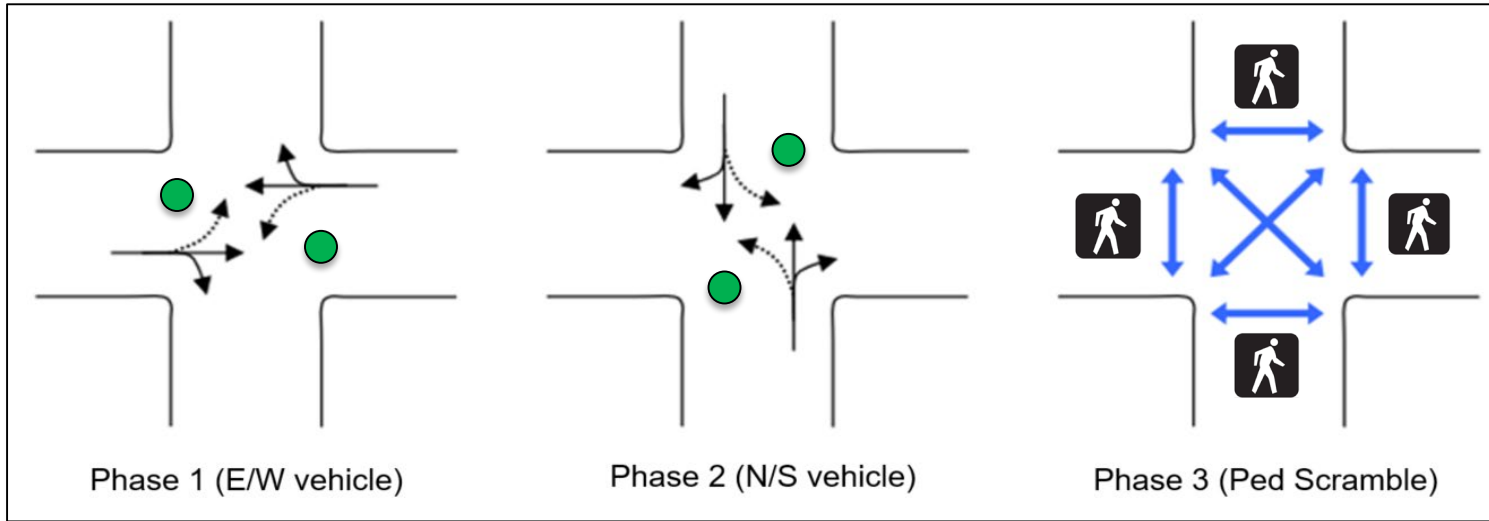


Calgary: 3 Street & 2 Avenue SW

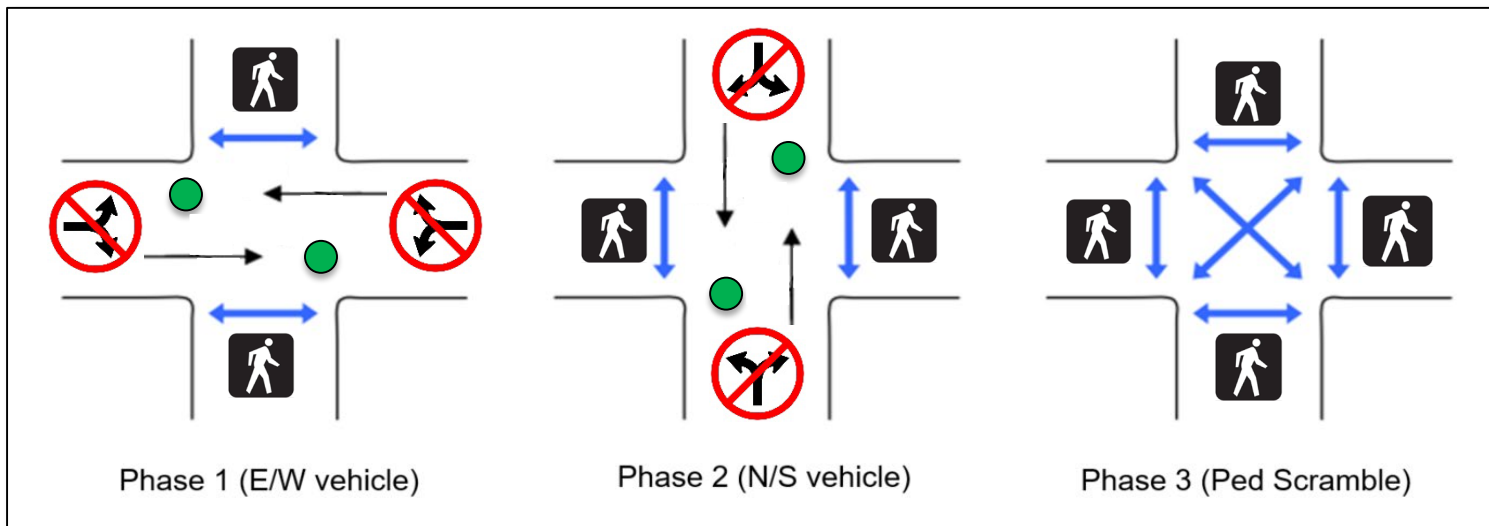


Victoria: Wharf & Government

Pedestrian Scramble – What is it?

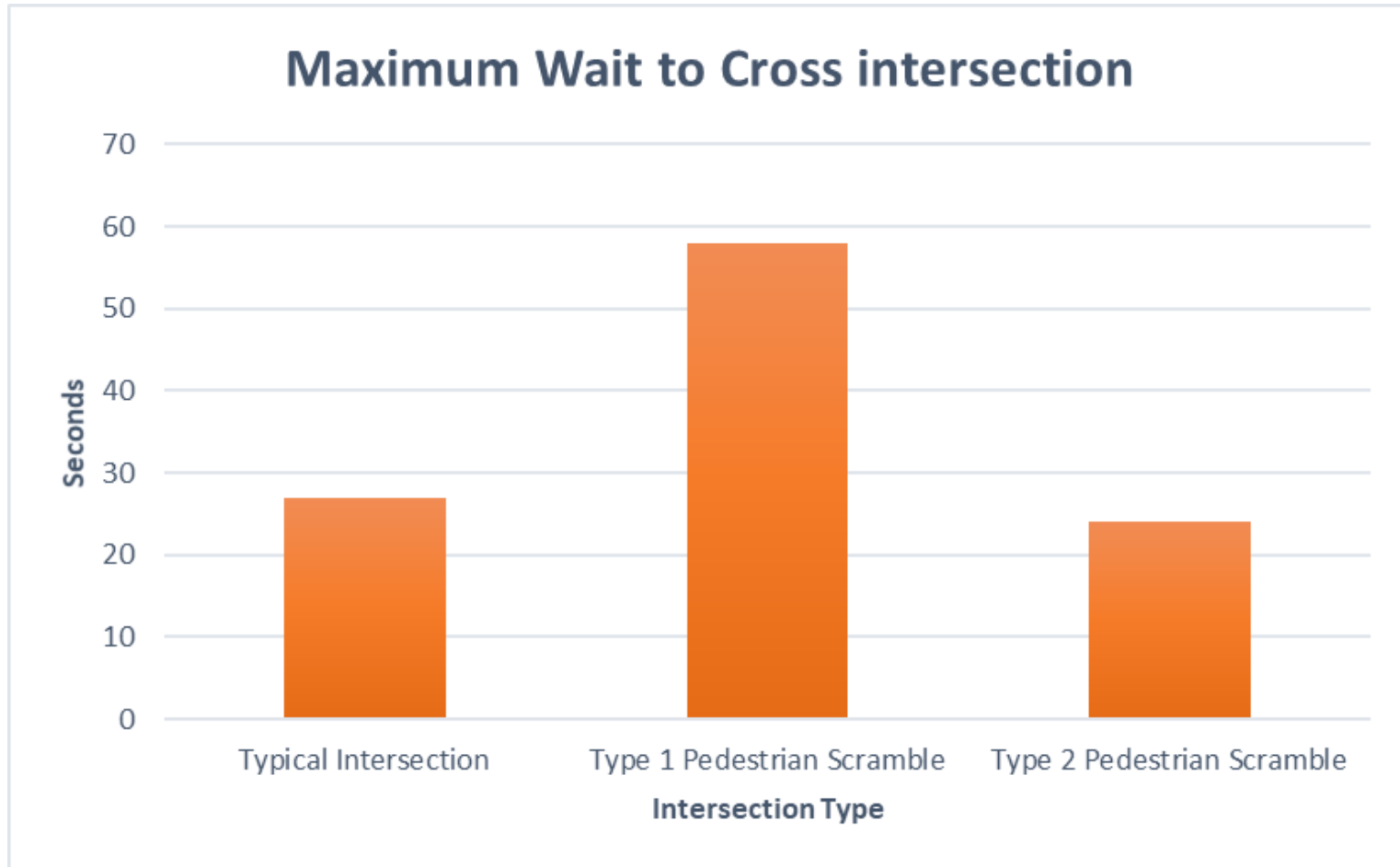


Type 1 - Pedestrian Scramble



Type 2 - Pedestrian Scramble

Pedestrian Scramble – What is it?



Benefits of Pedestrian Scramble

- Eliminate or minimize conflicts between pedestrians and vehicles
- Increase pedestrian priority and placemaking at the intersection
- Decrease crossing distance and time for pedestrians crossing diagonally through the intersection
- Shorten pedestrian crossings when intersection geometry is skewed

Disadvantages of Pedestrian Scramble

- Longer waiting time for pedestrians, resulting in more crowded sidewalks and increased non-compliance (Type 1)
- Increased transit and vehicle delays
- Accessibility challenges for blind or low vision people with diagonal crossing due to the lack of vehicle movement parallel to the crosswalk during the walk phase

Identifying Locations – Criteria

- Consistently high pedestrian volumes - particularly demand for diagonal crossings or high ratio of pedestrian volumes to vehicle volumes
- Pedestrian safety concerns from turning vehicles
- Desire for diagonal pedestrian crossings
- Placemaking and public realm improvement opportunities

Locations considered:

1. Granville & Georgia
2. Burrard & Georgia
3. Granville & Robson
4. Burrard & Robson
5. Thurlow & Robson
6. Commercial & 1st Ave
7. Commercial & Broadway
8. Davie & Denman
9. Seymour & Cordova

- *Construction Timeline & Feasibility*
- *Cost of Implementation*
- *Coordination Opportunities*

Locations considered

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4. Davie & Denman

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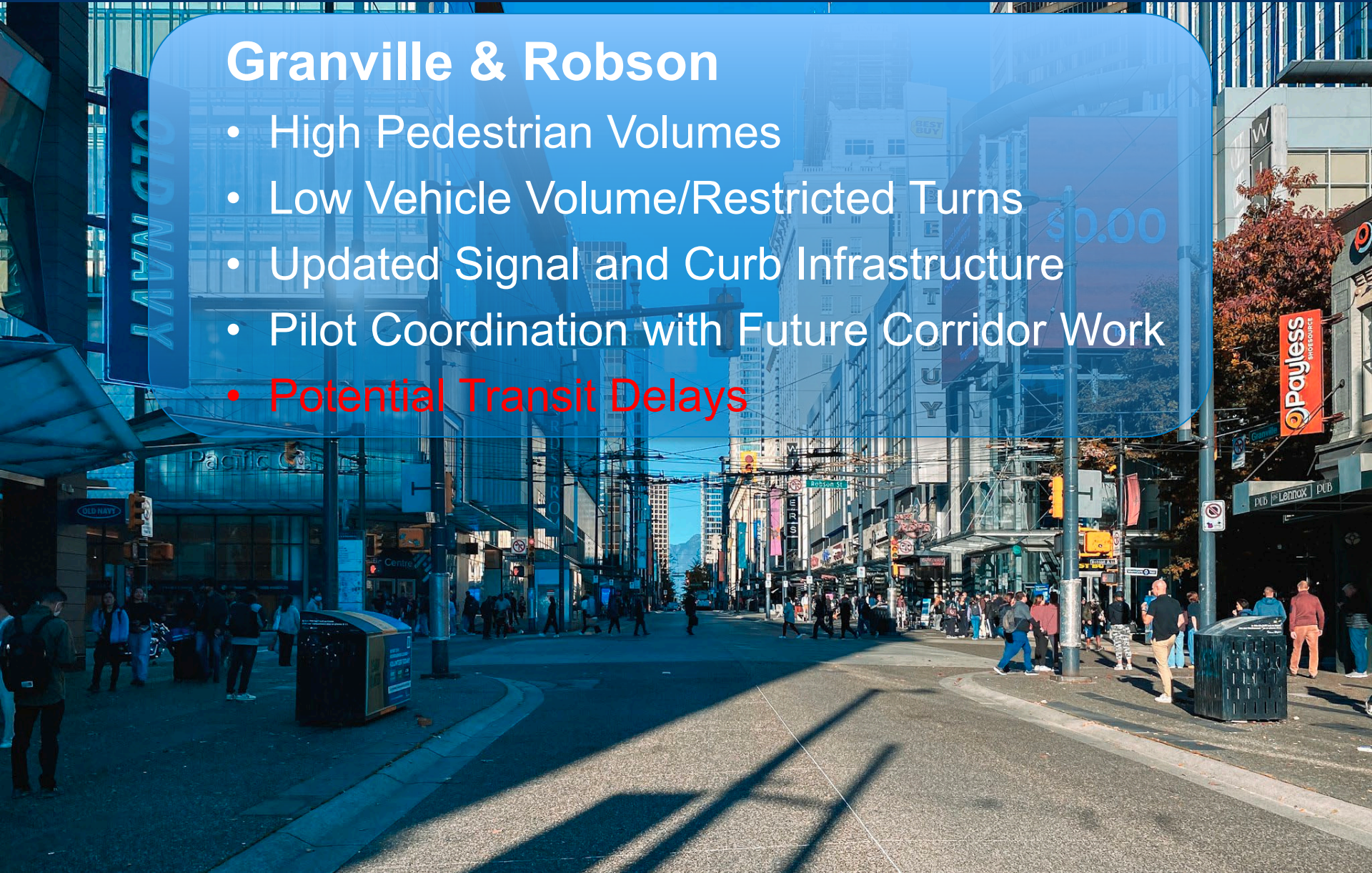
Traffic Modeling Software Analysis

		Vehicular Intersection Delay (seconds/veh)	Vehicular Intersection Delay (% increase)	Level of Service
Granville & Robson	Existing	12.4	151%	B
	Scramble	31.1		C
Granville & Georgia	Existing	12.7	196%	B
	Scramble	37.7		D
Commercial & 1st	Existing	35.6	703%	D
	Scramble	286.0		F
Denman & Davie	Existing	15	194%	B
	Scramble	44.2		D

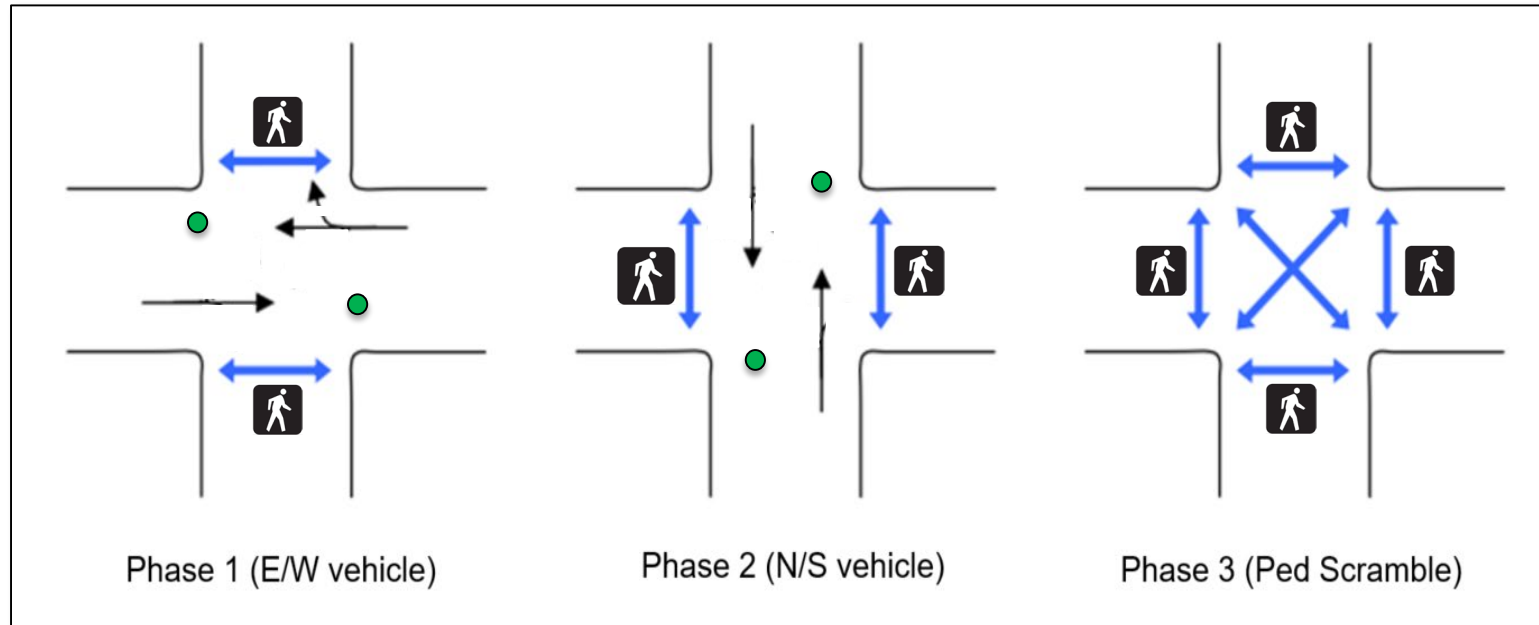
Recommendation

Granville & Robson

- High Pedestrian Volumes
- Low Vehicle Volume/Restricted Turns
- Updated Signal and Curb Infrastructure
- Pilot Coordination with Future Corridor Work
- Potential Transit Delays



Granville & Robson – Type 2 Pedestrian Scramble



- Allow pedestrians to cross during concurrent green phase
- Vehicle turn movements already restricted except buses (westbound right-turn)
- No Right Turn on Red

- Additional stakeholder engagement
- Advance detailed design
- Develop monitoring and evaluation plan
- Implementation pilot in 2024
- Report back to Council following assessment of pilot