

International Boulevard Pedestrian Safety Study and Local Road Safety Plan

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Mason Giem Public Works Programs Coordinator

Eric Widstrand, PE, PTOE Northwest Regional Traffic Engineering Director Toole Design

PRESENTATION OVERVIEW

PURPOSE OF PRESENTATION

To provide a review of the metrics used to create a prioritized list of pedestrian safety projects along International Boulevard and review the list of prioritized projects.

WHY IS THIS ISSUE IMPORTANT?

- 1. The metrics guide decisions on what projects will be selected.
- 2. The projects will increase pedestrian safety along International Boulevard.
- 3. The valuable input from the sidewalk committee will help inform decisions.



City Wide Local Road Safety Study Plan and Pedestrian Crossings of International Boulevard

- The **Scope**: Two distinct, but interrelated safety programs for the City of SeaTac
 - 1. Pedestrian safety crossing improvement projects on the International Boulevard corridor, from South 152nd Street to South 216th Street.
 - 2. Preparing a citywide Local Road Safety Plan that will propose strategies and measures to improve safety for all modes of transportation.



City Wide Local Road Safety Study Plan and Pedestrian Crossings of International Boulevard

Project Timeline

- August 2020- June 2021 Phase 1, Pedestrian Crossings along International Boulevard.
- December 2020 December 2021 Phase 2, Local Road Safety Plan



City Wide Local Road Safety Study Plan and Pedestrian Crossings of International Boulevard Map





Proposed Prioritization Methodology

Factor	Details	Potential Weighting				
Location Priority						
Locations with high crash injury weighting		5 points if in top third				
		3 points if in middle third				
		0 points if in bottom third				
Locations with pedestrian crash risk factor	Crosswalk crosses six or more lanes; cross street has posted speed limit of 35	1 point if crosswalk crosses six or more lanes				
	MPH	1 point if cross street has posted speed limit of 35 MPH				
High Pedestrian Activity Location: Transit	Light rail or Rapid Ride	1 point for Rapid Ride stop				
		2 points for light rail stations (note – 176 th St and 200 th St have				
		both a light rail station and a Rapid Ride stop, these locations				
		would score 3 points).				
High Pedestrian Activity Location: Destinations	Location is adjacent to restaurant, bar, grocery store, retail, school, park, or	1 point if pedestrian destination is present within 300' of the				
	other similar pedestrian destination.	intersection, per intersection leg (4 points possible)				
Benefit-cost comparison						
Benefit-Cost Ratio	When CMFs are available: apply expected crash modification factor to the value	10 points if BCR is in top third				
	of observed crash history, calculated using Equivalent Property Damage Only	5 points if BCR is in middle third				
	(EPDO) criteria. Divide by the estimated cost to obtain the Benefit Cost Ratio.	0 points if BCR is in bottom third				
[or]						
Generalized benefit vs. cost	When CMFs are not available, either because the recommendation is	10 points if generalized benefit vs. cost is high				
	programmatic or because a CMF has not yet been evaluated, develop a	5 points if generalized benefit vs. cost is medium				
	generalized high-medium-low benefit/cost ratio based on estimated costs as	0 points if generalized benefit vs. cost is low				
	well as expected safety benefit informed by research and engineering judgment.					
		Total Points Possible: 24				



QUESTIONS?



Potential Corridor Wide Countermeasures

Corridor Wide

- 1. Reduce posted speed limit to 30 MPH along corridor
- Install Leading Pedestrian Interval at each signalized intersection
- 3. Re-evaluate signal timing (in conjunction with reduced posted speed limit)
- 4. Install "No turn on red" signs at each signalized intersection
- 5. Evaluate corridor for lane removal potential based on traffic analysis to reduce pedestrian crossing distances. *Note that this is in conflict with TMP recommendation for widening along portion of the corridor
- 6. Install pedestrian countdown signals at locations where not already present
- 7. Convert HOV lane to bus only lane along corridor
- 8. Install pedestrian signal recall at all intersections with bus or light rail stop, if not already present
- 9. Install new pedestrian crossings at locations where crossings are more than ¼ mile apart
- 10. Stripe lane lines along International Boulevard

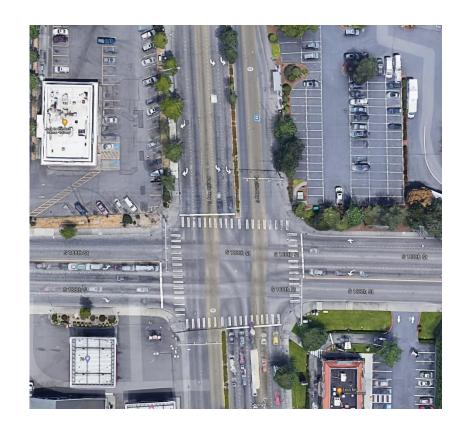
Programmatic

- Further engineering analysis to evaluate the effectiveness of street lighting along the corridor
- 2. Active speed feedback signs
- 3. Pedestrian Decoy Enforcement Operations



S 188th St – Potential Countermeasures

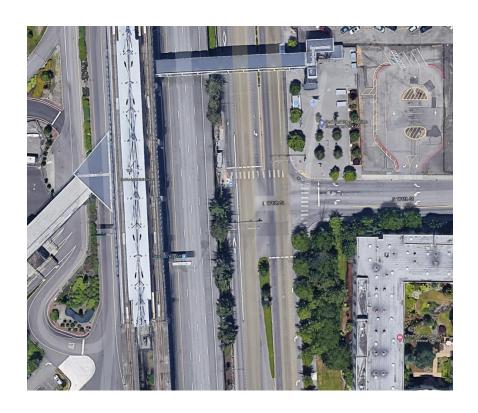
- 1. Roadway reconfiguration fill in bus pullout at northeast leg to shorten pedestrian crossing distance
- 2. Move bus stop closer to intersection
- 3. Pedestrian signal recall (if not already present)
- 4. Signage at bus stop "Use crosswalk"
- 5. Median fencing at southern leg (near term solution)





S 176th St – Potential Countermeasures

- Upgrade curb ramps (eastern) to be fully ADA compliant (directional ramps with truncated domes)
- 2. Pedestrian signal recall, if not already present
- 3. Improve signal hardware: lenses, back-plates, mounting, size, and number (addresses southbound crashes that involve vehicles heading straight)
- 4. Install pedestrian scramble phase (all-way walk) to serve all three corners at once





S 200th St – Potential Countermeasures

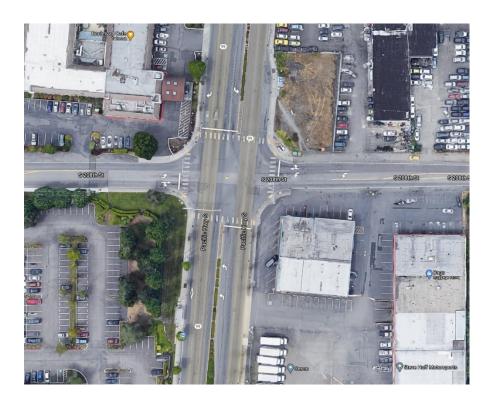
- Roadway reconfiguration fill in bus pullout at northeast leg to shorten pedestrian crossing distance
- 2. Move bus stop closer to intersection
- 3. Pedestrian signal recall, if not already present
- 4. Signage at bus stop "use crosswalk"
- Median fencing at northern leg (near term solution)





S 208th St – Potential Countermeasures

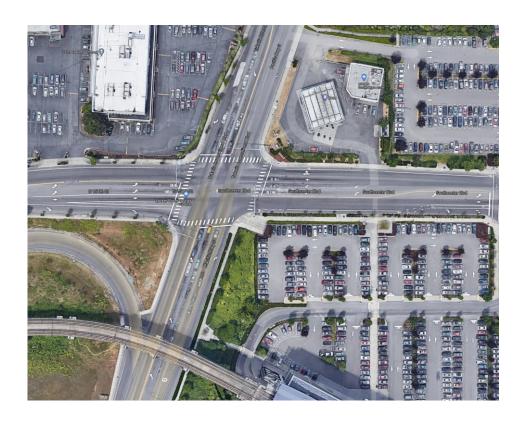
Install median fencing at southern leg (near term solution)





S 154th St – Potential Countermeasures

Curb radius reduction on SE/NW corner





Pedestrian Safety Along International Boulevard Prioritized Intersection Projects

Location	Countermeasures	Intersection Rank	Weighted Pedestrian Injury Score
International Blvd and S 188th St	 > Fill in Bus Pull Out > Move bus stop closer to intersection > Pedestrian signal recall (assumed absent) > Add signage R9-3bP Use Crosswalk > Install median fencing at southern leg 	1	28
International Blvd and S 176th St	 Upgrade curb ramp Pedestrian Signal Recall* (assumed absent) Improve signal hardware: retroreflective backplate Install pedestrian scramble 	2	21
International Blvd and S 154th St	Curb radius reduction on SE/NW corner	3	9
International Blvd and S 208th St	> Install median fencing at southern leg	4	10
International Blvd and S 200th St	 > Fill in Bus Pull Out > Move bus stop closer to intersection > Pedestrian signal recall (assumed absent) > Add signage R9-3bP Use Crosswalk > Median fencing at northern leg 	5	11



Pedestrian Safety Along International Boulevard Prioritized Corridor Projects

Countermeasure	Corridor Wide Rank (out of 5 assessed)
Install Leading Pedestrian Interval at each signalized intersection (assumed all locations for analysis)	1
Reduce posted speed limit to 30 MPH along corridor	2
Install pedestrian countdown signals at locations where not already present (assumed all locations for analysis)	3
Stripe lane lines along International Boulevard	4
Install new pedestrian crossings at locations where crossings are more than 1/4 mile apart (5 new crossings total)	5



QUESTIONS?



Thank you

