Sidewalk Committee
Virtual Meeting Agenda
December 17, 2020
6:00 PM to 7:00 PM

Due to the current COVID-19 public health emergency, and social distancing protocols, pursuant to the Governor's and public health officials' orders, this meeting will be conducted virtually. The meeting is live streamed on SeaTV and the City's website. The public may also call in to the conference line to listen to the meeting. The number is 206-973-4555. While you will be able to hear the meeting, you will not be able to participate in the meeting. Please note that if you are unable to mute your phone, everyone else on the call-in line will be able to hear you, so please refrain from speaking. City Hall will be closed so no one will be able to physically attend this meeting.

Council
Pam Fernald, Chair
Takele Gobena
Stanley Tombs

Note: A quorum of the Council may be present.

Community Members
Jill Aldrich
Kathleen Brave
David Korthals
Paul Jackson
Miranda Hemmings
Trevor White

Staff Coordinators
Will Appleton
Public Works Director
Florendo Cabudol
City Engineer

ITEM	TOPIC	PROCESS	WHO	TIME
1	Call to Order		Chair	
2	Public Comment	**PUBLIC COMMENTS (any topic):** In an effort to adhere to the social distancing protocols, pursuant to the Governor's and public health officials' orders, and in order to keep our residents, Council, and staff healthy, the Council Committee will not hear any in-person public comments during this COVID-19 public health emergency. The Committee is providing remote and written public comment opportunities. All comments shall be respectful in tone and content. Signing-up for remote oral comments or providing written comments must be done by 2:00 PM the day of the meeting. • Instructions for providing remote oral public comments are located at the following link: Council Committee and Citizen Advisory Committee Virtual Meetings. Submit email/text public comments to SWPublicComment@seatacwa.gov. The comment will be mentioned by name and	Chair	5

		subject and then placed in the committee handout packet posted to the website. Public comments submitted to an email address other than the provided address, or after the deadline, will not be included as part of the record.		
3	Approve Prior Meeting Minutes	Oct 15 Minutes to be approved	Chair	
4	International Blvd Pedestrian Safety Crossings and Local Road Safety Program	Draft Findings by Toole Design Group/ Informational	Mason Giem	45
5	Sidewalk Projects Update	Update	Florendo Cabudol	10
6	Adjourn		Chair	

Sidewalk Committee Meeting Agenda

October 15, 2020
6:00 PM to 7:00 PM
Virtual Meeting

Commenced: 6:00 PM
Adjourned: 7:00 PM

Present:

Council
Pam Fernald, Chair P
Stanley Tombs P
Takele Gabena P

Note: A quorum of the Council may be present.

Community Members
Paul Jackson P
Jill Aldrich P
Kathleen Brave P
David Korthals P
Miranda Hemmings A
Trevor White (future)

Staff Coordinators
Will Appleton
Public Works Director
Florendo Cabudol
City Engineer

Other Councilmembers Present:

Other Staff Members Present:
Gwen Voelpel, Deputy City Manager; Mason Giem, Pw Programs Coordinator

Approve Prior Meeting Minutes

ITEM	TOPIC	PROCESS	WHO	
1	Call to Order	Chair Fernald	Chair	
2	Public Comment	No public comment	Chair	
4	IB Pedestrian Safety Crossings and Local Road Safety Program	Mr. Giem gave an introduction to the International Boulevard Pedestrian Safety Study and the Local Road Safety Plan. This included a description of the two distinct but interrelated safety programs currently underway. The first is Pedestrian Safety Improvements along International Boulevard and the second is a Local Road Safety Plan. The purpose of the presentation was to gather feedback from committee members on the two plans. The first phase (pedestrian safety along International Boulevard) began in August	Mason Giem, Public Works Programs Coordinator	

		2020 and will be complete by June 2021. The second phase (Local Road Safety Plan) will begin in December 2020 and will be completed by December 2021. The intended project outcomes are: • Plan and design project(s) along International Boulevard in SeaTac that will make it safer for pedestrians to use this transportation and business corridor. • Create a comprehensive plan that assesses the most critical safety issues for SeaTac's local roadways and proposes specific strategies and countermeasures to address them. At least one safety project in the plan will be designed through construction documents (ready to build). Staff explained that there are currently other projects happening in the same area. These include the SeaTac/ Airport Station Area Pedestrian Improvement Project, the SeaTac Housing Action Plan and in the future there will be the Phase 2 Sub-Area Plan for Airport Business District/ Station Area. Gabriel Silberblatt, MCP, from BDS Planning and Urban Design then proceeded with the discussion section. The first question was, "What are the greatest opportunities for improving pedestrian safety on International Boulevard in SeaTac?" The Committee asked if the City of Tukwila will be involved. Gabriel responded that he has spoken to Tukwila City Council member Quinn and received feedback from him. The Committee asked if 32nd Ave South street was part of this study. Gabriel responded that it is not but is being worked on as part of SeaTac/Airport Station Area Pedestrian Improvement Project. The Committee would like to make sure that King County Metro has an opportunity to provide feedback and they say the bus stop down by 200th and International Blvd is dangerous.	Approve Prior Meeting Minutes	

		The Committee commented that there is a big need for overhead Lighting. The Committee asked about the possibility of an all-ways cross walk. Toole Design responded that an all ways crosswalk along International Boulevard is not feasible because the road is too wide to make the timing work. The Committee mentioned that they would like sound at all crosswalks. The Committee stated that there is a lot of truck traffic south of Angle Lake and trucks are having to make wide difficult turns cause traffic problems. The Committee stated that some ideas might have to go on the back burner due to financial constraints. The Committee stated that they would like to explore overhead pedestrian crossings, for instance at South 200th Street. The Committee suggested adding way finding signs for pedestrians, lowering the speed limit and adding bike lanes. Questions may be sent to Mason Giem at mgiem@seatacwa.gov	Approve Prior Meeting Minutes	
5	Sidewalk projects update	City Engineer presented a PowerPoint of current and upcoming projects. This PowerPoint presentation is uploaded to the calendar item on October 15 on City's website.		
6	New Sidewalk Member Introduced	Paul Jackson, our newest Sidewalk Committee member, was introduced	Chair	
7	Adjourn		Chair	

MEMORANDUM

To: Sidewalk Committee
Through: William Appleton, Public Works Director
From: Mason Giem, Public Works Programs Coordinator
Date: December 17, 2020
Subject: Pedestrian Crossings along International Boulevard Study

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BUDGET SIGNIFICANCE: none

Purpose:

To obtain feedback from committee on potential solutions to safety issues identified by the draft outreach and crash analysis of International Boulevard.

Background:

- The **Scope**: Two distinct, but interrelated safety programs for the City of SeaTac
    1. Pedestrian safety crossing improvement projects on the International Boulevard (IB) 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.
- **Timeline:** Phase 1: August 2020 – June 2021; Phase 2: April – December 2021.
- **Intended Project Outcomes:**
    - Plan and design project(s) along International Boulevard in SeaTac that will make it safer for pedestrians to use this transportation and business corridor.

- Create a comprehensive plan that assesses the most critical safety issues for SeaTac's local roadways and proposes specific strategies and countermeasures to address them. At least one safety project in the plan will be designed through construction documents (ready to build).
-

Related Projects:

1) The IB corridor safety project is one of multiple projects the City will be building adjacent to the airport and light rail station over the next few years.

2) These projects are continuations of the visioning and urban design framework project the City undertook last year. In addition to the IB safety corridor study, they include:

- **SeaTac/Airport Station Area Pedestrian Improvement Project**: Focused on design and construction of sidewalk and road improvements near the light rail station along part of S 176th St, 32nd Ave S and S 180th St.
- **SeaTac Housing Action Plan**: This plan will identify how the City can support strategies to increase the supply and type of housing for all income levels throughout the City and specifically near light rail stations.
- **Phase 2 Sub-Area Plan for Airport Business District/Station Area:** Once funding has been identified, the City will begin Phase 2 of the vision/urban design framework project, which will complete a long-term growth and development plan for the airport business district and station area.

3) The City is developing community and stakeholder engagement processes for these projects and are interested in interviewee input in any/all of these projects.

Prioritization Metrics:

This memo is intended to detail how potential countermeasures and projects may be identified and prioritized to improve pedestrian safety along International Boulevard in the most cost-effective and impactful manner.

The outcome of the prioritization process will be a list of projects and scores for each variable, as well as an aggregate score. Including separate scores for each variable allows for scenario-building, provides greater transparency, and helps communicate project benefits during implementation.

Process for Countermeasure succession

The overall process for identifying potential countermeasures first involved development of a countermeasure toolbox. This was drawn from multiple sources, including NCHRP 926 - Guidance to Improve Pedestrian and Bicyclist Safety at Intersections, Target Zero - Washington State's Strategic Highway Safety Plan, and California's Local Roadway Safety Manual (which specifies countermeasures that have been thoroughly researched and verified as to their quantifiable safety benefits). In addition, Toole Design identified countermeasures and programs not included in these sources that are particularly relevant for the International Boulevard corridor. Information for each countermeasure is provided, included details on crash modification factors, cost, applicability along International Boulevard, and crash types addressed.

Countermeasures from this toolbox were then identified to address the top five high-priority locations along the corridor identified from the crash analysis, in alignment with WSDOT's process for project identification in the Local Roadway Safety Plans. In addition to the top five high-priority locations, the entire corridor was reviewed to ensure that systemic safety opportunities were maximized.

Factors and Variables

Prioritization will consist of two elements: location priority and benefit-cost comparison. Each of these elements include one or more factors. Further, some of these factors have several variables based on how the factor is best measured, as outlined in Table 1 below. Additional background information is provided on page 3 for the benefit-cost comparison metrics.

Table 1. Proposed Prioritization Factors

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 MPH	1 point if crosswalk crosses six or more lanes 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 – 176th St and 200th 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 other similar pedestrian destination.	1 point if pedestrian destination is present within 500' of the roadway per intersection leg (4 points possible)
Benefit-cost comparison		
Benefit-Cost Ratio	When CMFs are available: apply expected crash modification factor to the value of observed crash history, calculated using Equivalent Property Damage Only (EPDO) criteria. Divide by the estimated cost to obtain the Benefit Cost Ratio. (See below)	10 points if BCR is in top third 5 points if BCR is in middle third 0 points if BCR is in bottom third
[or]		
Generalized benefit vs. cost	When CMFs are not available, either because the recommendation is programmatic or because a CMF has not yet been evaluated, develop a generalized high-medium-low benefit/cost ratio based on estimated costs as well as expected safety benefit informed by research and engineering judgment.	10 points if generalized benefit vs. cost is high 5 points if generalized benefit vs. cost is medium 0 points if generalized benefit vs. cost is low

Benefit Cost Ratio Development

Development of a Benefit Cost Ratio (BCR) is based on the estimated cost of each countermeasure compared to the expected safety benefit. The BCR is developed by multiplying the countermeasures' Crash Modification Factor by the cost valuation of the location's applicable crash history. The cost valuation is assigned using the Equivalent Property Damage Only (EPDO) method. This method weighs crashes according to the highest severity injury sustained in the crash by converting each crash to an equivalent number of property damage only (PDO) crashes. For example, a crash that results in a possible injury is "worth" approximately 10 PDO crashes, whereas a fatal crash is worth approximately 231 PDO crashes. These EPDO factors are informed by the comprehensive societal costs of crashes. The EPDO technique is utilized because normalizing crashes to a base unit in this way allows crashes to be easily compared, which is helpful during prioritization efforts. Additionally, subcategories of crashes can be compared based on the average EPDO score per crash type to identify which types resulted in higher severity injuries. Total EPDO scores are a measure of overall crash intensity and the average EPDO score per crash is a measurement of average crash intensity/severity. Table 2 crash costs were provided by WSDOT. The project's expected benefit will be developed by multiplying the crash reduction factor by the EPDO score of the applicable crash history. This value is divided by the countermeasure's cost, resulting in the BCR. Higher BCRs reflect higher cost effectiveness for safety impacts.

Table 2. Washington State Crash Costs (2020 Values)

Crash Severity	EPDO Score	Comprehensive Crash Cost
Fatal (K)[1], Suspected Serious Injury (A)	231.31	$3,423,400
Suspected Minor Injury (B)	16.04	$237,400
Possible Injury (C)	9.61	$142,300
Property Damage Only (PDO)	1.0	$14,800

Generalized Benefits vs. Cost Comparison

Not all pedestrian safety countermeasures have been rigorously studied, and many have yet to be assigned a Crash Modification Factor. In addition, Crash Modification Factors are not assigned to programmatic countermeasures such as education and outreach programs. Because of this, an additional method is needed to review and prioritize benefits and costs qualitatively. To do this, the countermeasures' cost will be compared with the overall safety expectation of the

[1] Refers to Injury Severity Levels used by WSDOT (KABCO scale)

countermeasure based on research and engineering judgement. This will enable a relative comparison of costs and benefits.

Questions

- Do you have feedback on the prioritization metrics?
- Do you have other thoughts on the proposed projects?

Attachments:

- PowerPoint Presentation with draft list of prioritized projects.

International Boulevard Pedestrian Safety Study and Local Road Safety Plan

December 17th, 2020

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

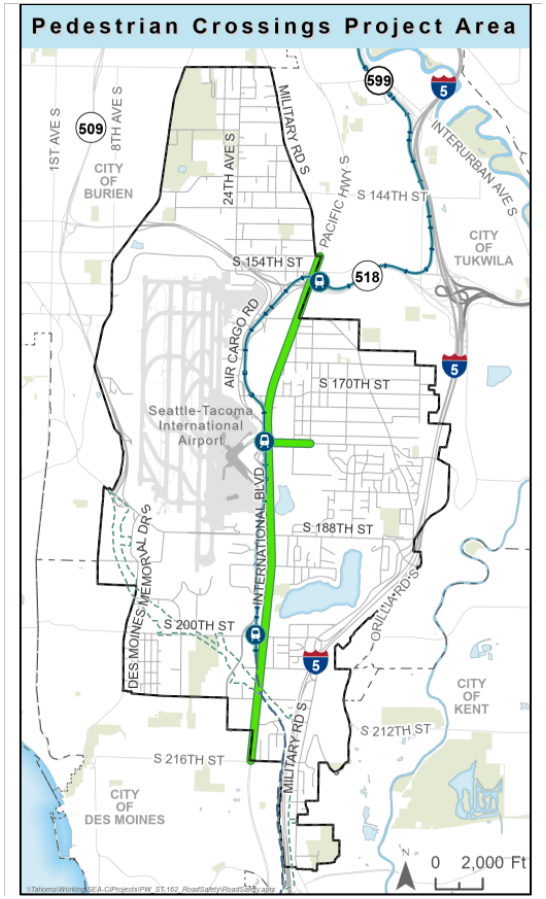
- The **Scope**: Two distinct, but interrelated safety programs for the City of SeaTac
  1. Pedestrian safety crossing improvement projects on the International Boulevard corridor, from South 152nd Street to South 216th Street.
  2. Preparing a citywide Local Road Safety Plan that will propose strategies 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
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High Pedestrian Activity Location: Destinations	Location is adjacent to restaurant, bar, grocery store, retail, school, park, or other similar pedestrian destination.	1 point if pedestrian destination is present within 300' of the intersection, per intersection leg (4 points possible)
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		Total Points Possible: 24

QUESTIONS?

Potential Corridor Wide Countermeasures

Corridor Wide

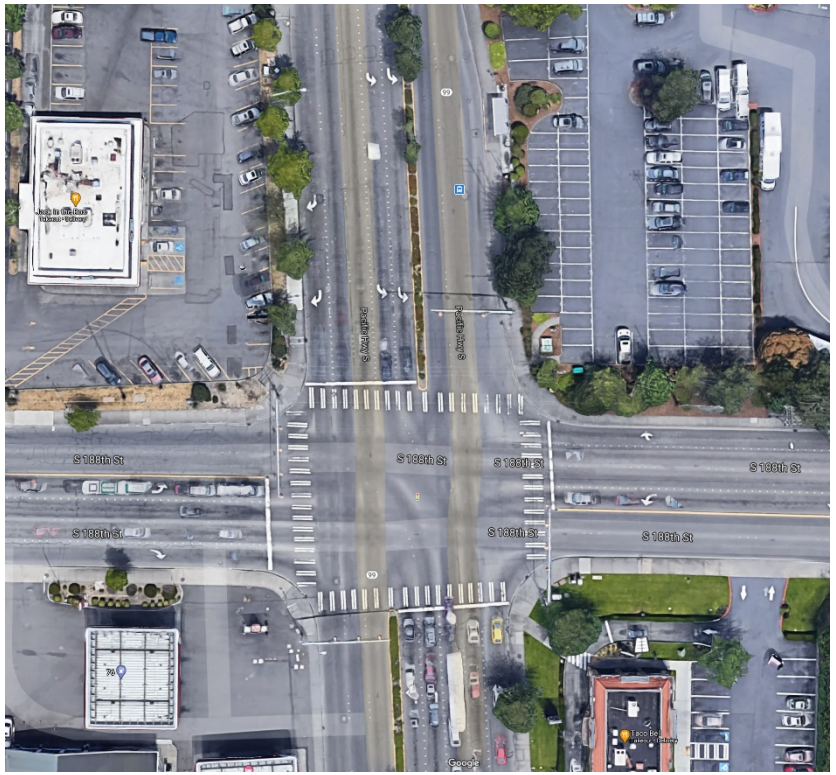
1. Reduce posted speed limit to 30 MPH along corridor
2. Install Leading Pedestrian Interval at each signalized intersection
3. Re-evaluate signal timing (in conjunction with reduced posted speed limit)
4. Install “No turn on red” signs at each signalized intersection
5. Evaluate corridor for lane removal 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

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

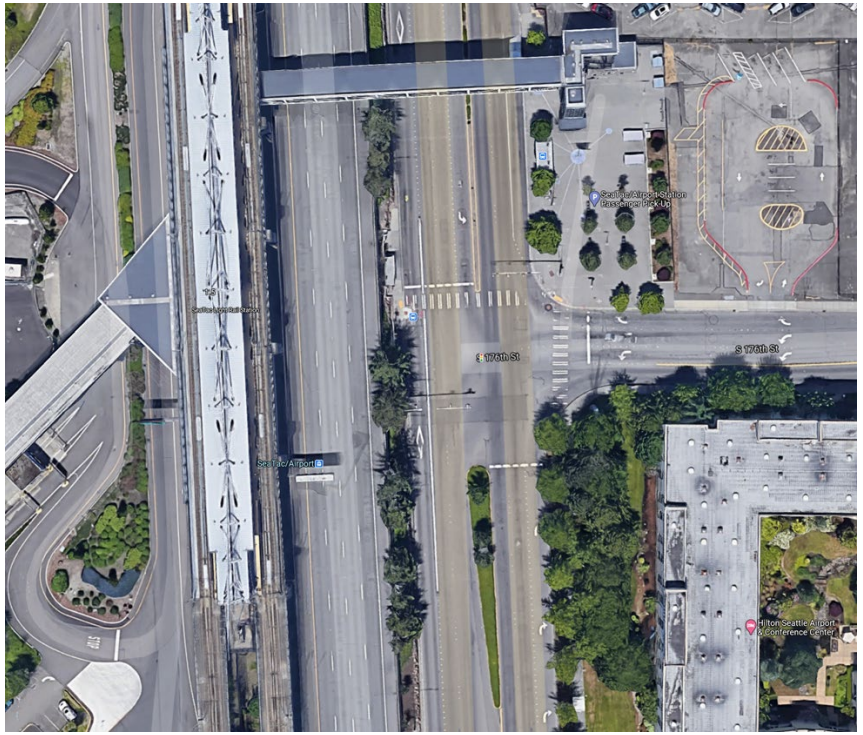
S 188th St – Potential Countermeasures

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

1. 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

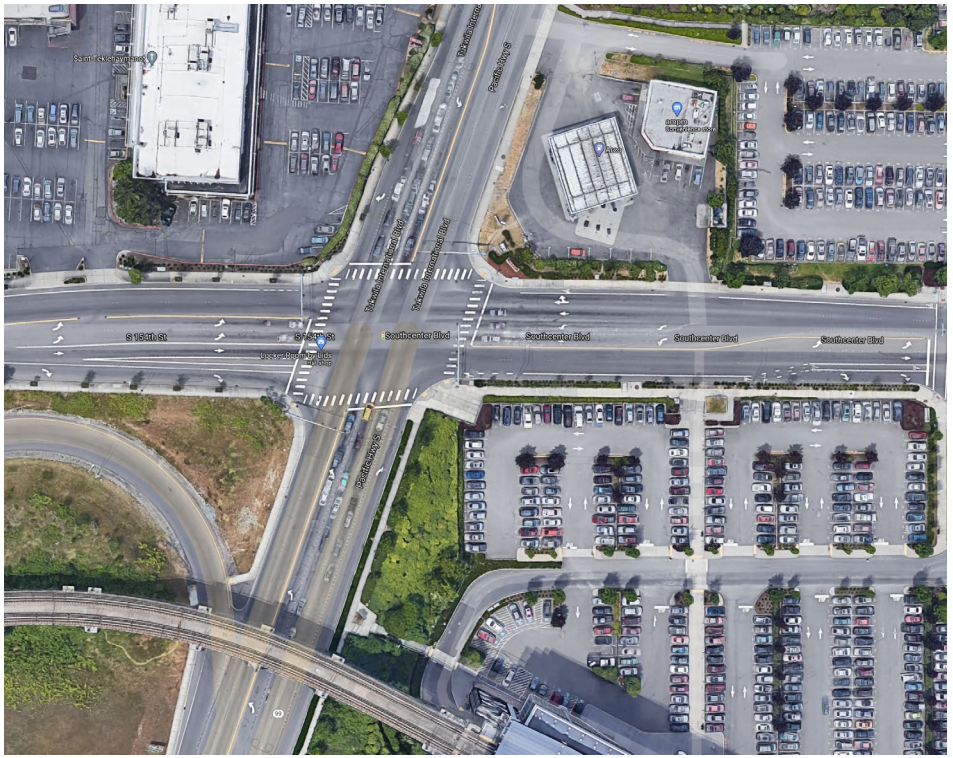
1. Roadway reconfiguration - fill in bus pullout at northeast leg to shorten pedestrian crossing distance
2. Move bus stop closer to intersection
3. Pedestrian signal recall, if not already present
4. Signage - at bus stop "use crosswalk"
5. Median fencing at northern leg (near term solution)

S 208th St – Potential Countermeasures

1. Install median fencing at southern leg (near term solution)

S 154th St – Potential Countermeasures

1. Curb radius reduction on SE/NW corner



Pedestrian Safety Along International Boulevard

- **Prioritized List of Projects**

QUESTIONS?

Thank you