

Welcome!



Study Update Meeting



KPG

Intersection Studies on 156th Avenue SE

APRIL 3, 2019

6:00-8:00 PM

LAKE HILLS COMMUNITY CLUB



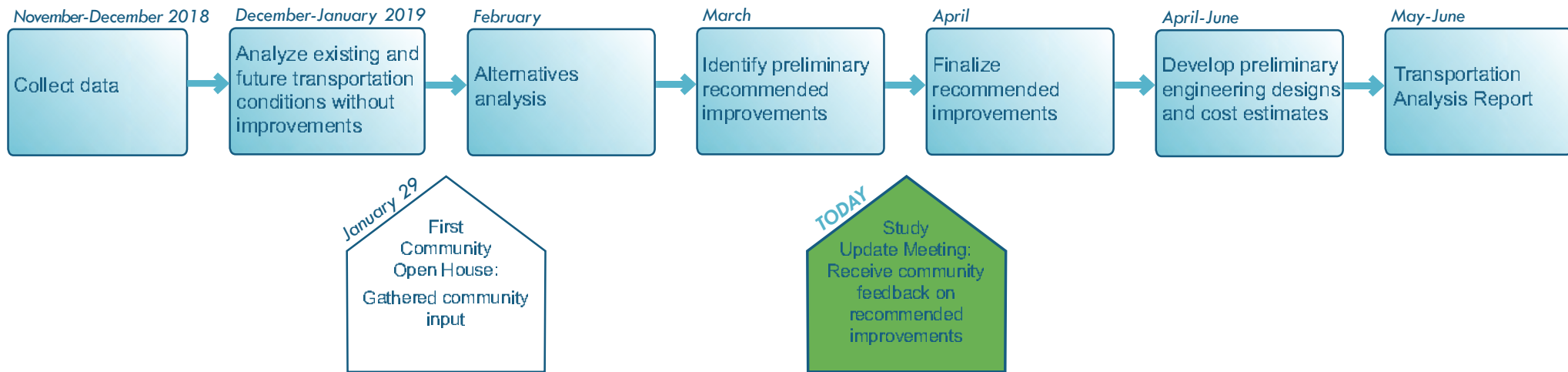
1. Purpose, Planning Process, and Schedule



Purpose

Identify improvements at three intersections on 156th Avenue SE to address safety, traffic flow, non-motorized mobility while considering cost and property and neighborhood impacts.

Planning Process and Schedule



Possible Future Steps:

- Secure funding
- Complete design
- Construct improvements



2. Study Intersections



3. City of Bellevue Projects in the Area

There are numerous other transportation safety and connectivity projects along 156th Avenue that will be under construction in 2019. These projects are funded by the city's Neighborhood Safety, Connectivity and Congestion Levy.





The first open house shared information about the project and collected community input about issues, concerns and ideas for the three study intersections.

Information Shared:

- **Existing Conditions** - Review of safety history, traffic operations, and non-motorized facilities.
- **Future Conditions** - Afternoon peak hour vehicle delays at the intersections are expected to increase between 56-67% by 2035.
- **Traffic Control Improvement Options:**
 - » Maintain all-way stop signs
 - » Traffic signal
 - » Roundabout

A printed packet of the January 29 Open House boards is available below.



Over 60 people attended the January 29 Open House and 49 comments were received via comment form, e-mail, and phone.

A summary of the comments showed:

- Support for pedestrian safety and mobility improvements at all three intersections.
- Support for new signals or roundabouts to reduce congestion at the three intersections. However, there was a similar number of comments expressing concern that congestion improvements will increase traffic volumes.
- Support for making the SE 24th Street-SE 22nd Place (5-legged) intersection less confusing.





Intersection alternatives include these primary improvements:

- Construct roundabout or signal, or maintain existing all-way stops
- Add/upgrade sidewalks and crosswalks
- Enhance lighting and landscaping
- Integrate 156th Avenue SE bike lane project

Evaluation Criteria:

- Congestion reduction (vehicle delay and queueing)
- Safety
- Community input
- Pedestrian and bicycle mobility
- Neighborhood character
- Property impacts (intersection widening)
- Environmental impacts (wetlands, trees)
- Construction cost



Lake Hills Boulevard

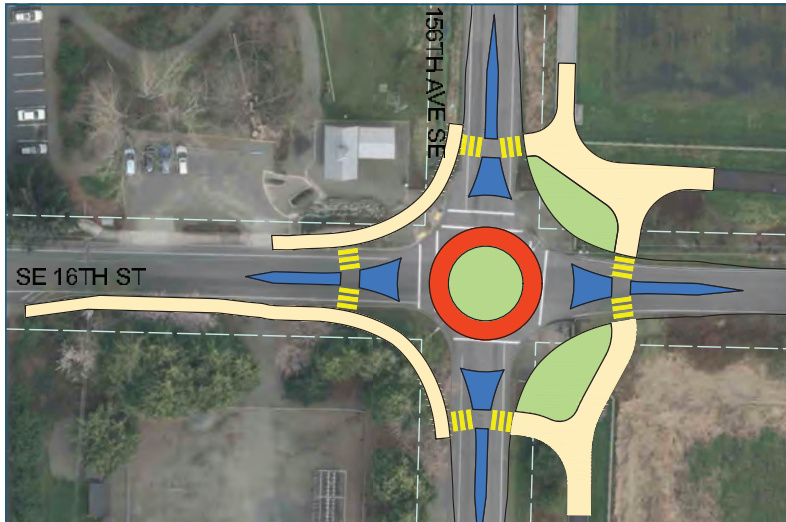


- Roundabout has the largest impacts to adjacent properties and driveways, and highest construction cost compared to other alternatives.

LEGEND:

	CONCRETE WALK
	PLANTED ISLAND
	MOUNTABLE ISLAND
	SPLITTER ISLAND

SE 16th Street



- Roundabout will impact wetlands, increasing construction costs.
- SE 16th Street has the lowest vehicle delay of the three intersections.

SE 24th Street-SE 22nd Place



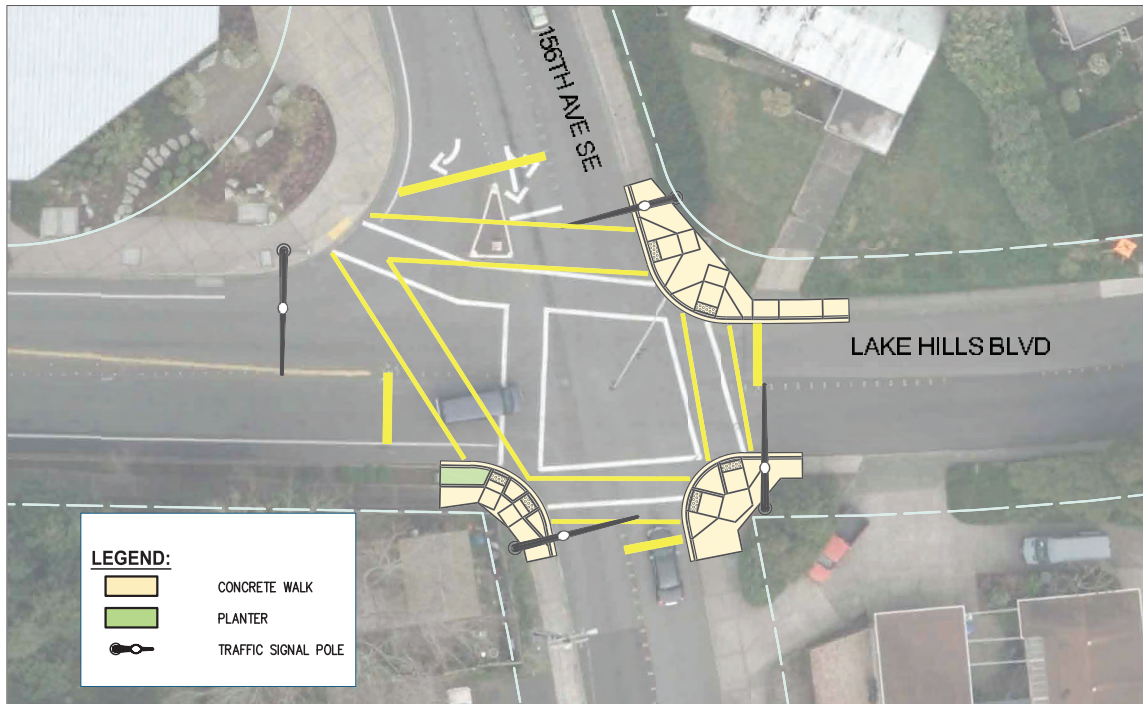
- Roundabout has the greatest impacts to adjacent properties, and requires leveling of steep grades, which makes it the highest cost alternative.
- Intersection will be monitored and a roundabout may be reevaluated as a separate future project.

8. Lake Hills Blvd Intersection Characteristics



- Experiences delays and queuing during the morning and afternoon commutes.
- High number of southbound right turning vehicles necessitates a separate right turn lane.
- King County Metro route 226 operates on the west and north legs of the intersection.
- Experiences an average of 3.5 reported collisions per year, mostly angle collisions where one driver fails to yield the right of way or runs the stop sign.
- Intersection has a compact layout and widening would likely impact adjacent properties.

9. Lake Hills Blvd Preliminary Recommended Alternative



Traffic Signal Alternative

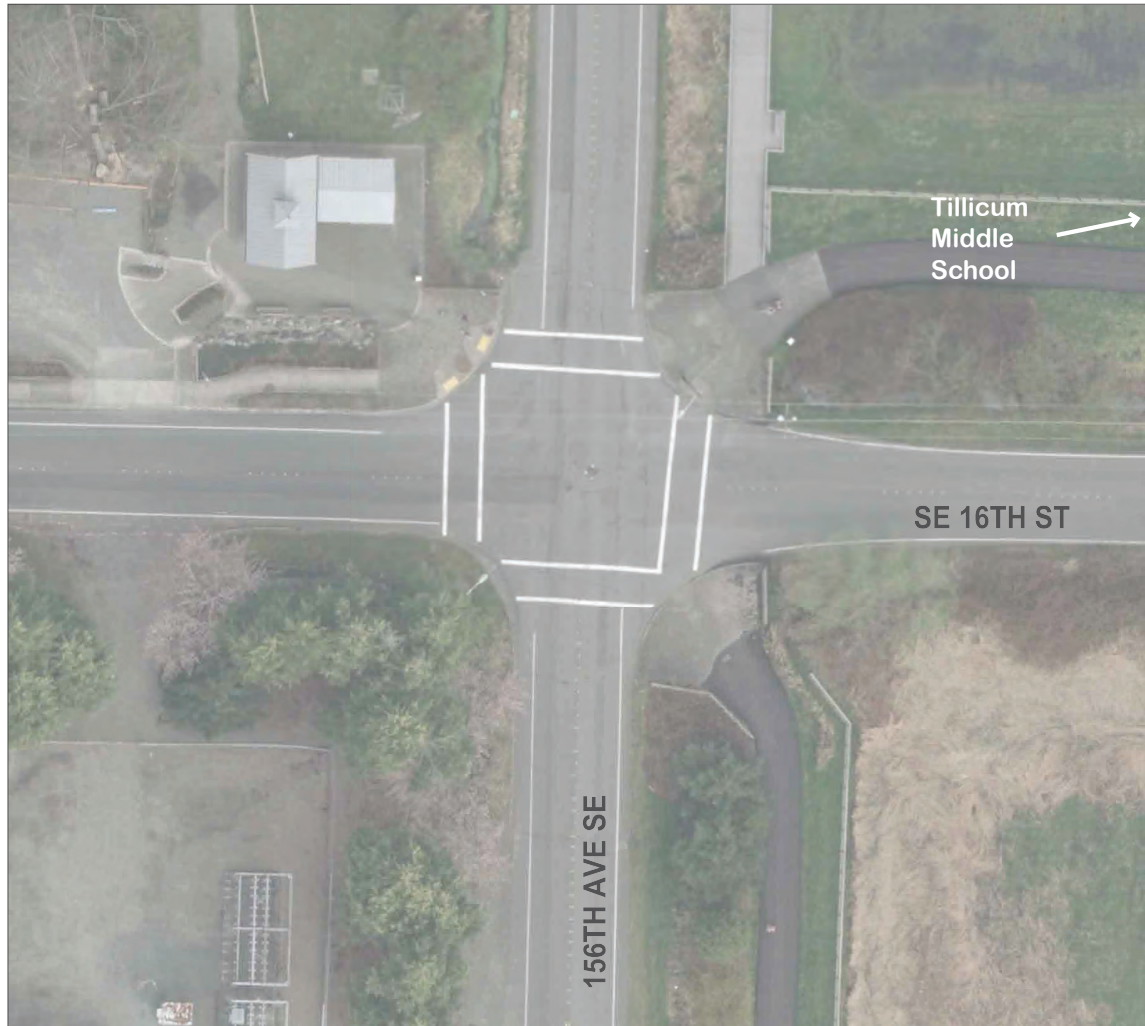
- Signal reduces traffic delays and vehicle queueing.
- Enhances safety by not allowing southbound right turns on red during pedestrian crossing phases.
- Signal creates platoons of vehicles; gaps in traffic make it easier to access side streets and driveways.
- Smaller intersection footprint with less impact to adjacent properties and driveways compared to roundabout.

Traffic Delay Comparison

Lake Hills Boulevard	Seconds of Delay	
	AM	PM
Existing (2018) All-Way Stop	33	42
Baseline (2035) All-Way Stop	96	70
Recommended (2035) Signal	26	19



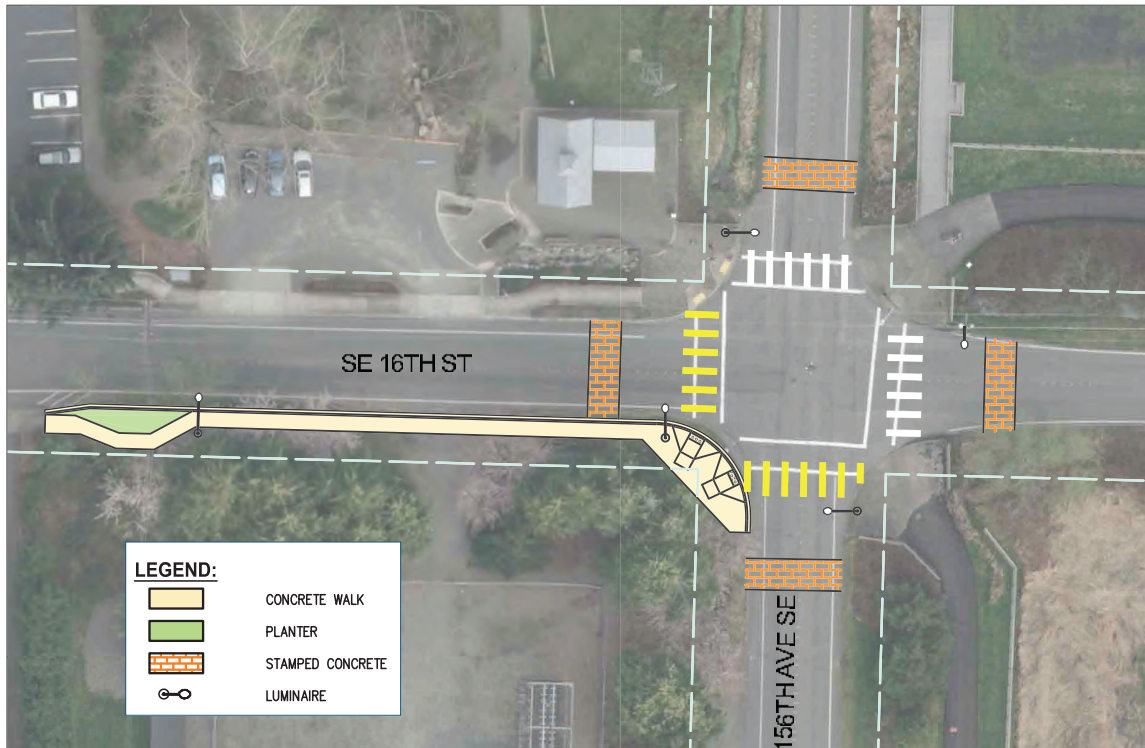
10. SE 16th Street Intersection Characteristics



- Intersection has limited sidewalks, but there are trail crossings at the north and east legs.
- Tillicum Middle School is located 0.4 miles to the east.
- Bike lanes are planned along SE 16th Street as part of a future project.
- Experiences an average of 1.6 reported collisions per year.
- Widening for intersection improvements may impact wetland areas.



11. SE 16th Street Preliminary Recommended Alternative



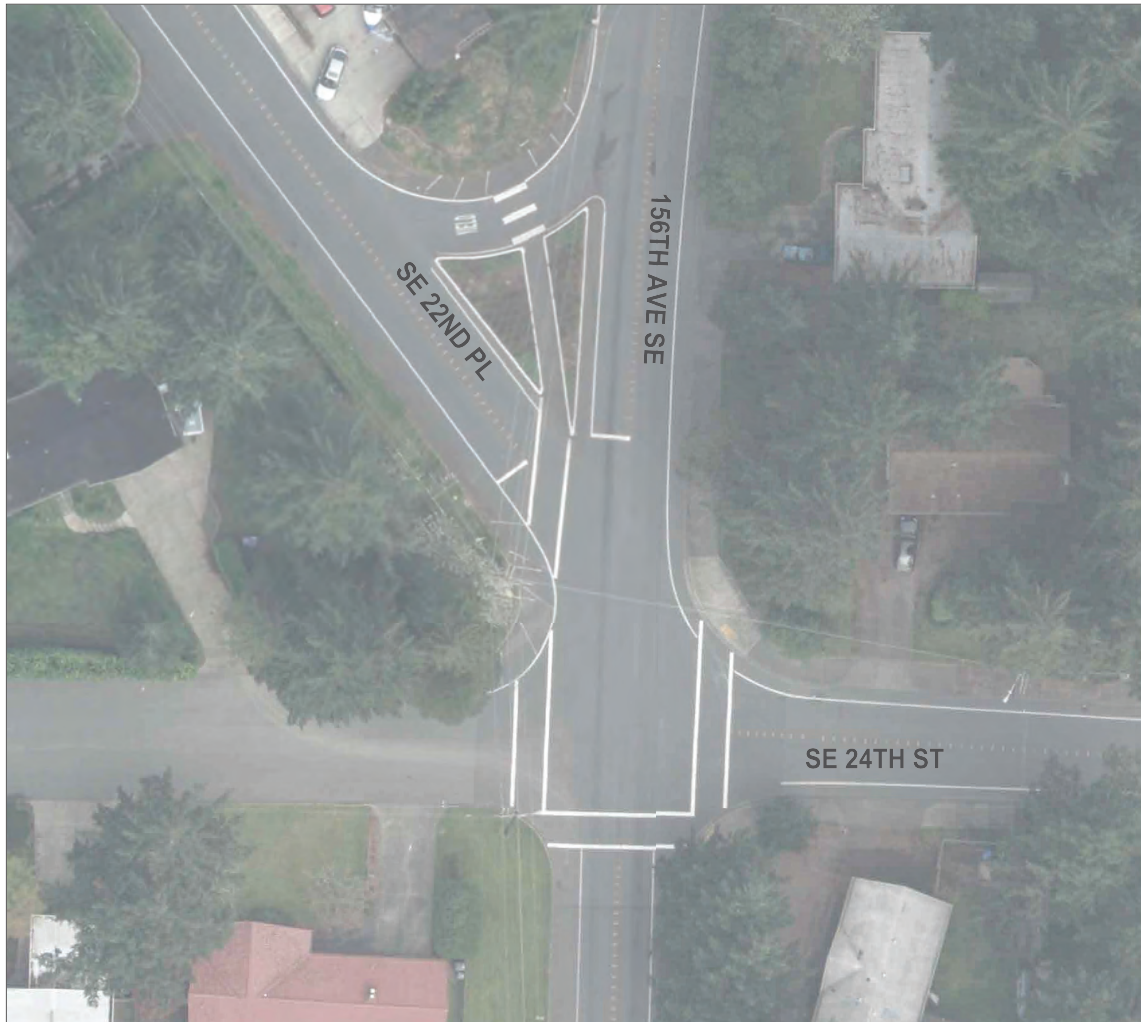
Enhanced All-Way Stop

- Retains all-way stop control with single lane approaches.
- Stamped concrete enhances visibility of crosswalks.
- New sidewalk on south side of SE 16th Street, west of the intersection.
- Improved street and pedestrian lighting.
- Intersection forecast to operate with the least delay of the three intersections.
- Smaller intersection footprint with less impact to adjacent wetlands compared to roundabout.

SE 16th Street	Seconds of Delay	
	AM	PM
Existing (2018) All-Way Stop	18	27
Baseline (2035) All-Way Stop	39	42
Recommended (2035) All-Way Stop	39	42



12. SE 24th Street Intersection Characteristics



- 5-legged intersection is inefficient for traffic operations. Intersection experiences delays and queuing during peak travel times.
- Limited sidewalks and no marked crosswalk at north leg of intersection.
- King County Metro route 221 operates on SE 22nd Place and on the east leg of SE 24th Street.
- Experiences an average of 1.3 reported collisions per year.
- Improvements may impact adjacent properties and steep grades will increase improvement costs.

13. SE 24th Street Alternative 1: 4-Leg Stop Control



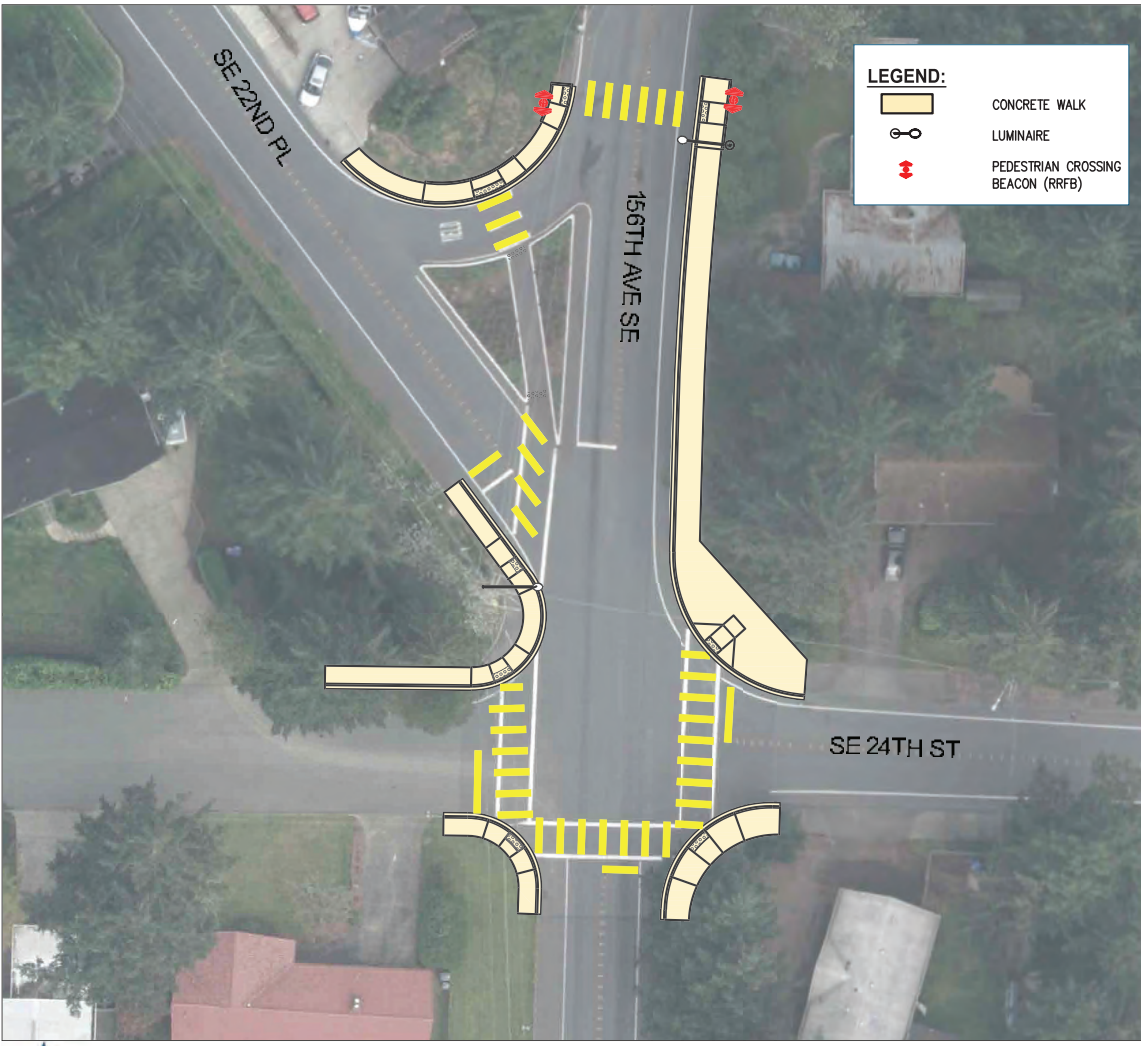
All-Way Stop (Reduced from 5 Legs to 4 Legs)

- Simplifies vehicle and pedestrian operations by closing west leg of SE 24th Street and creates vehicle turnaround.
- Adds a marked crosswalk with flashing beacon (RRFB) north of the intersection.
- Enhanced intersection lighting.
- Maintains emergency vehicle access to west leg of SE 24th Street.
- Smaller intersection footprint with less impact to adjacent properties and driveways compared to roundabout.

SE 24th Street- SE 22nd Place	Seconds of Delay	
	AM	PM
Existing (2018) 5-Way Stop	31	38
Baseline (2035) 5-Way Stop	68	63
Alternative 1 (2035) 4-Way Stop	49	48



14. SE 24th Street Alternative 2: 5-Leg Stop Control



Maintains All-Way Stop With Pedestrian Improvements

- Adds a marked crosswalk with flashing beacon (RRFB) north of the intersection.
- Enhanced intersection lighting.
- Does not improve traffic operations.
- Least impact to adjacent properties and driveways compared to roundabout.

SE 24th Street- SE 22nd Place	Seconds of Delay	
	AM	PM
Existing (2018) 5-Way Stop	31	38
Baseline (2035) 5-Way Stop	68	63
Alternative 2 (2035) 5-Way Stop	68	63



15. Next Steps



- Review comments from tonight's open house and incorporate into alternatives: **April**
- Finalize recommended improvements and develop preliminary engineering designs: **April-June**
- Complete Transportation Analysis Report: **May-June**
- This project will compete with other projects for design and construction funding from the City of Bellevue's Neighborhood Safety, Connectivity & Congestion Levy: **Second half of 2019**

Please fill out a comment form and leave it with a staff person this evening.

