CITY OF BELLEVUE
NEIGHBORHOOD SAFETY, CONNECTIVITY & CONGESTION LEVY

Welcome!

Open House

KPG

Intersection Study on 156th Avenue SE

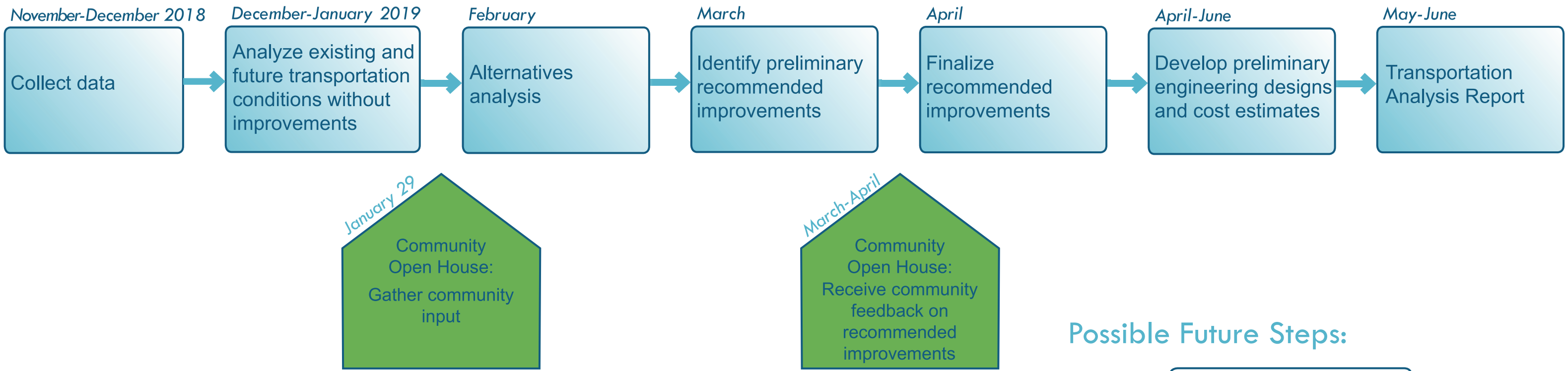
JANUARY 29, 2019
4:30-6:30 PM
LAKE HILLS LIBRARY

1. Purpose, Planning Process and Schedule

Purpose

Identify improvements at the three intersections to address safety, traffic flow, non-motorized mobility while considering cost and property and neighborhood impacts.

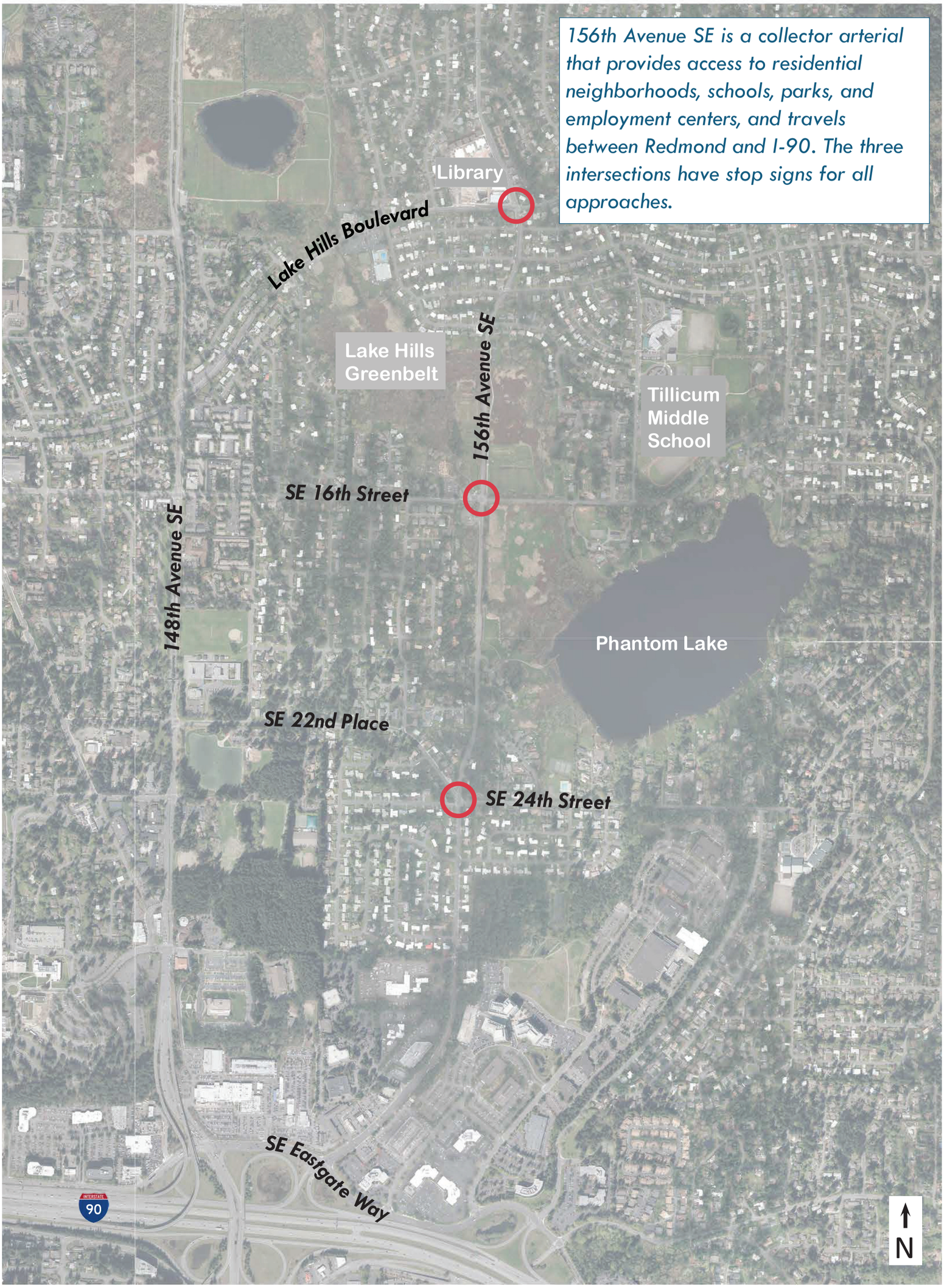
Planning Process and Schedule



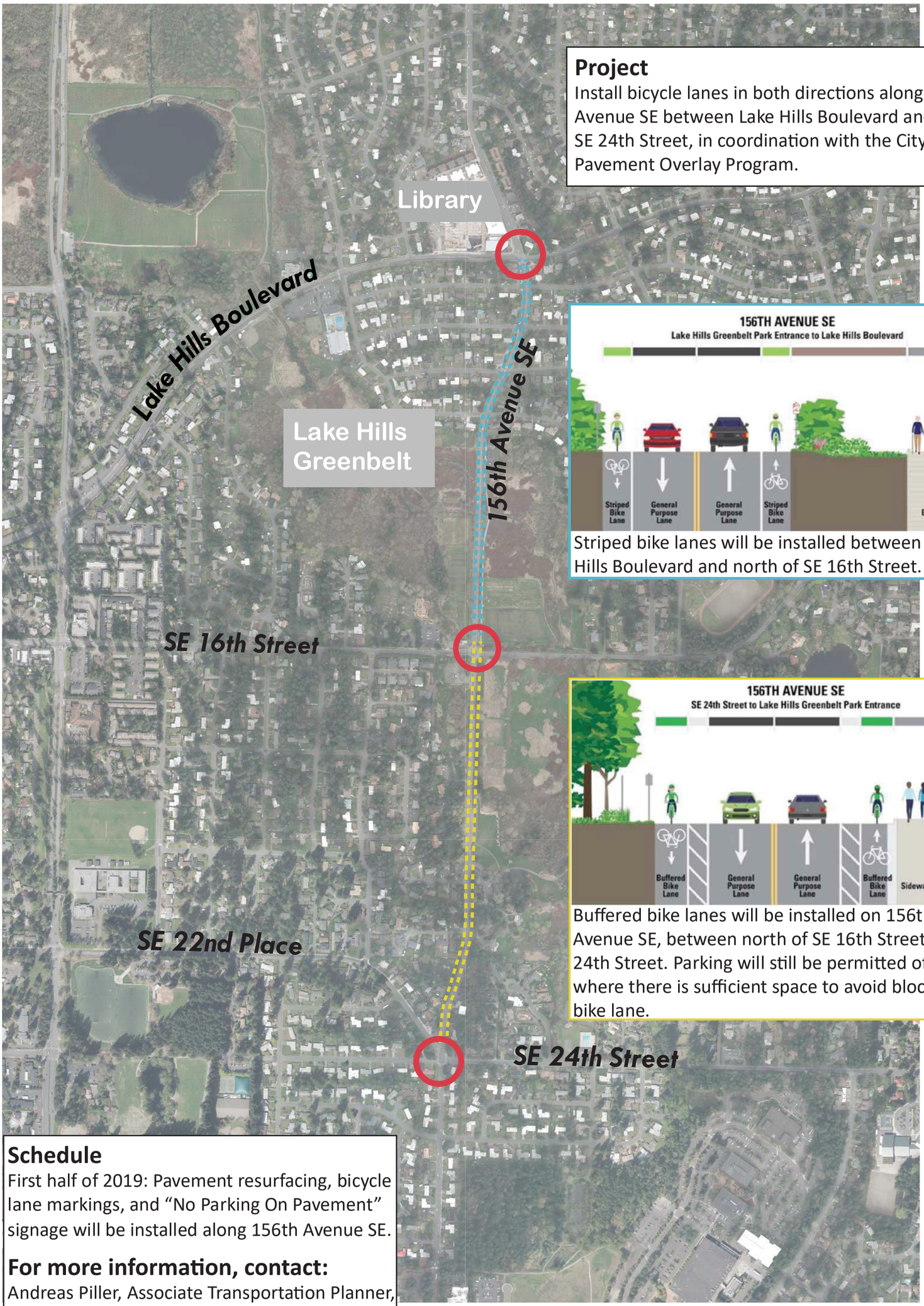
Possible Future Steps:

- Secure funding
- Complete design
- Construct improvements

2. Study Intersections



3. 156th Avenue SE Bike Project



Project

Install bicycle lanes in both directions along 156th Avenue SE between Lake Hills Boulevard and SE 24th Street, in coordination with the City's Pavement Overlay Program.

Striped bike lanes will be installed between Lake Hills Boulevard and north of SE 16th Street.

Buffered bike lanes will be installed on 156th Avenue SE, between north of SE 16th Street and SE 24th Street. Parking will still be permitted off-street where there is sufficient space to avoid blocking the bike lane.

Schedule

First half of 2019: Pavement resurfacing, bicycle lane markings, and "No Parking On Pavement" signage will be installed along 156th Avenue SE.

For more information, contact:

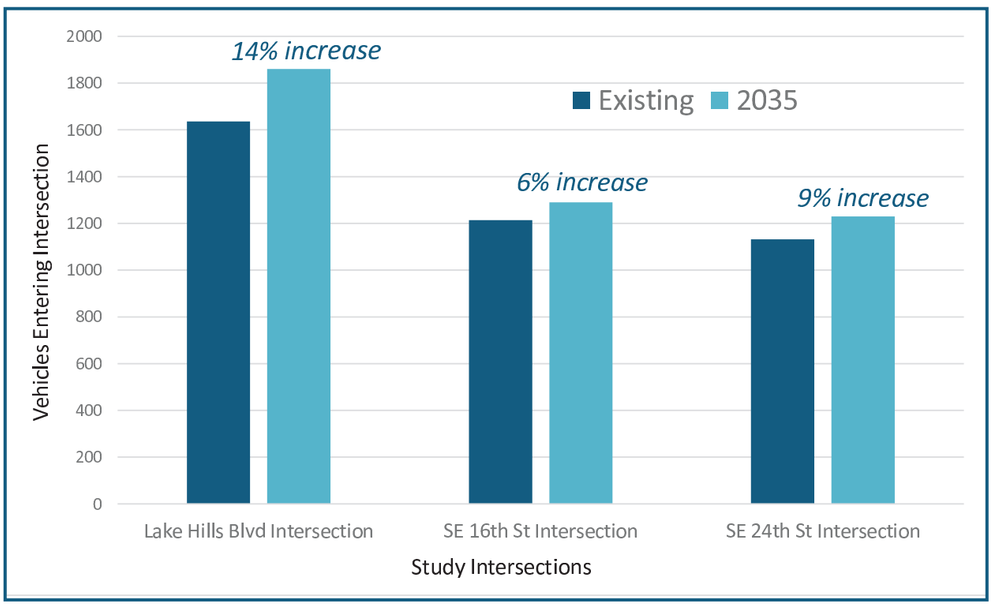
Andreas Piller, Associate Transportation Planner, apiller@bellevuewa.gov or 425-452-2931

4. Traffic Volumes & Operations

Existing Weekday Vehicle Volumes on 156th Avenue SE

- In the morning, northbound is the peak direction of travel.
- The highest weekday traffic volumes occur from approximately 5:00-6:00 PM when both directions carry between 350 and 450 vehicles per hour.
- Midday has moderate traffic volumes between 200 and 300 vehicles per hour.

Vehicle Volumes - Existing and Forecasted 2035 PM Peak Hour



- 2035 traffic volumes are based on the City's future population and employment forecasts.
- From 2018 to 2035, traffic volumes are expected to increase between 6% and 14% at the three intersections.

Average Vehicle Delay (Seconds) - Existing and Forecasted 2035 PM Peak Hour

Intersection	*Seconds of Delay*	
	Existing (2018)	*2035**
Lake Hills Blvd SE and 156th Ave SE	42	70
SE 16th St and 156th Ave SE	27	42
SE 24th St and 156th Ave SE	38	63

*Assumes all-way stop control at each intersection.

- All-way stop signs work best when traffic volumes are similar at each intersection approach, which leads to similar delays for each approach. Volumes and delays are higher on 156th Avenue SE compared to side streets.
- From 2018 to 2035, average vehicle delays at the intersections are expected to increase between 56% and 67% during the afternoon peak hour.

5. Lake Hills Boulevard & 156th Avenue SE Intersection

Intersection Characteristics:

- Experiences delays and queuing during the afternoon commute.
- Has a high number of southbound right turning vehicles, which necessitates a separate right turn lane.
- King County Metro route 226 operates on the west and north legs of the intersection.
- Includes sidewalks on all four approaches.
- Experiences an average of 3.5 collisions per year, mostly angle collisions where drivers fail to yield the right of way or run the stop sign.
- Intersection has a compact layout and widening for improvements would likely impact adjacent properties or buildings.

6. SE 16th Street & 156th Avenue SE Intersection

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 another future project.
- Experiences an average of 1.6 collisions per year.
- Widening for intersection improvements may impact wetland areas.

7. SE 24th Street & 156th Avenue SE Intersection

Intersection Characteristics:

- 5-legged intersection is inefficient for traffic operations and intersection experiences delays and queuing during peak travel times.
- Intersection has limited sidewalks.
- King County Metro route 221 operates on SE 22nd Place and the east leg of SE 24th Street.
- I-90 ramps are located 0.7 miles south of the intersection.
- Experiences an average of 1.3 collisions per year.
- Widening for improvements may impact adjacent properties or buildings.

8. Potential Improvements

The outcome of this study may include recommended improvements at each of the study intersections. If improvements are recommended, the City will need to acquire funding for design and construction.

Potential Intersection Improvements:

- Add/upgrade ADA-compliant sidewalks and curb ramps.
- Integrate planned bike lanes on 156th Avenue SE.
- Add/upgrade lighting, landscaping and stormwater improvements.
- Maintain existing all-way stops or construct roundabouts or signals.

Characteristics of All-Way Stops, Roundabouts and Traffic Signals

Categories	All-Way Stop (Existing)	Roundabout	Traffic Signal
Traffic Operations	• Results in significant delays and queuing with 2035 traffic volumes.	• Accommodates 2035 traffic volumes with minor delays and queuing.	• Accommodates 2035 traffic volumes with minor delays and queuing.
Traffic Calming and Corridor Volumes	• Traffic calming benefit as vehicles must stop.	• Traffic calming benefit as vehicles must reduce speeds to navigate the roundabout. • Improved operations may result in a minor increase in traffic volumes along the corridor.	• Improved operations may result in a minor increase in traffic volumes along the corridor.
Pedestrian and Bike Crossings	• All vehicles stop at intersection crosswalks.	• Single lane crossings with center refuge island.	• Provides a dedicated walk phase with the corresponding through traffic movement.
Collisions	• Collisions typically occur at lower speeds. • Typically higher occurrence of angle collisions.	• Design reduces the number of injury collisions such as angle and head-on crashes.	• Collisions may occur at higher speeds. • Typically higher occurrence of rear-end collisions.
Cost / Right of Way Requirements	• Lower construction and maintenance costs.	• Larger footprint at intersection will likely impact adjacent properties. • Low maintenance costs.	• Requires installation of signal equipment and widening for turn lanes. • Ongoing costs for maintenance of signal equipment.

9. Next Steps

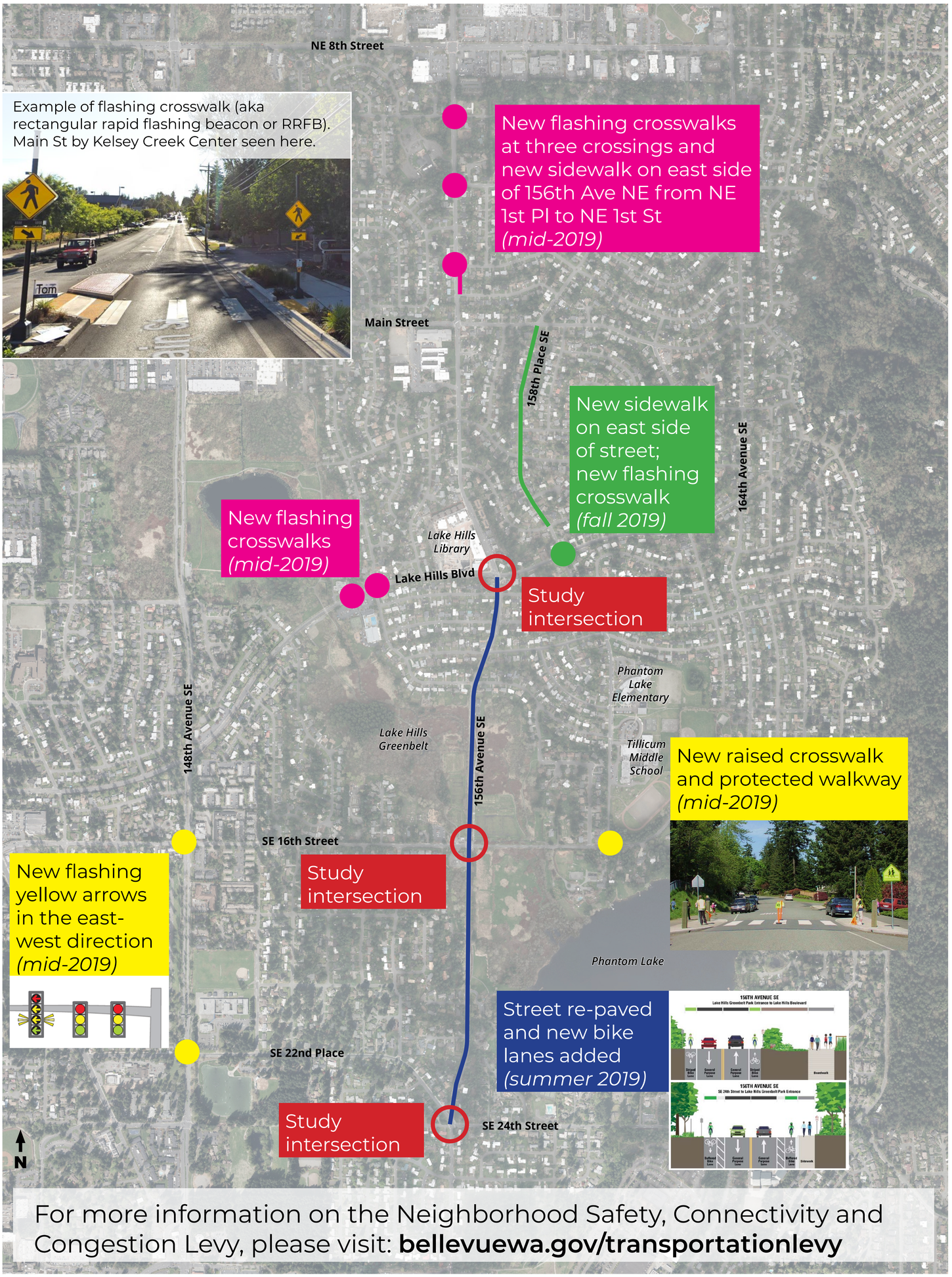
- Review community input and conduct alternatives analysis: February
- Identify preliminary recommended improvements: March
- **Second Community Open House to receive feedback on preliminary recommended improvements: March-April**
- Finalize recommended improvements and develop preliminary engineering designs: April-June
- Complete Transportation Analysis Report: May-June
- This project will compete with other projects for design and construction funding from the City's Neighborhood Congestion Levy: Second half of 2019

CITY OF BELLEVUE
NEIGHBORHOOD SAFETY, CONNECTIVITY & CONGESTION LEVY

Place a dot on the map to show where you live:

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.



For more information on the Neighborhood Safety, Connectivity and Congestion Levy, please visit: **bellevuewa.gov/transportationlevy**