

# Location Map

Hot Spot: Skyline Blvd

## NW Cornelius Pass Road and Skyline Boulevard



# Presented Alternatives

## Hot Spot: Skyline Blvd

Improvement Description	Prelim. Cost Estimates
<b>SBR:</b> 2-Lane Roundabout	\$4.6–5.3 million (depending on orientation)
<b>SBS:</b> Signalized Intersection	\$3.7–5.4 million (depending on Skyline design speed)

# Presented Alternatives

## Comparison Table

### Hot Spot: Skyline Blvd

Comparison Criteria		Alternatives	
		Roundabout	Traffic Signal
Layout	Lane configuration (design year 2035)	See figures <sup>1</sup>	
	Queue length	Up to 75' in SB direction in AM and 250' in NB direction in PM (See figures for more details)	Up to 725' in SB direction in AM and 400' in NB direction in PM (See figures for more details)
	Public comfort	Less familiar layout could provide lower level of comfort to the public	Familiar layout could provide higher level of comfort to the public
	Access changes	Right-in/right-out to grocery store suggested	Right-in/right-out to grocery store recommended
	Key trucking considerations	Can be designed to accommodate trucks Trucks occupy both lanes for through movement Must slow down through intersection	Can be designed to accommodate trucks Through movement is straight NB uphill start/stop on red light
Safety	Vehicle speed	25 MPH (all legs)	45 MPH (Corn Pass) 25- 35 MPH (Skyline)
	Conflict points <sup>2</sup>	17	40
	Predicted crash reduction	68% reduction in overall crashes 88% reduction in injury crashes	44% reduction in overall crashes
	Anticipated annual economic benefit by reducing crashes	\$56,000	\$36,000
Capacity (2035 Design Year)	Level of service (LOS) <sup>3</sup>	B	C
	Average delay in seconds	7.7 (AM) 14.5 (PM)	20.6 (AM) 13.5 (PM)
	Controlling volume-to-capacity (V/C) ratio	0.46 (AM) 0.79 (PM)	0.84 (AM) 0.60 (PM)
	Wetland impacts	1,508 to 4,319 square feet	3,689 to 5,717 square feet
Environmental	Air quality	0-25% reduction in vehicle emissions	0-25% higher vehicle emissions
	Energy	0-25% reduction in energy usage	0-25% higher energy usage
	Right-of-Way	Number of affected properties	3
Estimated area to acquire		5,000 to 15,000 square feet	4,000 to 7,000 square feet
Cost	Estimated construction cost	\$4.6 - \$5.3 Million (depending on orientation)	\$3.7 - \$5.4 Million (depending on Skyline design speed)
Annual Maintenance Cost	Estimated ongoing annual cost	\$2,000	\$5,000

<sup>1</sup>Roundabout lane configuration is also required for the current year to meet existing traffic volumes. Traffic projections indicate a northbound receiving lane for a traffic signal would not be needed for about 7-8 years. If it is excluded from the signalized intersection option, this would save approximately \$200,000 with this project and the right lane upstream of the intersection would be converted to a right turn only lane. If the intersection work is phased in this

<sup>2</sup>Conflict points are defined as the number of vehicle crossing points at the intersection where a crash could occur.

# Other Ideas

## Hot Spot: Skyline Blvd

The team has received input from a variety of sources. The following ideas have been heard in addition to the presented alternatives and will be considered:

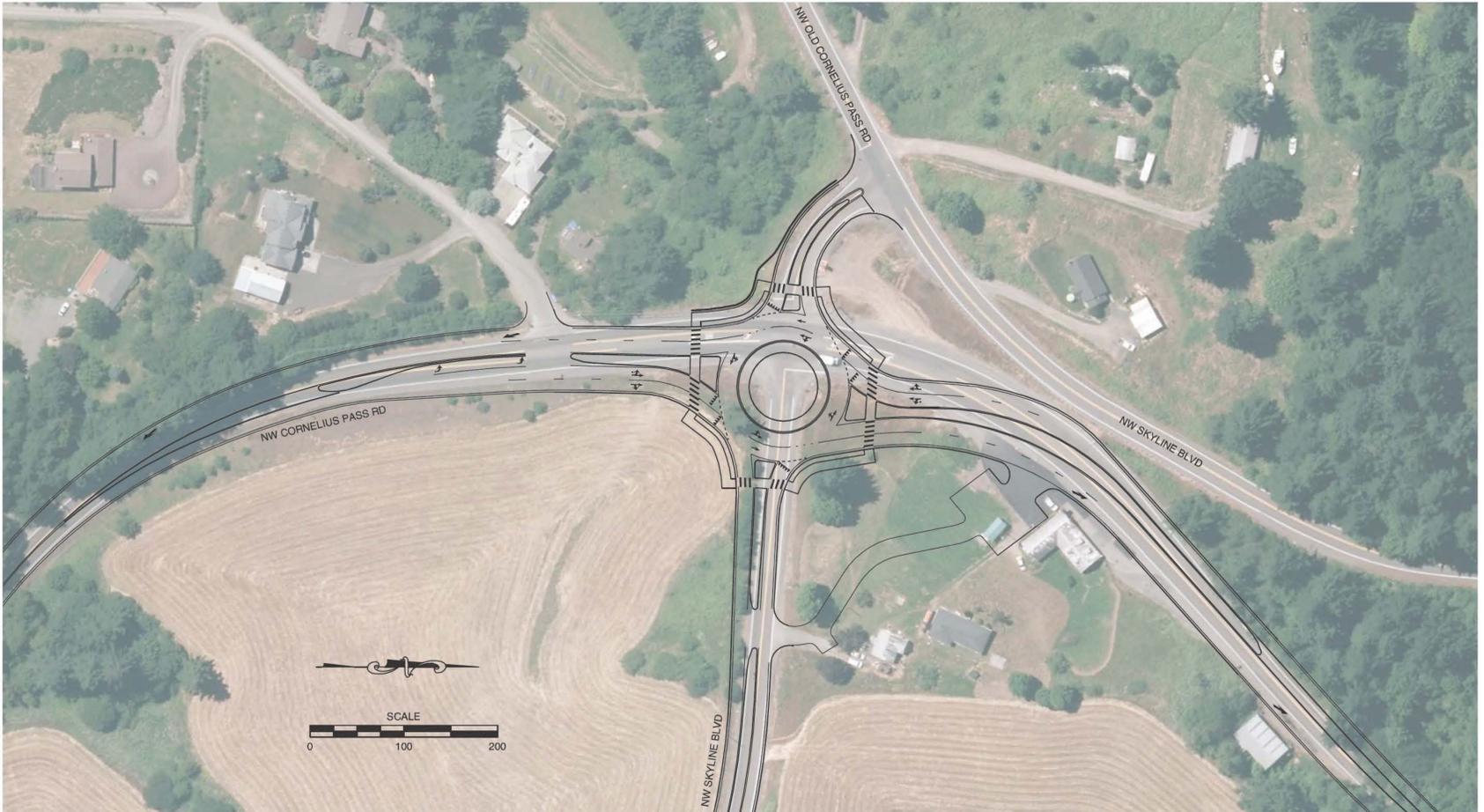
- Split one-way road at Skyline Blvd
- Manage private accesses and grading to improve intersection sight distance
- Realignment of Cornelius Pass Rd and Plainview Rd
- Realignment of Cornelius Pass Rd and introduce SB passing lane
- Single lane roundabout
- Realign roadway to utilize existing railroad tunnel
- Reduced size signalized intersection
- Grade separated intersection with over/underpass
- Install additional landscaping
- Alteration of sign angles
- Install delineators
- Realign roadway and construct new tunnel from tunnel curves to south of Skyline
- Part time warning signs for peak hours
- Four way stop
- “Stop light on demand”

Input and ideas from the meeting tonight will be considered before a final recommendation is made.

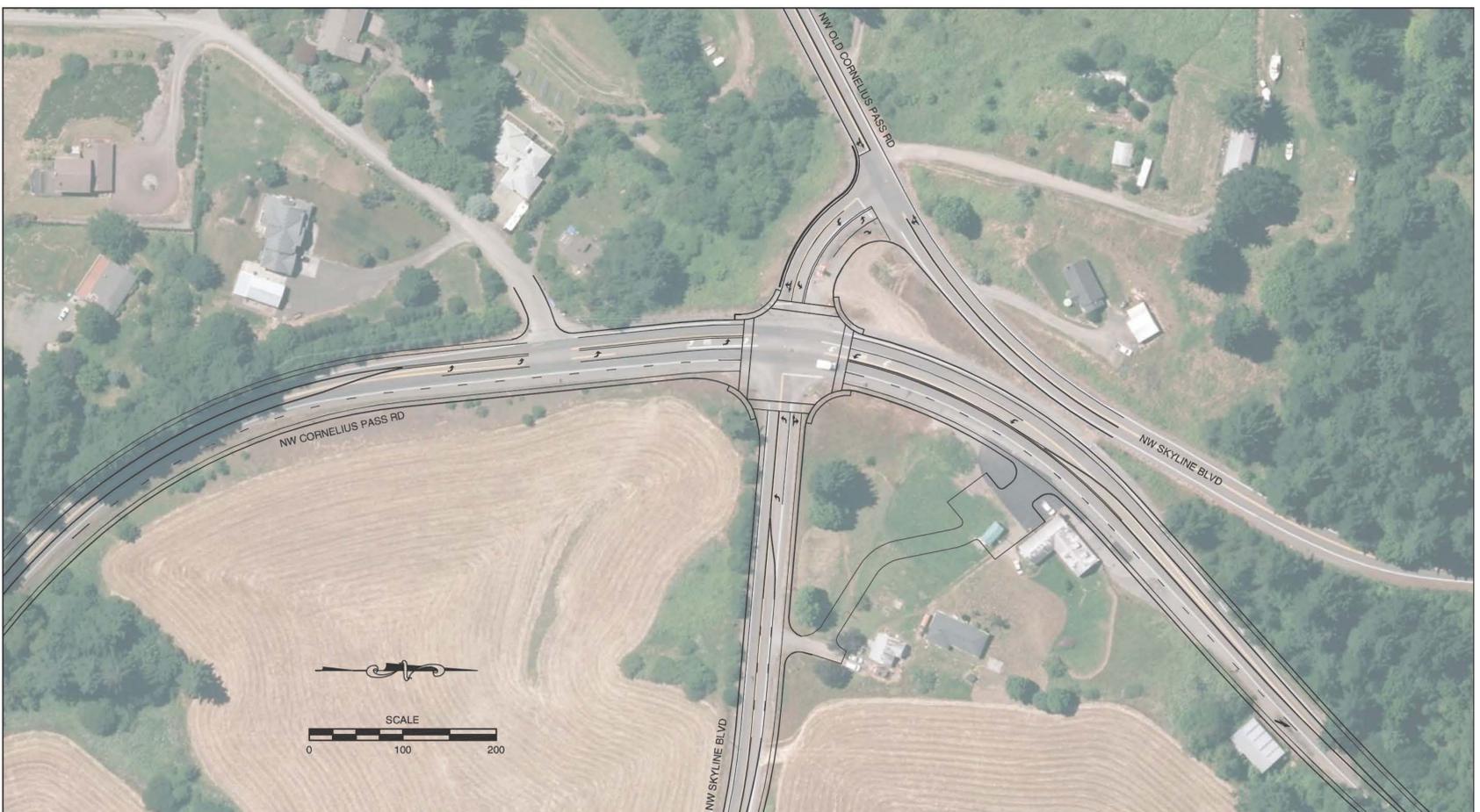
# Presented Alternatives

## Hot Spot: Skyline Blvd

### Technical Diagrams: Roundabout Intersection (**SBR**)



### Signalized Intersection (**SBS**)



# Presented Alternatives

## Hot Spot: Skyline Blvd

### Technical Diagrams: Roundabout Intersection (**SBR**)



### Signalized Intersection (**SBS**)

