Questions and Answers to Councilmembers
Updated 8/18/2025

Alternatives Refinement

Q1: What were the 10 alternatives the study considered?
A1: The study considered the following potential alternatives, which provided a range of pedestrian, bicycle, and intersection improvements, combined in different ways to achieve different project scopes and scales for comparison. The presentation slides and handouts from the February 11, 2025 City Council meeting provide additional details and cross sections for the initial 10 alternatives. The slides can be found on the project website.

1. **Transit Crossing Improvements and Enhancements**: Install street crossings at bus stops, transit stop improvements, and sidewalk spot improvements (also included in all subsequent alternatives). Provides a lower cost alternative to improve pedestrian and transit access that can also be implemented relatively quickly. These changes are included in all subsequent alternatives.
2. **Transit Crossings/Enhancements, Pedestrian and Safety Spot Improvements**: All transit improvements proposed in Alternative 1, plus additional street crossings and sidewalk to connect to Evans Creek Preserve, vehicle safety and congestion spot fixes, and a roundabout at NE 28th Place/223rd Avenue NE.
3. **Corridor Pedestrian Improvements**: All transit improvements proposed in Alternative 1, plus installation of sidewalk on west side of Sahalee Way NE from NE 37th Way to NE 25th Way to provide a continuous pedestrian route through the corridor.
4. **Corridor Bicycle Improvements**: All transit improvements proposed in Alternative 1, plus installation of protected bike lanes on both sides of the street from NE 37th Way to NE 8th Street/NE Inglewood Hill Road to provide a continuous bicycling route through the corridor.
5. **Shared-Use Path North of NE 25th Way**: All transit improvements proposed in Alternative 1, plus installation of a shared-use path from NE 37th Way to NE 25th Way, and a northbound protected bike lane south of NE 25th Way to provide a continuous pedestrian and bicycle route through the corridor.
6. **Regional Trail**: All transit improvements proposed in Alternative 1, plus installation of a shared use-path from SR 202 to NE 8th Street/NE Inglewood Hill Road, with the goal of laying the groundwork for a future regional trail connection from Redmond to Sammamish.
7. **Urbanized Corridor South of NE 25th Way – Higher Speed North of NE 25th Way**: All transit improvements proposed in Alternative 1, plus changes to the cross section of 228th Avenue NE south of NE 25th Way to an urbanized section that includes sidewalk and protected bike lanes on both sides of the street. North of NE 25th Way, it adds a shared-use path, identical to Alternative 5. Lowers speed limit to 35 mph south of NE 25th Way.
8. **Urbanized Corridor South of NE 25th Way – Lower Speed North of NE 25th Way**: All transit improvements proposed in Alternative 1, plus changes to the cross section of 228th Avenue NE south of NE 25th Way to an urbanized section that includes sidewalk and protected bike lanes on both sides of the street, similar to Alternative 7. North of NE 25th Way, it adds sidewalk on one side and protected bike lanes on both sides. Lowers the speed limit to 35 mph south of NE 37th Way. Proposes converting six unsignalized intersections to roundabouts.

9. **Fully Urbanized Corridor**: All transit improvements proposed in Alternative 1, plus changes to the cross section of the corridor from NE 37th Way to NE 8th Street/NE Inglewood Hill Road to an urbanized design with sidewalk and bike lanes on both sides. Lowers the speed limit to 35 mph south of NE 37th Way. Proposes converting six unsignalized intersections to roundabouts.
10. **Follow City Three-Lane Principal Arterial Standards**: Follows the City of Sammamish three-lane principal arterial roadway standards, which includes one lane in each direction, a center turn lane (at intersections) or median (beyond intersections), conventional bike lanes, and sidewalks. Adds traffic signals at three unsignalized intersections. This alternative is included for demonstration purposes to study the effects of widening the roadway and installing medians. Also includes transit improvements proposed in Alternative 1.

Q2: How were the alternatives reduced from ten to the final three?

A2: The alternative selection and refinement process, which has progressed since May 2024, occurred in stages, with additional analysis completed as alternatives were refined. This phased approach was done strategically, to inform decision making and allocate the appropriate amount of resources. The study team considered the project goals and planning guidance throughout this refinement process. Each phase in the process is shown in the graphic below and additional details are provided in the following sections.

<u>Alternatives Refinement: From 10 to 6:</u>

The study team performed initial evaluations of the ten alternatives listed above. The evaluation included traffic analyses, level of traffic stress (LTS) evaluations, and safety performance studies. These traffic and operations analyses were completed at this time to inform the refinement of cross section widths and project features, specifically to help develop more refined initial opinions of cost. In conjunction with partner agency feedback (specifically King County's information on Alternative 6 not having the support of their current planning documents and objectives), the study team reduced the alternatives list to six candidate projects. These were Alternatives 2, 3a (the same as Alt. 3 above), 3b (a modified version of Alt. 3 with shoulders that could be used by bicyclists in both directions), 7, 8, and 10.

The following alternatives did not advance for the following reasons:

- Alternative 1 did not advance because all of its elements are contained in Alternative 2, which the study team determined to be a more complete package of transit and pedestrian improvements.
- Alternative 4 did not advance because its proposed bicycle improvements instead of pedestrian improvements did not fall in alignment with public feedback on desired corridor use.
- Alternative 5 did not advance because its proposed shared-use path overlapped significantly with Alternatives 7 and 8.
- Alternative 6 did not advance because the proposed shared-use path (regional trail) extending into unincorporated King County does not appear to have support from the County's transportation plans.
- Alternative 9 did not advance because it proposed a full sidewalk along both sides of the corridor, which carries a high cost and has low projected use in the northern section of the City as nearly all residents live west of Sahalee Way NE.

Alternatives Refinement: From 6 to 3:

The study team evaluated each of these six alternatives in more detail, including cost estimating, stormwater modeling, travel time simulation modeling, and assessing impacts to private property and the natural environment. After completing this analysis, the study team conducted a design workshop with additional city staff members, from the Public Works Department, to refine the list to the top three alternatives. The study team considered the following categories to decide on which alternatives to advance for further analysis:

- Project benefits
    - Improved safety for all users
    - New or upgraded pedestrian facilities
    - New or upgraded bicycle facilities
    - Improved transit speed and reliability
    - New or upgraded connections to transit
    - Reduced vehicle congestion
    - Controlled/reduced vehicle travel speeds
    - Enhanced corridor sustainability
    - Potential for quick implementation
    - Competitiveness for grant funding
- Project challenges
    - Capital cost
    - Right-of-way needs/property impacts
    - Environmental impacts
    - Slope stability risk (requiring mitigation)
    - Stormwater management risk
    - Increased driver travel times
    - Maintenance cost
    - Impacts during construction

The workshop attendees discussed the level of importance for each of the above categories and how each alternative ranked for each category. Staff and the study team identified the following:

- Alternative 2 provides a lower cost improvement that addresses key needs for the corridor: improves transit stop accessibility and safety upgrades.
- Alternative 3b is preferred to Alternative 3a because Alternative 3a would have eliminated all space for bicyclists in the southbound direction north of NE 25th Way. Alternative 3b retains shoulder spaces that bicyclists could use if they are comfortable riding without any physical separation from traffic. Alternative 3a was not advanced.
- Alternatives 7 and 8 provide multi-modal facilities using two different proposed speed limits for the corridor.
- Alternative 10, the City's standard principal arterial design, invests significantly in sidewalks along the eastern side of the corridor in the north half where there are very few residences. The features proposed in Alternative 10 require widening the corridor, which adds significant cost and infrastructure to mitigate slope stabilization risk on the east side of the corridor.

Additionally, the standard bicycle lanes in Alternative 10 do not achieve the BLTS 2 or better guidelines established in the TMP. Alternative 10 was not advanced.

This discussion of Alternatives 7 and 8 with City Council occurred in February 2025 to help select one of those two alternatives as the final alternative, in combination with 2 and 3b, to advance for public feedback. Direction from the Council from this session was to share Alternative 8 with the public for comment and that future discussions would determine how much to incorporate from Alternative 7.

To streamline messaging for the public comment period on the final three alternatives, the study team revised the naming conventions for the alternatives to use a letter system:

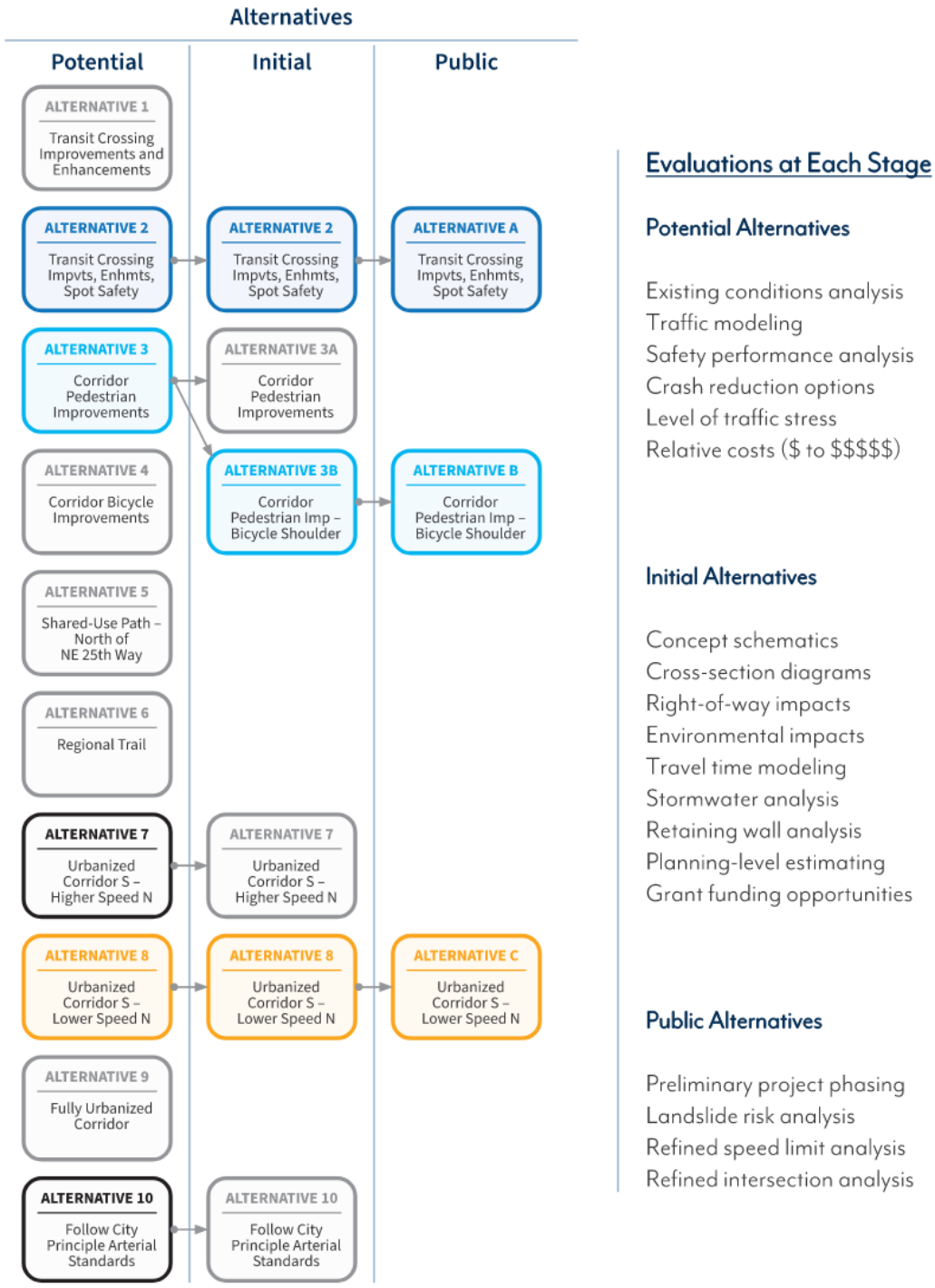
- Alternative A = Alternative 2
- Alternative B = Alternative 3b
- Alternative C = Alternative 8

Preferred Alternative Selection

The study team presented Alternatives A, B, and C to City Council at the June 10 study session, in addition to presenting analysis about speed reduction throughout the corridor. Council requested consideration of additional cost breakdowns and a consideration of how bike features might be added to Alternative B while keeping costs lower than Alternative C.

Following Council's direction, staff has prepared additional analysis of costs and level-of-stress results of additional facility types. The intent is to provide Council with additional information to balance policy objectives with constraints of costs and proximity to landslide areas.

The study team will next meet with Council in September (and possibly October) 2025 to gain direction on the preferred alternative. Further design choices can be explored during the final design phase that will begin after the corridor planning is complete.



Q3: What improvements were considered or incorporated between NE 37th Way and SR 202?
A3: The proposed alternatives A, B, or C do not include any project elements north of NE 37th Way. The improvements included in the final alternatives were selected because they address the top goals expressed by the Council to improve experiences for pedestrians and bicyclists (including as transit riders), and it is unlikely most people will want to walk, roll, or bike north of NE 37th Way. As discovered during the geotechnical exploration for the Sahalee Way Corridor Project, the existing slopes are

sensitive to any additional widening that would be required to add additional travel lanes on Sahalee north of the City limits.

Potential Alternative 6 included improvements between NE 37th Way and SR 202 (the proposed regional trail), but the alternative was not advanced as it lacked King County's endorsement. The SR 202 roundabout improvement may advance as a WSDOT or King County project in the future. Currently, no information is available on timeframe or funding status.

During final design the study team plans to explore if there is feasibility in using the shoulder space north of NE 37th Way for peak-hour transit operations, similar to how some WSDOT highways function. This will require further pavement investigation and coordination with King County. If viable, this component could be added to any preferred alternative.

Q4: What improvements were considered or incorporated for transit speed and reliability?
A4: The 2024 Sammamish Transit Plan (link) proposes several considerations for transit speed and reliability, including bus stop optimization (near-side/far-side bus stop relocation) for two locations along the Sahalee Corridor. These improvements will be incorporated into all proposed alternatives for the Corridor Study. In addition, the study has considered two intersection treatments that would improve transit speed and reliability:

SR 202

At SR 202, a roundabout may improve operations for all vehicles in the northbound direction on Sahalee Way. This concept was initially developed by WSDOT as part of their SR 202 corridor study several years ago. However, the latest modeling the study team performed for this analysis found that a roundabout would function with LOS F operations in the future morning peak hour. This latest modeling also showed an acceptable level of service with the current traffic signal through 2044, so the project does not include any proposed required revisions at this intersection. Transit speed and reliability improvements that WSDOT and King County could consider at this location include a new queue jump to allow buses priority for turning left from Sahalee Way NE towards Redmond.

NE 37th Way

The 2024 Sammamish Transit Plan (link) identified the potential for a "Continuous Green T" at NE 37th Way. This concept would improve throughput for northbound traffic on Sahalee, including buses; but would require expansion of the roadway footprint. This intersection is not incorporated yet into any alternative because of questions about viability with widening to complete this improvement in the vicinity of one of the steep hillsides that the project's geotechnical engineer is continuing to study. The study team is currently evaluating the steep slopes and mitigation options, which will inform if this "Continuous Green T" improvement is viable. If it is, the study team can incorporate this with any preferred alternative. Note that the Transit Plan was developed prior to the significant geotechnical engineering investigation that occurred during the Sahalee Way Corridor Project.

Segment Candidate Improvement

The study team will explore if King County and King County Metro would be willing to use the shoulders north of city limits for transit operations during the peak periods (specifically the morning commute). This technique is used on some WSDOT highways. This investigation will occur during the final design

phase. These modifications are also potentially limited by the adjacent steep slopes, slide risks, and existing pavement thicknesses.

Q5: Please provide the detailed public feedback.
A5: The two public outreach summary reports are attached.

Bicycle Facility Options

Q6: What ways can we achieve a bike level of travel stress (BLTS) of 1 or 2?
A6: There is no way to achieve a BLTS 1 score on Sahalee Way, even at 35 mph, because the travel volumes on Sahalee are so large. BLTS 2 can be achieved through a separated bike lane or a shared-use path, and both facility types require a physical dividing treatment (see details below).

The WSDOT Design Manual, from which Sammamish derives its LTS guidelines, classifies bike facilities into five types. Those facility types have the following BLTS grades for Sahalee Way's configuration. The Sammamish Transportation Master Plan (TMP) has a guideline of LTS 2 or better for the study corridor, this is consistent with other agency LTS targets.

- Bikes riding within travel lanes (i.e. mixed traffic) – BLTS 4
- Conventional bike lane (5 feet wide, minimum; no buffers) – BLTS 3 at 35 mph, BLTS 4 at 40+ mph
- Buffered bike lanes (minimum 2-foot-wide channelized buffer) – BLTS 3 at 35 mph, BLTS 4 at 40+ mph
- Separated bike lanes (physical dividing treatment: tubular markers, curb, traffic barrier, or planter) – BLTS 2
- Shared-use path (with physical dividing treatment) – BLTS 2

Q7: Could we narrow the cross section by eliminating the planter and instead using the existing shoulder?
A7: The planter strip can be removed to save additional width, however the following would need to be considered:

- Pedestrian and bicycle facilities need to be outside the shoulder to achieve the LTS targets
- Steet trees may not be able to be incorporated into the design
- Roadway width for emergency response, as Sahalee is a lifeline route for the City

The Sahalee Way corridor serves as an emergency response route for the north end of Sammamish and also needs to provide sufficient width for maintenance activities or potential vehicle pull-off space for stalled vehicles. To accommodate these needs and concurrently maintain two-way traffic (one lane per direction), the roadway width—measured from edges of shoulder or curbs or barriers—needs to be at least 18 feet per direction where the corridor is divided (by a non-traversable median) and 29 feet total

where it is undivided. As noted above, BLTS 2 is only achieved if a physical divider separates the bike facility from the vehicle travel lanes. The 18-foot or 29-foot design criteria are measured from the edge of the physical divider.

Project Costs

Q8: What is the breakdown of costs by segment and by project feature?
A8: The cost breakdowns, excluding inflation, and including design and administrative costs for each alternative are as follows (2024 $, millions):

Element	Alt. A	Alt. B	Alt. C
North half: 25th to 37th			
Intersection upgrades	$2.8	$2.8	$4.2
Segment upgrades	$10.3	$21.3	$27.5
Stormwater, excavations, misc.	$3.0	$6.8	$10.2
North total	**$16.1**	**$30.9**	**$41.9**
South half: 8th to 25th			
Intersection upgrades	$2.4	$2.4	$4.5
Segment upgrades	$2.2	$2.8	$22.2
Stormwater, excavations, misc.	$0.1	$1.4	$10.3
South total	**$4.7**	**$6.6**	**$37.0**
Total	**$20.8**	**$37.5**	**$78.9**

The study team estimated the individual cost share for certain project elements, listed in this table below. Note that these are surface treatment costs, omitting sub-surface construction like earthwork and utilities, and these costs do not account for inflation.

Improvement	2024 Cost (See Note)
Intersection Improvements	
HAWK Signal with Curb Extensions	$650 K
RRFB with Curb Extensions	$500 K
Single-Lane Roundabout (4-Leg)	$2.5 M
Single-Lane Roundabout (3-Leg)	$2.1 M
Compact Roundabout (4-Leg)	$1.6 M
Compact Roundabout (3-Leg)	$1.3 M
North (25th to 37th)	
Sidewalk and Planter	$13.4 M
Sidewalk, Planter, and Bike Lanes	$14.3 M
Shared-Use Path and Planter	$19.7 M
New east sidewalk segments	$4.5 M
New turn lanes at 216th/217th	$3.2 M
South (8th to 25th)	
Raised Bike Lane, Planter, and Sidewalk	$22.1 M
Two-Way Cycle Track South	$15.6 M

Note: Values do not include stormwater, excavations, or sub-surface work. These will all be extra costs.

Q9: How much do the proposed roundabouts in Alternative C cost?
A9: Assuming compact roundabouts without landscaping but excluding costs like excavations and utilities (which are difficult to parse from surface feature construction at this stage), the surface treatments for the roundabouts will cost roughly: $4.2 million for three roundabouts in the north half and $4.0 million for three roundabouts in the south half. The north half roundabouts are slightly more expensive because one of them is a four-leg roundabout (at NE 28th Place/223rd Avenue NE) while all others are three-leg roundabouts. Note that if roundabouts are not used, there will be some costs to install enhanced crossing treatments instead. These enhanced crossing treatments are around 33-50% of the cost of a compact roundabout. (See Answers 12 and 13 for information on why roundabouts are beneficial for the corridor.)

Q10: Can we use lower-cost roundabouts on this corridor?
A10: Yes, the alternative costs listed above now reflect less-expensive compact roundabouts instead of larger, landscaped single-lane roundabouts. Compact roundabouts are slightly smaller, are fully mountable (so large trucks and emergency vehicles can turn left across them more easily), and exclude landscaping. The cost savings per roundabout by using compact instead of landscaped would be around $850,000 per intersection. Compact roundabouts also require less maintenance, reducing future costs.

Q11: Would a low-cost solution such as adding a traffic barrier near the current fog line provide sufficient separation to utilize the existing shoulders for bikes?
A11: A traffic barrier can be used to separate bicyclists and pedestrians from adjacent traffic, but it will not be a solution that avoids widening the corridor. This is because we need to maintain adequate width for maintenance and/or emergency activities, as described above in Answer 7. Also, traffic barriers (the style on WSDOT highways and freeways) need to have a buffer distance (often referred to as a "shy distance") between them and adjacent travel lanes or bike/ped spaces to avoid conflicts with mirrors. As a result, a traffic barrier treatment with a shared-use path on one side would still require widening the corridor, to roughly the same width as is proposed for Alternative B. (Note: this strategy would achieve a better BLTS score than Alternative B does for a similar width.) Adding a traffic barrier would still require engineering and maintenance costs to ensure this treatment doesn't become a safety challenge along the corridor.

Roundabouts and Speed Control

Q12: Why are roundabouts important for this corridor?
A12: The study team recommends roundabouts for the corridor for multiple reasons. As an intersection treatment, roundabouts have a strong safety record, and they service side-street traffic well throughout the day. Roundabouts also provide good pedestrian crossings in combination with enhanced treatments like rectangular rapid flashing beacon (RRFB) systems. As described below in Answer 13, for Alternative C a series of roundabouts will provide a speed control

technique to improve safety in the corridor. Roundabouts also benefit from lower long-term maintenance costs than signals because they remove the risk of costly signal pole damage that can occur if struck by a vehicle.

Q13: Which intersections have proposed roundabouts to address congestion/delay issues and which are proposed for other reasons?

A13: Roundabouts generally outperform other intersection treatments (signals, stop signs) when it comes to severe crash rates and delays accessing major corridors from side streets. The project proposes a roundabout improvement at the Sahalee Way and 28th/223rd intersection in all three alternatives. This improvement is recommended to address congestion issues for the adjacent neighborhoods, who face delays during commute hours turning onto Sahalee Way. A signal can also be considered for this intersection improvement. Elsewhere in the corridor, roundabouts can be used as a speed control tactic in addition to their other benefits. Well-designed roundabouts require drivers to slow down as they approach the intersection and maintain a slow speed (approximately 20 miles per hour, maximum) through the intersection. The concept proposed in Alternative C, which could be applied to the other alternatives, is to construct a series of roundabouts throughout the corridor to keep driver speeds lowered compared to their existing patterns. The study team anticipates that this will control top-end speeding and help enforce a lower posted speed limit of 35 mph. Finally, because roundabouts slow drivers and also divide the corridor with splitter islands, pedestrian crossings become shorter and can be enhanced with RRFB systems instead of more expensive pedestrian hybrid beacon (PHB; also known as “HAWK” signals) systems.

Q14: Can roundabouts eliminate left-turn movements at some cross streets?

A14: The study team can evaluate adding access control in the south half of the corridor (between 12th and 25th) in combination with roundabouts to change left-turn movements into u-turn movements. This evaluation will occur in the early stages of the design phase. This strategy is not recommended north of NE 25th Way because intersections are spaced further apart.