Everett Street Corridor Alternative Analysis Report

Camas, Washington

Prepared for:
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1. PROJECT BACKGROUND

Project Description

The Everett Street corridor considered in this analysis runs from the Lacamas Lake bridge at the southern terminus to Camas city limits at the northern terminus. The corridor is a Washington State facility (State Route 500) and is listed as a Gateway Corridor in the City of Camas' (City) 2035 Comprehensive Plan. There is currently a signalized intersection at NE 43rd Avenue, and all other intersections along the corridor are stop-controlled and yield to Everett Street traffic. The Everett Street corridor spans several key locations including Lacamas Park and several businesses near the southern end, Camas High School via NE 43rd Avenue at the midpoint, and several religious institutions near the northern end. Everett Street will also provide a vital connection to future developments north of Lacamas Lake via SE Ledbetter Road and via a new road shown in concept plans for the North Shore Subarea Plan.

With the overall population of the city expected to reach 34,000 by 2035, and significant development expected to take place in the North Shore subarea in the coming years, the Everett Street corridor must be prepared to serve future demand. This Alternative Analysis Report evaluates the benefits, impacts, and challenges associated with proposed improvements along the corridor. Specifically, this analysis considers several alternatives for vehicular use, and several alternatives for pedestrian and cyclist use, with an eye toward selecting the best alternative for each of these two user groups. When analyses and evaluations have been completed, a preferred alternative will be selected and a proposed phasing plan for future projects will be developed. The City will move forward with the design once funding for specific phases is secured.

Project Purpose and Need

The intersection of Everett Street and NE 43rd Avenue includes existing crosswalks, but the remainder of the corridor does not include any existing pedestrian or bicyclist facilities. Individuals must use the shoulder or the vehicular travel lanes when walking or biking along Everett Street and must cross Everett Street without a crosswalk at locations other than NE 43rd Avenue. The current conditions described above create an undesirable travel route and the highest possible traffic level of stress for pedestrians and cyclists. Adding pedestrian and bike facilities would significantly improve pedestrian and cyclist safety and willingness to travel along the corridor. These proposed improvements would promote the health and safety of the community and would be congruent with Washington State Department of Transportation's (WSDOT) Active Transportation Plan and Target Zero initiative.

Between 2017 and 2022, roughly half of the recorded crashes along the Everett Street corridor involved two or more parties, and the other half of recorded crashes involved a single party striking wildlife or a roadside object. Of the crashes involving two or more parties, rear-ending was the most common type of crash, and several crashes involved turning movements. Safety will be improved by adding intersection and corridor improvements that will encourage lower vehicle operating speeds while also reducing conflict points. These improvements include additional illumination along the corridor, median curbs, roundabouts at select intersections or turn lanes at high-volume locations.

The existing Everett Street corridor between the Lacamas Lake bridge and Camas city limits does not have any aesthetic or interpretive elements, despite being listed as a gateway corridor by the City. The recently completed Lake and Everett Street roundabout, immediately south of the corridor considered in this analysis, contains aesthetic and interpretive elements that are in alignment with the City of Camas Gateway Corridor ordinance. These aesthetic elements will be continued along Everett Street with this project. Additional improvements will include iconic street signage, street trees, and gateway features intended to create the Camas look and feel within the Everett Street corridor.

Public Involvement and Outreach

There is considerable community support for this project. An initial open house hosted by the City occurred in November 2022 and discussed the North Shore Subarea Plan and the City's comprehensive long-term planning for the area. Materials were presented to the public containing conceptual designs for consideration.

The project design team worked with City staff, the Project Advisory Committee, City Council, and the public to establish priorities. These were used in a community outreach survey to determine which priorities were most important to the public. With the survey, each participant was asked to rank each of the priorities in terms of importance. Following the community outreach, the priorities were ranked numerically with 1 having the highest ranking and 14 having the lowest ranking. The community priorities were then used to inform the Analysis Criteria that would be used to evaluate each of the alternatives (See Section 3. Analysis Criteria).

Table 1. Community Priorities and Analysis Criteria

Ranking	Priorities from Public Involvement	Weight	Analysis Criteria
1	Improve safety and mobility for pedestrians	2	P1 – Pedestrian Mobility and Safety
2	Improve safety and mobility for drivers	2	T1 – Motorist Mobility and Safety
3	Improve connections to nearby areas	2	P2 – Connections to Nearby Areas
4	Emergency access	2	T4 – Emergency Access
5	Minimize impact to environment	1.5	E1 – Minimize Impact to Environment
6	Improve safety and mobility for casual cyclists	1.5	P3 - Casual Cyclist Mobility and Safety
7	Maintain traffic flow and property access during construction	1.5	T2 – Traffic Flow and Property Access Impacts During Construction
8	Has a Camas look and feel	1.2	P4 – Camas Look and Feel
9	Minimize impact to properties on the corridor	1.2	I1 – Private Property Impacts
10	Can be completed for a reasonable cost	1.2	I2 – Construction Costs
11	Improve lighting	1.2	T3 – Lighting Impacts and Benefits
12	Improve parking	1.2	P5 – Public Parking
13	Improve safety and mobility for wheelchair users	1	P6 – Wheelchair User Safety and Mobility
14	Improve safety and mobility for experienced cyclists	1	P7 – Experienced Cyclist Mobility and Safety
15	Minimize noise [to adjacent properties]	1	E2 – Noise Impacts and Mitigation

2. ALTERNATIVES OVERVIEW

The following multimodal and roadway alternatives have been developed to address the priorities identified with the public involvement process. The design team developed five multimodal alternatives and three roadway alternatives.

Multimodal Alternatives

NB (No-Build)

This alternative proposes no improvements; nothing would be constructed, and the existing roadway would remain in its current state. This option may be appropriate if all other options have adverse impacts that outweigh benefits.

Bike Lane and Sidewalk Alterative (MM1)

This alternative would include the following features:

- Landscape strip separating pedestrians from vehicular traffic.
- Sidewalk and bicycle lane on both sides of Everett Street with the bicycle lane on the roadway.
- When combined with a two-lane roadway (RB1), there would be no property impacts beyond the right-of-way.
- When combined with a three-lane roadway (S1 and RB2), there would be property impacts beyond the right-of-way.

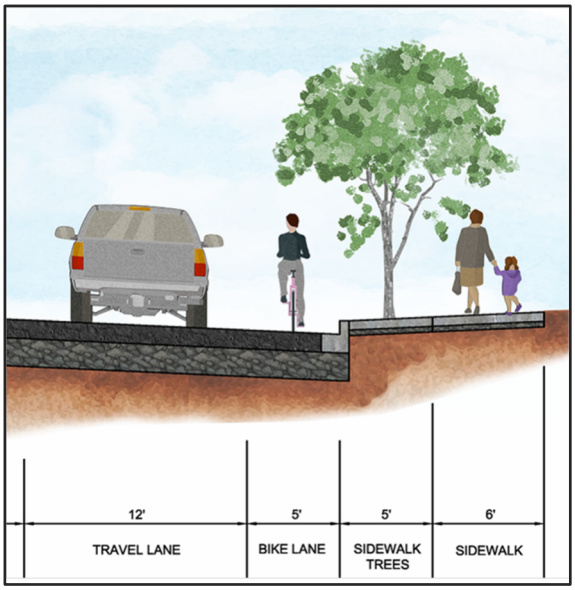


Figure 1. Bike Lane and Sidewalk Alternative (MM1).

Shared-Use Path Alternative (MM2)

This alternative would include the following features:

- Landscape strip separating bicycles and pedestrians from vehicular traffic
- Sidewalk and bicycle lane on both sides of Everett Street
- When combined with a two-lane roadway (RB1), there would be no property impacts beyond the right-of-way.
- When combined with a three-lane roadway (S1 and RB2), there would be property impacts beyond the right-of-way.

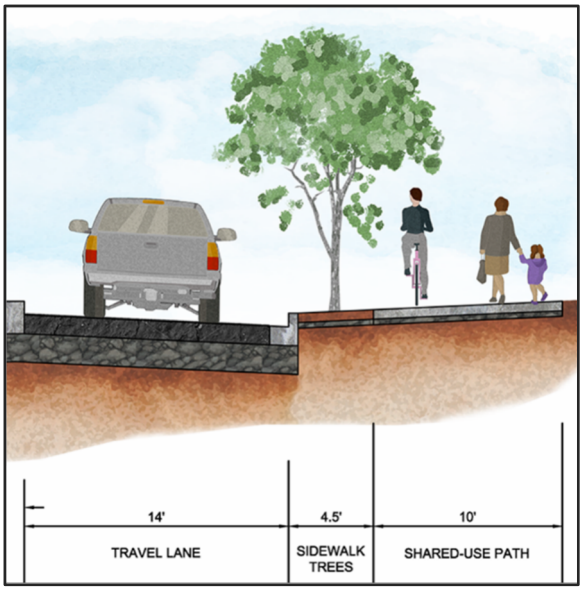


Figure 2. Shared-use Path Alternative (MM2).

Elevated Bike Lane and Sidewalk Alternative (MM3)

This alternative would include the following features:

- Bike and pedestrian traffic would be elevated above the roadway and behind the curb, with a paved buffer between the roadway and elevated bicycle lane.
- When combined with a two-lane roadway (RB1), there would be no property impacts beyond the right-of-way.
- When combined with a three-lane roadway (S1 and RB2), there would be property impacts beyond the right-of-way.

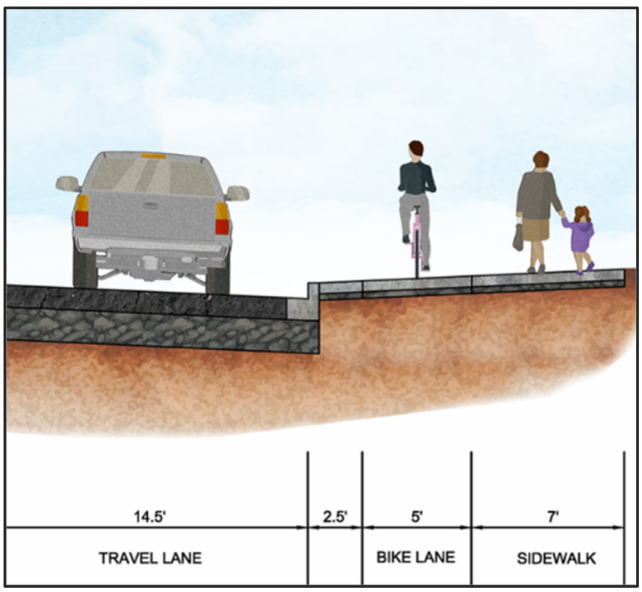


Figure 3. Elevated Bike Lane and Sidewalk Alternative (MM3).

Bi-Directional Bikeway and Sidewalk Alternative (MM4)

This alternative would include the following features:

- A bi-directional bike lane, sidewalk, and buffer areas would be elevated above the roadway and behind the curb on the western side of Everett Street as well as a new sidewalk on the eastern side of Everett Steet.
- When combined with a two-lane roadway (RB1), there would be no property impacts beyond the right-of-way.
- When combined with a three-lane roadway (S1 and RB2), there would be property impacts beyond the right-of-way.

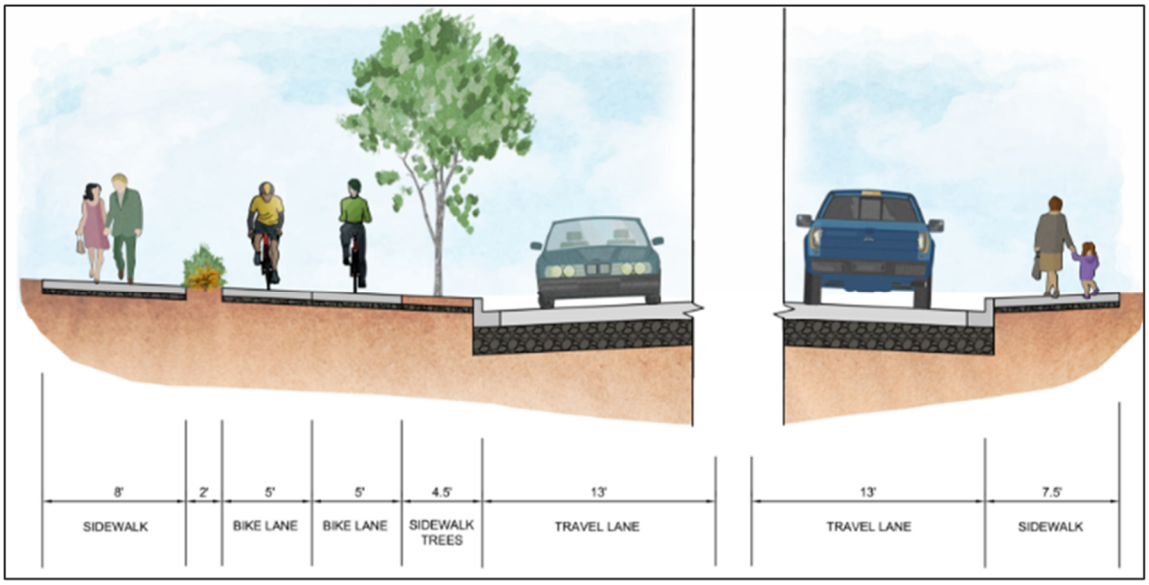


Figure 4. Bi-Directional Bikeway and Sidewalk Alternative (MM4).

Roadway Alternatives

Two-Lane Section with Roundabouts Alternative (RB1)

This alternative would include the following features:

- Roundabouts at key intersections (NE 38th Avenue, NE 43rd Avenue, SE Leadbetter Rd, and SE 8th Street).
- Two travel lanes divided by a traffic curb along the full length of the corridor.
- Median breaks to provide full access to driveways north of SE 8th Street.

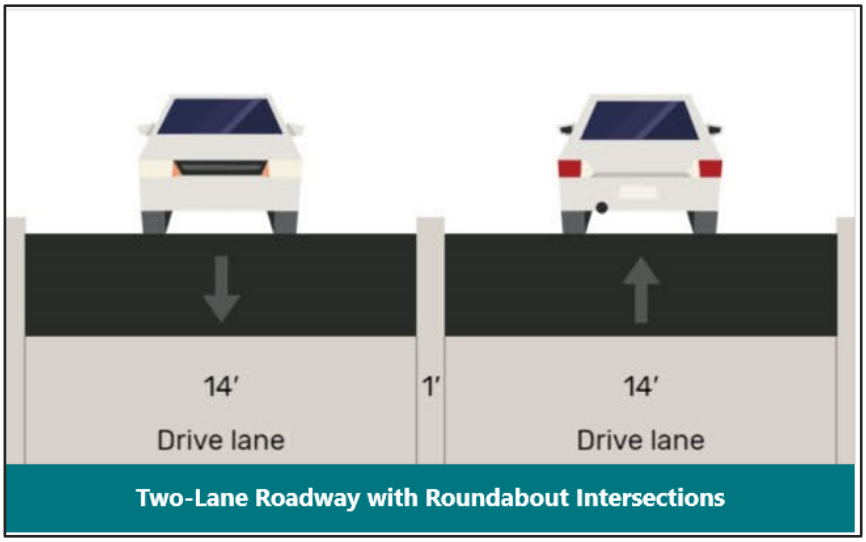


Figure 5. Two-Lane Section with Roundabouts Alternative (RB1).

Three-Lane Section with Signals Alternative (S1)

This alternative would include the following features:

- Traffic signals at key intersections (NE 38th Avenue, NE 43rd Avenue, SE Leadbetter Road, and SE 8th Street).
- Two travel lanes plus a two-way left turn lane along the full length of the corridor.

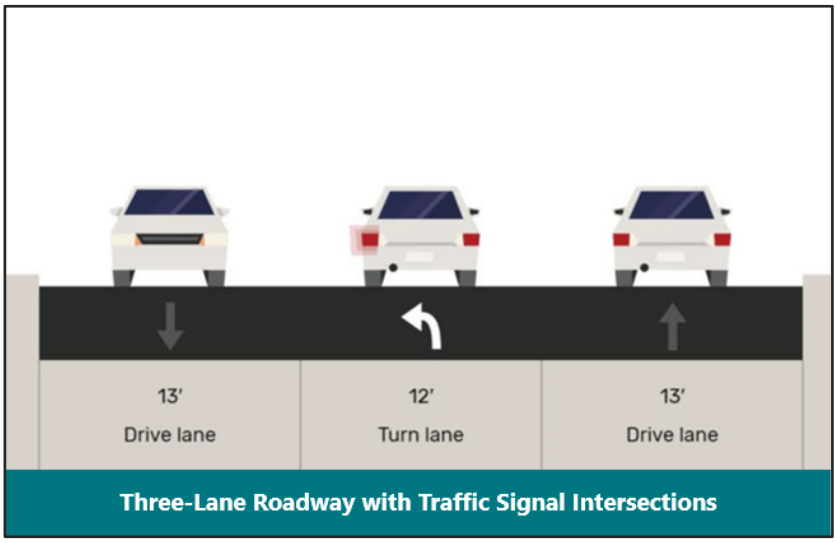


Figure 5. Three-Lane Section with Signals Alternative (S1).

Three-Lane Section with Roundabouts (RB2)

This alternative would include the following features:

- Roundabouts at NE 43rd Avenue and other key intersections to the north (SE Leadbetter Road and SE 8th Street).
- Two travel lanes plus a two-way left-turn lane north of SE Leadbetter Road; two travel lanes divided by median south of SE Leadbetter Road.

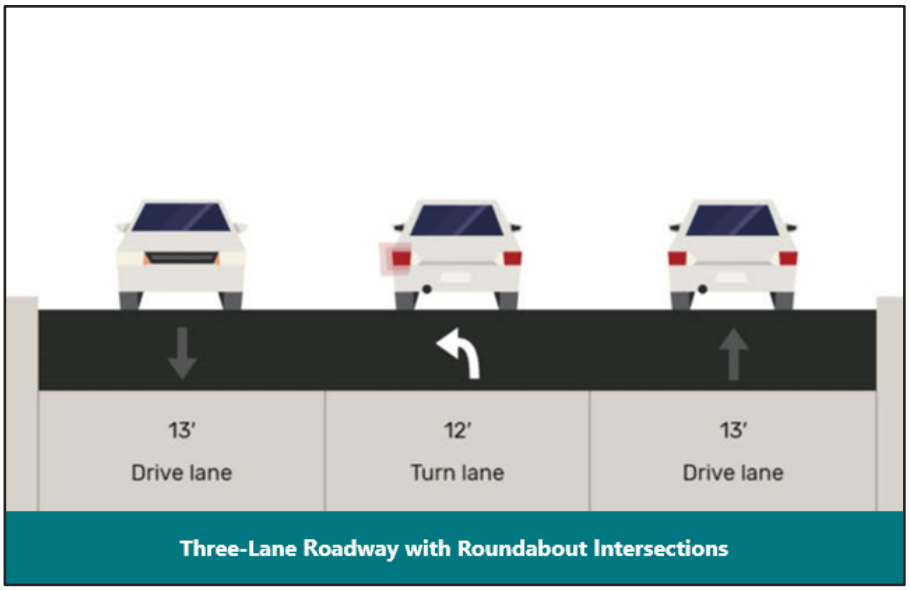


Figure 6. Three-Lane Section with Roundabouts – North of SE Leadbetter Road (RB2).

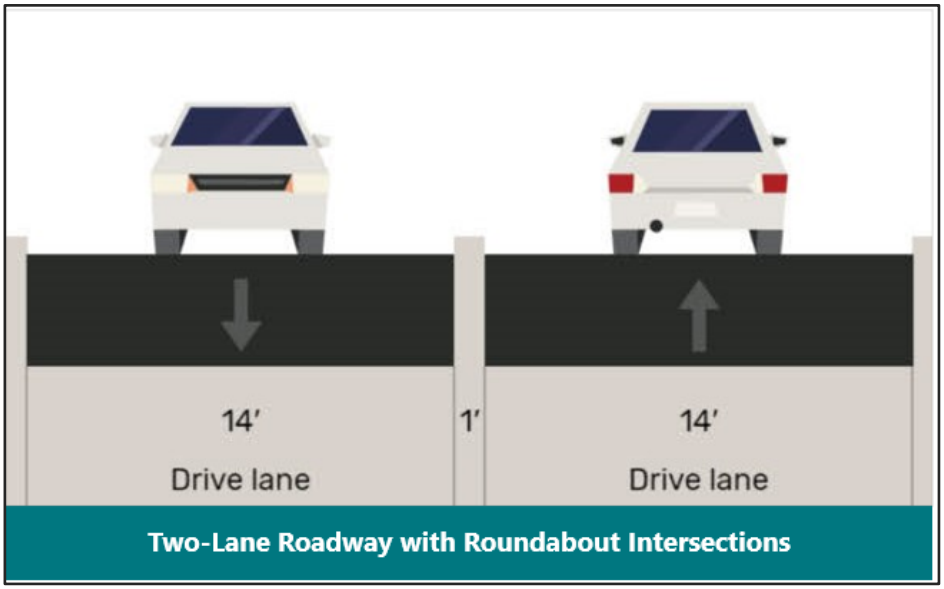


Figure 7. Two-Lane Section with Roundabouts – South of SE Leadbetter Road (RB2).

3. ANALYSIS CRITERIA AND ALTERNATIVE EVALUATION

The Analysis Criteria was developed based on priorities gathered during the community outreach events. Subsequently, each of these priorities were ranked and weighted based on feedback from community surveys. The criterion weights were based on community priorities, which were obtained from a community survey that ran from November 2022 to January 2023. The alternatives present above were then evaluated using the criterion scoring using a score between 1 and 10 for each applicable criterion.

Table 2. Analysis Criteria

Public Impacts and Benefits	
Analysis Criteria	**Weight**
P1 – Pedestrian Mobility and Safety	2
P2 – Connections to Nearby Areas	2
P3 - Casual Cyclist Mobility and Safety	1.5
P4 – Camas Look and Feel	1.2
P5 - Public Parking	1.2
P6 - Wheelchair User Safety and Mobility	1
P7 – Experienced Cyclist Mobility and Safety	1
Traffic Impacts and Benefits	
Analysis Criteria	**Weight**
T1 – Motorist Mobility and Safety	2
T2 – Traffic Flow and Property Access Impacts During Construction	1.5
T3 - Lighting Impacts and Benefits	1.2
T4 – Emergency Access	2
Environmental Impacts and Benefits	
Analysis Criteria	**Weight**
E1 – Minimize Impact to Environment	1.5
E2 – Noise Impacts and Mitigation	1
Infrastructure Impacts and Benefits	
Analysis Criteria	**Weight**
I1 – Private Property Impacts	1.2
I2 – Construction Costs	1.2

P1 - Pedestrian Mobility and Safety

Criteria Description

Currently there are no pedestrian facilities north of NE 35th Avenue along the Everett Street corridor.

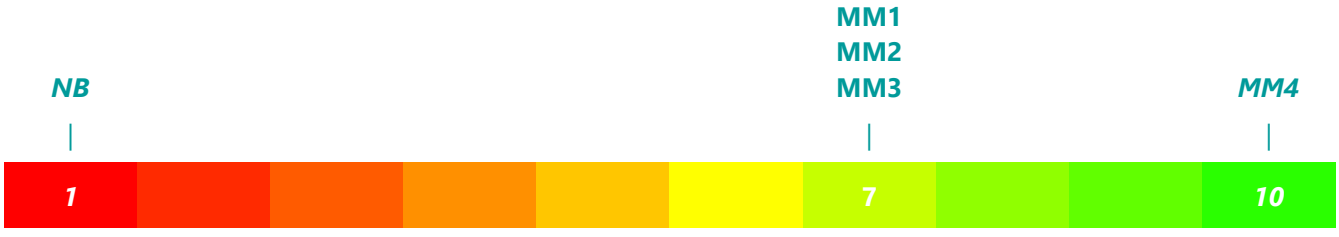
All alternatives (except no-build) add pedestrian facilities along the length of the corridor. Evaluation of added pedestrian facilities will consider: continuity of facilities, required crossings (if any), protection at crossings, buffer from other modes of traffic, and required out-of-direction travel (if any).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any pedestrian facilities.
- A maximum score of 7 will be applied to alternatives having a pedestrian facility width of 6 feet.
- A score of 10 will be applied to alternatives that have pedestrian facility width of more than 6 feet and includes buffers between pedestrian facilities and other modes of transport.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
MM1	7	Buffer from bike facilities provided by a curb. Sidewalk is only 6 feet wide.
MM2	7	Pedestrians have no buffer from cyclists in a shared facility. Shared use path is 10 feet wide.
MM3	7	Buffer from bike facilities provided by a landscape strip. Sidewalk is 7 feet wide.
MM4	10	Buffer from bike facilities provided by a landscape strip. Sidewalk is 8 feet wide.

RATING SCALE



P2 - Connections to Nearby Areas

Criteria Description

Currently there are no pedestrian or bike facilities north of NE 35th Avenue along the Everett Street corridor.

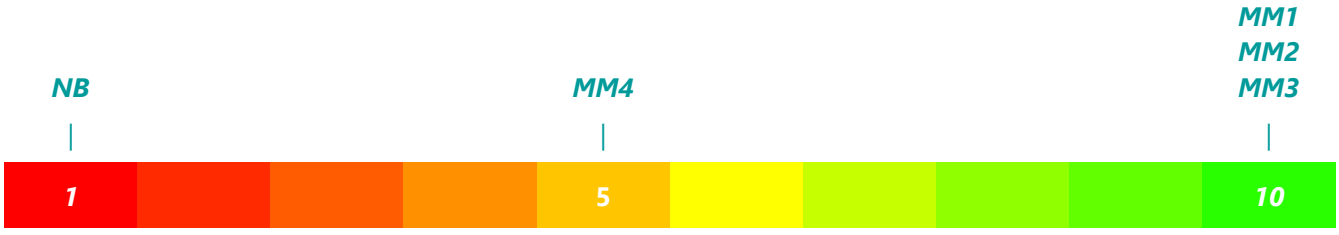
All alternatives (except no-build) add pedestrian and bike facilities along the length of the corridor, such that pedestrians and cyclists can travel north or south along Everett Street. Evaluation of connectivity will consider: ability of users to reach key locations and any out-of-direction travel required to reach key locations.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add pedestrian and bike facilities.
- A score of 10 will be applied to alternatives that add pedestrian and bike facilities that connect users to all identified key locations and require no out-of-direction travel.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
MM1	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.
MM2	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.
MM3	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.
MM4	5	Bike facilities on one side of the street, and therefore out-of-direction travel required for cyclists.

RATING SCALE



P3 - Casual Cyclist Mobility and Safety

Criteria Description

Currently there are no bike facilities north of the Lake & Everett roundabout along the Everett Street corridor.

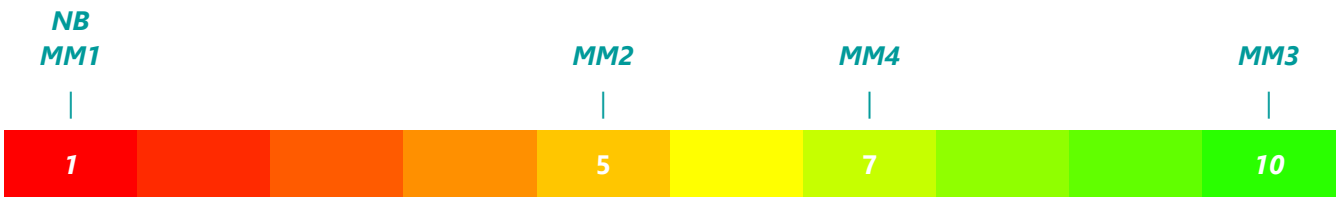
All alternatives (except no-build) add bike facilities along the length of the corridor. Evaluation of added bike facilities will consider: continuity of facilities, required crossings (if any), protection at crossings, buffer from other modes of traffic, and required out-of-direction travel (if any).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any bike facilities.
- A maximum score of 5 will be applied to alternatives with no buffer between bike facilities and other modes of transport (pedestrian, vehicle).
- A maximum score of 7 will be applied to alternatives having bike facilities on a single side of the street, and therefore requiring out-of-direction travel for adjacent users.
- A score of 10 will be applied to alternatives that allow cyclists to travel along the full length of the corridor without crossing Everett Street, require minimal out-of-direction travel, and have a buffer between bike facilities and other modes of transport.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add bike facilities.
MM1	1	Bike lanes are in roadway with no buffer from vehicular traffic.
MM2	5	Elevated bike lane with no buffer from pedestrians in the shared facility.
MM3	10	Elevated bike lanes on both sides of street, and a buffer from pedestrian facilities provided by a buffer strip.
MM4	7	Bike facilities on one side of the street, and therefore out-of-direction travel required for cyclists.

RATING SCALE



P4 - Camas Look and Feel

Criteria Description

The Everett Street corridor has been identified in the City of Camas 2035 Comprehensive Plan as a Gateway Corridor. Desirable features within Gateway Corridors include iconic street signage and lighting, layered landscaping and street trees, historic and interpretive elements, and other unique features that give roadway users the distinct impression that they are entering Camas.

All alternatives (except no-build) will add gateway features and aesthetic elements in alignment with the character of Camas.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any gateway or aesthetic improvements.
- A maximum score of 3 will be applied to alternatives that include gateway-style signage and lighting but no landscape.
- A maximum score of 7 will be applied to alternatives that do not include historical/interpretive elements.
- A score of 10 will be applied to alternatives that include gateway-style lighting and signing, street trees and landscaping, and pertinent historical/interpretive elements.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add any gateway or landscape improvements.
MM1	10	Includes street trees and gateway features.
MM2	10	Includes street trees and gateway features.
MM3	3	Includes gateway features but does not include street trees.
MM4	7	Includes gateway features but does not include street trees on one side of the road.

RATING SCALE

P5 - Public Parking

Criteria Description

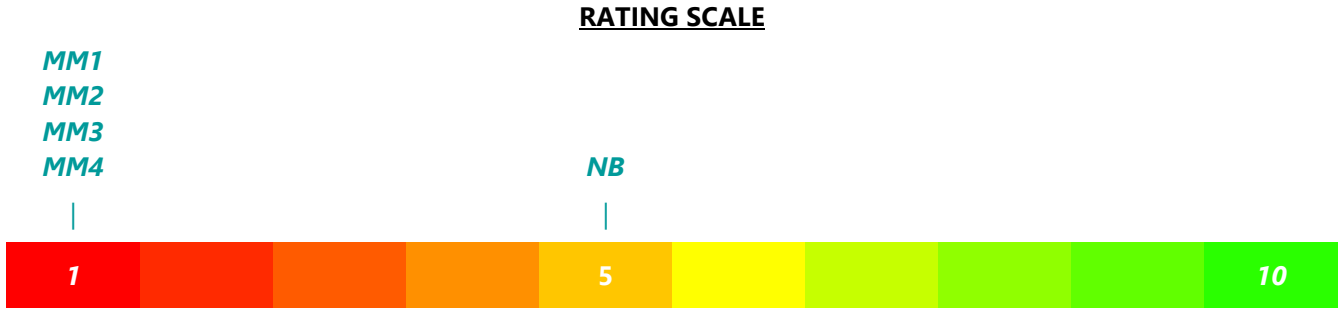
The quantity of legal parking spaces serving key locations at the south end of the corridor is currently insufficient.

Criteria Scoring

- A score of 5 will be applied to alternatives that maintain parking stall count.
- One point will be deducted for every 2 parking stalls removed, down to a minimum score of 1.
- One point will be added for every 5 parking stalls added, up to a maximum score of 10.

Note: Off-site parking should be considered to mitigate the removal of current parking spaces.

Scoring		
Alt	**Score**	**Justification**
NB	5	Maintains existing parking stall count.
MM1	1	Does not maintain existing parking stall count and requires off-street parking.
MM2	1	Does not maintain existing parking stall count and requires off-street parking.
MM3	1	Does not maintain existing parking stall count and requires off-street parking.
MM4	1	Does not maintain existing parking stall count and requires off-street parking.



P6 - Wheelchair User Safety and Mobility

Criteria Description

Currently there are no pedestrian facilities north of NE 35th Avenue along the Everett Street corridor.

All alternatives (except no-build) add Americans with Disabilities Act (ADA) compliant pedestrian facilities along the length of the corridor.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add ADA-compliant pedestrian facilities.
- A maximum score of 3 will be applied to alternatives with any gaps or discontinuities in pedestrian facilities along the corridor.
- A maximum score of 5 will be applied to alternatives that require pedestrians to cross Everett Street to continue northbound or southbound travel along the corridor.
- A maximum score of 7 will be applied to alternatives with attached sidewalks and to alternatives with no buffer between pedestrian facilities and bike facilities.
- A score of 10 will be applied to alternatives that allow pedestrians to travel along the full length of the corridor without crossing Everett Street, require minimal out-of-direction travel, and have detached sidewalks.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
MM1	10	Separated bike facilities for the length of the project.
MM2	7	Bike facility is shared with pedestrians.
MM3	10	Separated bike facilities for the length of the project.
MM4	7	Bike facilities are only located on one side of the road, resulting in out-of-direction travel potential.

RATING SCALE

P7 - Experienced Cyclist Mobility and Safety

Criteria Description

Currently there are no bicyclist facilities north of the Lake & Everett roundabout along the Everett Street corridor.

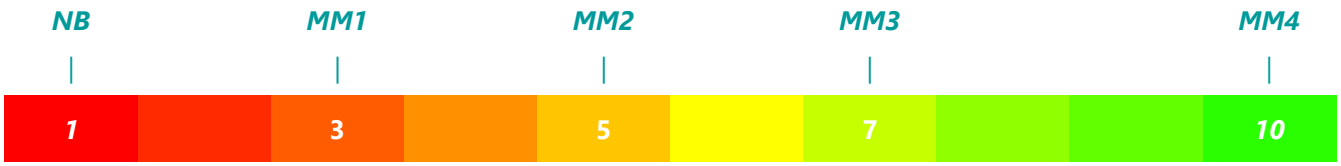
All alternatives (except no-build) add bike facilities along the length of the corridor. Evaluation of added bike facilities will consider: continuity of facilities, required crossings (if any), protection at crossings, buffer from other modes of traffic, and required out-of-direction travel (if any).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add bicycle facilities that meet WSDOT traffic stress criteria.
- A maximum score of 5 will be applied to alternatives with no buffer between bike facilities and other modes of transport (pedestrian, vehicle).
- A maximum score of 7 will be applied to alternatives which have more intersection crossings.
- A score of 10 will be applied to alternatives that allow cyclists to travel along the full length of the corridor without crossing Everett Street, minimal intersection crossings, and have a buffer between bike facilities and other modes of transport.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add bike facilities.
MM1	3	Bike lanes are in roadway with no buffer from vehicular traffic.
MM2	5	Cyclists have no buffer from pedestrians in a shared facility.
MM3	7	Bike lanes on both sides of the street, and a buffer from pedestrian facilities is provided by a landscape strip.
MM4	10	Bike facilities on one side of the street with minimal intersection crossings.

RATING SCALE



Multimodal Results

The following table summarizes the results from section 3, Analysis Criteria and Weight:

Everett Street Corridor Alternatives Analysis – Multimodal						
Public Impacts and Benefits						
Analysis Criteria	**Priority Weight**	**NB**	**MM1**	**MM2**	**MM3**	**MM4**
Pedestrian Mobility and Safety	2	1	7	7	7	10
Connections to Nearby Areas	2	1	10	10	10	5
Casual Cyclist Mobility and Safety	1.5	1	1	5	10	7
Camas Look and Feel	1.2	1	10	10	3	7
Public Parking	1.2	5	1	1	1	1
Wheelchair User Safety and Mobility	1	1	10	7	10	7
Serious Cyclist Mobility and Safety	1	1	3	5	7	10
Total without priority		**11**	**42**	**45**	**48**	**47**
Total with priority		**14.7**	**61.7**	**66.7**	**70.8**	**67.1**

Multimodal Selected Alternative

MM3 scored the highest of options MM1 through MM4. However, due to the relatively small point differential between all options, in conjunction with the fact that no single option adequately satisfied the community and City goals, an additional option was added to best meet the multimodal criteria (MM5). See below for the new alternative cross section and the updated results summary including MM5.

Elevated Bikeway and Sidewalk Alternative (MM5)

This alternative would include the following features:

- An elevated bikeway, sidewalk, and buffer areas would be elevated above the roadway and behind the curb on both sides of Everett Street.
- When combined with a two-lane (RB1) and three-lane roadway (S1 and RB2), there would be property impacts beyond the right-of-way.

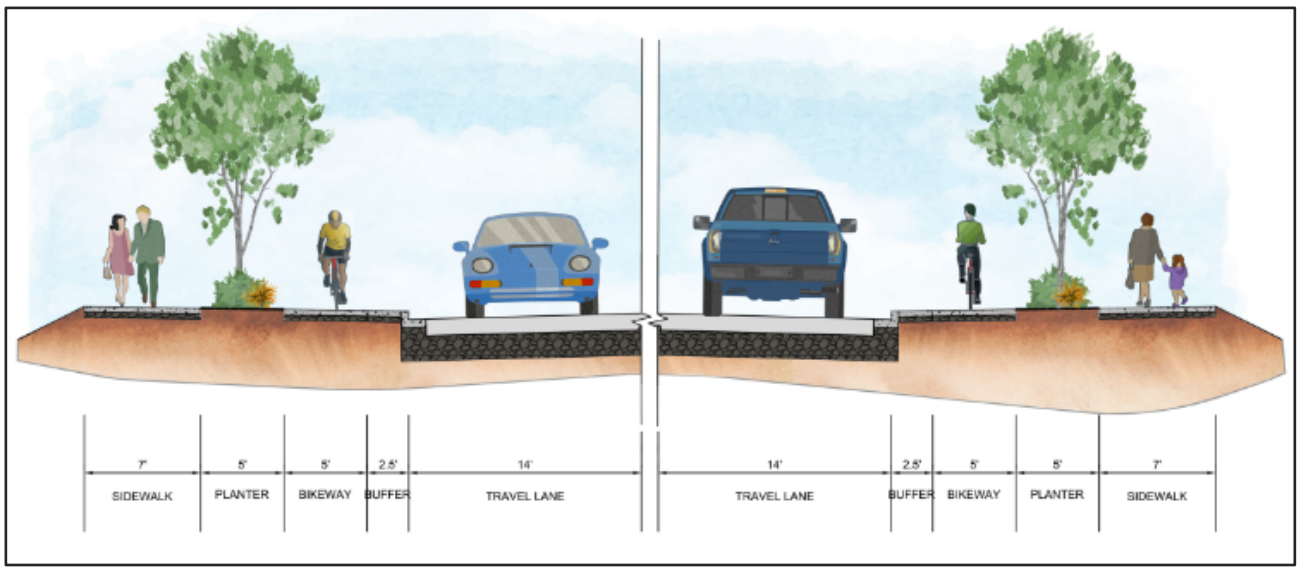


Figure 8. Elevated Bikeway and Sidewalk Alternative (MM5).

Everett Street Corridor Alternatives Analysis – Multimodal								
Public Impacts and Benefits								
Analysis Criteria	**Priority Weight**	**NB**	**MM1**	**MM2**	**MM3**	**MM4**	**MM5**	**MM5 Justification**
Pedestrian Mobility and Safety	2	1	7	7	7	10	10	Buffer from bike facilities provided by landscape strip. Sidewalk is 7 feet wide.
Connections to Nearby Areas	2	1	10	10	10	5	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.
Casual Cyclist Mobility and Safety	1.5	1	1	5	10	7	10	Bike lanes on both sides of the street, and buffer from pedestrian facilities provided by buffer strip.
Camas Look and Feel	1.2	1	10	10	3	7	10	Includes street trees and gateway features.
Public Parking	1.2	5	1	1	1	1	1	Does not maintain existing parking stall count, requires off-street parking.
Wheelchair User Safety and Mobility	1	1	10	7	10	7	10	Separated bike facilities for length of project.

Serious Cyclist Mobility and Safety	1	1	3	5	7	10	7	Bike lanes on both sides of the street, and buffer from pedestrian facilities provided by landscape strip.
Total without priority		**11**	**42**	**45**	**48**	**47**	**58**	
Total with priority		**14.7**	**61.7**	**66.7**	**70.8**	**67.1**	**85.2**	

Option MM5 was determined to best satisfy the community and City's goals for all users of the corridor: connectivity, Camas look and feel, mobility, and safety. The design team strongly recommends option MM5 for the multimodal corridor as the best option for the City. This option was further vetted with City staff and the team concluded that MM5 is the recommended multimodal solution which will be used in conjunction to the roadway alternatives.

P1 - Pedestrian Mobility and Safety

Criteria Description

Currently there are no pedestrian facilities north of NE 35th Avenue along the Everett Street corridor.

All alternatives (except no-build) add pedestrian facilities along the length of the corridor. Evaluation of added pedestrian facilities will consider pedestrian safety (results are based on research by the National Insurance Institute for Highway Safety).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any pedestrian facilities.
- A score of 10 will be applied to the safest alternatives.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
RB1 W/MM5	10	Buffer from bike facilities provided by a curb. The sidewalk is only 6 feet wide.
S1 W/MM5	7	Research has proven that signalized intersections are less safe than roundabouts, as when collisions happen, they are more likely to result in injuries or fatalities.
RB2 W/MM5	10	Buffer from bike facilities provided by a landscape strip. The sidewalk is 7 feet wide.

RATING SCALE

P2 - Connections to Nearby Areas

Criteria Description

Currently there are no pedestrian or bike facilities north of NE 35th Avenue along the Everett Street corridor.

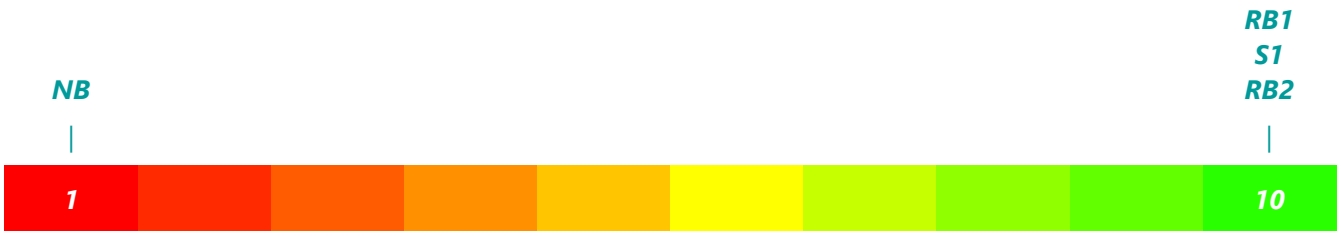
All alternatives (except no-build) add pedestrian and bike facilities along the length of the corridor, such that pedestrians and cyclists can travel north or south along Everett Street. Evaluation of connectivity will consider the ability of users to reach key locations and any out-of-direction travel required to reach key locations.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add pedestrian and bike facilities.
- A score of 10 will be applied to alternatives that add pedestrian and bike facilities that connect users to all identified key locations and require no out-of-direction travel.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
RB1 W/MM5	10	Sidewalks and bike facilities on both sides of street along the length of the corridor.
S1 W/MM5	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.
RB2 W/MM5	10	Sidewalks and bike facilities on both sides of the street along the length of the corridor.

RATING SCALE



P3 - Casual Cyclist Mobility and Safety

Criteria Description

Currently there are no bike facilities north of the Lake & Everett roundabout along the Everett Street corridor.

All alternatives (except no-build) add bike facilities along the length of the corridor. Evaluation of added bike facilities will consider casual bicyclist safety (results are based on research by the National Insurance Institute for Highway Safety).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any bike facilities.
- A score of 10 will be applied to alternatives that provide the highest safety standards. This has been interpreted as providing dedicated bike facilities.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add bike facilities.
RB1 W/MM5	10	Bike lanes are in the roadway with no buffer from vehicular traffic.
S1 W/MM5	10	Elevated bike lane with no buffer from pedestrians in the shared facility.
RB2 W/MM5	10	Elevated bike lanes on both sides of the street, and buffer from pedestrian facilities provided by a buffer strip.

RATING SCALE

P4 - Camas Look and Feel

Criteria Description

The Everett Street corridor has been identified in the City of Camas 2035 Comprehensive Plan as a Gateway Corridor. Desirable features within Gateway Corridors include iconic street signage and lighting, layered landscaping and street trees, historic and interpretive elements, and other unique features that give roadway users the distinct impression that they are entering Camas.

All alternatives (except no-build) will add gateway features and aesthetic elements in alignment with the character of Camas.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not landscape or gateway features
- A score of 10 will be applied to alternatives that have the highest potential to add landscape or gateway features.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add landscape or gateway features.
RB1 W/ MM5	7	Adds landscape and gateway features behind the curbs.
S1 W/ MM5	7	Adds landscape and gateway features behind the curbs.
RB2 W/ MM5	10	Adds landscape and gateway features behind the curbs, with potential to add landscaped medians north of Leadbetter Road.

RATING SCALE

P5 - Public Parking

Criteria Description

The quantity of legal parking spaces serving key locations at the southern end of the corridor is currently insufficient.

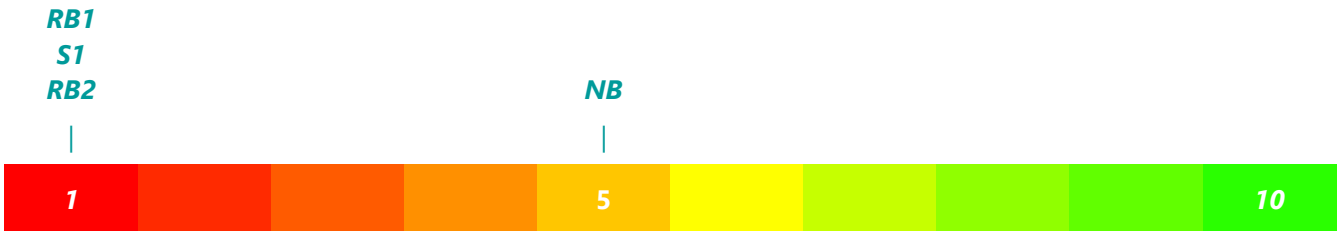
Criteria Scoring

- A score of 5 will be applied to alternatives that maintain parking stall count.
- One point will be deducted for every 2 parking stalls removed, down to a minimum score of 1.
- One point will be added for every 5 parking stalls added, up to a maximum score of 10.

Scoring		
Alt	**Score**	**Justification**
NB	5	Maintains existing parking stall count.
RB1 W/ MM5	1	Does not maintain existing parking stall count and requires off-street parking.
S1 W/ MM5	1	Does not maintain existing parking stall count and requires off-street parking.
RB2 W/ MM5	1	Does not maintain existing parking stall count and requires off-street parking.

Note: Off-site parking should be considered to mitigate the removal of current parking spaces

RATING SCALE



P6 -Wheelchair User Safety and Mobility

Criteria Description

Currently there are no pedestrian facilities north of NE 35th Avenue, along the Everett Street corridor.

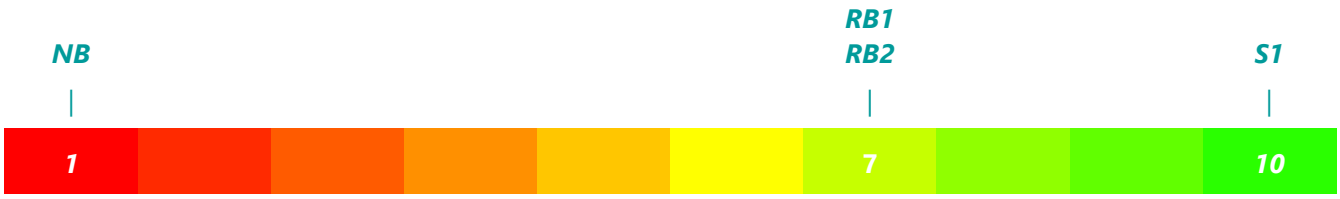
All alternatives (except no-build) add ADA-compliant pedestrian facilities along the length of the corridor.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any bike facilities.
- A score of 10 will be applied to alternatives that provide the highest safety standards. This has been interpreted as providing a signalized crossing for slower mobility users
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add pedestrian facilities.
RB1 W/MM5	7	Single lane crossings reduce exposure time.
S1 W/MM5	10	Signalized crossing provides the highest level of safety
RB2 W/MM5	7	Single lane crossings reduce exposure time.

RATING SCALE



P7 - Experienced Cyclist Mobility and Safety

Criteria Description

Currently there are no bike facilities north of the Lake & Everett roundabout along the Everett Street corridor.

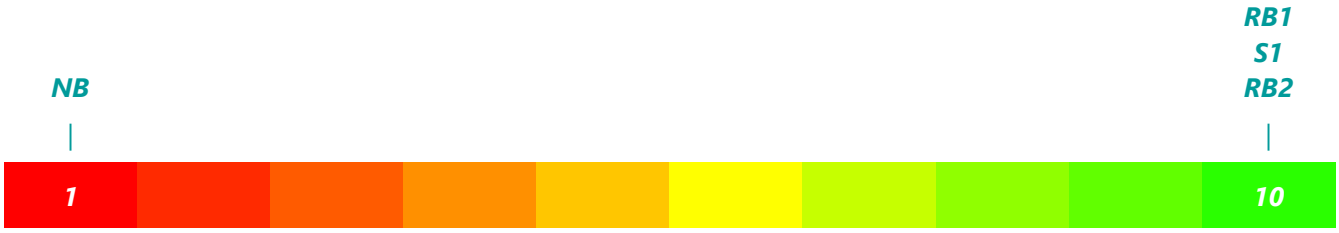
All alternatives (except no-build) add bike facilities along the length of the corridor. Evaluation of added bike facilities will consider casual bicyclist safety (results are based on research by the National Insurance Institute for Highway Safety).

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add any bike facilities.
- A score of 10 will be applied to alternatives that provide the highest safety standards. This has been interpreted as providing dedicated bike facilities.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	Does not add bike facilities.
RB1 W/MM5	10	Bike lanes are in the roadway with no buffer from vehicular traffic.
S1 W/MM5	10	Elevated bike lane with no buffer from pedestrians in the shared facility.
RB2 W/MM5	10	Elevated bike lanes on both sides of the street, and a buffer from pedestrian facilities provided by a buffer strip.

RATING SCALE



T1 - Motorist Mobility and Safety

Criteria Description

Currently NE 43rd Avenue is the only intersecting street along the corridor with facilities to protect turning movements onto Everett Street. All other intersecting streets are stop-controlled and must yield to Everett Street traffic, thereby generating unprotected turns onto Everett Street.

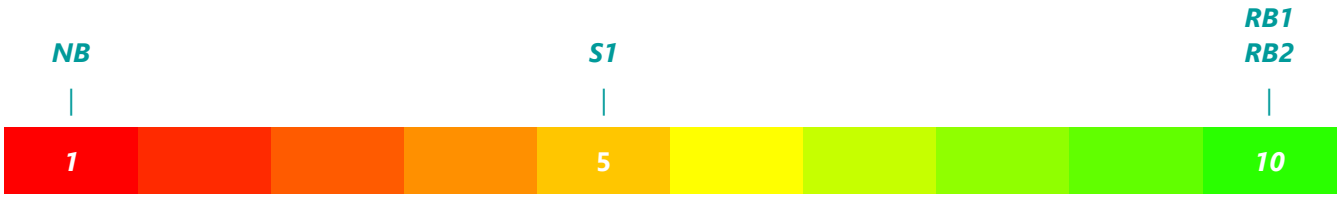
Alternatives propose stop lights or roundabouts at key intersections to eliminate unprotected turns onto and off of Everett Street. Access at other intersections may be reduced, and limited out-of-direction travel may be introduced in some locations.

Criteria Scoring

- A score of 1 will be applied to the alternative with the highest probability of fatal crashes and largest anticipated speeds through intersections.
- A score of 10 will be applied to the alternative with the lowest probability of fatal crashes and safest anticipated speeds through intersections.
- Other alternatives will be scored proportionally. Overall crash rates may not coincide with fatal crash probabilities, in which case ratings of 1 or 10 may not be applied to any alternatives.

Scoring		
Alt	**Score**	**Justification**
NB	1	There is currently a signalized intersection at NE 43rd Avenue, and all other intersecting roads are stop-controlled and yield to Everett Street. This leaves motorists performing turning movements unprotected against high-speed through traffic. Additionally, the current two-lane section does not have any auxiliary turn lanes south of NE 43rd Avenue, meaning that turning movements off of Everett Street in this area cause delays of through traffic.
RB1 W/MM5	10	Roundabouts allow for higher traffic throughput than intersections with the same number of lanes, and fewer fatal collisions occur at roundabouts than intersections due to lower speeds and oblique collision angles.
S1 WMM5	5	This alternative adds a two-way center turn lane and several signalized intersections that would provide storage and protected phases for turning movements, but there is a higher chance of high-speed and fatal collisions when compared to roundabouts.
RB2 W/MM5	10	Roundabouts allow for higher traffic throughput than intersections with the same number of lanes, and fewer fatal collisions occur at roundabouts than intersections due to lower speeds and oblique collision angles.

RATING SCALE



T2 -Traffic Flow and Property Access Impacts During Construction

Criteria Description

All alternatives (except no-build) will introduce traffic impacts as a result of construction activity. Impacts may include: reduced speeds, lane closures, temporary traffic signals, temporary traffic flaggers, traffic realignments, and traffic delays.

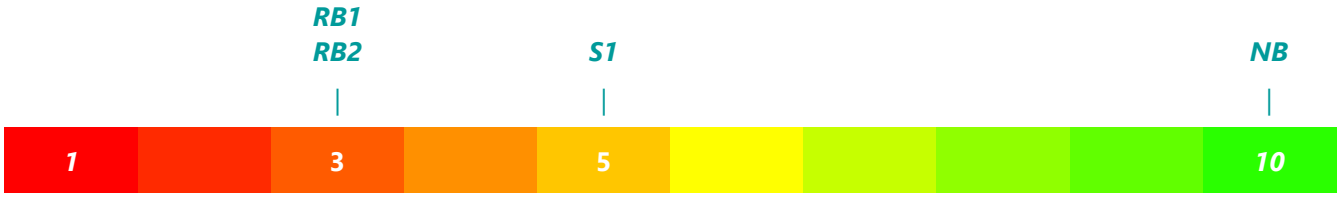
The extent of these impacts will be dependent upon several factors including: space available for construction, project scope, and construction phasing. In general, the more improvements that are made within the footprint of the existing roadway, the greater the traffic impacts will be.

Criteria Scoring

- A score of 1 will be applied to alternatives that require a full closure of the road for a significant duration.
- A maximum score of 3 will be applied to alternatives that require a partial closure of the road for a significant duration.
- A maximum score of 5 will be applied to alternatives that impose significant property access impacts, including out-of-direction travel.
- A score of 10 will be applied to alternatives that can be achieved with no traffic impacts.

Scoring		
Alt	**Score**	**Justification**
NB	10	No construction; zero traffic impacts due to construction.
RB1 W/MM5	3	Based on available space, it is likely that roundabouts will require at least partial roadway closures for significant durations.
S1 W/M5	5	It may be possible to complete signalized alternative without roadway closures, but property access will be affected at times by construction of adjacent roadway and multimodal facilities.
RB2 W/MM5	3	Based on available space, it is likely that roundabouts will require at least partial roadway closures for significant durations.

RATING SCALE



T3 -Lighting Impacts and Benefits

Criteria Description

Lighting along the Everett Street corridor currently includes modern streetlights at the intersections of NE Everett Drive, SE Leadbetter Road, and NE 43rd Avenue. All other locations have no lighting, or lighting that doesn't meet modern standards.

All alternatives will add lighting and improve illumination along the corridor. Illumination will be of particular importance at intersections and pedestrian/cyclist crossings.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not add lighting along the corridor.
- A score of 10 will be applied to alternatives that provide satisfactory lighting at all locations along the corridor.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	1	No lighting added.
RB1 W/MM5	10	Satisfactory lighting added at all locations along the corridor.
S1 W/MM5	10	Satisfactory lighting added at all locations along the corridor.
RB2 W/MM5	10	Satisfactory lighting added at all locations along the corridor.

RATING SCALE

T4 - Emergency Access

Criteria Description

Currently there are no medians or islands along the Everett Street corridor that pose a navigation obstacle to emergency vehicles. However, there are areas where shoulder width is extremely limited, especially at the southern end of the corridor.

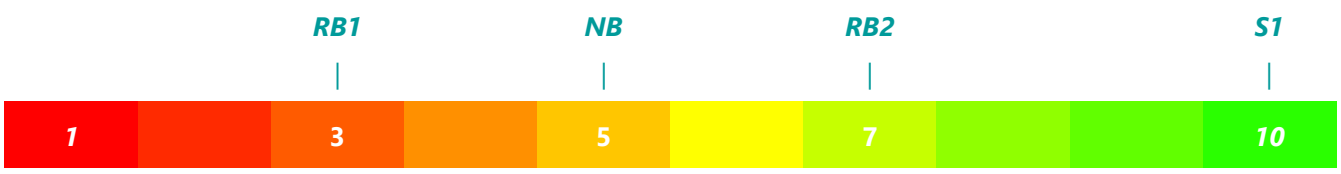
Alternatives that introduce medians or islands will maintain adequate clear space. Alternatives will also minimize out-of-direction travel and incorporate a shoulder where feasible.

Criteria Scoring

- A score of 1 will be applied to alternatives that do not include sufficient clear space at certain locations and/or require considerable out-of-direction travel.
- A score of 10 will be applied to alternatives that maintain sufficient clear space at all locations, and do not require out-of-direction travel.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	5	Two-lane section with a limited shoulder along much of corridor, but full access at all intersections and no out-of-direction travel required.
RB1 W/MM5	3	Two-lane section divided by a median throughout the corridor will result in clear space constraints throughout the corridor.
S1 W/MM5	10	Three-lane section with a center-left turn lane and full access preserved at all intersections.
RB2 W/MM5	7	Two-lane section divided by a median along the southern half of the corridor will have clear space constraints, but a three-lane section with a center turn lane along the northern half of corridor will provide full access.

RATING SCALE



E1 - Minimize Impact to the Environment

Criteria Description

Impact on the environment includes a number of more specific impacts such as ground disturbance, tree disturbance and removal, and changes in water and air quality.

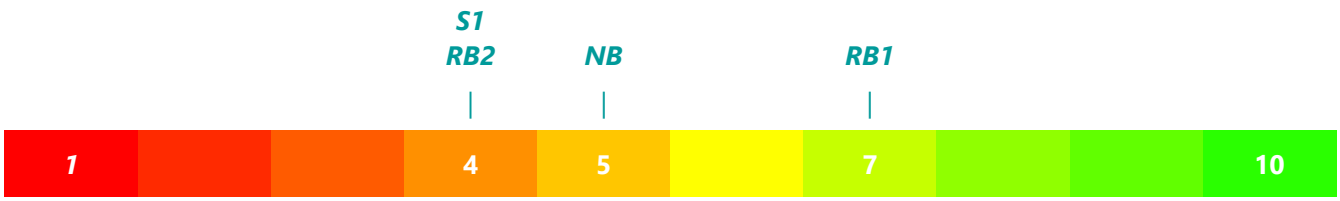
All alternatives (except no-build) will require a certain degree of environmental impact, and in general, the larger the footprint of the new roadway the greater the environmental impact.

Criteria Scoring

- A score of 1 will be applied to the alternative that results in significant ground disturbance, removal of numerous trees, and degradation of air and water quality.
- A score of 10 will be applied to the alternative that results in no ground disturbance (and thus no tree removal or disturbance), and no water or air quality impacts.
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	5	No ground disturbance, tree disturbance, or removal. However, no roadway and stormwater improvements could lead to increased vehicular traffic congestion, reduced air quality, and water quality in the immediate area.
RB1 W/ MM5	7	The two-lane section with roundabouts will likely require moderate ground disturbance, tree disturbance/removal, and increases in stormwater runoff. However, roundabouts provide greater traffic throughput than intersections, thereby limiting air quality impacts due to traffic congestion.
S1 W/ MM5	4	The three-lane section with signalized intersections will likely require moderate ground disturbance, tree disturbance/removal, and increases in stormwater runoff.
RB2 W/ MM5	4	The three-lane section with roundabouts has the largest footprint and will likely require the greatest ground disturbance, tree disturbance/removal, and greatest increase in stormwater runoff. However, roundabouts provide greater traffic throughput than intersections, thereby limiting air quality impacts due to traffic congestion.

RATING SCALE



E2 - Noise Impacts and Mitigation

Criteria Description

In general, noise generated by a road will increase will the average speed of traffic, and with the volume of traffic. It is assumed that traffic will continue to increase independent of any improvements made to Everett Street.

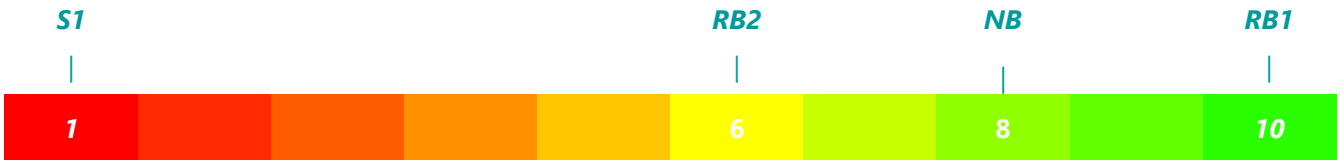
Currently, there are no noise barriers along the Everett Street corridor. Studies will determine anticipated future noise levels generated by traffic, and if said noise levels exceed a critical threshold, construction of noise barriers will be considered.

Criteria Scoring

- A score of 1 will be applied to the alternative that results in the loudest traffic noise affecting adjacent properties.
- A score of 10 will be applied to the alternative that results in the quietest traffic noise affecting adjacent properties (likely by means of a noise barrier and/or traffic calming).
- Other alternatives will be scored proportionally.

Scoring		
Alt	**Score**	**Justification**
NB	8	No traffic calming will be implemented, but travel lanes will not be shifted toward residences.
RB1 W/MM5	10	Roundabout chicanes will reduce traffic speed through intersections and along the corridor.
S1 W/MM5	1	Travel lanes will shift closer to residences and traffic speeds while likely be higher.
RB2 W/MM5	6	Roundabout chicanes will reduce traffic speed through intersections and along the corridor. However, portion of the travel lanes will be closer to residences.

RATING SCALE



I1 - Private Property Impacts

Criteria Description

Several alternatives may require right-of-way acquisition from adjacent private properties.

One or more private properties have improvements within the existing right-of-way, and all alternatives may require the removal of said improvements.

Criteria Scoring

- A score of 1 will be applied to alternatives that will likely require relocation of residences or demolition of structures.
- A score of 5 will be applied to alternatives that require right-of-way acquisition from properties and substantially impact the use of the properties.
- A maximum score of 8 will be applied to alternatives that require right-of-way acquisition but are not likely to substantially impact the use of said properties.
- A score of 10 will be applied to alternatives that do not extend roadway hardscape into impact private property.

Scoring		
Alt	**Score**	**Justification**
NB	10	No right-of-way impacts.
RB1 W MM5	8	Some right-of-way impacts but maintains existing driveways and parking at residences.
S1 W/MM5	1	High probability of substantially impacting or demolishing existing structures.
RB2 W/MM5	8	Some right-of-way impacts but maintains existing driveways and parking at residences.

RATING SCALE

I2 - Construction Costs

Criteria Description

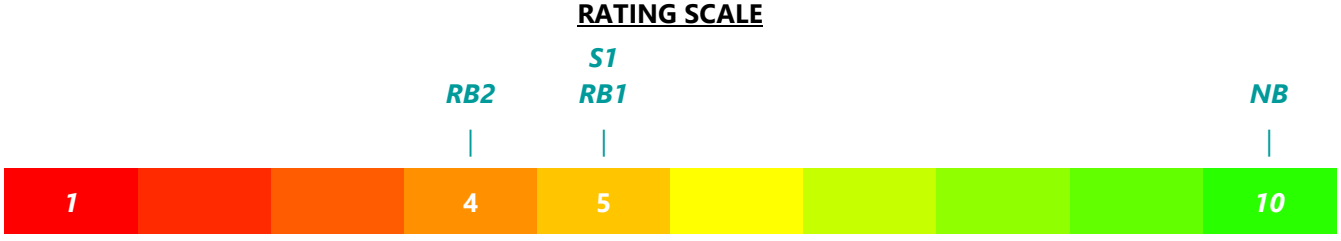
The three construction-based alternatives have been conceptually costed out for the purposes of a cost comparison.

Upon selection of a preferred alternative, the preferred alternative and its project additives will be refined to provide a more detailed construction cost estimate.

Criteria Scoring

- Lowest cost will receive a score of 10.
- Highest cost will receive a score of 1.
- All options start at 10 and lose a point for every $8 million

Scoring		
Alt	**Score**	**Justification**
NB	10	$0
RB1 W/MM5	5	$41M
S1 W/MM5	5	$41M
RB2 W/MM5	4	$46M



Alternative Evaluation Results

The following table summarizes the results from the analysis of the roadway alternatives and their respective scores. The overall results were combined with the preferred multimodal alternative (MM5).

Public Impacts and Benefits					
Analysis Criteria	**Priority Weight**	**NB**	**RB1 W/ MM5**	**S1 W/ MM5**	**RB2 W/ MM5**
Pedestrian Mobility and Safety	2	1	10	7	10
Connections to Nearby Areas	2	1	10	10	10
Casual Cyclist Mobility and Safety	1.5	1	10	10	10
Camas Look and Feel	1.2	1	7	7	10
Public Parking	1.2	5	1	1	1
Wheelchair User Safety and Mobility	1	1	7	10	7
Serious Cyclist Mobility and Safety	1	1	10	10	10
Total without priority		**11**	**55**	**55**	**58**
Total with priority		**14.7**	**81.6**	**78.6**	**85.2**

Traffic Impacts and Benefits					
Analysis Criteria	**Priority Weight**	**NB**	**RB1 W/ MM5**	**S1 W/ MM5**	**RB2 W/ MM5**
Motorist Mobility and Safety	2	1	10	5	10
Traffic Flow and Property Access during Construction	1.5	10	3	5	3
Lighting Impacts and Benefits	1.2	1	10	10	10
Emergency Access	2	5	3	10	7
Total without priority		**17**	**26**	**30**	**30**
Total with priority		**28.2**	**42.5**	**49.5**	**50.5**

Environmental Impacts and Benefits					
Analysis Criteria	**Priority Weight**	**NB**	**RB1 W/ MM5**	**S1 W/ MM5**	**RB2 W/ MM5**
Minimize Impact to the Environment	2	5	7	4	4
Noise Impacts & Mitigation	1	8	10	1	6
Total without priority		**13**	**17**	**5**	**10**
Total with priority		**18**	**24**	**9**	**14**

Infrastructure Impacts and Benefits					
Analysis Criteria	**Priority Weight**	**NB**	**RB1 W/ MM5**	**S1 W/ MM5**	**RB2 W/ MM5**
Private Property Impacts	1.2	10	8	1	8

Construction Costs	1.2	10	5	5	4
Total without priority		**20**	**13**	**6**	**12**
Total with priority		**24**	**15.6**	**7.2**	**14.4**

Summary				
	NB	**RB1 W/ MM5**	**S1 W/ MM5**	**RB2 W/ MM5**
Total without priority	**50**	**111**	**96**	**110**
Total with priority	**84.9**	**163.7**	**144.3**	**164.1**

Note:

- RB1 = Single-lane roundabout corridor along the entire corridor.
- RB2 = Single-lane corridor from the Lake and Everett Roundabout Corridor to Leadbetter Road, and a three-lane roundabout corridor north to the city limits.
- S1 = Three-lane signalized corridor.

4. DRAFT RECOMMENDED ALTERNATIVE

Option RB2 (three-lane section north of Leadbetter Road) was determined to best satisfy the community and City's goals for all users of the corridor. RB2 is a single-lane roundabout corridor, with a narrow median from the southern project limits to SE Leadbetter Road, and a single-lane roundabout corridor with a large median from SE Leadbetter Road to the northern project limits.

This Alternative Analysis Report evaluated the benefits, impacts, and challenges associated with proposed improvements along the corridor. After considering several vehicular and pedestrian/cyclist alternatives, the final alternatives chosen are the MM5 cross section and RB2 roundabout design. The RB2 design in combination with MM5 improves the connectivity to key locations, as well as the safety and mobility of pedestrians, cyclists, and motorists along the corridor. These options are projected to reduce the severity of rear-end and turning movement related crashes by speed reduction, added illumination, and roundabout design. Additionally, these options create the distinct City of Camas look and feel. The design team strongly recommends the combination of these two alternatives as the best option for the City of Camas.

5. FEEDBACK FROM OPEN HOUSE #3

The third corridor open house, held on September 20, 2023, at Lacamas Lake Lodge again saw an attendance of over 50 people, including several elected officials and those running for office, and lasted until after 8:00 pm. To allow participants to catch up on past events, presentation printouts and event summaries from open houses 1 and 2 were provided before the presentation began. Additionally, project staff were available for one-on-one discussion both before and after the program. Public Works Director Steve Wall, with support from project team members, fielded more than 20 questions and comments.

Several attendees posed questions and made comments. Key themes were as follows:

- Property Impacts/Right-of-Way
- Design
- Roundabout Benefits
- Funding
- Timing

- Comprehensive Planning

These questions and comments were made during an open Question & Answer session in which project staff provided answers and feedback. These notes were made to the best of the notetaker's ability and are not an actual transcription of discussion. Any items can be further researched for accuracy and completeness upon request.

- What is the right-of-way (ROW) distance? About 30 feet from the road's center stripe.
- In the recommended concept, MM5, does the sidewalk need to be on both sides of the roadway? Yes.
- Is this where eminent domain comes in? Steve referenced the formal ROW process.
- Request for bigger graphics so measurements are readable.
- Is the timing of this project being coordinated with the North Shore? Yes, the North Shore is being considered. We do not yet know the timing of the phases in this project.
- Question on the recommended concept and bike use.
- What size are the roundabouts? Not as big as the Lake-Everett roundabout. Approximately 110 feet, using WSDOT guidance and the newest roundabout guide for design. We will refine the design with community input. Additional discussion on the roundabout concepts having less impact along the corridor than the signal concept, more at intersections.
- At the intersection near Camas High School (43rd and Everett), how does the roundabout play out with traffic volumes? Roundabouts keep traffic moving, provide gaps, and slow people down. The traffic simulation shown on screen (references a monitor set up in the event space) show a 20-year projection, are sped up five times, and don't show cars slowing to enter.
- Regarding widening in the north segment, what has the conversation with WSDOT addressed in terms of the transition to unincorporated areas? WSDOT is planning roundabouts at 3rd & Everett and 3rd & Robinson, with construction anticipated summer 2024.
- Is the bridge part of the project? Yes, the bridge and the 35th intersection would probably go together. Raising the bridge will be required to get out of the floodplain?
- Regarding congestion and future development, is public transit being considered? Yes. The CTRAN representative present added that this project could allow for new access to their services.
- Regarding timing, is it possible that pieces of this project could be completed faster than two decades? There are potential alternatives, such as trails being looked at by the Parks Department, that could provide access sooner.
- Can we do anything to reduce speed? Traffic studies would likely be required with proof shown of how people are using the corridor. Unable to answer fully tonight.
- As the county and city expands to the north, how is this project planning being integrated with land use planning? Our traffic analysis uses the county's most recent data. Future planning will evolve, with new details being incorporated constantly.
- The corridor project doesn't show ways to accommodate areas coming off of it. Is there a plan for improving infrastructure into and out of this area? The city's planning process looks at this, and planning growth is included in this project's plan.
- What is the cost estimate and funding outlook? $40-50 million. We'll break out the project into segments, look at options and grants. The city tracks and pursues funding opportunities.

- Does this cost include maintenance costs? We separate the two, but they need to work together despite coming from different funding streams. The Council weighs in on these discussions. It's getting hard to find maintenance dollars state and nationwide.
- Do you know what the segments are? Somewhat, but we don't know the order of addressing them. The south section will likely take priority.
- Regarding intersection priorities, it depends on the pedestrian or roadway focus. How you move through the roadway affects movement through the intersections.
- Will people move through the corridor easier if bottlenecks at intersections are fixed? Yes.
- Specific question about the south and north sections and how the concept would affect her property. Staff will follow up with her one on one.
- With WSDOTs roundabouts, the total is eight. Is there a hybrid option to do some roundabouts and some signals? Yes, we've looked at that. "Consistent expectation" is important.
- Is combining intersections possible? The hill makes it hard.
- Does modeling incorporate the new planned infrastructure? Yes, and other city planning documents reflect that too.

6. CITY COUNCIL FEEDBACK

TBD

7. FINAL RECOMMENED ALTERNATIVE

TBD