

MEMORANDUM

Date: May 11, 2021 Project #: 23021.19
To: Project Management Team

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Project: Oregon City-West Linn Pedestrian and Bicycle Bridge Concept Plan
Subject: TM #5: Executive Summary and Recommendations

PURPOSE

This memorandum summarizes the findings and recommendation for the concept plan for a pedestrian/bicycle bridge crossing between Oregon City and West Linn. The top five most promising bridge alignments identified in *TM #2: Identify Crossing Alignments* were analyzed based on the criteria established in *TM #1: Evaluation Criteria for Crossing Alignments*. The analysis of the top five most promising bridge alignments is described in *TM #3A: Preliminary Bridge Concept Plans*, *TM 3B: Benefits and Impacts Analysis*, and *TM #4: Active Transportation Analysis*. Based on the findings from this evaluation, the project team has provided a preliminary recommendation for the concept plan.

POTENTIAL BRIDGE ALIGNMENTS

A preliminary list of 15 potential bridge alignments was developed and screened based on the project's evaluation criteria and conversations with interested government parties, government agencies with regulatory authority, as well as previous studies¹. Stakeholder groups, focus groups, and the Technical Advisory Committee (TAC) provided input on these bridge alignments to select the five most promising bridge alignments, which are evaluated in this memorandum². The top five bridge alignments are illustrated in Figure 1.

¹ This initial screening is documented in *TM #2: Identify Crossing Alignments*.

² Stakeholder and public feedback are provided in the *Stakeholder Interview and Focus Group Summary Report* and the *Public Outreach Summary Report*, respectively.

Figure 1: Potential Bridge Alignments



The five most promising bridge alignments illustrated above were evaluated in greater detail in the following three technical memoranda.

- **TM #3A: Preliminary Bridge Concept Plans** assesses the bridge alignments based on planning-level cost, design, and construction feasibility, and risk of U.S. Coast Guard compatibility regarding the navigational channel vertical and horizontal clearance needs.
- **TM #3B: Benefits and Impacts Analysis** identifies the potential benefits and burdens of the bridge alignments with respect to user experience and health outcomes.
- **TM #4: Active Transportation Analysis** evaluates opportunities for integrating the bridge alignments into the adjacent active transportation networks of West Linn and Oregon City.

EVALUATION OF POTENTIAL BRIDGE ALIGNMENTS

Evaluation criteria and performance measures identified in *TM #1: Evaluation Criteria for Crossing Alignments* were used to assess the trade-offs of each concept and determine how closely each potential bridge alignment aligns with the Purpose and Needs Statement³. Within the Concept Plan, the needs for a new bridge are as follows:

- Address Historic Arch Bridge deficiencies for people walking, biking, and rolling
- Identify a new low-stress, comfortable, and designated connection across the Willamette River to enhance the experience for people walking, biking, and rolling
- Connect existing and planned walking, biking, and rolling networks
- Enhance the accessibility and cultural experience of historic resources
- Create opportunities for economic and community development
- Minimize environmental impacts

The scoring scale for each criterion ranges from -1 to +2, reflecting the extent to which a potential bridge alignment achieves the evaluation criteria per the associated performance measures. An evaluation of the benefits and impacts of the potential bridge alignments according to this scale is provided below for each criterion. A summary of the score across all criteria is provided in the Evaluation Criteria Detailed Scoring section of this memorandum.

Equity

The *equity* criterion considers the benefits and burdens that a bridge alignment will accrue.

The equity of each bridge alignment is assessed with respect to social and economic stakeholder mapping⁴ and public support. Social and economic stakeholder mapping focuses on elevating the voices of vulnerable groups who historically face transportation barriers and environmental justice communities that have been traditionally underserved with respect to transportation.⁵ This mapping was based on

³ Additional detail about the purpose and need for this project is provided in the *Purpose and Needs Memorandum*.

⁴ The Project Management Team conducted a stakeholder mapping exercise that charted groups' access to transportation options and ability to influence planning decisions. Groups identified as having a low ability to influence decisions and/or low transportation access include Indigenous people, unemployed people, people without access to personal vehicles, youth and students, elderly, crowded households, individuals experiencing low-income situations, and people using mobility devices.

⁵ Groups that historically face transportation barriers and environmental justice communities that have been historically underserved includes people of color, Hispanic populations, elderly populations (over age 64), youth populations (under 18), individuals experiencing low-income situations (income under 200% of the federal poverty line), and crowded households (households with more than one person per room).

focus group meetings and stakeholder interviews. Public input includes broader input received from the PAC meetings, TAC meetings, and Project Management Team (PMT) meetings, with particular emphasis on Indigenous persons' perspectives. Table 1 summarizes the equity evaluation based on social and economic stakeholder mapping and public input. As summarized in Table 1:

- Alignments 6 and 7b receive the most consistent support and raise the fewest equity concerns.
- Alignment 4a raises the most equity concerns: stakeholders are worried that Alignment 4a will negatively impact existing travel patterns in downtown Oregon City and degrade the existing view of the Historic Arch Bridge.
- Alignments 1c and 2b have strong potential to provide benefits to the community but receive mixed support due to concerns about potential impacts to views of the Willamette Falls, Historic Arch Bridge, and proximity to historic tribal resources.

Diversity, Equity, Inclusion, and Access (DEIA) Focus Groups

Focus group meetings were held with DEIA populations to ensure environmental justice populations voices are included in the development and selection of the preferred bridge alignments. Focus groups were held with Youth populations and Spanish-speaking populations. Key themes voiced through these focus group meetings are summarized below and contributed to the equity scoring identified in Table 1.

Youth

- Overall sentiment that walking, biking, and rolling across the Historic Arch Bridge is unsafe
- General agreement that if a new bridge were built, it would be heavily used, with particular emphasis on students traveling between Oregon City and West Linn
- The top five alignments were all voiced as having strong attributes
- Alignments 6 and 7b are convenient for accessing destinations in West Linn (West Linn High School)
- Alignment 1c provides a good user experience and views of the Willamette Falls

Spanish-Speaking Group

- All participants indicated a bridge dedicated to walking, biking, and rolling will benefit the community
- Alignment 7b and 6 received the highest number of votes for user experience
- Alignment 7b and 2b received the most votes for connectivity
- Alignment 1c was considered less desirable with respect to user experience and connectivity

Table 1: Equity Evaluation Summary

Alignment	Equity Score	Social and Economic Stakeholder Mapping	Public Input, with Particular Emphasis on Underrepresented Populations
Alignment 1c: 4 th Street to Mill Street	+0.75	<p>The alignment substantially enhances access for vulnerable groups identified in stakeholder mapping. Concerns were raised that the alignment may negatively impact vulnerable groups identified in stakeholder mapping.</p> <ul style="list-style-type: none"> A concern was raised that alignment may negatively impact indigenous persons by providing public access to cultural sites. Public access to these cultural sites can be seen as positive (because it promotes historical awareness, highlights cultural significance, and could generate economic revenue to tribes with property in the area) or negative (because it could lead to deterioration of the natural environment). These potential impacts are continuing to be explored. The alignment provides improved access for users who are unable to walk, bike, or roll across the Willamette River today because the Historic Arch Bridge is not accessible for many users due to stress or facility type (generally elderly, youth, and people using wheeled mobility devices). 	<p>The alignment has mixed, but generally positive support from community members.</p> <ul style="list-style-type: none"> The public recognizes the potential to provide recreational access to the sites in the area. Mixed feedback from tribes: Some do not support general public access and views of the culturally significant sites within the area and others see the potential economic and general historical awareness benefits of highlighting the cultural significance. Youth groups indicate benefits associated with visual experience of Willamette Falls.
Alignment 2b: 5 th Street to Mill Street	+0.75	<p>The alignment substantially enhances access for vulnerable groups identified in stakeholder mapping. Concerns were raised that the alignment may negatively impact vulnerable groups identified in stakeholder mapping.</p> <ul style="list-style-type: none"> A concern was raised that alignment may negatively impact indigenous persons by providing public access to cultural sites. Public access to these cultural sites can be seen as positive (because it promotes historical awareness, highlights cultural significance, and could generate economic revenue to tribes with property in the area) or negative (because it could lead to deterioration of the natural environment). These potential impacts are continuing to be explored. The alignment provides improved access for users who are unable to walk, bike, or roll across the Willamette River today because the Historic Arch Bridge is not accessible for many users due to stress or facility type (generally elderly, youth, and people using wheeled mobility devices). 	<p>The alignment has mixed, but generally positive support from community members.</p> <ul style="list-style-type: none"> The public recognizes the potential to provide recreational access to the sites in the area. Mixed feedback from tribes: Some do not support general public access and views of the culturally significant sites within the area and others see the potential economic and general historical awareness benefits of highlighting the cultural significance. Spanish-speaking groups indicate benefits associated with connectivity.
Alignment 4a: Main Street to Mill Street	+0	<p>The alignment moderately enhances access for vulnerable groups identified in stakeholder mapping. Concerns were raised that the alignment negatively impacts vulnerable groups identified in stakeholder mapping:</p> <ul style="list-style-type: none"> Stakeholders identified concerns that this alignment would create a Transportation Demand Management issue and parking shortage in downtown Oregon City if it is used predominantly as a recreational route. They are concerned that this would decrease potential for expanded economic development in the region. The alignment provides improved access for users who are unable to walk, bike, or roll across the Willamette River today because the Historic Arch Bridge is not accessible for many users due to stress or facility type (generally elderly, youth, and people using wheeled mobility devices). It is a direct connection for students at West Linn High School. 	<p>The alignment has mixed support from community members.</p> <ul style="list-style-type: none"> Some residents like the close proximity to the Historic Arch Bridge: It is a “known option” that falls into existing travel patterns. Concerns were raised about negative impacts to the view of the Historic Arch Bridge.
Alignment 6: 9 th Street to Willamette Drive	+2	<p>The alignment substantially increases access to active transportation options for vulnerable groups identified in stakeholder mapping. No concerns about impacts to vulnerable groups were identified.</p> <ul style="list-style-type: none"> The alignment provides improved access for users who are unable to walk, bike, or roll across the Willamette River today because the Historic Arch Bridge is not accessible for many users due to stress or facility type (generally elderly, youth, and people using wheeled mobility devices). It provides direct connections for elderly and youth populations due to proximity to several schools, hospitals, and community centers in Oregon City. This alignment may impact the right-of-way of a couple homes in West Linn. 	<p>This alignment has strongly positive responses from the public.</p> <ul style="list-style-type: none"> Throughout stakeholder interviews, focus group meetings, and Project Advisory Committee meetings, groups expressed strong support for this option. The public recognizes the potential for this alignment to serve as a regional connection. This alignment does not impact views of the Historic Arch Bridge. Youth groups indicate benefits associated with connectivity and access to destinations including the West Linn High School. Spanish-speaking groups indicate benefits associated with user experience.
Alignment 7b: 10 th Street to OR 43	+2	<p>The alignment substantially increases access to active transportation options for vulnerable groups identified in stakeholder mapping: No concerns about impacts to vulnerable groups were identified.</p> <ul style="list-style-type: none"> The alignment provides improved access for users who are unable to walk, bike, or roll across the Willamette River today because the Historic Arch Bridge is not accessible for many users due to stress or facility type (generally elderly, youth, and people using wheeled mobility devices). It provides direct connections for elderly and youth populations due to proximity to several schools, hospitals, and community centers in Oregon City. This alignment may impact the right-of-way of a couple homes in West Linn. 	<p>This alignment has strongly positive responses from the public</p> <ul style="list-style-type: none"> Throughout stakeholder interviews, focus group meetings, and Project Advisory Committee meetings, groups expressed strong support for this option. The public recognizes the potential for this alignment to serve as a regional connection. This alignment does not impact views of the Historic Arch Bridge. Youth groups indicate benefits associated with connectivity and access to destinations including the West Linn High School. Spanish-speaking groups indicate benefits associated with user experience and connectivity.

Demand

The *demand* criterion measures how each bridge alignment increases the convenience and opportunities for walking and biking trips.

Table 2 summarizes the demand evaluation with respect to projected walking and biking trips and support of access to essential destinations. Additional information about projected walking and biking trips and community access to essential destinations is provided in *TM #4: Active Transportation Analysis*.

Table 2: Demand Evaluation Summary

Alignment	Demand Score	Projected Increase in Walking and Biking Trips ¹	Community Access to Essential Destinations ²
Alignment 1c: 4 th Street to Mill Street	+1	• Moderate increase in walking and biking trips (800 trips)	• Some (23) essential destinations
Alignment 2b: 5 th Street to Mill Street	+1	• Moderate increase in walking and biking trips (925 trips)	• Some (22) essential destinations
Alignment 4a: Main Street to Mill Street	+1.5	• Considerable increase in walking and biking trips (1,100 trips)	• Several (26) essential destinations
Alignment 6: 9 th Street to Willamette Drive	+2	• Substantial increase in walking and biking trips (1,150 trips)	• Many (28) essential destinations
Alignment 7b: 10 th Street to OR 43	+2	• Substantial increase in walking and biking trips (1,175 trips)	• Many (29) essential destinations

¹ This is a weekday trip estimate that includes projected recreational trips and mode shift trips.

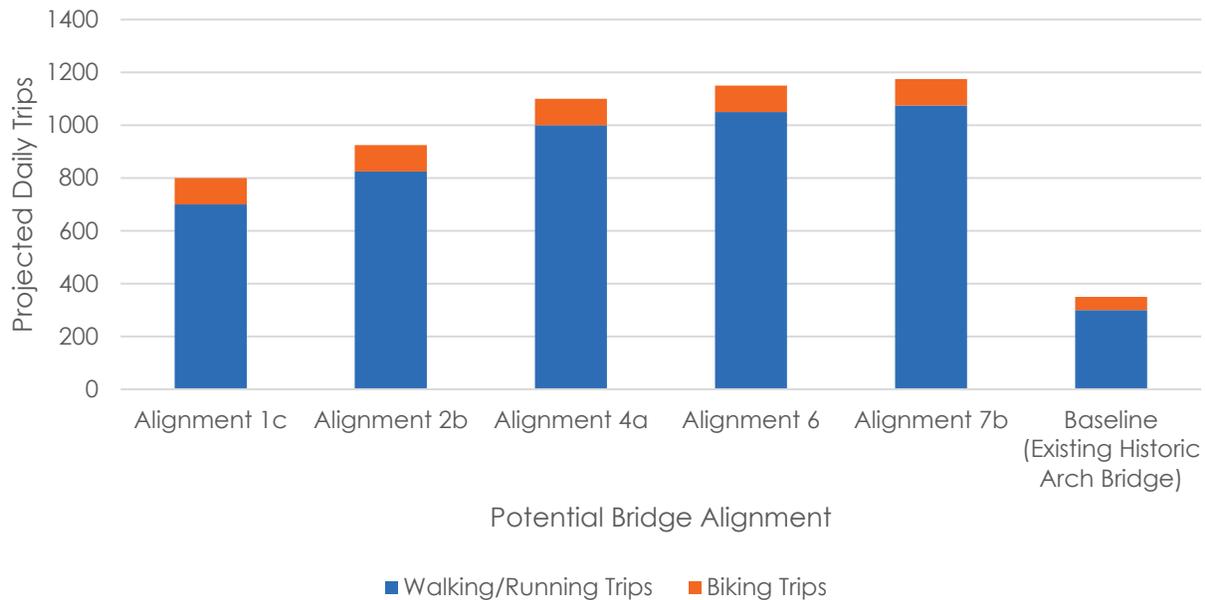
² Count of essential destinations mapped in Transportation System Plans located within a ½-mile radius of each bridgehead.

Note: The anticipated demand increases shown in Table 2 do not account for potential weekend and/or tourist generated demand that could be attributed to opportunities provided through the Blue Heron redevelopment, Metro Riverwalk, and potential access and redevelopment on Moores Island.

Projected Walking and Biking Trips

Chart 1 illustrates the total projected walking, running, rolling, and biking trips associated with each potential bridge alignment. All five potential bridge alignments would increase total active transportation trips. Alignments 6 and 7b generate the greatest number of new active transportation trips.

Chart 1: Total Projected Active Trips



Community Access to Essential Destinations

Locations of essential destinations identified in local Transportation System Plans (TSPs) include schools, libraries, landmarks, hospitals, community centers, and green spaces (e.g., parks). A map of these destinations is provided in *TM #4: Active Transportation Analysis*. The essential destinations within a half-mile radius are best served by Alignments 4a, 6, and 7b based on the proximity to the municipal elevator or Singer Hill; however, planned future redevelopment in the Industrial Heritage District and Willamette Falls Downtown District will be more directly served by Alignment 1c and Alignment 2b.

Tourist and Regional Destination Considerations

The redevelopment of the Blue Heron site, Moores Island, and the Historic Mill properties along with future investments in Metro’s Riverwalk and envisioned Oregon City Esplanade could attract tourist and recreational trips. These types of amenities could substantially increase the walking, biking, and rolling usage of bridge Alignments 1c and 2b above the demand anticipated at Alignments 4a, 6, and 7b during both the weekdays and weekend.

Comparable tourist and regional destinations include the Tilikum Crossing⁶ along the Willamette River to the north and Multnomah Falls⁷ along the Columbia River. Data is provided for bicycle use along the

⁶ <https://trimet.org/tilikum/>

⁷ <https://www.multnomahfallslodge.com/>

Tilikum Bridge⁸. On average, approximately 60,000 monthly users and roughly 1,500 daily users travel across the Tilikum Bridge by bicycle. Data for people walking is not available. Multnomah Falls attracts over 2 million patrons a year and is noted as the most visited natural recreation site in the Pacific Northwest.

Given the widened range of potential demand for Alignments 1c and 2b, the PMT should consider the associated characteristics i.e., increase in parking, foot traffic, and economic opportunities based on the recreational and tourism use to these alignments. As a regional destination and tourism attraction, the demand of parking will likely increase based on people traveling from outside the region. Alignments 6 and 7b are expected to serve the regional transportation network more directly but are not expected to increase the recreational and tourism demand as significantly compared to the upstream alignments due to the surrounding land uses and limited viewsheds of the Willamette Falls.

Transportation Safety

The *transportation safety* criterion measures how well each bridge alignment provides safe and comfortable facilities for people walking, biking, and rolling.

Table 3 provides explanations for pedestrian level of traffic stress (PLTS) and bicycle level of traffic stress (BLTS) categories. Figure 2 and Figure 3 illustrate the access to low-stress facilities at each bridgehead for people walking/rolling and biking, respectively. Table 4 summarizes the transportation safety score with respect to PLTS and BLTS. The score and LTS visualizations are based on the **planned** connections between low-stress walking and biking/rolling networks and the potential bridge alignments (identified in *TM #4: Active Transportation Analysis*).

Today, low-stress networks are limited in extents: No bridge alignments provide low-stress connectivity between Oregon City and West Linn. Planned projects will improve access in the future to all bridge alignments, especially Alignments 1c and 2b with the development of Metro's Riverwalk and Blue Heron site redevelopment with accompanying bridge and elevator for people walking, biking, and rolling to access the Willamette Falls Project area.

⁸ <http://portland-tilikum-crossing.visio-tools.com/>

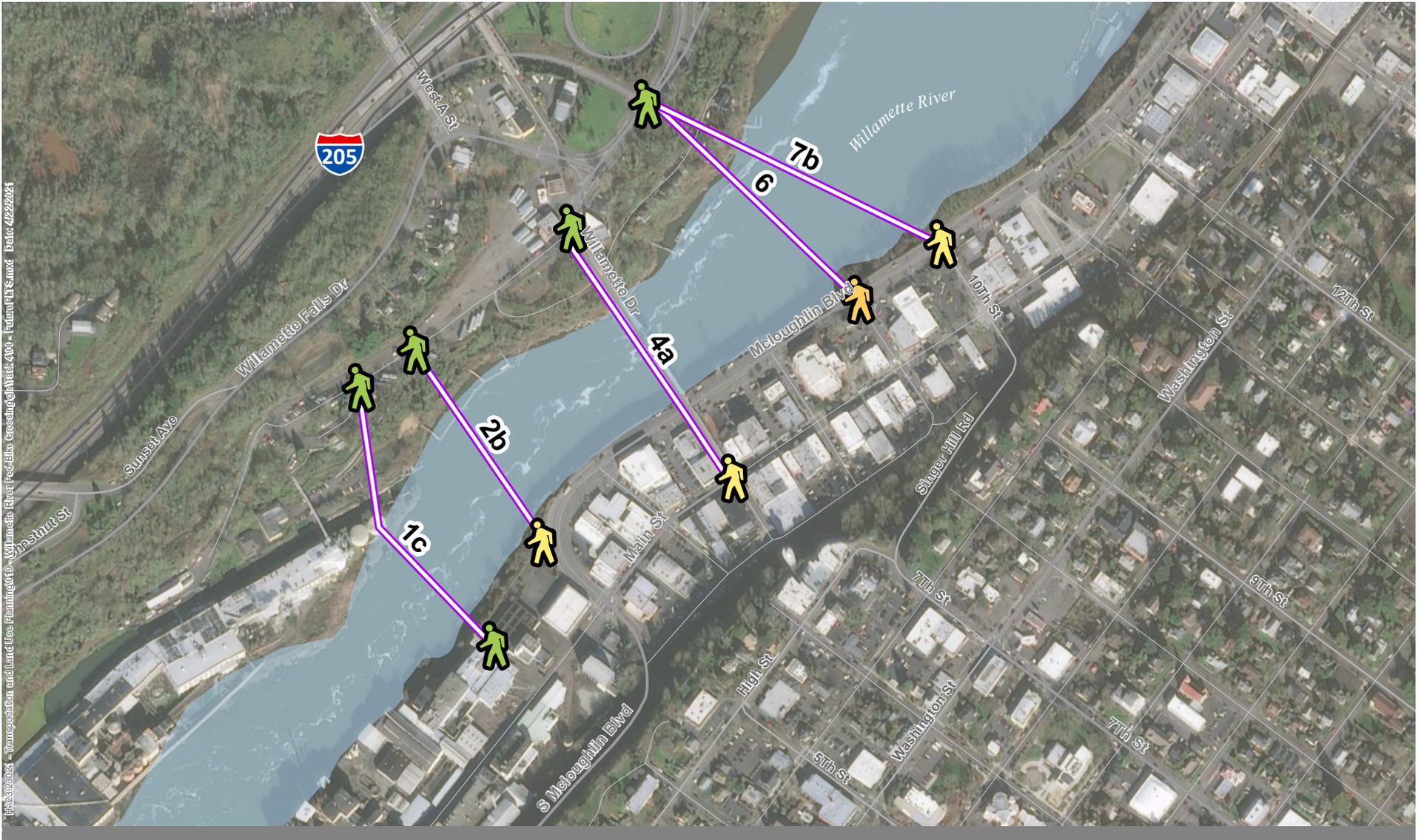
Table 3: Significance of Level of Traffic Stress

Level of Traffic Stress Category	Level of Traffic Stress Definition
PLTS 1 / BLTS 1	<ul style="list-style-type: none"> • Low stress • Suitable for users of all ages and abilities (including children and people using a wheeled mobility device) • Facility examples include residential local streets, separated paths, and wide sidewalks with landscape buffers • All users are willing to use these facilities
PLTS 2 / BLTS 2	<ul style="list-style-type: none"> • Low stress • Suitable for users of most ages and abilities (not suitable for young children and may be limiting for people using a wheeled mobility device) • Facility examples include collector-level streets with bike lanes, shared roadway in a central business district, and sidewalks alongside roadways with higher traffic speeds/volumes • Most users are willing to use these facilities
PLTS 3 / BLTS 3	<ul style="list-style-type: none"> • Moderate stress • Suitable for observant and able-bodied adults (not suitable for children, teens, and some adults, and may have impassable barriers to people using a wheeled mobility device) • Facility examples include low-speed arterials with bike lanes and sidewalks alongside high-speed roadways without buffers or with obstacles • Some users are willing to use these facilities
PLTS 4 / BLTS 4	<ul style="list-style-type: none"> • High stress • Suitable for experienced and skilled adults biking with limited other route choices • Facility examples include high-speed or multilane roadways with narrow/no bike lanes or narrow/missing sidewalks • Only the most confident or trip-purpose driven users will use these facilities

Source: ODOT *Analysis Procedures Manual*, Chapter 14: Multimodal Analysis.

BLTS = bicycle level of traffic stress; PLTS = pedestrian level of traffic stress.

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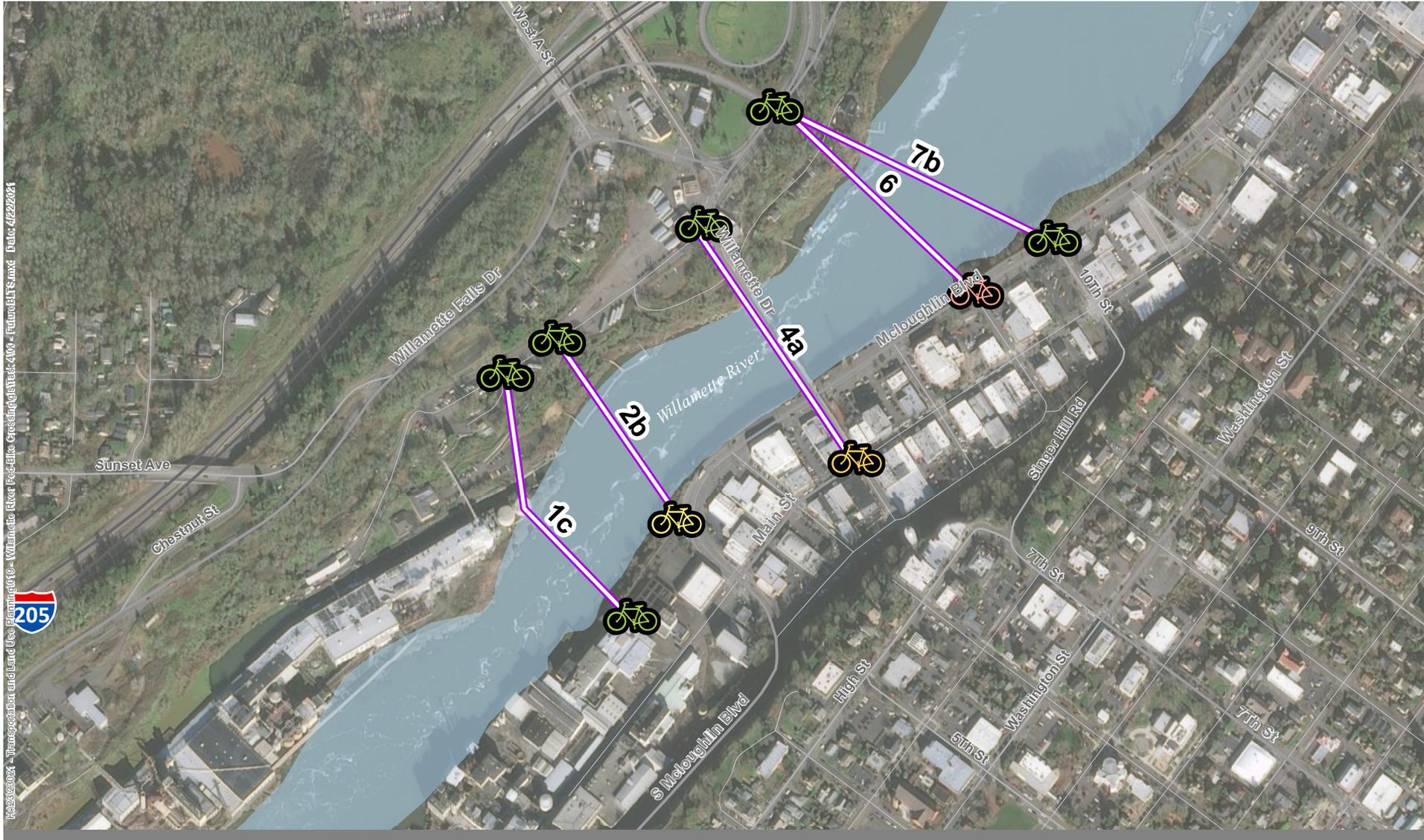


Legend

-  Potential Alignments
-  PLT 1
-  PLT 2
-  PLT 3



Figure 2



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Legend

 Potential Alignments



BLTS 1



BLTS 2



BLTS 3



BLTS 4



Figure 3

Table 4: Transportation Safety Evaluation Summary

Alignment	Safety Score	Walking Connections to Bridgeheads	Biking/Rolling Connections to Bridgeheads
Alignment 1c: 4 th Street to Mill Street	+2	<ul style="list-style-type: none"> Although the bridgeheads currently connect to PLTS 4 facilities, planned development will provide PLTS 1 facilities at both bridgeheads. Connections to the greater area via facilities on Main Street, 7th Street, and 5th Street are low-stress. Connections to the greater area via facilities on Mill Street, McLoughlin Boulevard, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the Metro Riverwalk, Blue Heron redevelopment site and accompanying bridge and elevator for people walking and rolling, and the new separated sidewalk facilities along the realigned Willamette Falls Drive. 	<ul style="list-style-type: none"> In the immediate area, limited access via low-stress facilities: The bridgeheads connect to BLTS 1 facilities. Connections to the greater area via facilities on Main Street, McLoughlin Boulevard, 7th Street, 5th Street, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the Metro Riverwalk, Blue Heron redevelopment site and accompanying bridge and elevator for people biking and rolling, and the new separated bike lanes along the realigned Willamette Falls Drive.
Alignment 2b: 5 th Street to Mill Street	+1	<ul style="list-style-type: none"> Although the bridgehead in West Linn currently connects to PLTS 4 facilities and the bridgehead in Oregon City currently connects to PLTS 3 facilities, planned development will provide PLTS 1 facilities in West Linn and PLTS 2 facilities in Oregon City. Connections to the greater area via facilities on Main Street, 7th Street, and 5th Street are low-stress. Connections to the greater area via facilities on Mill Street, McLoughlin Boulevard, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the Metro Riverwalk, Blue Heron redevelopment site and accompanying bridge and elevator for people walking, biking, and rolling, and the new separated sidewalk facilities along the realigned Willamette Falls Drive. 	<ul style="list-style-type: none"> Although access to low-stress facilities is currently incomplete (the bridgehead in West Linn connects to BLTS 1 facilities but the bridgehead in Oregon City connects to BLTS 4 facilities), planned projects will provide BLTS 2 facilities at the bridgehead in Oregon City. Connections to the greater area via facilities on Main Street, McLoughlin Boulevard, 7th Street, 5th Street, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the Metro Riverwalk, Blue Heron redevelopment site and accompanying bridge and elevator for people walking, biking, and rolling, and the new bike lanes along the realigned Willamette Falls Drive.
Alignment 4a: Main Street to Mill Street	+0.5	<ul style="list-style-type: none"> In the immediate area, access to low-stress facilities: The bridgeheads connect to PLTS 2 facilities. Planned facilities in West Linn will improve PLTS near that bridgehead to PLTS 1. Connections to the greater area via facilities on Main Street, 7th Street, and 5th Street are low-stress. Connections to the greater area via facilities on Mill Street, McLoughlin Boulevard, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the new separated sidewalk facilities along the realigned Willamette Falls Drive. 	<ul style="list-style-type: none"> In the immediate area, incomplete access via low-stress facilities: The bridgehead in West Linn connects to BLTS 1 facilities but the bridgehead in Oregon City connects to BLTS 3 facilities. Connections to the greater area via facilities on Main Street, McLoughlin Boulevard, 7th Street, 5th Street, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the new cycle track facilities along the realigned Willamette Falls Drive.
Alignment 6: 9 th Street to Willamette Drive	-0.5	<ul style="list-style-type: none"> In the immediate area, partial access to low-stress facilities: PLTS 2 facilities are present at both bridge landings. Accessing the low-stress facilities in Oregon City requires crossing McLoughlin Boulevard, a PLTS 3 facility, at an unsignalized¹ intersection. Planned projects may improve PLTS on the West Linn side of the roadway to PLTS 1. Connections to the greater area via facilities on Main Street, 7th Street, and 5th Street are low-stress. Connections to the greater area via facilities on Mill Street, McLoughlin Boulevard, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future via the new separated sidewalk facilities along OR 43. 	<ul style="list-style-type: none"> In the immediate area, incomplete access via low-stress facilities: The bridgehead in Oregon City connects to BLTS 1 facilities, however it requires crossing McLoughlin Boulevard, a BLTS 4 facility, at an unsignalized¹ intersection. The bridgehead in West Linn connects to BLTS 3 facilities, but planned projects may improve BLTS on the West Linn side of the roadway to BLTS 1. Connections to the greater area via facilities on Main Street, McLoughlin Boulevard, 7th Street, 5th Street, and Willamette Falls Drive are high-stress. Planned projects on the west shoreline will improve this network in the future via the new cycle track facilities along OR 43.
Alignment 7b: 10 th Street to OR 43	+1.5	<ul style="list-style-type: none"> In the immediate area, partial access to low-stress facilities: PLTS 2 facilities are present at both bridge landings. Accessing the low-stress facilities in Oregon City requires crossing McLoughlin Boulevard, a PLTS 3 facility, at a signalized intersection. Planned projects may improve PLTS on the West Linn side of the roadway to PLTS 1; however, there are no planned improvements on the Oregon City side. Connections to the greater area via facilities on Main Street, 7th Street, and 5th Street are low-stress. Connections to the greater area via facilities on Mill Street, McLoughlin Boulevard, and Willamette Falls Drive are high-stress. Planned projects will improve this network in the future. 	<ul style="list-style-type: none"> In the immediate area, incomplete access to low stress facilities: The bridgehead in Oregon City connects to BLTS 1 facilities but the bridgehead in West Linn connects to BLTS 3 facilities. Planned projects may improve BLTS on the West Linn side of the roadway to BLTS 1. Facilities on 10th Street, Willamette Drive, and McLoughlin Boulevard south of 10th Street are high-stress. Connections to the greater area via facilities on Main Street, McLoughlin Boulevard, 7th Street, 5th Street, and Willamette Falls Drive are high-stress. Planned projects on the west shoreline will improve this network in the future via the new cycle track facilities along OR 43.

BLTS = bicycle level of traffic stress; PLTS = pedestrian level of traffic stress.

¹It may be feasible to add a traffic signal at the intersection of McLoughlin Boulevard/9th Street. This would require analysis and additional costs.

User Experience

The *user experience* criterion measures the comfort for users as it relates to sense of place and personal security and considers the cultural and historical experiences of the users along the bridge alignment and its approaches. “Sense of place and personal security” considers the experience of someone walking, biking, or rolling along the bridge and the personal security at the bridgeheads and along the bridge itself. “Cultural and historical experience” considers the experience of someone walking, biking, or rolling along the bridge and the impact to the study area.

Table 5 summarizes the user experience score for each bridge alignment as it relates to sense of place and personal security and cultural and historical experience. Each bridge alignment provides distinct advantages and drawbacks as it relates to user experience:

- Alignments 1c and 2b provide the greatest views: People traveling along the alignments can view Willamette Falls, the Historic Arch Bridge, and the Willamette River. These alignments may also negatively impact users’ sense of security in the near-term due to the current lack of lighting and activity in the vicinity of the bridgeheads. However, future planned development would alleviate these potential burdens.
- Alignment 4a has the most positive impact on users’ sense of place and personal security approaching and traveling along the bridge due to the existing lighting and activity in the vicinity of the proposed bridgeheads. The proximity of the proposed bridge alignment negatively impacts views of the Historic Arch Bridge and the loud traffic sounds from vehicles traveling along the Historic Arch Bridge may be unpleasant.
- Alignments 6 and 7b have a neutral impact on users’ sense of place and personal security due to a moderate amount of lighting and activity in the vicinity of the proposed bridgeheads. These bridge alignments do not provide a direct connection to cultural and historic resources compared to the other bridge alignments and offer no views of Willamette Falls. In addition, there are limited redevelopment opportunities in the vicinity of both bridgeheads.

Additional information about user experience is provided in *TM #3b: Benefits and Impacts Analysis. Public*. Stakeholder and public input have been incorporated to the findings of sense of place, personal security, cultural and historic experience, summarized in Table 5.

Online Open House and Survey

The project’s online open house and survey were available to the general public in English and Spanish from March 29 through April 13, 2021. The online open house provided an opportunity for people to learn about project including project area history, other planned projects, and the potential bridge alignments. It included an interactive 360° video of the top five alignment options and virtual reality simulations which allowed participants to experience associated trade-offs. Figure 4 and Figure 5 illustrate the quantitative results of the online survey for user experience and connectivity.

Figure 4: Bridge User Experience Input

Which alignment do you think would provide the best user experience? Consider views, safety, sounds, historic architecture, ease of use, connections to cultural and ethnic resources

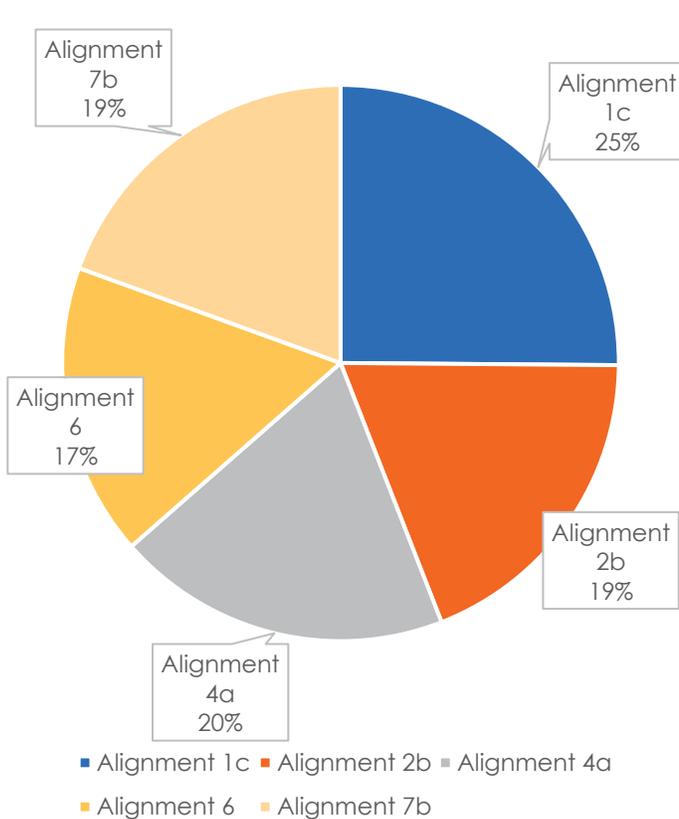
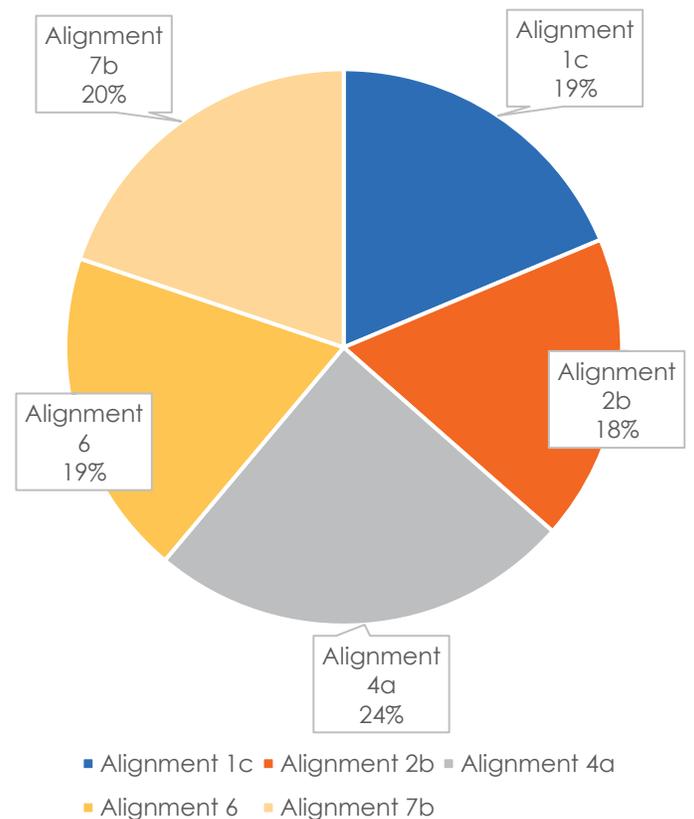


Figure 5: Bridge Connectivity Input

Which alignment do you think would provide the best connection (providing access to the most places people want to go) for people walking, biking, and rolling?



As illustrated in the above figures, Alignment 1c scored highest for user experience followed by Alignment 4a and Alignment 7b. Alignment 4a scored highest for connectivity followed by Alignment 7b 1c and 6.

Table 5: User Experience Evaluation Summary

Alignment	User Experience Score	Sense of Place and Personal Security	Cultural and Historical Experience
Alignment 1c: 4 th Street to Mill Street	+1.75	<ul style="list-style-type: none"> Alignment 1c has a current negative impact on users’ sense of place and personal security approaching and traveling along the bridge. This impact would turn positive with planned development. The span length is average compared to other bridgeheads; grade change requires substantial ramping on Moores Island, but no ramping is required in Oregon City. There is a current lack of activity and lighting in the vicinity of the bridgeheads. This impact would turn positive with planned development. Positive input received from online open house and survey for user experience. 	<ul style="list-style-type: none"> The alignment substantially improves the cultural and historical experience for people in the study area. This alignment has some of the best views and provides access to historic and cultural resources. No loud traffic sounds are anticipated. The grade change and ramping may be challenging for some users. Positive input received from online open house and survey for user experience.
Alignment 2b: 5 th Street to Mill Street	+1.5	<ul style="list-style-type: none"> Alignment 2b has a current negative impact on users’ sense of place and personal security approaching and traveling along the bridge. This impact would turn positive with planned development. The span length is relatively short; a grade change requires substantial ramping on the Oregon City shoreline. There is a lack of activity and lighting in the vicinity of the bridgeheads. This impact would turn positive with planned development. 	<ul style="list-style-type: none"> The alignment substantially improves the cultural and historical experience for people in the study area. This alignment has great views and provides access to historic and cultural resources. No loud traffic sounds are anticipated. The grade change and ramping may be challenging for some users.
Alignment 4a: Main Street to Mill Street	+0.75	<ul style="list-style-type: none"> Alignment 4a has a highly positive impact on users’ sense of place and personal security approaching and traveling along the bridge. There is some lighting and activity in the area; more is desirable. The span is average compared to the other bridgeheads and has little-to-moderate ramping requirements. There is good lighting and activity at both bridgeheads. Positive input received from online open house survey for user experience and connectivity. 	<ul style="list-style-type: none"> The alignment negatively impacts the cultural and historical experience for people in the study area. This alignment has good views and provides connection to the municipal elevator. It has moderate grade changes that are accessible for most users. The loud traffic sounds from vehicles traveling along the Historic Arch Bridge may be unpleasant. Positive input received from online open house survey for user experience and connectivity.
Alignment 6: 9 th Street to Willamette Drive	+0.5	<ul style="list-style-type: none"> Alignment 6 has a neutral impact on users’ sense of place and personal security approaching and traveling along the bridge. The span is average compared to the other bridgeheads and there is a moderate amount of ramping required. There is some lighting and activity in the area; more is desirable. 	<ul style="list-style-type: none"> The alignment moderately improves the cultural and historical experience for people in the study area. This alignment has good views; the alignment does not provide direct connection to historic architecture. It has moderate grade changes that are accessible for most users. No loud traffic sounds are anticipated.
Alignment 7b: 10 th Street to OR 43	+0.75	<ul style="list-style-type: none"> Alignment 7b has a neutral impact on users’ sense of place and personal security approaching and traveling along the bridge. The span is long, but no ramping is required. There is some lighting and activity in the area; more is desirable. Positive input received from online open house survey for user experience and connectivity. 	<ul style="list-style-type: none"> The alignment moderately improves the cultural and historical experience for people in the study area. This alignment has good views; the alignment does not provide direct connection to historic architecture. It has moderate grade changes that are accessible for most users. Positive input received from online open house survey for user experience and connectivity. No loud traffic sounds are anticipated.

Health Outcomes

The *health outcomes* criterion considers health outcomes associated with the anticipated increase in the frequency of people walking and biking and a decrease in driving trips associated with each bridge alignment. These changes are associated with physical, social, and mental health benefits from increased activity and decreased vehicle emissions.

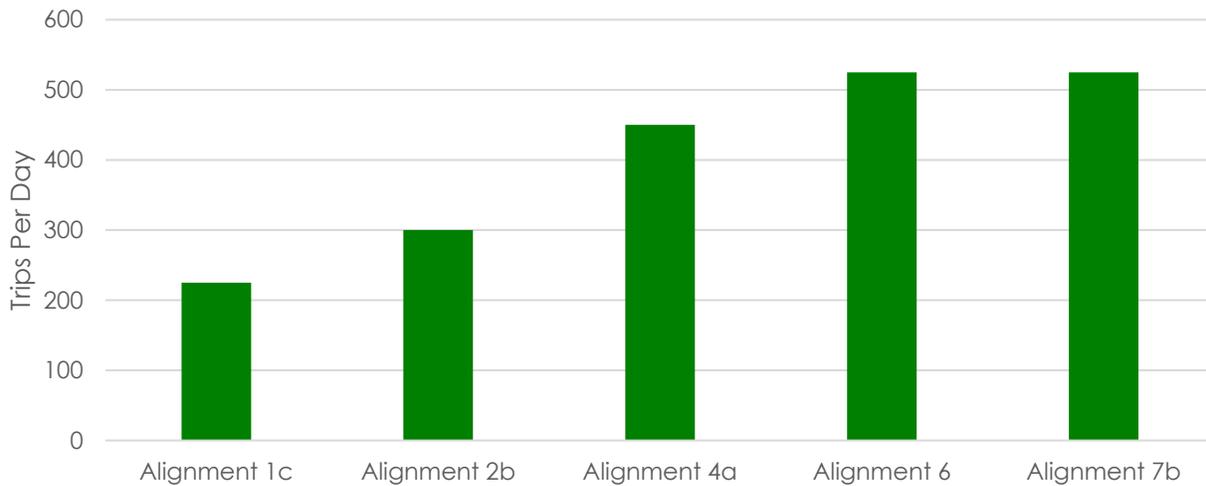
Table 6 summarizes the health evaluation score with respect to active transportation mode shift.

Table 6: Health Evaluation Summary

Alignment	Health Score	Mode Shift from Vehicular Trips to Active Trips
Alignment 1c: 4 th Street to Mill Street	+1	• The alignment is expected to create some shift towards active modes
Alignment 2b: 5 th Street to Mill Street	+1	• The alignment is expected to create some shift towards active modes
Alignment 4a: Main Street to Mill Street	+1.5	• The alignment is expected to create a large shift towards active modes
Alignment 6: 9 th Street to Willamette Drive	+2	• The alignment is expected to create a substantial shift towards active modes
Alignment 7b: 10 th Street to OR 43	+2	• The alignment is expected to create a substantial shift towards active modes

Chart 2 shows the mode shift projections calculated in *TM #4: Active Transportation Analysis*.

Chart 2: Mode Shift from Vehicular Trips to Walking and Biking Trips⁹



As identified in *TM #4: Active Transportation Analysis*, all five potential bridge alignments are projected to increase active transportation trips through mode shift. This mode shift, and the associated health

⁹ This chart shows the total daily mode shift trips; it does not show purely recreational trips.

benefits, is projected to be greatest for Alignments 6 and 7b. Additional information about health benefits associated with active commuting is provided in *TM #4: Active Transportation Analysis*.

Environmental

The *environmental* criterion evaluates potential impacts to environmental resources and potential impacts to cultural resources (Section 106) as well as potential impacts to cultural resources and parks + resources (Section 4[f]).

Environmental Resources

Potential environmental resource impacts based on each bridge alignment’s including potential impacts to below ordinary high water (OHW), parks, right-of-way (ROW) needs, socio-economic, riparian, hazmat, and floodplain cut/fill balance. Table 7 summarizes the considerations of these criteria as applied to each alignment.

Table 7: Environmental Considerations Summary

Alignment	Environmental Score	Environmental Considerations
Alignment 1c: 4 th Street to Mill Street	-2	<ul style="list-style-type: none"> • Ramp structures on Moores Island likely to produce more impacts below OHW than other alignments • Ramp structure on Moores Island has potential to disturb hazardous materials due to previous industrial use in area • Ramp structure on Moores Island likely to produce more fill in the floodplain than other alignments which must be balanced by cut elsewhere
Alignment 2b: 5 th Street to Mill Street	-1	<ul style="list-style-type: none"> • Potential impacts to docks may require ROW takes that have an impact on the public
Alignment 4a: Main Street to Mill Street	-1	<ul style="list-style-type: none"> • Appears to have more potential socio-economic impacts due to conflicts with existing buildings in downtown Oregon City
Alignment 6: 9 th Street to Willamette Drive	-2	<ul style="list-style-type: none"> • Potential impacts to West Bridge Park • Potential impacts to docks may require ROW takes that have an impact on the public • Impacts to private residential properties will likely require ROW takes and/or aerial easements • Appears to have a higher impact on riparian zones compared to Alignments 1c, 2b, and 4a
Alignment 7b: 10 th Street to OR 43	-2	<ul style="list-style-type: none"> • Potential impacts to West Bridge Park • Potential impacts to docks may require ROW takes that have an impact on the public • Impacts to private residential properties will likely require ROW takes and/or aerial easements • Appears to have a higher impact on riparian zones compared to Alignments 1c, 2b, and 4a

Cultural Resources & Historic Resources

Section 106 cultural resources were assessed by ODOT Historian and ODOT Archaeologist and Tribal Liaison. The Section 106 cultural resource scoring provided in Table 8 are intended to provide preliminary scoping level technical input based on the information available at this time.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve.

The ODOT Archaeologist and Tribal Liaison has initiated consultation with six federally-recognized Tribes: Grand Ronde, Siletz, Warm Springs, Umatilla, Nez Perce and Yakama. These efforts have included sending Section 106 Initiation letters, hosting two virtual project information meetings with Tribes, a cultural resources meeting with Grand Ronde, plus numerous email and phone contacts with the Tribes. Preliminary comments from the Tribes have asserted that Willamette Falls and vicinity are very significant for both historic and contemporary use by Tribal members. Protection of cultural resources is important to all the Tribes.

Section 4(f) requires Department of Transportation project to avoid use of publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance and historic sites of national state, or local significance. These properties may only be used if there is no prudent or feasible alternative for their use and the program or project encompasses all possible planning to minimize harm resulting from its use

Table 8: Preliminary Section 106 Cultural Resource Summary

Alignment	Cultural/ Historical Score	Section 106	Section 4(f)
Alignment 1c: 4 th Street to Mill Street	-1	<ul style="list-style-type: none"> Likely Section 106 Adverse Effect on Historic Arch Bridge Likely Section 106 Adverse Effect on Traditional Cultural Property/Historic Property of Religious and Cultural Significance to Indian Tribes (TCP/HPRCSIT) High probability of impacts to archaeological resources Likely Section 106 No Adverse Effect on Willamette Falls Locks 	<ul style="list-style-type: none"> No Section 4(f) use of the Historic Arch Bridge May have Section 4(f) constructive use of TCP/HPRCSIT
Alignment 2b: 5 th Street to Mill Street	-1	<ul style="list-style-type: none"> Likely Section 106 Adverse Effect on Historic Arch Bridge Likely Section 106 No Adverse Effect for archaeological resources Likely Section 106 Adverse Effect on TCP/HPRCSIT 	<ul style="list-style-type: none"> No Section 4(f) use of the Historic Arch Bridge
Alignment 4a: Main Street to Mill Street	-1	<ul style="list-style-type: none"> Section 106 Adverse Effect on Historic Arch Bridge Likely Section 106 No Adverse Effect for archaeological resources 	<ul style="list-style-type: none"> Section 4(f) constructive use of Historic Arch Bridge
Alignment 6: 9 th Street to Willamette Drive	0	<ul style="list-style-type: none"> Likely Section 106 No Adverse Effect on Historic Arch Bridge Likely Section 106 No Adverse Effect for archaeological resources 	<ul style="list-style-type: none"> No Section 4(f) use of the Historic Arch Bridge
Alignment 7b: 10 th Street to OR 43	0	<ul style="list-style-type: none"> Section 106 No adverse Effect on Historic Arch Bridge Likely Section 106 No Adverse Effect on archaeological resources 	<ul style="list-style-type: none"> No Section 4(f) use of the Historic Arch Bridge

Adverse impacts to resources eligible for listing on the National Historic Register of Historic Places resulting in a constructive use (substantial impairment to the property's activities, features, or attributes that qualify the property for protection under Section 4(f)) would require an individual Section 4(f) evaluation to demonstrate there are no feasible and prudent alternatives that would meet the project Purpose and Need while completely avoiding the use of the Section 4(f) resource. As a result, any selection of a potential alignment with a Section 4(f) use or Section 106 Adverse Effect may require a higher level of environmental evaluation during the NEPA phase of the project.

Cost

The *cost* criterion assesses the scale of planning-level costs for each bridge alignment.

Table 9 summarizes the anticipated planning-level costs associated with each alignment, as established in *TM #3A: Preliminary Bridge Concept Plans*. A range is provided to encompass multiple bridge types, from girder to long-span. These unit costs do **not** include construction costs for any other improvements associated with the project, design engineering, construction engineering, right-of-way and utility, maintenance, and other similar costs.

As shown in the table, all five alignments have similar construction costs. The type of bridge constructed will have a greater impact on the cost of the project than the alignment selected.

Table 9: Cost Evaluation Summary

Alignment	Cost Score	Planning-Level Construction Costs
Alignment 1c: 4 th Street to Mill Street	0	• Moderate planning-level costs with respect to other alignments: \$27M - \$40M
Alignment 2b: 5 th Street to Mill Street	0	• Moderate planning-level costs with respect to other alignments: \$22M - \$32M
Alignment 4a: Main Street to Mill Street	0	• Moderate planning-level costs with respect to other alignments: \$23M - \$35M
Alignment 6: 9 th Street to Willamette Drive	0	• Moderate planning-level costs with respect to other alignments: \$25M - \$36M
Alignment 7b: 10 th Street to OR 43	0	• Moderate planning-level costs with respect to other alignments: \$25M - \$37M

Planning-level Cost

The planning-level construction cost ranges presented in Table 9 are based on the assumptions documented in *TM #3A: Preliminary Bridge Concept Plans* and are provided for comparative magnitudes of cost only.

Right-of-Way Access

Right-of-way (ROW) requirements to develop the bridgeheads and access the local active transportation system differ between the bridge alignments and result in either needed acquisitions or potential dedication requirements through future redevelopment projects. Table 10 provides a high-level assessment of initial right-of-way needs under each bridge alignment.

Table 10: Anticipated ROW Impacts

Alignment	Oregon City Shoreline	West Linn Shoreline
Alignment 1c: 4 th Street to Mill Street	<ul style="list-style-type: none"> ROW will either need to be dedicated through future redevelopment (assuming alignment adoption into TSP) or acquired. 	<ul style="list-style-type: none"> ROW will either need to be dedicated through future redevelopment (assuming alignment adoption into TSP) or acquired.
Alignment 2b: 5 th Street to Mill Street	<ul style="list-style-type: none"> ROW will either need to be dedicated through future redevelopment (assuming alignment adoption into TSP) or acquired. 	<ul style="list-style-type: none"> ROW will either need to be dedicated through future redevelopment (assuming alignment adoption into TSP) or acquired.
Alignment 4a: Main Street to Mill Street	<ul style="list-style-type: none"> ROW will need to be acquired and potentially could impact two existing downtown buildings. 	<ul style="list-style-type: none"> ROW may need to be acquired near the existing Historic Arch Bridge bridgehead.
Alignment 6: 9 th Street to Willamette Drive	<ul style="list-style-type: none"> No private ROW acquisition is anticipated. 	<ul style="list-style-type: none"> Aerial ROW rights or one or two residential properties acquisitions will be necessary.
Alignment 7b: 10 th Street to OR 43	<ul style="list-style-type: none"> No private ROW acquisition is anticipated. 	<ul style="list-style-type: none"> Aerial ROW rights of one or two residential properties acquisitions will be necessary.

ROW = right of way; TSP = Transportation System Plan.

Utilities

No significant utility impacts have been identified during the planning-level effort. Further explorations of potential impacts to utilities will need to be performed in the design phase.

Maintenance Costs

A high-level estimate for maintenance costs for the preferred bridge alignment will be considered in *TM #6: Preferred Crossing Alignment Location & Implementation Plan*. Maintenance costs will depend on the bridge type, which will be determined through a separate analysis outside of this project.

Design Feasibility

The *design feasibility* criterion assesses whether each bridge alignment has design feasibility concerns with respect to:

- Horizontal and vertical bridge approaches and alignments
- Existing and planned facility networks at approach landings
- Clearance to flood elevation
- River vessel navigational clearance
- Accommodation of emergency vehicles
- Properties of sufficient size to serve the bridge landing

Table 11 summarizes the design feasibility score for each potential bridge alignment. Additional information about these design feasibility considerations is provided in *TM #3A: Preliminary Bridge Concepts*.

- Alignment 1c has the most design feasibility challenges. It requires a major ramping structure on Moores Island that creates a deterrent to most users and does not provide an accessible route for emergency vehicles. It has a lower clearance across the portion of river leading to the falls, which provides limited clearance to river vessel navigation. The necessary vertical clearance for river traffic is provided at the locks channel.
- Alignment 2b has several design feasibility challenges, including a ramping structure at the Oregon City bridgehead that creates a deterrent to most users and does not provide an accessible route for emergency vehicles. The increased elevation across the entire river exceeds minimum standards for clearance to flood elevation and meets navigational clearance requirements.
- Alignment 4a has some design feasibility challenges. It could be constructed with no ramping required, which would also allow for easy access of emergency vehicles, but this would require the demolition of buildings in downtown Oregon City. It is assumed that demolition of these buildings must be avoided and, therefore, reduced width ramping is required at the Oregon City bridgehead.
- Alignments 6 and 7b have the fewest design feasibility challenges. Alignment 6 likely requires some minor ramping at the Oregon City bridgehead while Alignment 7b does not. Therefore, Alignment 7b provides a more suitable approach for users and provides better access to emergency vehicles.

Table 11: Design Feasibility Evaluation Summary

Alignment	Design Feasibility Score	Horizontal and vertical bridge approaches and alignments ¹	Existing Facility Networks at Approach Landings	Planned Facility Networks at Approach Landings	Clearance to Flood Elevation	River Vessel Navigational Impact	Accommodation of Emergency Vehicles	Properties of Sufficient Size to Serve Bridge Landing
Alignment 1c: 4 th Street to Mill Street	0.3	<ul style="list-style-type: none"> Deterrent to most users 	<ul style="list-style-type: none"> Inaccessible access to the bridge 	<ul style="list-style-type: none"> Comfortable for most users with the Willamette Falls Drive Project and Willamette Falls Legacy Project improvements. 	<ul style="list-style-type: none"> Meets minimum standards for clearance to flood elevation. 	<ul style="list-style-type: none"> None³ 	<ul style="list-style-type: none"> Not accessible for emergency vehicles. 	<ul style="list-style-type: none"> Properties of sufficient size to serve the bridge landing.
Alignment 2b: 5 th Street to Mill Street	0.3	<ul style="list-style-type: none"> Deterrent to most users 	<ul style="list-style-type: none"> Uncomfortable access to the bridge for most users 	<ul style="list-style-type: none"> Comfortable for most users with the West Linn Arterials Roadway Project and shared-use path extension along McLoughlin Boulevard improvements 	<ul style="list-style-type: none"> Exceeds minimum standards for clearance to flood elevation. 	<ul style="list-style-type: none"> None³ 	<ul style="list-style-type: none"> Not accessible for emergency vehicles. 	<ul style="list-style-type: none"> Properties of sufficient size to serve the bridge landing.
Alignment 4a: Main Street to Mill Street	-0.3	<ul style="list-style-type: none"> Deterrent to most users² 	<ul style="list-style-type: none"> Moderately access to the bridge for most users. Improvements are needed along Main Street to provide comfortable access. 		<ul style="list-style-type: none"> Exceeds minimum standards for clearance to flood elevation. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Not accessible for emergency vehicles.² 	<ul style="list-style-type: none"> No properties of sufficient size to serve the bridge landing.²
Alignment 6: 9 th Street to Willamette Drive	0.7	<ul style="list-style-type: none"> Suitable for most users 	<ul style="list-style-type: none"> Uncomfortable access to the bridge for most users 	<ul style="list-style-type: none"> Comfortable for most users with the planned projects along Willamette Drive and a shared-use path extension along McLoughlin Boulevard 	<ul style="list-style-type: none"> Exceeds minimum standards for clearance to flood elevation. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Difficult access for emergency vehicles. 	<ul style="list-style-type: none"> Properties of sufficient size to serve the bridge landing.
Alignment 7b: 10 th Street to OR 43	1.2	<ul style="list-style-type: none"> Suitable for all users 	<ul style="list-style-type: none"> Moderately access to the bridge for most users 	<ul style="list-style-type: none"> Comfortable for most users with the planned projects along Willamette Drive, a shared-use path extension along McLoughlin Boulevard, and the connection to the existing signal. 	<ul style="list-style-type: none"> Exceeds minimum standards for clearance to flood elevation. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Easily accessible for emergency vehicles. 	<ul style="list-style-type: none"> Properties of sufficient size to serve the bridge landing.

¹ Suitability of horizontal and vertical approaches and alignments is based on the grade change and amount of ramping required for the alignment. Greater grade changes and more ramping is a deterrent for most users.

² Evaluations assume that Alignment 4a will include reduced width ramping at the Oregon City bridgehead to avoid demolition of downtown buildings.

³ Evaluation assumes that the U.S. Coast Guard will approve reduced vertical clearance in the portion of the river leading to Willamette Falls and outside of the locks channel.

EVALUATION CRITERIA DETAILED SCORING

Table 12: Detailed Evaluation Summary

Evaluation Criterion	Performance Measure	Concepts									
		Alignment 1c: 4 th Street to Mill Street		Alignment 2b: 5 th Street to Mill Street		Alignment 4a: Main Street to Mill Street		Alignment 6: 9 th Street to Willamette Drive		Alignment 7b: 10 th Street to OR 43	
Equity	Social and economic stakeholder mapping	+0.75	+1	+0.75	+1	0	0	+2	+2	+2	+2
	Public support, with particular emphasis on indigenous persons' perspectives		+0.5		+0.5	0	0	+2	+2	+2	+2
Demand	Projected walking and biking trips	+1 to 2 ¹	+1	+1 to 2 ¹	+1	+1.5	+1.5	+2	+2	+2	+2
	Community access to essential destinations (within a half mile)		+1		+1	+1.5	+1.5	+2	+2	+2	+2
Transportation Safety	Pedestrian level of traffic stress (PLTS)	+2	+2	+1	+1	+0.5	+1	-0.5	0	+1.5	+1
	Bicycle level of traffic stress (BLTS)		+2		+1	+0.5	0	-0.5	-1	+1.5	+2
User Experience	Sense of place and personal security	+1.75	+1.5	+1.5	+1	+0.75	+2	+0.5	0	+0.75	0.5
	Cultural and historical experience		+2		+2	+0.75	-0.5	+0.5	+1	+0.75	+1
Health Outcomes	Behavior assessment related to active transportation mode shift	+1	+1	+1	+1	+1.5	+1.5	+2	+2	+2	+2
Environmental	Impact to environmental resources	-1.3	-2	-0.7	-1	-1	-1	-0.7	-2	-0.7	-2
	Impact to cultural resources (Section 106)		-1		-1	-1	-1	-0.7	0	-0.7	0
	Impacts to cultural resources and parks+ resources (Section 4[f])		-1		0	-1	-1	-0.7	0	-0.7	0
Cost	Planning-level cost	0	0	0	0	0	0	0	0	0	0
Design Feasibility	Horizontal and vertical bridge approaches and alignments	+0.3	0	+0.3	0	-0.3	0 ³	+0.7	+1	+1.2	+2
	Existing and planned facility networks at approach landings		+2		+1		-1		+1		+2
	Clearance to flood elevation		0		+1		+1		+1		+1
	River vessel navigational impact		0 ²		0		0		0		0
	Accommodation of emergency vehicles		-1		-1		-1 ³		0		+1
	Properties of sufficient size to serve bridge landing		+1		+1		-1 ³		+1		+1
Total⁴		5.5 to 6.5		4.9 to 5.9		3.6		6.0		8.8	

1 Projected walking, biking, and rolling trips expected to increase based on recreational and tourism attraction (weekends expected to see higher levels of use)

2 Evaluations assume that Alignment 1c would require a navigational adjustment approval from the U.S. Coast Guard.

3 Evaluations assume that Alignment 4a would require the demolition of buildings in downtown Oregon City.

4 The scoring scale for each criterion ranges from -1 to +2, reflecting the extent to which a potential bridge alignment achieves the evaluation criteria per the associated performance measures. The criterion score (shown in the colored boxes) is the average of the score for each of that criterion's performance measures (shown in the grey boxes). The scores of all the evaluation criteria are added together to produce the total score.

PROJECT TEAM PRELIMINARY RECOMMENDATION

Based on all the analysis contained in this memorandum, public and stakeholder feedback to date, the complex and integrated benefits, burdens, and unknowns of the top five most promising alignments at this time, and the compressed concept planning timeframe during the pandemic, the project team believes the concept plan should memorialize all the work completed to date and recommends the following actions:

1. Initialize a NEPA Planning Environmental Linkage process to recognize the project purpose and need and public process followed through the concept planning effort.
2. Adopt upstream and downstream pedestrian/bicycle bridge alignment corridors¹⁰ in proximity of 4th Street (future Sunset/West A) and 10th Street (I-205 northbound terminal), respectively, and a crossing alignment refinement study into the Oregon City and West Linn Transportation System Plans. Through this action, the communities would:
 - a. Confirm the need for a new pedestrian/bicycle crossing within the study area;
 - b. Recognize the complex and integrated benefits, burdens, and unknowns at this time;
 - c. Preserve the alignment corridors; and,
 - d. Demonstrate the public support necessary to seek and secure funding to conduct the environmental review, select a preferred alternative, and construct a new pedestrian/bicycle bridge crossing.
3. Continue to seek and uplift tribal input to select an alignment that respects the cultural and historic significance of the area.

NEXT STEPS

TM #5: Executive Summary and Recommendations has been reviewed by the PAC, Project Leadership Team (PLT), and PMT and updated based on comments received. Based on this feedback, the project team has updated the preliminary recommendation as summarized above.

¹⁰ These upstream and downstream corridors are shown in Figure 6.

Figure 6: Most Promising Upstream and Downstream Corridors



Appendix A Public Involvement Summary
Report