EVALUATION CRITERIA MEMO

FRENCH PRAIRIE BRIDGE PROJECT

June 7, 2017

Prepared for the City of Wilsonville

WILSONVILLE OREGON

Prepared By

OBEC CONSULTING ENGINEERS

OBEC Consulting Engineers
5000 Meadows Road, Suite 420
Lake Oswego, OR 97035
503.620.6103

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INTRODUCTION

The City of Wilsonville is undertaking a project to develop preliminary designs for the French Prairie Bridge, a proposed bicycle/pedestrian/emergency vehicle crossing of the Willamette River between Interstate 5 and the railroad bridge. The project addresses bridge alignment, bridge type selection, 30% design, and preliminary environmental documentation.

This memo is intended to provide a decision-making framework for selection of the preferred bridge alignment corridor. Since project kickoff in August 2016, the project team and project management team (PMT) have collected a comprehensive set of information and data that informs alignment corridor selection. Sources of information include: the Opportunities and Constraints Memo, the Technical Advisory Committee (TAC), the project's Task Force (TF), and public events and comments. The Opportunities and Constraints Memo has previously been submitted under separate cover. Appendix A summarizes the lists of criteria collected from the TAC meeting, TF meeting and Open House.

This memo distinguishes between design criteria and evaluation criteria, and presents the recommended evaluation criteria, the approach to scoring of alternatives, and the weighing of each criterion.

DESIGN CRITERIA

Design criteria are those items and considerations that will be met or achieved by the project, regardless of the preferred alignment or bridge type. For each of the alternatives, the design criteria apply equally and are therefore not included as evaluation criteria. Some of the project considerations identified as part of the project meetings (Appendix A) fall into the design criteria category and are therefore not included in the evaluation criteria presented below. Project design criteria include:

- Bridge design according to ODOT's loading conditions, and seismic and hydraulic performance criteria
- Bicycle, pedestrian, roadway and emergency vehicle design standards.
- Compliance with the Americans with Disability Act (ADA)
- Compliance with all federal, state, and local laws and regulations

EVALUTION CRITERIA

Based on the lists of criteria in Appendix A, and as tabulated in Appendix B, six evaluation criteria are recommended. The six criteria capture nearly all of the criteria listed in Appendix A, but with sufficient clarity and specificity to provide meaningful comparisons of alignment corridor alternatives.

Each criterion has three or four sub-criteria. The purpose of the sub-criteria is to capture the variety of considerations in the input received.

The six criteria and respective sub-criteria are presented below in narrative form and are tabulated in Appendix B.

Criterion A - Connectivity and Safety

The criterion is to connect to existing or planned bike/pedestrian routes directly or using streets with sidewalks and bike lanes and meet minimum safety and design standards for bicycle and pedestrian users. The alignment corridors differ in how they connect to existing and planned local and regional bike/pedestrian routes. In addition, they differ in the ability to meet or exceed design standards for bike and pedestrian facilities. Exceeding design standards will provide users with a more functional facility. The four sub-criteria are:

- A-1 – Connect to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on north side of the bridge
- A-2 – Connect to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on south side of the bridge
- A-3 – Connect to planned bike/pedestrian routes on north side of the bridge
- A-4 – Connect to planned bike/pedestrian routes on south side of the bridge

Criterion B – Emergency Access

The criterion is to provide direct and rapid emergency vehicle access to the bridge while minimizing impacts to bridge users, residents, park activities, and marina operations. The alignment corridors differ in ease of bridge access by emergency vehicles. Emergency access includes emergency response to Charbonneau and areas south of the Willamette River and secondary emergency response to clear accidents and debris when the I-5 Boone Bridge is congested. Emergency access also includes the movement of equipment and materials should the I-5 Boone Bridge not be accessible after a major earthquake. The three sub-criteria are:

- B-1 – Connect to emergency routes directly, minimizing out of direction travel and response time at and near the north terminus
- B-2 – Connect to emergency routes directly, minimizing out of direction travel and response time at and near the south terminus
- B-3 – Minimize emergency response impacts on residents, park activities, and marina operations

Criterion C – Environmental Impacts

The criterion is to avoid adverse impacts on environmental resources with the goal of maximizing project eligibility for programmatic environmental permitting processes. Impacts will vary depending on alignment corridor. The three sub-criteria are:

- C-1 – Avoid or minimize adverse impacts on wildlife habitat and trees
- C-2 – Avoid or minimize adverse impacts on waters and wetlands
- C-3 – Avoid or minimize adverse impacts on cultural and historic resources

Criterion D – Compatibility with Recreational Goals

The criterion is to maximize the recreational benefits the bridge provides. There are several opportunities to improve or enhance recreational opportunities. The opportunities vary among the alignment corridor. The four sub-criteria are:

- D-1 – Provide a positive user experience (e.g. noise, aesthetics, view, comfort, security, compatible with other travel modes, exceeds minimum design standards for turns and slopes)
- D-2 – Maximize compatibility with and flexibility for recreational uses including parks and the river on the north side.
- D-3 – Maximize compatibility with and flexibility for recreational uses, including parks, the marina and the river on the south side
- D-4 – Maintain or improve river access

Criterion E - Compatibility with the Existing Built Environment

The criterion is to avoid displacement of and incompatibility with residences, businesses, marina operations, and planned infrastructure improvements and to minimize adverse effects of locating and accessing the bridge. Consideration is given to project benefits or impacts to underrepresented populations (e.g. communities of color, limited English proficient and low-income populations, people with disabilities, seniors, and youth. The four sub-criteria are:

- E-1 – Minimize bridge location and access impacts on residences in Old Town
- E-2 – Minimize bridge location and access impacts on residences at the south terminus in Clackamas County
- E-3 – Minimize bridge location and access impacts on marina facilities

- E-4 – Minimize bridge location and access impacts to possible future infrastructure improvements (e.g. Railroad, ODOT)

Criterion F – Cost and Economic Impact

The criterion is to minimize the cost and adverse economic impacts of the project. There are temporary and permanent economic impacts which could improve or hinder local and regional economics. Those impacts vary depending on the preferred alignment corridor. The four sub-criteria are:

- F-1 – Minimize total project cost (e.g. bridge, retaining wall, on grade path, environmental mitigation). This project cost does not consider architectural features or amenities.
- F-2 – Minimize property acquisition (e.g. right-of-way, easements) and avoid displacements of residences and businesses
- F-3 – Minimize the displacement of utilities
- F-4 – Maximizes economic benefit through tourism and access to commercial and regional destinations and trail system connections

SCORING OF ALTERNATIVES

The three or four sub-criteria within each criterion will be arithmetically averaged to provide a score of 0 to 10 for each alternative. This avoids giving more weight to criteria with four sub-criteria.

For each sub-criterion three scoring ranges are recommended to provide an objective baseline. However, the scoring ultimately contains a necessary and appropriate level of subjectivity based on factors that are not readily quantified.

Scores of 0 to 3 are recommended when an alternative generally does not meet most or any of the sub-criterion's objectives. Scores of 4 to 6 are recommended where an alternative meets some of the objectives. Scores of 7 to 10 are recommended where an alternative meets most or all of the objectives. A brief description for each scoring range for each sub-criterion is provided in Appendix C.

WEIGHING CRITERIA

The TF weighted criteria at their May 22, 2017 meeting as follows:

Criterion A – 20%

Criterion B – 20%

Criterion C – 11.5%

Criterion D – 20%

Criterion E – 17%

Criterion F – 11.5%

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Appendix A – Criteria Lists

Task Force Criteria List

At the first Task Force meeting, the following list of criteria to consider when evaluating bridge alignment was created by the membership:

- Bicycle-pedestrian connectivity at bridge landings and to the greater networks, for both residents and tourists
- Sensitivity to homes at the bridge landings and traffic Impacts to neighbors and residents
- Increased safety for all users
- Emergency vehicle access
- Seismic resilience
- Increased mode share towards active transportation
- Balance between cost, aesthetics and usability
- Increased tourism and revenue for maximum economic benefit to the city, state and region
- ADA accessibility
- Bridge landing design allows for park amenities like toilets and picnic tables
- Avoids railroad crossings
- Ability to use golf carts to cross the bridge
- Partnerships with the state and counties to upgrade local, connecting roadways
- Design maximizes the number of users
- Accommodates as many utility uses (power lines, sewer, etc.) as it can support
- Provides increased access to the river so all users can experience the water and natural environment
- Supports Wilsonville's initiative as a HEAL (Healthy Eating Active Living) City through increased recreational opportunities

Technical Advisory Committee Criteria List

At the first Technical Advisory Committee meeting, the following list of criteria to consider when evaluating bridge alignment was created by the membership:

- Impacts to historic resources
- Impacts to protected resources areas
- Impacts to trees
- Impacts of alignments on any potential park uses
- Impacts to fish, riparian habitats, streams, wetlands, channels, tributaries
- Ecological value and functional value of wetlands
- Interpretive and recreational opportunities around these ecological resources
- Directness of connections to major destinations and the regional and statewide trail network
- User experience (views, noise)
- User comfort (safety, topography)
- Effects on future master planning efforts of adjacent park facilities
- Level of access for emergency vehicles
- Neighborhood impacts (visual, noise, traffic, emergency use frequency)
- Level of construction costs
- Impacts to utilities

Open House Criteria List

At the Open House a list of criteria proposed by the project Task Force and the Technical Advisory Committee was displayed on two boards. Participants were asked to use a green dot sticker to identify which criteria they thought were most important. A nearby easel pad also provided the opportunity to suggest additional criteria.

Overall, community members felt that the evaluation criteria proposed by the Task Force and TAC were comprehensive. Between the Task Force and TAC lists, the following top two criteria were identified as most important:

Task Force Evaluation Criteria

- Sensitivity to homes at the bridge landings and traffic impacts to neighbors and residents (23)
- Bicycle-pedestrian connectivity at bridge landings and to the greater networks, for both residents and tourists (15)

TAC Evaluation Criteria

- Neighborhood impacts (visual, noise, traffic, emergency use frequency). (14)
- Directness of connections to major destinations and the regional and statewide trail network. (13)

Community members were invited to provide any additional ideas or overall thoughts. Some of these included:

- The bridge would be a major asset to Wilsonville and connect it to the valuable regional bike network, increasing the tourism draw to the area.
- Impacts to private residences, businesses and neighborhoods should be closely monitored.
- Questions were raised about the greater traffic and transportation issues in the area.
- Questions were raised about the infrastructure for pedestrians and cyclists when they come off the bridge, especially on the south side of the river.

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Appendix B - Evaluation Matrix

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A	Connectivity and Safety	W1	W2	W3	Notes
A-1	Connects to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on north side of the bridge				
A-2	Connects to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on south side of the bridge				
A-3	Connects to planned bike/pedestrian routes on north side of the bridge				
A-4	Connects to planned bike/pedestrian routes on south side of the bridge				
20.0%	Criteria A Weighting	0	0	0	

B	Emergency Access	W1	W2	W3	Notes
B-1	Connect to emergency routes directly, minimizing out of direction travel and response time at and near the north terminus				
B-2	Connect to emergency routes directly, minimizing out of direction travel and response time at and near the south terminus				
B-3	Minimize emergency response impacts on residents, park activities, and marina operations				
20.0%	Criteria B Weighting	0	0	0	

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C	Environmental Impacts	W1	W2	W3	Notes
C-1	Avoid or minimize adverse impacts on wildlife habitat and trees				
C-2	Avoid or minimize adverse impacts on waters and wetlands				
C-3	Avoid or minimize adverse impacts on cultural and historic resources				
11.5%	Criteria C Weighting	0	0	0	

D	Compatibility with Recreational Goals	W1	W2	W3	Notes
D-1	Provide a positive user experience (e.g. noise, aesthetics, view, security, compatible with other travel modes, exceeds design standards for turns and slopes)				
D-2	Maximize compatibility with and flexibility for recreational uses including parks and the river on the north side.				
D-3	Maximize compatibility with and flexibility for recreational uses, including parks, the marina and the river on the south side.				
D-4	Maintain or improve river access				
20.0%	Criteria D Weighting	0	0	0	

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E	Compatibility with Existing Built Environment	W1	W2	W3	Notes
E-1	Minimize bridge location and access impacts on residences in Old Town				
E-2	Minimize bridge location and access impacts on residences at south terminus in Clackamas County				
E-3	Minimize bridge location and access impacts on marina facilities				
E-4	Minimize bridge location and access impacts to possible future infrastructure improvements (e.g. Railroad, ODOT)				
17.0%	Criteria E Weighting	0	0	0	

F	Cost and Economic Impact	W1	W2	W3	Notes
F-1	Minimize total project cost (e.g. bridge, retaining wall, on grade path, environmental mitigation). This project cost does not consider architectural features or amenities.				
F-2	Minimize property acquisition (e.g. right-of-way, easements) and avoid displacement of residences and businesses				
F-3	Minimize the displacement of utilities				
F-4	Maximizes economic benefit through tourism and access to commercial and regional destinations and trail system connections				
11.5%	Criteria F Weighting	0	0	0	

100%	**Total, Weighted Score**	0	0	0	

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Appendix C - Scoring Guidance

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SCORING GUIDANCE - Blue text indicates evaluation considerations to determine the appropriate range of point value based on how well each alternative achieves the sub-criteria

Criteria Sub-criteria		**0 to 3**	**4 to 6**	**7 to 10**
A	**Connectivity and Safety**			
A-1	Connects to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on north side of the bridge	Does not connect well to existing pedestrian and bike facilities or facilities do not meet most design and safety standards	Connects to existing pedestrian and bike facilities that do not comply with all design and safety standards	Directly connects to existing pedestrian and bike facilities that meet or exceed design and safety standards
A-2	Connects to existing bike/pedestrian routes directly or using streets with sidewalks and bike lanes on south side of the bridge	Does not connect well to existing pedestrian and bike facilities or facilities do not meet most design and safety standards	Connects to existing pedestrian and bike facilities that do not comply with all design and safety standards	Directly connects to existing pedestrian and bike facilities that meet or exceed design and safety standards
A-3	Connects to planned bike/pedestrian routes on north side of the bridge	Does not connect well to planned bike and pedestrian routes	Connects to planned regional or local bike and pedestrian routes	Directly connects to planned regional and local bike and pedestrian routes
A-4	Connects to planned bike/pedestrian routes on south side of the bridge	Does not connect well to planned bike and pedestrian routes	Connects to planned regional or local bike and pedestrian routes	Directly connects to planned regional and local bike and pedestrian routes
B	**Emergency Access**			
B-1	Connect to emergency routes directly, minimizing out of direction travel and response time at and near the north terminus	Indirect route from Wilsonville Road to middle of Willamette River	Neither direct nor indirect route from Wilsonville Road to middle of Willamette River	Direct route from Wilsonville Road to middle of Willamette River
B-2	Connect to emergency routes directly, minimizing out of direction travel and response time at and near the south terminus	Indirect route from Miley Road @ I-5 to middle of Willamette River	Neither direct nor indirect route from Miley Road @ I-5 to middle of Willamette River	Direct route from Miley Road @ I-5 to middle of Willamette River
B-3	Minimize emergency response impacts on residents, park activities, and marina operations	Route for emergency responders directly adjoins residences or businesses or emergency vehicle use interrupts park activities or marina operations	Route for emergency responders avoids residences or businesses, but emergency vehicle use impacts park activities or marina operations	Route for emergency responders avoids residences, businesses, and parks and is separated from them

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SCORING GUIDANCE - Blue text indicates evaluation considerations to determine the appropriate range of point value based on how well each alternative achieves the sub-criteria

Criteria Sub-criteria		**0 to 3**	**4 to 6**	**7 to 10**
C	**Environmental Impacts**			
C-1	Avoid or minimize adverse impacts on wildlife habitat and trees	Adverse impacts to wildlife habitat and trees	Moderate adverse impacts on wildlife habitat and trees	Avoids or has minimal adverse impacts on wildlife habitat and trees
C-2	Avoid or minimize adverse impacts on waters and wetlands	Adverse impacts to waters and wetlands	Moderate adverse impacts on waters and wetlands	Avoids or has minimal adverse impacts on existing waters and wetlands
C-3	Avoid or minimize adverse impacts on cultural and historic resources	Adverse impacts to cultural and historical resources	Moderate adverse impacts on cultural and historical resources	Avoids or has minimal adverse impacts on existing cultural and historical resources
D	**Compatibility with Recreational Goals**			
D-1	Provide a positive user experience (e.g. noise, aesthetics, view, security, compatible with other travel modes, exceeds design standards for turns and slopes)	Achieves some or few facets of a positive user experience	Achieves most facets of a positive user experience	Achieves all or nearly all facets of a positive user experience
D-2	Maximize compatibility with and flexibility for recreational uses including parks and the river on the north side.	Generally incompatible with existing uses (Permanent inconvenience or displacement) and/or precludes future improvements.	Compatible with existing uses with some temporary modifications and/or minor permanent displacement or limits flexibility for future improvements.	Compatible with existing uses with minor temporary modifications and no permanent displacement, while being flexible for future improvements.
D-3	Maximize compatibility with and flexibility for recreational uses, including parks, the marina and the river on the south side.	Generally incompatible with existing uses (Permanent inconvenience or displacement) and/or precludes future improvements.	Compatible with existing uses with some temporary modifications and/or minor permanent displacement or limits flexibility for future improvements.	Compatible with existing uses with minor temporary modifications and no permanent displacement, while being flexible for future improvements.
D-4	Maintain or improve river access	The alignment provides opportunities to view the river, but adversely impacts existing public accesses to the river bank.	Provides opportunities to view the river and maintains existing public river bank access points	Provides opportunities to view the river and allows for improved public access to the river bank

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Appendix C - Scoring Guidance

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SCORING GUIDANCE - Blue text indicates evaluation considerations to determine the appropriate range of point value based on how well each alternative achieves the sub-criteria

Criteria Sub-criteria		**0 to 3**	**4 to 6**	**7 to 10**
E	**Compatibility with Existing Built Environment**			
E-1	Minimize bridge location and access impacts on residences in Old Town	The alignment directly impacts residences in Old Town or impacts underrepresented populations (e.g. communities of color, limited English proficient and low-income populations, people with disabilities, seniors, and youth)	The alignment or its intended accesses is in close proximity to, but does not directly impact, residences in Old Town	The alignment and its accesses are not in close proximity to residences in Old Town or benefit underrepresented populations (e.g. communities of color, limited English proficient and low-income populations, people with disabilities, seniors, and youth)
E-2	Minimize bridge location and access impacts on residences at south terminus in Clackamas County	The alignment directly impacts residences in Clackamas County or impacts underrepresented populations (e.g. communities of color, limited English proficient and low-income populations, people with disabilities, seniors, and youth)	The alignment is in close proximity to, but does not directly impact, residences in Clackamas County	The alignment is not in close proximity to residences in Clackamas County or benefit underrepresented populations (e.g. communities of color, limited English proficient and low-income populations, people with disabilities, seniors, and youth)
E-3	Minimize bridge location and access impacts on marina facilities	The alignment directly impacts Marina operations and those impacts cannot be readily mitigated	The alignment impacts Marina operations, but those impacts can be readily mitigated	The alignment does not impact Marina operations
E-4	Minimize bridge location and access impacts to possible future infrastructure improvements (e.g. Railroad, ODOT)	The alignment impacts future infrastructure improvements	The alignment does not substantially impact future infrastructure improvements	The alignment does not impact future infrastructure improvements
F	**Cost and Economic Impact**			
F-1	Minimize total project cost (e.g. bridge, retaining wall, on grade path, environmental mitigation). This project cost does not consider architectural features or amenities.	Formula based on relative project costs. Costs are not actual cost since there is insufficient information at this stage. Once each alignment has a relative cost based on the proportion of bridge, wall, path and mitigation, the least cost will receive a 10. Each of the other two alternatives will be scored lower in proportion to how much higher their cost is when compared with the lowest cost.		
F-2	Minimize property acquisition (e.g. right-of-way, easements) and avoid displacement of residences and businesses	The alignment affects more than four properties or may result in one or more displacements.	The alignment affects no more than four properties and does not result in any displacements.	The alignment affects no more than two properties and does not result in any displacements.
F-3	Minimize the displacement of utilities	The alignment directly impacts existing City or Franchise utilities which cannot be easily relocated	The alignment directly impacts existing City or Franchise utilities which can easily be relocated	The alignment does not impact existing City or Franchise utilities
F-4	Maximizes economic benefit through tourism and access to commercial and regional destinations and trail system connections	Provides limited opportunity to increase revenue for the local and regional economies through improved access and tourism	Provides some opportunity to increase revenue for the local and regional economies through improved access and tourism	Provides significant opportunity to increase revenue for the local and regional economies through improved access and tourism