



French Prairie Bridge Project Task Force Meeting #4

**Meeting Summary
Wednesday, December 5, 2018
6:00– 9:00 PM**

Wilsonville City Hall
29799 SW Town Center Loop E, Wilsonville,
OR Willamette River Rooms I & II

Members Present

Douglas Muench, Andrew Harvey, Steve Chinn, Samara Phelps, Steven Van Wechel, Michelle Ripple, Councilor Charlotte Lehan, Commissioner Chair Jim Bernard, Simon Springall, Pete Ihrig, Steve Benson, Leann Scotch, Patricia Rehberg

Members Unable to Attend

Jeremy Appt, Blake Arnold, David Becker, Heidi Bell, Tony Holt, Karen Houston, Brian Sherrard, David Stead, Gary Wappes, Ryan Sparks, Councilor Susie Stevens

Project Management Team/ Staff

Zach Weigel, City of Wilsonville; Patty Nelson, City of Wilsonville; Bob Goodrich, OBEC Consulting Engineers; Anne Pressentin, EnviroIssues; August Burns, EnviroIssues

Conversation is summarized by agenda item below.

1. Welcome and Meeting Purpose

Co-Chairs Councilor Charlotte Lehan and County Chair Jim Bernard opened the meeting and began introductions. Count Chair Jim Bernard went through the meeting purpose for the Task Force, which included:

- Reviewing alignment selection decision
- Reviewing bridge type selection and public engagement processes
- Discussing and providing comments on draft Bridge Type Evaluation Report
- Reviewing and advising on the ranking of the five bridge types

2. Project Updates

Zach Weigel, City of Wilsonville Project Manager reminded the Task Force of key project milestones, including the recommendation for the preferred bridge alignment, which the Council and Commission unanimously adopted. Zach then reminded the task force of the project's key benefits:

- Creating healthy communities: The project will connect the Ice Age Tonquin trail and the

southwest Portland metro area's trail system to Champoeg State Park, and the Willamette River Scenic Bikeway, as well as future connections to Charbonneau and residences on the south side of the river.

- Emergency Services: The French Prairie Bridge would be the only seismically resilient bridge for 30 miles and would serve as an emergency vehicle route.
- Economy and tourism: In 2014 there was \$3.1 million in bicycle related tourism associated with just bike routes in the area

Zach said the project is funded by a Metro RFFA grant, which covers the determination of the preferred bridge location (which has been done), the preferred bridge type (currently underway), and the bridge cost (based on bridge alignment and type). After these three pieces have been determined, decision makers will be able to decide if and how the project moves forward.

Zach then briefly went through the project schedule, reminding the task force of the public open house and online open house that took place in October. Zach said that the goal for this evening was to narrow from five to two recommended bridge types based on technical advisory committee and public feedback, as well as the Task Force's own expertise. After two bridge types are recommended, further work will be done to analyze those bridge types, including cost estimate ranges and artists renderings.

3. Public Comment

There was no public comment during the designated time.

4. Bridge Type Selection Process

Bob Goodrich of OBEC Consulting Engineers walked the Task Force through the selection criteria for five bridge types, noting they were different than the bridge alignment selection criteria. Bob began by showing the Task Force two bridge types that had already been eliminated based on incompatibility with ADA standards and minimum span requirements for navigation. Bob then described the four criteria;

1. Economics
Broken down into three major areas; design and construction costs, design and construction duration, maintenance.
2. Constructability
Broken down into four major areas; substructure (everything below the bridge deck) access and complexity, and super structure (everything from the bridge deck up) access and complexity. Considerations included: whether the construction means and methods are readily completed by Oregon contractors, potentially unique design and construction requirements, specialty access techniques required because of the river, etc.
3. Temporary and permanent impacts
Both temporary and permanent impacts were broken down into resource impacts such as environmental (water, wetlands, biology, wildlife), cultural, and built environment impacts (marina, parking lots, parks, roads)
4. Bridge aesthetics
This was not formally evaluated due to its subjective nature

Questions/Comments from the Task Force:

- A member asked if any bridge types were more capable of withstanding an earthquake.

- Bob answered that earthquake readiness is a basic design criterion that all bridge types will meet.
- A member asked whether the bridge types with pillars in the water would obstruct navigation.
 - Bob responded that all pillars in the water would be designed to meet minimum requirements for navigation. Some bridge types exceed the minimum requirements.
- A member asked if the curve of the north end of the alignment could swing toward the railroad bridge to allow for more usable park space.
 - Bob responded that every stage of the project has a refinement process and that is a consideration for a future phase.
- The Task Force wanted the project team to consider landing points and their impact on adjacent properties. A concern was expressed over potential impacts to adjacent properties caused by moving the bridge landing.

Bob walked the Task Force through all five potential bridge types, their benefits and drawbacks, and the suitability of each bridge type for the selection criteria.

Questions from the Task Force:

- A clarifying question was asked regarding why excavating of the shoreline was necessary for bridge types that had pillars in the water. The Task Force member assumed that the volume would be negligible
 - Bob explained that the Willamette River is in a FEMA regulated floodway and therefore the new bridge cannot result in a rise of the 100-year flood elevation without costly and time-intensive letter of map revision. Therefore to provide an equivalent conveyance of water and maintain the flood elevation, some bank excavation or other hydraulic mitigation will be required. At this preliminary phase of the project, the shoreline excavation captures this work.
 - Zach responded that the volume of the foundation and piers in the water are significant enough to require excavating so that the bridge met FEMA requirements to accommodate the 100-year flood.
 - Bob told the Task Force that there are bridge types in the study that span the entire length of the river and therefore require no hydraulic mitigation (bank excavation) because there are no piers in the water.
- A member asked if boats will have to curve to get between the two bridges.
 - Bob responded that boats will still have to turn because they must turn in the current set up, but a new bridge would not add an additional navigational challenge.
- A member asked if the piers would impact kayak access to the northside of the river.
 - Bob did not expect the piers to impact kayak access to the river directly. Bob noted that hydraulic mitigation to offset water displaced by the piers could potentially impact the existing access.
- A member asked if the experience of riding across all these bridge types are essentially the same or if the grade of the bridges will impact the experience.
 - Bob responded that the experience will be similar but not the same. As an example, the steel girder is a little bit steeper than the steel truss because below the deck is deeper, so it must be higher in the air to meet the navigational clearance and connect with Butteville Road. However, all bridge types will be at a grade of 5% or less to meet ADA requirements.
- A member asked if all bridge types can have a view from a platform, a bench, or pull off.

- Bob responded that design can accommodate something with each bridge option.
 - Zach pointed out an aesthetic consideration for the steel truss. The steel must be painted, which is an additional maintenance cost for every time the bridge needs to be repainted. If weathering steel were used, then when it rains the steel would bleed onto the concrete deck and stain it. The steel girder only stains below the deck.
- A member asked if the tied-arch bridge main span is at its practical maximum length or if it could be increased to move the piers further up the bank.
 - Bob responded that on the southside it is not possible to move them further up the bank because vertical clearance for boats and trailers going out of the marina is needed under the bridge. He also said this bridge type would look thin and tall and might feel closed in.
- A member asked if the cables from the cable-stayed bridge need to be anchored into the ground.
 - Bob responded that they do on the north side, but do not on the south side. On the south side the cables connect to the deck, which hooks into the pier, which anchors the stay cables. If the pier in the marina parking lot were to be removed, the cables could be arranged differently while still achieving the overall intent. This reconfiguration would avoid permanently impacting a marina parking spot.
- A member wondered if the Tilikum Crossing is a cable stayed bridge.
 - Bob confirmed that it is.
- A member asked about the distance from Boones Ferry Park and houses to the cables from the cable-stayed bridge. The Task Force also asked if the placement of the cables would affect the curve of the bridge.
 - The bridge extends 150 feet back from the top of the bank into Boones Ferry Park and is quite far from the nearest house. Bob responded that curving the bridge is a bit trickier, and could be possible but potentially at a cost increase.
- Anne Pressentin asked for the Task Force to clarify the benefit of the curve.
 - Members explained that the space between the railroad track and bridge is wasted park space. If the bridge were brought closer to the railroad bridge then more space would open for parking or more park space.
- A member asked if the bridge could be angled differently to maximize space.
 - Bob responded that the bridge currently crosses the river essentially perpendicularly to keep it as short as possible. Angling the bridge would make it longer and thus more expensive.
- One member expressed interest in ensuring the new bridge design and location is consistent with the master plan for Boones Ferry Park.
 - Zach said the master plan identifies the bridge area.
- Members asked questions related to the height of the cable-stayed bridge.
 - Bob said the height of the pylons at 160 feet would be significantly higher than the railroad bridge, but was unlikely to affect the airspace of Aurora Airport.
- Members asked about the experience with and size of the suspension bridge compared to other types
 - Bob said the suspension pylons are about half as tall as the cable stay and the cable supports are thinner than tied-arch.
 - A member asked if there would be retractable bollards at either end of the bridge to allow emergency vehicles. Bob said that type of design detail would be decided later.
- A member asked where the suspension bridge would tie off, concerned about an anchor encroaching on public space.

- Bob responded that the anchors will be buried and on the south side likely placed in the middle of where the bridge loop on the south side of Butteville Road.

Public Questions:

- A member of the public asked if all the bridges have a refuge for pedestrians in the instance of an emergency vehicle crossing.
 - Bob said that there is no designated refuge, but the intention behind providing a 17' wide deck is to offer ample passing room between vehicles and pedestrians. It was noted that a standard car lane is 12' wide.
- A member of the public asked how the bridge types compare in terms of maintenance, durability, and longevity and if there is a ranking for one being considerably more expensive to maintain than another.
 - Bob responded that the steel girder bridge is going to be the least expensive by quite a bit. It will also be the least expensive to build. It requires very little maintenance. A consideration is that underwater piers will need to be examined every 5 years. The steel truss bridge is not too far behind in cost. The other three bridges would all require specialty equipment to do the inspections.
- A member of the public asked for a cost differentiation between a bridge that would only accommodate pedestrian and bicycles to this bridge, which also accommodates emergency vehicles.
 - Bob responded that the difference is negligible.

Bob then told the Task Force about the Technical Advisory Committee (TAC) recommendations and the results from the public engagement efforts in October (an in-person open house and an online open house).

Key takeaways from the TAC:

- Permanent impacts are more important than temporary impacts
- Incorporate relative bridge cost and the relative difficulty of permitting for each bridge type (which the project team incorporated)
- Recommend against advancing the tied-arch because it is higher cost and has a similar river impact to the truss and girder bridge types
 - Zach added that another TAC reasoning was that there are two other lower cost signature type bridges that do not impact in the river.
- TAC recommended picking one utilitarian type bridge and one signature bridge as the final two

Key takeaways from public engagement:

- Top three considerations included: aesthetics, construction cost and river impacts
- Favored bridge types:
 - Cable-stayed – agree the benefits outweigh the cost
 - Suspension – agree the benefits outweigh the cost
 - Steel girder
 - Steel truss – highest percentage of negative responses
 - Tied arch – high percentage of negative responses due to cost and impacts
- There was a mixed opinion on project need with many people saying alleviating congestion was a higher priority.

Anne Pressentin then led the Task Force in a round of discussion to narrow the bridge types. She first asked the Task Force if there were any bridge types they felt comfortable getting rid of immediately. The Task Force agreed to eliminate the tied-arch and steel truss from the discussion. The tied arch was removed based on higher cost and negative impacts to the natural environment. The steel girder was removed based on aesthetic considerations.

Anne then asked if the Task Force agreed with the TACs recommendation for selecting one bridge type from the least cost and signature categories. This sparked robust conversation centered around aesthetics. Some members of the Task Force wanted a more utilitarian bridge type because it blended in with the other bridges in the area and did not distract from the natural beauty. Many members recounted trips they had taken around the region and internationally that had iconic bridges that they vividly remember. A member of the public pointed out that they did not want Wilsonville to be known as the city with three boring bridges, but rather a destination with a signature bridge that people remember and want to experience. Members of the Task Force felt that a signature bridge would garner the most public support and have the highest chance of finding funding. Many members also valued the two signature bridge types because they had the least amount of permanent impacts and no piers in the water, which are easier to permit and can be built year-round.

Key discussion points flip charted by Anne:

- Maximize the usable space on the north side/park side
 - Is there opportunities for parking between two bridge landings? However, there is a question as to the need for parking.
 - Try to move new bridge landing close to the railroad bridge
- Quality structure and cost are both important.
- Want a beautiful community that attracts tourism. Least cost is less important
- Aesthetics are important, but we need options.
- Think to the future. Don't want to look back and say, "why didn't we?"
- Plan for emergencies and the potential for two-way vehicle traffic
- Support for the facility will bring funding. Support exists.

5. Recommendation for City Council

Anne drew three scenarios on a flip chart and asked the Task Force to vote on their favorite option. The options and final votes were:

1. Steel girder and cable stayed - 2
2. Steel girder and suspension - 2
3. Cable stayed and suspension – 9

Members who preferred the cable-stayed and suspension bridge said it was important to have a signature bridge in Wilsonville that would attract users and be something that the City is known for. These members also highlighted the lack of permanent in-water impacts.

Members who preferred keeping a lower cost option said decorative treatments can be added and construction funding is not yet secured. Cost should be a consideration.

Anne flip charted key rationale for the recommendations, which the Task Force agreed to:

- Concerned about the environmental impacts – both for in-water and excavation
- Impacts on the park

- Attraction to Wilsonville; looks attractive and attracts people
 - Great cities have great structures
- Economic benefits of the facility for Wilsonville
- Impact on the marina

6. Next Steps

Zach told the Task Force that the project team will take into consideration the Task Force, TAC, and public recommendations and bring two bridge types to City Council in January. After there is agreement on the two bridge types moving forward the project team will begin putting together cost estimates and artists renderings as well as in-depth analysis of the two final bridge types.

The project team is looking at gathering the Task Force again in the spring to review that data to select a final preferred bridge type.

7. Closing Comments

Co-chair Lehan noted that most members of the committee recommended eliminating both the highest cost and the least cost options as well as those with the most environmental impacts. Co-chair Bernard said the conversation was productive and resulted in changing his opinion. Both co-Chairs thanked the Task Force and community members for coming.

Flip chart transcription

Comments on Steel Girder Bridge

- Simple and doesn't call attention to itself, plus it's the least cost
- Doesn't market itself
- Can add decorative treatments for visual interest

Comments on Cable-Stay Bridge

- Very high pylons for the area - agree
- Prefer
 - Regionally significant!
- Really stands out visually -- positive

Comments on Suspension Bridge

- Prefer
 - No impact to river
 - Aesthetics
 - Have to weigh costs

Comments on Tied-Arch Bridge

- Eliminate

Comments on Steel Truss Bridge

- Eliminate

Comments:

- North side of river/park side:
 - Maximize usable space
 - Opportunity for parking between 2 bridges? Question as to need
 - Move closer to Boones Ferry or RR Bridge
- Want a beautiful community
 - Attractive for tourism
- Don't agree with least cost
- Don't want to create problem for Boone Bridge
- Quality, cost important
- Think to future -> don't want to say why didn't we?
- Plan for emergencies – 2way vehicle traffic or protocol.
- Aesthetics are important – but need options
- Look to economic development opportunities with bridge
 - Lean to signature bridge to make Wilsonville noticed
- Support for facility will bring funding. There is support.

Rationale

- Environmental impacts
 - In-water and excavation
- Attraction for Wilsonville
- Economic benefit
- Effect to the park
- Effect to Marina
- Signature/memorable for Wilsonville
 - Great structures

Final Vote

- Girder - Cable-stay – 2 (*Note: One vote was mistakenly counted from a member of the public*)
- Girder – Suspension – 2
- Suspension – Cable-stay - 9