

Appendix L

Open House #1 Presentation Boards and Comment Response Forms

WARREN AVENUE BRIDGE MULTIMODAL PROJECT



OPEN HOUSE

PREVIOUS PLANNING STUDIES

SR 303 CORRIDOR STUDY (2021)

- 2-year study included a stakeholder advisory group and community outreach
- Warren Avenue Bridge identified as top priority project
 - SR 303 Corridor Study Phase 1B – see project description from study in box at right

RECOMMENDED IMPROVEMENTS INCLUDED:

- 10' clear width both sides of bridge
- wayfinding
- center barrier
- lighting

EASTSIDE VILLAGE SUBAREA PLAN (2020)

- Examined alternatives for the future of the Eastside Village subarea (located immediately east of SR 303), with consideration and coordination of the SR 303 Corridor Study

RECOMMENDED PEDESTRIAN AND BICYCLE INFRASTRUCTURE IMPROVEMENTS INCLUDED:

- SR 303 Warren Avenue Bridge – new 8-foot shared use pathways on both sides of bridge
- Lower Wheaton Way from Lebo Boulevard to Sheridan Road (alternative to Cherry Avenue) – new shared use lane
- Callahan Drive from SR 303 to Wheaton Way – new bike lane connecting between priority bike routes
- Clare Avenue – Bike route connecting from SR 303 to the Bridge to Bridge Trail at Lebo Boulevard
- Sheridan Road – new shared use lane

SR 303 Corridor Study Phase 1B

PROJECT DESCRIPTION

Improve safety for vehicles crossing Warren Avenue Bridge by reducing lane width and installing center barrier. Improve active transportation connectivity across the Port Washington Narrows by improving active transportation facilities across the Warren Avenue Bridge and providing additional connections north and south of the bridge. Active transportation improvements on the bridge will enhance the bridge to bridge trail connection for the City of Bremerton.

Jurisdiction	City of Bremerton
Corridor Need	Improve corridor safety Improve pedestrian and bicycle connectivity
Location	Warren Avenue Bridge
Project Length	2,400 feet
Mode	Auto, transit, active transportation
Facility Type	Roadway, sidewalk, active transportation, bicycle

PROJECT ATTRIBUTES

Project Elements	<ul style="list-style-type: none"> Widen Warren Avenue Bridge to include 10' sidewalks on both sides Manage lane widths on Warren Avenue Bridge with a minimum of 10.5' Center barrier on Warren Avenue Bridge Construct a 3' wide low-maintenance landscape or hardscape buffer between curb and sidewalk and widen sidewalks to 10' on east side of SR 303 from north of 17th Street to the Warren Avenue Bridge Update lighting on the structure for both roadway and active transportation users Sidewalks at both north and south ends that are forward-compatible with long-term plan Active transportation facility to connect to Lebo Boulevard on the north side of the bridge Provide wayfinding for active transportation Bicycle facilities south of the bridge between SR 303 and Park Avenue
Benefits	<ul style="list-style-type: none"> Provides safe width for cyclists and pedestrians to cross Port Washington Narrows All active transportation facilities provide a key link for a fully functional bridge to bridge trail connection Improves accessibility across corridor
Issues and Risks	<ul style="list-style-type: none"> Cost Constructability of the cantilever section Optimizing existing bridge widths Maintenance Efficient off bridge pedestrian and bicycle routes
Notes	<ul style="list-style-type: none"> Warren Avenue Bridge improvements would include new decking material in response to recent potholes on the bridge that impacted traffic flow and reliability Consider overlooks on either side of the bridge near the uphill end The bicycle connection between SR 303 and Park Avenue needs to be constructed after the Warren Avenue Bridge improvements Appropriate lighting will be provided for active transportation facilities

Source: SR 303 Corridor Study, 2021

PROJECT AREA



Note: Conceptual drawing only. Channelization and sidewalk improvements north of the Warren Avenue Bridge are not included in this phase.



Note: Conceptual drawing only. Bicycle facilities along 18th Street and tunnel undercrossing are not included in this phase.

EXISTING BRIDGE CONDITIONS

- 1,700' long (1/3 mile)
- 67.5' overall width
- 4 lanes of vehicle travel
 - » 11' inside lane, 11.5' outside lane
- Non-ADA compliant pedestrian access route on each side
 - » Widths vary from 3'-2" to 3'-11"
 - » ADA compliance requires 5' each side
- **Structure is owned and maintained by WSDOT**
- Three different structure types
 - » Concrete T-Beam
 - » Concrete Box Girder
 - » Steel Plate Girder
- Eligible for National Register of Historic Places
 - » Bridge constructed in 1958

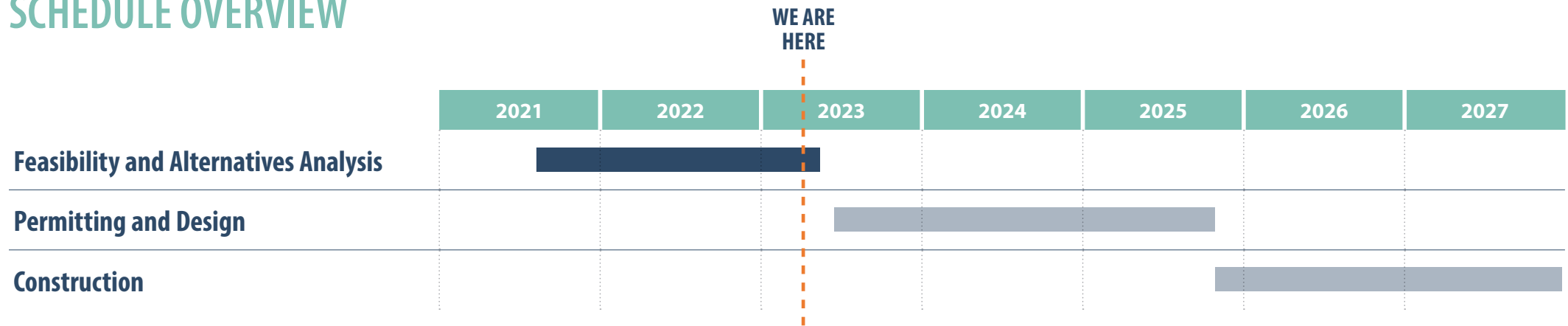


EXISTING BRIDGE CONDITIONS



PROJECT SCHEDULE

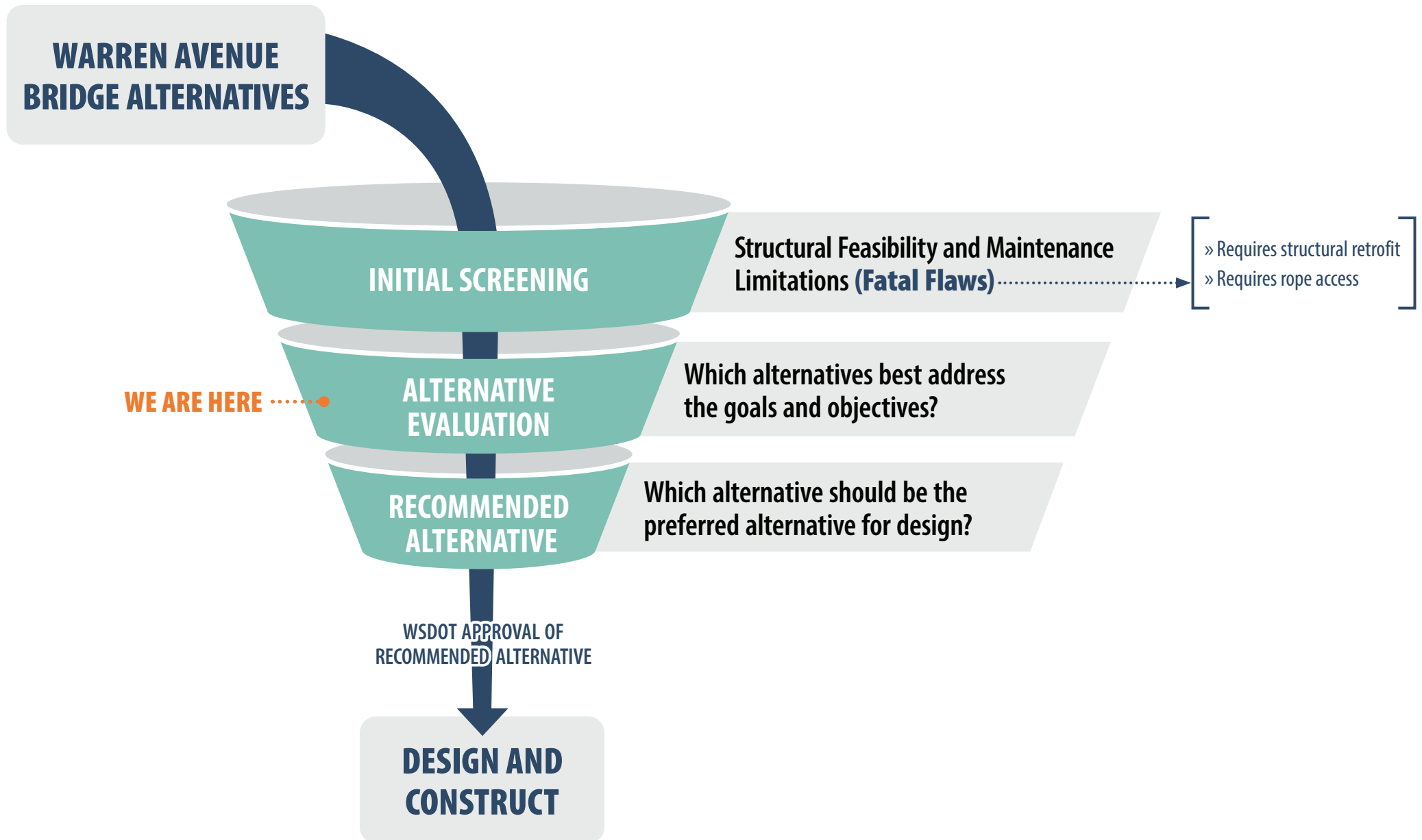
SCHEDULE OVERVIEW



FEASIBILITY AND ALTERNATIVES ANALYSIS



ALTERNATIVES ANALYSIS



INITIAL SCREENING – HELPFUL TERMS

SEISMIC RETROFIT

Modification of existing structures to make them more resistant to seismic activity, ground motion, or soil failure due to earthquakes. This is required on existing bridges when a project adds extra weight beyond the structure's original safety factors.



UNDER BRIDGE INSPECTION TRUCK (UBIT)

A specialized truck used by WSDOT to inspect and perform maintenance activities on the bridge. The truck provides access to all parts of the underside of the bridge within arms reach.



WSDOT ROPE ACCESS TEAM

Certified bridge inspectors who also hold rope access certification and use rope rappelling techniques to access the under side of the bridge.



INITIAL SCREENING—MAINTENANCE CONSIDERATIONS

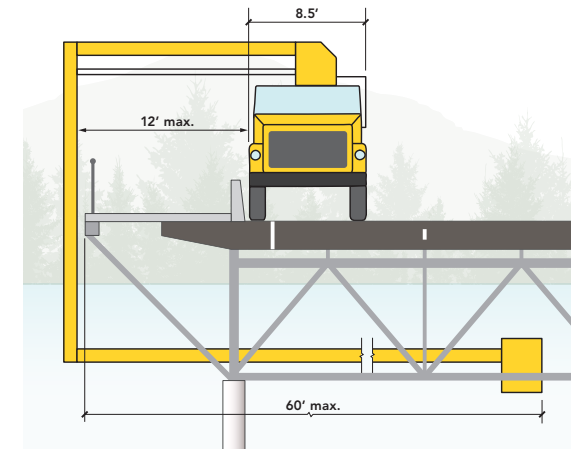
ROPE ACCESS TEAMS

- The Warren Avenue bridge does not easily lend itself to rope access without extensive effort for rigging.
- The ability for rescue must also be provided in accordance with L&I.
 - » This would require a means to get workers back up, or down to standby rescue boats in the water.
- Using Rope Access Teams is time- and personnel-intensive, and also involves greater risk.
 - » To plan for a design that requires this is contrary to current practices of safety risk management.
 - » This is not considered a viable method for our project due to worker safety.



LARGER UNDER BRIDGE INSPECTION TRUCK (UBIT) FEASIBILITY

- Some alternatives include the purchase of a larger UBIT to provide WSDOT with inspection/maintenance access.
- Response from WSDOT:
 - » WSDOT's existing fleet has been selected to serve the highest number of bridges.
 - » A larger UBIT will not be able to serve many of the existing bridges, therefore cannot replace an existing UBIT.
 - » City mitigation will be required if the purchase of a larger UBIT is necessitated.
 - WSDOT is open to the City purchasing a new, larger UBIT for their fleet, but this option needs to be evaluated and is considered mitigation for the project (cost to the City for purchase of a new UBIT has not been fully determined).



ALTERNATIVE SCREENING

INITIAL SCREENING MATRIX

Alternatives	Alternative 1	Alternative 2	Alternative 3	Alternative 4a	Alternative 4b	Alternative 5	Alternative 6	Alternative 7	Alternative 7a	Alternative 8	Alternative 8a
	8-foot clear width	10-foot clear width	12-foot clear width	16-foot clear width	16-foot clear width	14-foot clear width	At-grade 6-foot bike lane, 6-foot sidewalk	12-foot clear width on east side; 5-ft clear width on west side	12-foot clear width	14-foot clear width on east side; 5-ft clear width on west side	14-foot clear width
	Both sides	Both sides	Both sides	West side	East side	Both sides	Both sides	Both sides	East side	Both sides	East side
Origin	WSDOT recommendation	SR 303 Corridor Study preferred alternative	Larger 2-sided alternative assuming purchase of new UBIT	Combined WSCC one-sided alternative with WSDOT standard for shared use path	Alternate to 4a, not requiring an undercrossing of SR 303	WSDOT Traffic Office requested	Input from the stakeholder survey	WSCC requested one-sided alternative	Alternate to 7, keeping existing sidewalk on west side	WSCC requested one-sided alternative	Alternate to 8, keeping existing sidewalk on west side
Overlooks	8'x24', 4 total	6'x24', 4 total	No	No	No	N/A	N/A	No	No	No	No
Structural Feasibility	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Bridge Fully ADA Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Maintenance/Inspection Access	Existing UBIT	Existing UBIT	Larger UBIT	Rope access required	Rope access required	Larger UBIT	Existing UBIT	Larger UBIT	Larger UBIT	Larger UBIT	Larger UBIT
Planning Level Project Cost (Design and Construction)	\$23.1M	\$25.6M	\$29.1M	N/A	N/A	N/A	N/A	\$23.0M	\$17.8M	\$25.6M	\$20.2M

Notes:

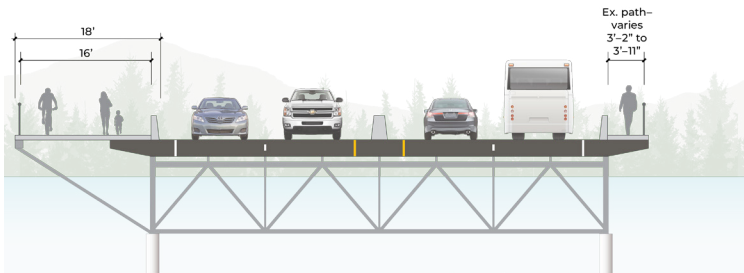
- Project scope includes on-structure improvements only (including minimal tie-in to the existing sidewalk).
- Budget available for Design and Construction is \$26.5M.
- "Clear width" is defined as the lateral distance of the path free from any obstructions, including barriers or railings. The minimum clear width for an ADA pedestrian accessible route is typically 5 feet.

	Feasible Alternative
	Eliminated Alternative <i>(not moving forward into the analysis or next phase)</i>
	Exceeds Project Budget

ELIMINATED ALTERNATIVES

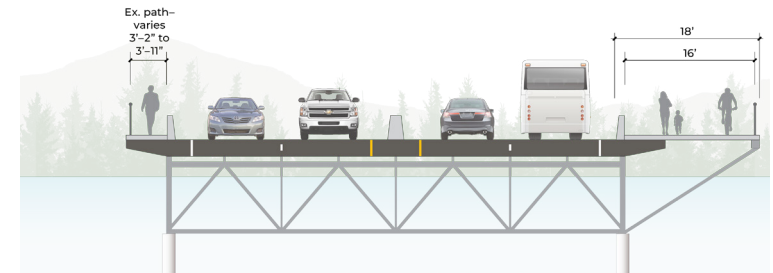
ALTERNATIVE 4a

- Fatal flaw(s):**
» Requires rope access



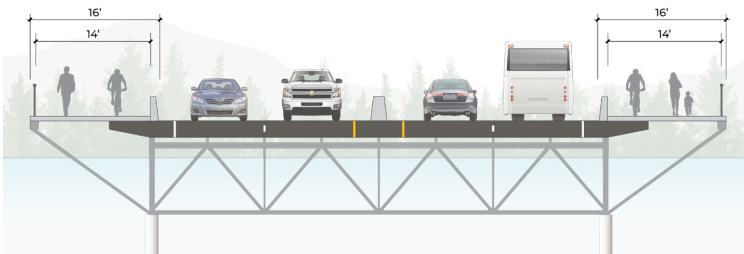
ALTERNATIVE 4b

- Fatal flaw(s):**
» Requires rope access



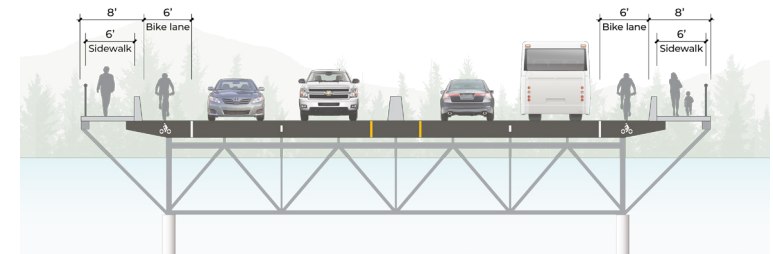
ALTERNATIVE 5

- Fatal flaw(s):**
» Requires structural retrofit



ALTERNATIVE 6

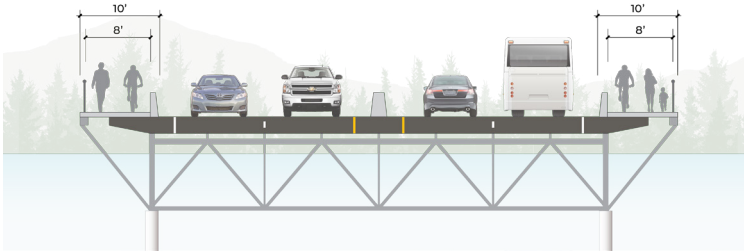
- Fatal flaw(s):**
» Requires structural retrofit



FEASIBLE ALTERNATIVES

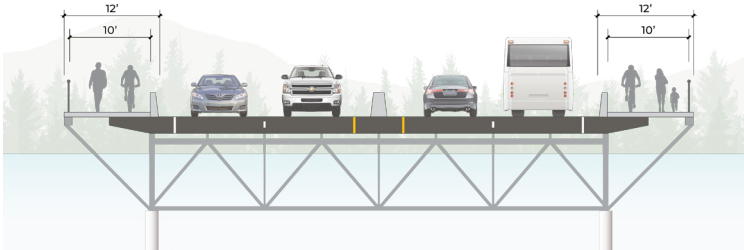
ALTERNATIVE 1

Cost Estimate:
\$23.1M



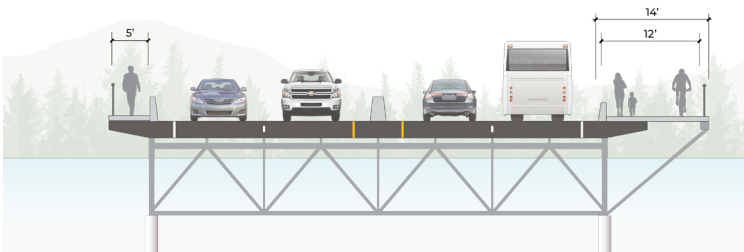
ALTERNATIVE 2

Cost Estimate:
\$25.6M



ALTERNATIVE 7

Cost Estimate:
\$23.0M



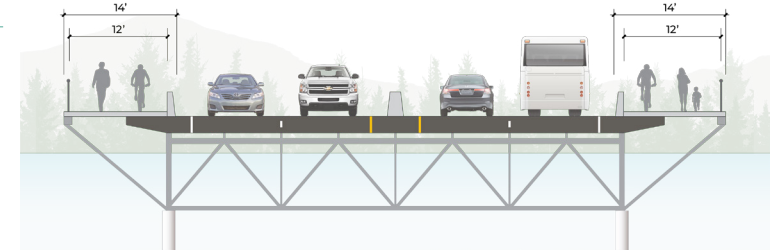
ALTERNATIVE 8

Cost Estimate:
\$25.6M



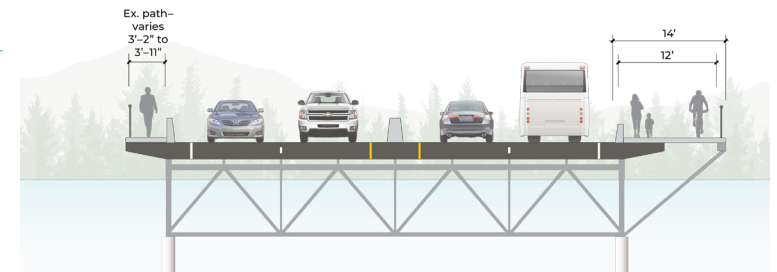
ALTERNATIVE 3

Cost Estimate:
\$29.1M
(exceeds project budget)



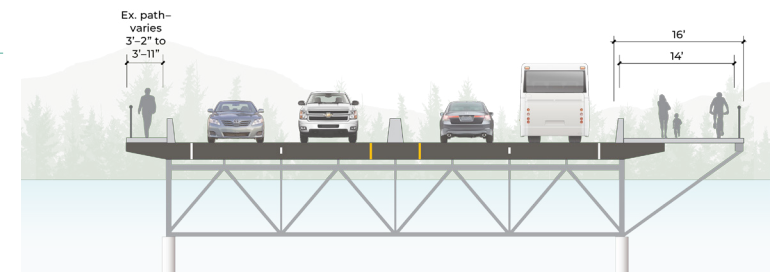
ALTERNATIVE 7a

Cost Estimate:
\$17.8M



ALTERNATIVE 8a

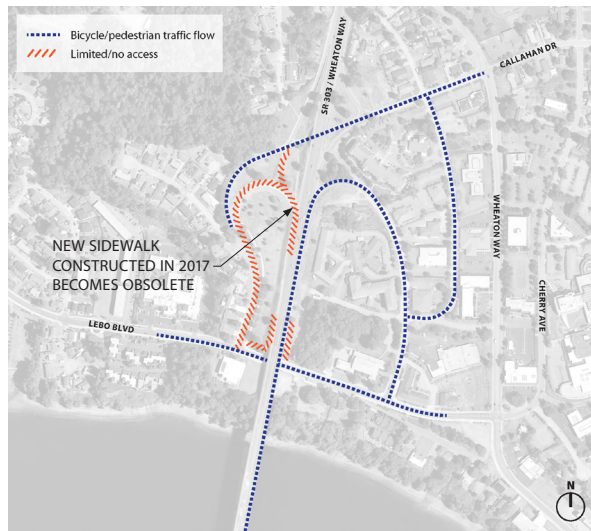
Cost Estimate:
\$20.2M



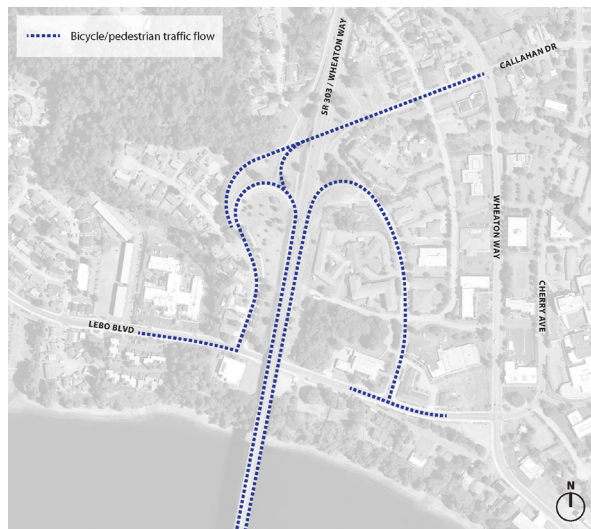
OFF BRIDGE MULTIMODAL CONNECTIVITY

ONE-SIDED VS. TWO-SIDED BRIDGE IMPROVEMENTS

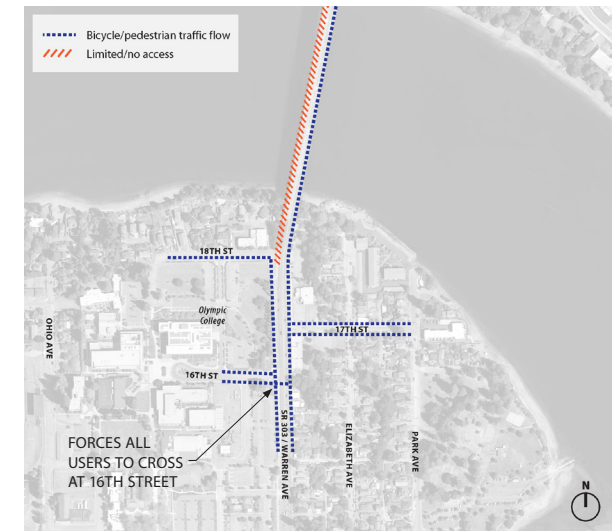
NORTH END –
*wide walkway on
the east side only*



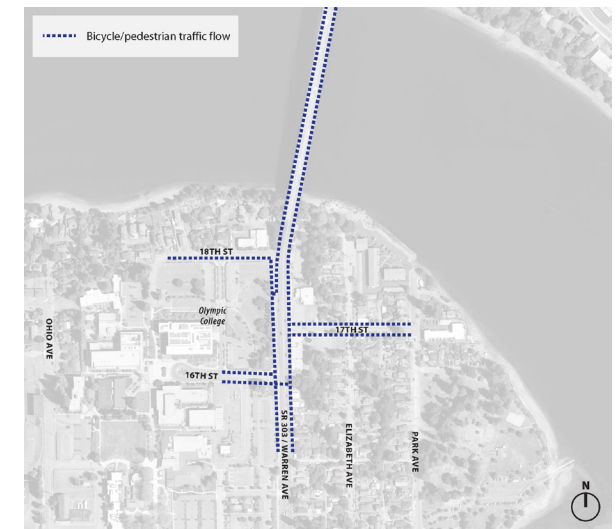
NORTH END –
*wide walkway on
both sides*



SOUTH END –
*wide walkway on
the east side only*



SOUTH END –
*wide walkway on
both sides*



OFF BRIDGE CONNECTIVITY CONCEPTS

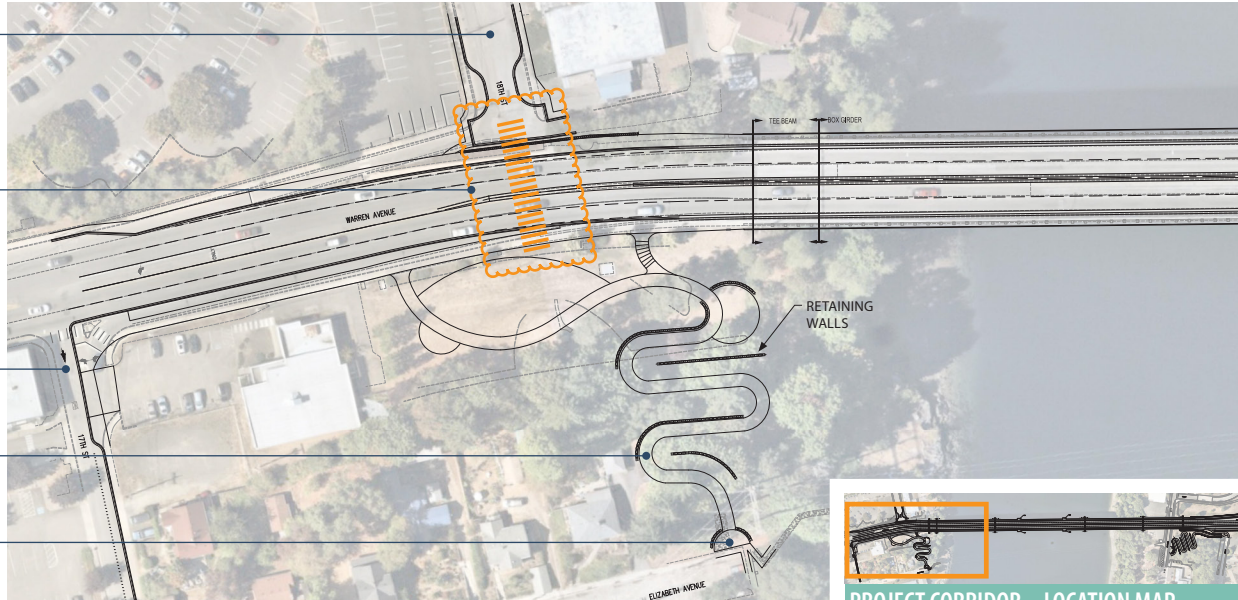
18TH STREET RAMP CLOSURE

POTENTIAL NON-MOTORIZED CONNECTION (TUNNEL)

17TH STREET ONE-WAY EASTBOUND CONVERSION

ROTO VISTA PARK PATHWAY

ELIZABETH AVENUE CONNECTION



TUNNEL.....\$10.0M

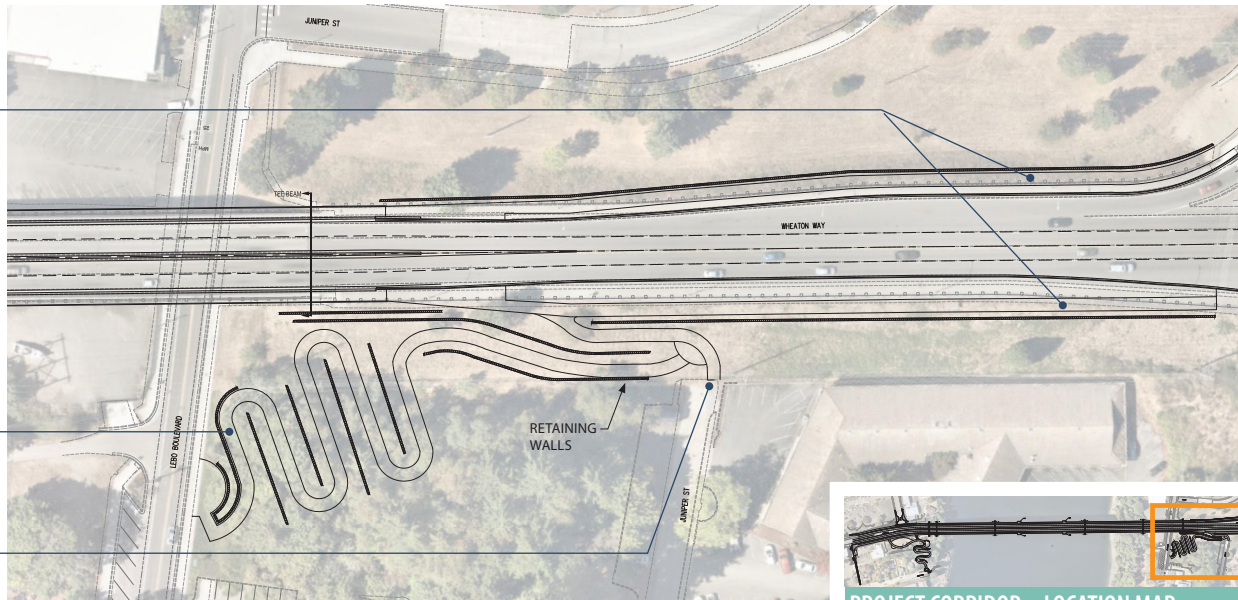
LEBO BOULEVARD PATHWAY.....\$2.6M

ROTO VISTA PARK PATHWAY.....\$2.2M

SIDEWALK EXTENSION ALONG WHEATON WAY

LEBO BOULEVARD PATHWAY

JUNIPER STREET CONNECTION



ROADWAY/SIDEWALK IMPROVEMENTS..... \$5.8M

Note: The above listed projects are examples of potential off bridge improvements, and are conceptual designs only. Public outreach efforts will occur once additional funding is obtained to identify the community's preferred off bridge improvements.

Public Comments – April 24, 2023 Open House

1 – Jessica Phares, 215-356-4708

Really liked this project and including community input! Excited to see the end result. Just a few comments:

- 1) I think it's important to widen both sides of the bridge equally as wide as possible within the budget. Both sides are probably equally used and it feels kind of annoying to widen one but not both.
- 2) I do think bikes should be separate from pedestrians. Someone I talked with today suggested bike lanes on the walkway and I think that's a great idea! Bikers can be rude and clumsy and I don't always enjoy sharing a space with them.
- 3) I'd like to suggest maybe some kind of walkway arch over the bridge connecting both sides. It's difficult to cross the street to get to the other side, so I think a crosswalk on either side or an overhead arch would be great!
- 4) I think the off bridge connectors and sidewalks should be built together. No one is going to use the bridge if it's annoying to get to, and having it happen after the project seems inefficient.
- 5) I think in the first round of comments there was a question about, would you rather have the bridge take longer or shorter to build (with tradeoffs) I would rather just build the bridge as quick as possible without delays just so it's done and cause traffic on that bridge with a slower build.

2 – No contact info, West Bremerton

The first 6 months I lived here, I didn't have a car. I commuted for work and leisure by foot and bike over the Warren Bridge 2-4x per week. The bike lanes led to so many nervous close calls with cars, I switched to walking. The sidewalks were so narrow, bumpy, and crowded that I frequently had run-ins with other pedestrians. Especially at night or after dark, this felt extremely unsafe. (I am a single female.) Warren Bridge's sidewalks are a public safety hazard. The bike lanes are a safety concern. For car-less residents (like myself), poorly maintained bike lanes and narrow, dangerous sidewalks are a class issue, an equity issue, and an insult to Bremerton residents. Any of the proposed options are a huge upgrade. Thank you for keeping us (and our safety) a priority!

3 – Carol Michel, 6088 Kingfisher

Option 7a seems to make the most sense. Wider–safer bike/ped lane and saves money as well.

4 – Jane Rebelowski, 360-479-7179, 1445 17th St. Bremerton

Alternative 7!! Must complete connectivity projects at same time.

5 – Sande Fernan, catssande@comcast.net, Charleston Ave. Bremerton

Born here. Lived here my entire 70 years! This looks like someone's pet project that is totally unnecessary. Shut down the whole project and make do with what is there – provided by the car drivers who paid for it – tolls and taxes. Times are hard and you all need to stop spending for a bit!

6 – No contact info

Alt 2 seems to be most practical, avoids purchasing \$1mil truck for WSDOT, and gives "good" width on both sides.

7 – Amy Lawrence, 206-356-6307

Very exciting – would prefer one wide lane to allow for \$\$ to use for safe connections to the bridge – without them we won't be able to use it! Thanks so much!

8 – Marc Hendel, Hendel.Marc@gmail.com, 207 Anoka Ave. Bremerton 98337

- 1) Alternative 8 seems great! Safe bike lanes on one side and ADA accessible on both.
- 2) Also need to think about paved bike lane off ramps on both sides.

9 – Jason Bury, buryjason@gmail.com, 1903 5th St. Bremerton 98337

I prefer Alternative 3, 12 feet of space is needed to allow bikes and pedestrians to use both sides of the bridge comfortably.

I like the idea of the tunnel on the south side. It will allow better access for people at Olympic College. I'm not a fan of the switchbacks on the north side, I'd prefer a longer gentle path along Juniper St.

10 – Judy McDonald, 360-801-4095, judymc90@gmail.com, 1311 Marlow Ave. B6, Bremerton 98310

The walkway should be min 12' both sides.

Noise from traffic still needs to be addressed some way! – possibly plexiglass panels above the concrete barriers to block sound and risk of being hit by things thrown from cars. It's happened to us.

11 – Jim McDonald, 360-550-6320, 1311 Marlow Ave. B6, Bremerton 98310

Support pathways but need to address noise and safety. I had a bottle thrown at me when I walked the bridge.

12 – Roy Runyon, 360-440-0620, sealance2449@gmail.com

I'm disappointed that the travel lane widths for each alternative was not put on the diagrams.

13 – Evan Costagliola, evan.corey@gmail.com, 108 Blackfish Ct., Bremerton 98310

I prefer Option 8.

Issues with the Alternatives:

- 1) I didn't see any design principles that are driving design decisions.
- 2) Are travel lane widths fixed? I will guess that the GP lanes are overly wide. But that's a guess... because there is no info.
- 3) Why aren't you presenting goals, objectives, or evaluation criteria? That is standard for an open house? It's hard to be critical without understanding the evaluation criteria.

14 – Zach Weaver, r3dsierra@gmail.com, 1515 10th St., Bremerton 98337

I would love to see wide bike lanes on both sides.

15 – Ann Richey, annrichey2009@gmail.com, 1444 17th St, Bremerton 98337

I bike the bridges almost every day. I think we should have one wide lane. There is room for me but no one else.

16 – Beth Anderson, 360-620-0893, 512brucie@gmail.com, 5502 NW Eldorado Blvd., Bremerton 98312

I was born in Bremerton and have lived here most of my life. My son and his wife live here too. I hope to see this place develop safe routes for walking and cycling as this is so important for quality of life and the health of the people who live here. I would like to see the 14' wide [option] because I have biked on narrower bridge paths which are not pleasant and result in conflicts between users of the path.

17 – No contact info

Juniper would be a great place for a bike/ped eastside exit from the bridge.

18 – Tom Baker

- 1) A challenging project but worthwhile. I prefer 10 ft sidewalks each side with access on east and west sides, to be able to use either side.
- 2) Consider traffic cameras as part of this project, or at least allow for conduits for power and signal. Getting in and out of Bremerton is limited to 4 routes. The Warren and Manette Bridges are critical connections north out of Bremerton. Traffic cameras provide the ability to see in real time conditions for evacuations, emergency response, road conditions, etc.
It is likely there is FEMA or other funding for cameras and WSOT has extensive experience in traffic cameras.
The fiber optics industry says to “dig once.” Same with the Warren Ave. Bridge, install conduits once!
Thank you.

19 – Barb Hagedorn

I like bike lane alternatives 7 and 8.

Would love to see an overpass/pedestrian bike bridge for this and it would help people not have to cross at 11th and Warren – which is awful! Thanks.

20 – Jennifer Hatfield

I think that options with widening to allow pedestrians and bicycles on both sides of the bridge would be preferred. I walk on the west side and it is much easier to access coming from the college side of the bridge. So, things that only allow bike access on the east side make it so I have to use roads with a lot more traffic. Especially with more dense housing on both sides of the bridge, it's important to keep traffic flow on both sides. This project would really incentivize walking and biking so I think use would really increase.

21 – Rich Warfield, 360-813-5140

Opportunity to enable ADA on westside of bridge without eliminating 18th access to Warren. Use the green belt for a long gradual ramp down to street level.

22 – Mark Dickerson

Thank you for presenting the information. I walk and bicycle the bridge on a regular basis for recreation and exercise and also frequently ride both the 520 and I-90 bridge trails and am comfortable with the path width on both. I believe it is important to maintain bicycle and pedestrian access on both sides of the bridge and find ten feet to be perfectly adequate. I am concerned that the alternatives that provide bicycle on only one side are too reliant on proposed and uncertain improvements on the north side of the bridge and on the south side in order

to cross under Warren Ave. from one side to the other. Cyclists who have gotten used to managing with a three foot path will continue to do so, if that side is more convenient.

23 – Charlie Michel

One poster showed a weird connection loop for NW connector. It loops way north then comes back south. Could use the road past the convalescent facility or put a shared use path through the park forested area.

24 – Kevin Koski, tricyclerider2001@gaill.com, 2005 Nipsic Ave., Bremerton

Please do not swale the bike path (the north off bridge concept) through the madronas at Sheridan Park. Instead use some of Juniper Street to make a longer curved path down through the park.