

Multnomah County is creating an earthquake-ready downtown river crossing



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February 2021

Technical Report Summary: Utilities

This summarizes the key findings of the *Draft Environmental Impact Statement* detailed in the *EQRB Utilities Technical Report*.

Affected Environment

The study area extends for several blocks around the existing bridge where utility realignments and upgrades would be required. Utilities within the project area occur in public street rights-of-way, private properties, and the bridge itself, and they exist below ground, the river bottom, on poles, or on existing structures. Utilities include communication and power lines; water, wastewater, and stormwater facilities; and transportation-related devices.

Mitigation

Below is list of mitigation strategies for disruption of utility service:

- Apply mitigation protection measures as described in the EQRB Utilities Technical Report.
- Coordinate with NW Natural to accommodate cut-overs during warmer months when use is lowest.
- Relocation plans would be prepared and service disruptions approved by affected utility providers before construction begins.
- Coordinate with utility owners to ensure that contingency plans for management of potential utility service disruptions during construction are accommodated.
- During the final design phase, the relocation sites for affected utilities would be mapped and the effects of the relocation actions confirmed.

A mitigation strategy for utility relocation could be to obtain vertical and horizontal limits of key underground utilities early in design and have the recommended actions included as part of the early design package.

More information on this topic is available in the *Draft Environmental Impact Statement* and in the *EQRB Utilities Technical Report*.

More information

Help shape the future of the Burnside Bridge and visit **BurnsideBridge.org** for more information.

For more information, contact:

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For information about this project in other languages, please call 503-209-4111 or email burnsidebridge@multco.us.

Para obtener información sobre este proyecto en español, ruso u otros idomas, llame al 503-209-4111 o envíe un correo electronico a burnsidebridge@multco.us

Для получения информации об этом проекте на испанском, русском или других языках, свяжитесь с нами по телефону 503-209-4111 или по электронной почте: burnsidebridge@multco.us.

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Impacts from the Bridge Alternatives



No-Build Alternative

With the No-Build Alternative, existing utilities and usage would continue with changes occurring as demanded by other projects, technology changes, unexpected failures, or population growth.



Impacts Common to all Build Alternatives

All the build alternatives would require the relocation of utilities on and near the bridge structure. Utility relocation prior to and during construction could result in interruptions of service. The following could result in the largest potential impacts to users and costs to mitigate and relocate:

- Stormwater and sewer lines that extend from the Ankeny Pump Station in Governor Tom McCall Waterfront Park under the river to NE Lloyd Boulevard could be impacted. Any riverside impacts to these lines are anticipated to warrant a complete pipe replacement.
- CenturyLink communication cables that run along the bridge and then along the river bottom between lift spans could require relocation.
- The NW Natural gas line running along Naito Parkway should be avoided if possible. NW Natural would require 12 months or more to relocate this line if avoidance is not possible.



Enhanced Seismic Retrofit Alternative

This alternative would affect the highest number and longest length of utilities, and it would result in the highest utility relocation costs due to impacts to large sewer and stormwater pipes and utility relocations associated with the TriMet MAX lines on NW/SW 1st Avenue. Thise alternative would also require the removal of the Burnside Skatepark and associated utilities.



Replacement Alternative with Short-Span Approach

This alternative would affect the lowest number and shortest length of utilities;, it would result in the lowest relocations costs, and it would reduce the likelihood that temporary relocations would be needed as compared to the Retrofit Alternative.



Replacement Alternative with Long-Span Approach

This alternative would have the same impacts as the Short-Span Alternative, and it would increase by less than 1 percent the total utility length impacted compared with the Short-Span Alternative. The alternative would increase relocation cost by less than 2 percent compared with the Short-Span Alternative. The larger foundation for this alternative would impact additional electrical, gas, and communications infrastructure as compared with the smaller Short-Span Alternative foundation at the same location.



Replacement Alternative with Couch Extension

In addition to common replacement alternative impacts, this alternative would increase total length of utilities impacted as compared with the other replacement alternatives, but it would be 25 percent lower than with the Retrofit Alternative. This alternative would also increase utility relocation costs compared with the other replacement alternatives but would be 31 percent lower than with the Retrofit Alternative.

Impacts from Construction Traffic Management



Without a Temporary Bridge

This option would result in no potential utility impacts.



With a Temporary Bridge

The temporary bridge would increase the number of utilities impacted as well as the total length of utilities requiring relocation. The largest impacts imposed by the temporary bridge would be to sewer and stormwater lines. These large impacts in addition to smaller ones and the added construction time would result in \$1,670,000 higher utility relocation costs as compared with the No Temporary Bridge Option.