Overview of the Fifth Street Bridge

The Fifth Street Bridge is an important piece of infrastructure serving the Comox Valley.

Completed in 1960, the 72 metre single span Pratt Truss bridge crosses the Courtenay River. It has two vehicle lanes and 1.5 metre sidewalks on both sides.

DAILY TRIPS

- Vehicles: 20,000 / day
- Pedestrians: 650 / day
- Cyclists: 500 / day

HISTORY OF THE CROSSING

The Fifth Street Bridge crossing has evolved significantly as the community has grown. The first bridge was a wooden bridge installed in 1874, followed by the first steel bridge in 1923. The current bridge is the third bridge at the crossing and with on-going investment is expected to last another 20 years before additional rehabilitation is required.

Maintenance and assessment are done routinely and the last significant investment was completed in 2012.

COMMUNITY UTILITIES

Several important utilities run underneath the bridge:

1. City of Courtenay water main
2. Comox Valley Regional District water main
3. Fortis Gas line
4. Telus tele-communications

www.courtenay.ca/fifthstreetbridge
Description of Fifth Street Rehabilitation Project

The City of Courtenay is developing plans for rehabilitating the Fifth Street Bridge and improving cycling and pedestrian accessibility across the Courtenay River.

THE SCOPE FOR FIFTH STREET REHABILITATION PROJECT INCLUDES:

- Bridge deck replacement
- Structural repairs to the steel
- New handrails
- Removal of lead paint and rust
- Recoating steel to prevent corrosion
- New 3.0 metre multi-use pathways on both sides

DETAILED PLANNING IS UNDERWAY AND WILL ADDRESS:

- Impacts to all modes of transportation, including emergency vehicles, transit, and active transportation
- Environmental/Regulatory considerations including protection, mitigation and permitting
- Schedule, considering phasing, and construction season
- Key utility network components
- Utilities to be safe-guarded during construction

www.courtenay.ca/fifthstreetbridge
Courtenay residents have expressed a desire to shift travel choices towards more sustainable modes, such as walking and cycling.

The Connecting Courtenay: Transportation Master Plan identifies that widening the pathways on both the north and south side of the Fifth Street Bridge would have significant connectivity and safety impacts across the Courtenay River for all active modes of transportation.

New three metre wide multi-use pathways are proposed to improve safety, accessibility and user experience for those who walk, bike, use strollers, and have mobility aids.

Specifically, the pathways will provide:

- an off-street cycling route allowing cyclists to travel separate from vehicles
- a wider pathway that provides a safe and comfortable walking experience
- new connections between Lewis Park, Simms Millennium Park, and downtown Courtenay

Options for improving connectivity will be informed by both public input and technical design standards, including the recently released B.C. Active Transportation Design Guide, with consideration for land availability, grades, road geometry, and costs.
Improving connectivity for people who walk and cycle across the Courtenay River is a priority as we plan for the future.

In parallel to the planning for rehabilitation of the Fifth Street Bridge, Courtenay Council has directed staff to investigate construction of a permanent Sixth Street bike and pedestrian bridge.

Timed with additional information related to the Fifth Street Bridge, staff will report back to Council in early 2020 with further detail about Sixth Street bridge options.
A multi-phased planning process is underway. Public engagement will occur throughout the process.

PHASE 1: FEASIBILITY AND FUNDING
- Confirm project goals and use of the bridge today

PHASE 2: ENGINEERING ASSESSMENT AND OPTIONS DEVELOPMENT
- Review high level concepts

PHASE 3: PROJECT REFINEMENT
- Council approval

PHASE 4: PUBLIC ENGAGEMENT AND PROJECT PLANNING
- Public engagement taking place from November - December
- Detailed design and traffic management plan to be informed by technical analysis and public input

PHASE 5: FINALIZE SCOPE
- Borrowing Bylaw will be prepared outlining purpose and amount of borrowing

PHASE 6: DETAILED DESIGN
- The detailed design will continue to evolve through 2019 and 2020

PHASE 7: CONSTRUCTION
- Construction is expected to begin in early 2021
- Exact details and schedule are yet to be determined

PHASE 8: PROJECT COMPLETION
- Grant funding requires the project to be completed by March 2022
How Will the Project Be Funded?

The Fifth Street Rehabilitation Project may be funded in a variety of ways, including grants, reserves, and borrowing.

<table>
<thead>
<tr>
<th>Project Element</th>
<th>Rehabilitation + 3.0 metre wide Bike and Pedestrian Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>A rehabilitated crossing with extended service life that provides improved cycling and walking amenities, with full utilization of the grant.</td>
</tr>
<tr>
<td>Bridge Recoating &amp; Deck Renewal</td>
<td>$4.1 million</td>
</tr>
<tr>
<td>Structural and Traffic</td>
<td>$2.2 million</td>
</tr>
<tr>
<td>Cantilever Pathway</td>
<td>$2 million</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$8.3 million</td>
</tr>
</tbody>
</table>

Fed / Prov Grant                  | $1.96 million                                               |
Reserves                          | $0.94 million                                               |

City Borrowing Amount             | $5.4 million                                                |

The City of Courtenay was successful in receiving $1.96 million in funding from the New Building Canada Fund – Small Communities Fund. The agreement in place for the federal government’s contribution expires March 31, 2022.
Financial considerations will be updated as project details are refined. The city will likely need to borrow money.
What are the anticipated costs for an average taxpayer?

At current tax rates, borrowing $5.4 million for bridge rehabilitation — including the new multi-use pathways — would be equivalent to an estimated 1.6% total tax increase.

RESIDENTIAL PROPERTY OWNERS:
The impact to an average residential property valued at $435,600 (based on 2019 assessments and tax rates) is estimated to be approximately $20 per year.

COMMERCIAL PROPERTY OWNERS:
The impact to an average commercial property* valued at $819,332 (based on 2019 assessments and commercial multiplier of 3.35) is estimated to be approximately $130 per year.

*Please note: Commercial Class 6 encompasses a wide range of businesses and assessment valuations.

The City anticipates using the Alternative Approval Process (AAP) for any necessary borrowing. The full impacts of borrowing would not be realized until 2022, the year after construction is complete.
What To Expect During Construction

Major infrastructure investment often has impacts. The City of Courtenay is committed to minimizing impacts where possible. It’s important the community is aware of what construction may include.

TRAFFIC:
To complete the repairs safely, the bridge will need to be wrapped in scaffolding and plastic. The vertical and horizontal clearance on the bridge will be reduced. Vehicular traffic will likely be reduced to single lane alternating across the bridge for a portion of construction. Duration for this is yet to be determined and will depend on the construction plan.

NOTE: the images above are concept sketches only.

Continued on next board >
Major infrastructure investment often has impacts. The City of Courtenay is committed to minimizing impacts where possible. It's important the community is aware of what construction may include.

**NOISE:**
In order to remove the lead paint and re-coat the steel structure, high pressure compressors are used. The compressors can produce a great deal of noise. The City will explore the application of noise barriers to reduce the impact.

**LIGHT:**
Should work be completed during evening hours, construction lighting may be used.

**LAY-DOWN AREA:**
The contractor will require a large area beside the bridge for storage of equipment, supplies, vehicles and construction trailer.

**COST:**
Final cost estimates will continue to be refined through the design phase. It is anticipated that some form of borrowing will be needed. If so, a borrowing bylaw will be required.
Access for all modes of traffic, including foot, bikes, buses and vehicles will be maintained during construction.

To minimize further impacts, a variety of options for managing traffic during construction are being considered:

1. **Construction Traffic Control**
   Establish single lane alternating traffic control practices to maximize available capacity.

2. **Bridge Closures**
   Ensure any required full bridge closures are scheduled to occur during periods when travel demand is lowest to minimize impact.

3. **Intersection Traffic Control**
   Optimize nearby intersection signal timings to reflect altered traffic conditions and minimize delay.

4. **Traffic Detour Route(s)**
   Identify detour routes that minimize negative impacts elsewhere in the network and offer comfort/certainty to motorists seeking alternatives to the Fifth Street Bridge.

5. **Time-of-day Travel**
   Promote / encourage off-peak travel to reduce congestion during peak periods.

6. **Alternative Travel Modes**
   Shift from single vehicle travel to walking, cycling, or carpooling.
Thank You!

Your input will help guide future Council decisions, and how the City will communicate with you during construction.

Please share your thoughts in the print or online survey available until Friday, December 6, 2019.

The input collected will be presented to Council and shared with the public in early 2020.

Learn more and sign-up to receive project updates at: www.courtenay.ca/fifthstreetbridge
Mitigating Construction Impacts

Rehabilitating and upgrading a bridge, while remaining open to traffic, requires a number of considerations. The safety of both work crews and the public will always be the top priority.

Of the following other considerations, please select the three (3) that are most important to you:

<table>
<thead>
<tr>
<th>Minimizing noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing congestion</td>
</tr>
<tr>
<td>Supporting downtown businesses</td>
</tr>
<tr>
<td>Maintaining access for all modes of transportation during construction</td>
</tr>
<tr>
<td>Minimizing costs</td>
</tr>
<tr>
<td>Value for investment</td>
</tr>
<tr>
<td>Duration of construction</td>
</tr>
<tr>
<td>Aesthetics around bridge during construction</td>
</tr>
<tr>
<td>Protecting the surrounding environment</td>
</tr>
<tr>
<td>Improving pedestrian and cycling amenities</td>
</tr>
</tbody>
</table>
Travel Behaviour

The construction required to safely rehabilitate the Fifth Street Bridge will cause traffic disruptions in adjacent areas for several months.

In terms of your own travel behaviour, during construction are you most likely to:

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift from driving to walking</td>
</tr>
<tr>
<td>Shift from driving to riding a bike</td>
</tr>
<tr>
<td>Take an alternate route</td>
</tr>
<tr>
<td>Move your travel time to outside peak periods</td>
</tr>
<tr>
<td>Plan for additional travel time</td>
</tr>
<tr>
<td>Car pool</td>
</tr>
<tr>
<td>Take the bus</td>
</tr>
<tr>
<td>Not change anything</td>
</tr>
<tr>
<td>Other ____________</td>
</tr>
</tbody>
</table>
The Fifth Street Rehabilitation project includes removing all of the existing lead paint and recoating the bridge to protect the steel from corrosion. There is an opportunity to change the colour of the bridge.

Do you feel the Fifth Street Bridge should be recoated in a different colour?

<table>
<thead>
<tr>
<th>Yes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Neutral / No Preference</td>
<td></td>
</tr>
</tbody>
</table>

Please provide any additional comments:

Current Bridge Colour
Communications During Construction

We recognize that regular and proactive communications during construction are important to mitigating impacts to the public.

What is the best way to keep you informed?
(Select the 3 that are most effective for you)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Local radio</td>
<td></td>
</tr>
<tr>
<td>Local newspaper</td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td></td>
</tr>
<tr>
<td>Email updates</td>
<td></td>
</tr>
<tr>
<td>Open houses</td>
<td></td>
</tr>
<tr>
<td>City of Courtenay website</td>
<td></td>
</tr>
<tr>
<td>Construction signage</td>
<td></td>
</tr>
<tr>
<td>Project newsletter email</td>
<td></td>
</tr>
<tr>
<td>Council reports</td>
<td></td>
</tr>
<tr>
<td>Other _______________</td>
<td></td>
</tr>
</tbody>
</table>
Improving Connectivity

To improve connectivity for people who walk, cycle, or use mobility aids approaching and exiting the Fifth Street Bridge, a number of improvements are being considered. Please share your thoughts about the proposed improvements:

1) How important is improving the connections to and from the Fifth Street Bridge for people who walk, cycle and use strollers, or mobility aids?

<table>
<thead>
<tr>
<th>1 (low)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (high)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Which destinations are most important to connect to from the Fifth Street Bridge when walking, cycling or using mobility aids? (Select the 3 most important to you)

<table>
<thead>
<tr>
<th>Lewis Park</th>
<th>Lewis Park Recreation Centre</th>
<th>Anderton Road</th>
<th>Cliffe Avenue</th>
<th>Simms Parks</th>
<th>Existing on-street bike lanes</th>
<th>Existing sidewalks</th>
<th>Other.....</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) If priority needed to be placed on advancing connections on either side of the bridge, which would you prioritize highest?

<table>
<thead>
<tr>
<th>West (Downtown)</th>
<th>East (Lewis Park)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.courtenay.ca/fifthstreetbridge
About the Rehabilitation Project

What do you like most about the Fifth Street Rehabilitation Project?
About the Rehabilitation Project

Do you have any concerns about Fifth Street Rehabilitation Project?