

### Key Trade-Offs and Benefits

The Critical Rehabilitation Scenarios (Scenarios A) were considered the base case outlining the absolute “do minimum” against which the other scenarios were evaluated.

Scenario		Trade-Offs	Benefits
B1	Rehabilitation	<ul style="list-style-type: none"> <li>• High lifecycle cost</li> <li>• 1-2 year full or partial closure of the High Level Bridge to complete the rehabilitation and upgrades every 25 years</li> <li>• No provision for mass transit</li> <li>• No upgrades to substandard active mode connections</li> </ul>	<ul style="list-style-type: none"> <li>• Lower short-term capital cost</li> <li>• Bridge will be future proofed for the next 25 years</li> <li>• Minimal impact to heritage value and no amendments to the Designation Bylaw anticipated</li> </ul>
B2	Rehabilitation + Strategic Considerations	<ul style="list-style-type: none"> <li>• High lifecycle cost</li> <li>• 1-2 year full or partial closure of the High Level Bridge to complete the rehabilitation and upgrades every 25 years</li> <li>• No provision for mass transit</li> <li>• Minor impact to heritage value; may require amendments to the Designation Bylaw</li> </ul>	<ul style="list-style-type: none"> <li>• Expanded Shared Use Paths will improve active mode connections between Downtown and Whyte Avenue</li> <li>• Moderate capital cost</li> <li>• Bridge will be future proofed for the next 25 years</li> <li>• Decision on mass transit will align with next rehabilitation anticipated in 25 years</li> </ul>
B3	Rehabilitation + Mass Transit + Shared Use Path Upgrades	<ul style="list-style-type: none"> <li>• Significant construction risks</li> <li>• Significant construction impacts</li> <li>• Increased lifecycle risks for mass transit</li> <li>• Moderate impact to heritage value; may require amendments to the Designation Bylaw</li> </ul>	<ul style="list-style-type: none"> <li>• Expanded Shared Use Paths will improve active mode connections between Downtown and Whyte Avenue</li> <li>• Bridge will be future proofed for the next 25 years</li> </ul>
C1	New Bridge + High Level Bridge for	<ul style="list-style-type: none"> <li>• Impacts to North Saskatchewan River Valley natural areas - the proposed</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced experience for pedestrians and cyclists on High Level Bridge with</li> </ul>

	Active Modes	<p>corridor for the new bridge impacts the forested area west of High Level Bridge</p> <ul style="list-style-type: none"> <li>● Impacts to North Saskatchewan River - additional instream piers</li> <li>● Alters the character of the valley and may obscure significant view planes to the High Level Bridge from the west</li> <li>● High capital and lifecycle costs</li> <li>● Based on the Mass Transit Study, a new dedicated mass transit connection is not a priority for the first population horizon of the City Plan (1.25 million people)</li> </ul>	<p>removal of vehicle traffic</p> <ul style="list-style-type: none"> <li>● New bridge will be straight and the road deck tall enough for easy access by emergency service vehicles</li> <li>● High Level Bridge will be future proofed for the next 25 years</li> <li>● Minimal impact to heritage value of the High Level Bridge; no amendments to the Designation Bylaw anticipated</li> </ul>
C2	New Bridge (Decommission High Level Bridge)	<ul style="list-style-type: none"> <li>● Decommissioning of High Level Bridge</li> <li>● Loss of heritage value; would require rescinding the Designation Bylaw.</li> <li>● Potential of reputational harm to the City</li> <li>● Impacts to Kinsmen Park from the new bridge (disruption to green space).</li> <li>● High capital cost</li> <li>● Based on the mass transit study a new dedicated mass transit connection is not a priority for the first population horizon of the City Plan (1.25 million people).</li> </ul>	<ul style="list-style-type: none"> <li>● New bridge alignment will be straight and the road deck tall enough for easy access by buses, emergency service vehicles and transport trucks</li> <li>● Improved active mode connections and access to the river valley</li> <li>● Lower lifecycle costs</li> <li>● Enhanced experience for pedestrians and cyclists on a new bridge</li> </ul>