Welcome
Kicking Horse Canyon Project
Public Open House
Open House Objectives

• Report on completion of Park Bridge and approaches
• Display design updates & construction schedule for:
  • Golden Hill to West Portal
  • Brake Check to Yoho Park
• Progress report on planning & design of West Portal to Yoho Bridge (Canyon Section)
• Report on Climate Action & other environmental initiatives
• Receive feedback
The Kicking Horse Canyon Project is a top priority for the Government of British Columbia. Total project length is 26 kilometres. The project has been divided into four major sections to be constructed in three phases. Total cost is estimated at $972 million, shared with the Government of Canada. The route carries up to 10,000 vehicles daily during the summer.

Improvements include:
- Highway widening to 4 lanes with a design speed of 100 km/h (80 km/h within Town of Golden)
- Improved alignments, replacement of narrow bridge structures
- Improved pedestrian and cycling facilities
- Other design innovations to reduce hazards
- Wildlife protection, revegetation and other environmental measures
The new Park Bridge and approaches were completed and opened to traffic on August 30, 2007, 21 months ahead of schedule.

Before Construction

September 2006

September 2007

The Park Bridge was dedicated to the past and present highway and bridge workers of British Columbia for their contributions on behalf of the citizens of the Province.

A unique partnering arrangement with the private sector that achieved time and cost savings received recognition with a Premier’s award.
Phase 3 Design Update – Highway 95 Interchange

Preliminary design of the Highway 95 Interchange is complete. Portions of the old highway alignment will be used to enhance the accommodation of cyclists and pedestrians.
Federal-provincial funding has been announced for construction between Golden Hill and the “West Portal”, or potential tunnel entrance. Construction is targeted for a late 2010 start, and will include an interchange at Golden Donald Upper Road, cycling/pedestrian trails and wildlife protection.
Two primary options and alignments are under current consideration:

- One long tunnel alignment, approximately 3,000 metres in length
- One surface option, requiring one 340-metre tunnel, approximately six rock sheds and up to 12 bridges
Evaluating the Options

Extensive review of both tunnel and surface options is required to compare advantages and disadvantages, including those listed at right.

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<tr>
<th>Some Issues and Considerations – Tunnel vs. Surface Option</th>
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<td><strong>Issue</strong></td>
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<td>Accommodating cyclists</td>
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Tunnels will require lighting, ventilation and safety monitoring.

This long tunnel concept contains driving lanes 3.7 metres wide, vertical clearance of 5.5 metres and 2.5-metre outside shoulders. Other features include lane control and lighting, ventilation, fire suppression, cross-passages for emergency access and evacuation, communication systems, waterproofing, and portals designed to reduce rockfall hazards at the tunnel entrance. Shorter tunnels would contain many of these features.
Federal-provincial funding has been announced for construction east of the Brake Check, to begin in Fall 2008. Improvements will include concrete median barrier to reduce the risk of head-on crashes, a new crossing of Mount Hunter Creek, and 3-metre shoulders to accommodate cyclists.
The 4-lane divided highway will have a 100 km/h design speed, and will feature fencing to protect against collisions with wildlife. Special overpasses and underpasses will be included for wildlife passage.
An overpass arrangement at the TCH/Wapta Road/Beaverfoot Road intersection will provide for safer and more effective access.
Wildlife Protection

Highway improvements will include protection for wildlife to reduce the risk of collisions and improve safety for both animals and motorists.

Overpass and underpass structures similar to those shown left and above will provide safe crossing opportunities for wild animals.

Bighorn sheep and other animals are commonly found near the highway. Extensive exclusion fencing, (left) combined with ungulate guards (centre) and one-way escapes (right) will greatly reduce wildlife collisions.
Accommodating Cyclists and Pedestrians

Cycling facilities will be improved throughout the Canyon route. On Golden Hill, cyclists and pedestrians will be able to follow paved pathways a short distance from the highway to connect to the local trail system and a new lookout.

Urban Cross Section

Rural Cross Section

ABOVE: Connectivity will be provided with local trail system
LEFT: View from new lookout location
# Phase 3 Construction Schedule

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<tr>
<th>Project</th>
<th>2008</th>
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<td>Brake Check to Yoho National Park</td>
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Climate Action

The Kicking Horse Canyon Project is at the forefront of innovation, applying research being conducted by the Ministry of Transportation and other agencies to quantify and minimize the direct (on-site) and indirect (embodied in the manufacture and delivery of materials) greenhouse gas (GHG) emissions associated with highway construction.

Measures to reduce GHG impacts from construction, many of which are already common MoT practice, include:

- Emphasizing the use of recycled materials in the production of steel, concrete, asphalt and aggregates
- Local sourcing where possible to reduce delivery-related emissions
- Use of biofuels and certified green electricity
- Mulching and use of organic waste on-site; sorting & recycling of other waste materials
- Revegetation of disturbed slopes; protecting, restoring and creating aquatic habitat

Straw “log” terraces are created to encourage moisture retention and improve surface soil stability while plantings of native vegetation become established.

On some steeper slopes, steel mesh is tightly anchored into the soil and underlying rock to prevent surface movement. Seeding follows to provide additional stability.
Climate Action

Greenhouse gas emissions from construction are only part of the picture. Having long considered financial life-cycle costs in the evaluation and implementation of transportation infrastructure designs, the Ministry of Transportation now also considers the “carbon expenditure” or GHG impact of operating, maintaining and using its facilities. This has led to an increasing emphasis on alignments that reduce the load on engines, and on facilities that can be operated and maintained with as low a net carbon footprint as practicable.
The Trans-Canada Highway in this region has provincial and national significance.

• It supports Pacific Gateway and ports system enhancements worth an additional $6.6 billion/year in economic output to the Canadian economy by 2020, with $4.7 billion of that occurring in British Columbia.

• It also means the creation of 45,000 new high-paying jobs, including 32,000 in British Columbia.

• The project has generated significant local employment. During the height of Phase 2 construction, the annual payroll was in the millions of dollars.

• It will leave a legacy of better access to area recreation opportunities, estimated as worth $46 million, generating 1,350 additional full-year jobs, $24 million in taxes and nearly $2.5 million for local municipal governments.
What Do You Think?

Thank you for attending the Kicking Horse Canyon Project Open House

If you have any comments, please take a moment and fill in the feedback form provided. This information is voluntary.

The project team will use your input when developing the project plans.

You will find more information about our project at our public website: www.kickinghorsecanyon.ca

Thank you for your participation!