

Alberta Transportation
Highway 3 – BC/Alberta Border to the Frank Slide
Functional Planning Study

FREQUENTLY ASKED QUESTIONS (FAQ)

The following are responses to many of the questions submitted during or following the public open house held January 20, 2004, at the Crowsnest Centre.

STUDY JUSTIFICATION / SCOPE

1. Why is this study being undertaken?

Functional planning studies are initiated for various reasons, including:

- a) To address highway safety issues, usually short-to-medium term in nature;
- b) To address highway capacity issues, usually long-term in nature;
- c) To identify future right-of-way or access management requirements in areas experiencing development or growth pressures;
- d) To assess future highway or local road network requirements;
- e) To facilitate municipal planning or development approval processes;
- f) To confirm past highway planning decisions where circumstances may have evolved differently than anticipated by the original studies; and
- g) To address municipal questions or concerns affecting highway status and future improvement.

The Highway 3 Functional Planning Study was initiated largely in response to item g; however, the study addresses all the above.

Some of the municipality's specific concerns with the previously gazetted Highway 3X route include:

Highway Standards & Alignment	Selection of a high-speed rural bypass versus low-speed urban collector road?
Previously Gazetted 3X Alignment	Potential for affect on water supply & quality, wildlife & aesthetic values and highway safety?
Community Planning	What are the long-term community planning and economic implications and opportunities?
Natural Constraints	Potential impact on environmental & historical resources and geotechnical design issues?
Timing	When will the highway be improved?



2. Highway 3 Corridor has a long history. Have past decisions been rejected?

The need to protect right-of-way for Highway 3 in the Crowsnest Pass area was first recognized in the late 1960's. Previous highway realignments have bypassed Bellevue, Hillcrest and Blairmore. Previous functional plans which proposed realignments passing Frank and Coleman were not implemented. The studies at the time assumed a first stage two-lane arterial highway design that could be expanded to a four-lane divided facility when required. The first two lanes along twenty of the highway's 32 km through the municipality have already been constructed in their final location.

The current study will define the future alignment for Highway 3 passing Coleman, using the gazetted 3X route as a base for comparison. Previous decisions have not been rejected; rather, they are being reassessed in light of current conditions and regulatory requirements. The present review must be comprehensive, and the widest possible range of alternatives is considered, to support the conclusions reached by this study.

LONG-TERM HIGHWAY PLANNING

3. How is the provincial highway system planned and protected?

The provincial highway system was established in the early 1900's, long before contemporary highway classification systems and service standards were developed in Alberta. Provincial transportation jurisdictions have since defined hierarchies for the rural road systems and set appropriate mobility and service level objectives and standards. In many areas, the province can only gradually and systematically achieve these objectives as the older road segments are upgraded. Where and when municipal and transportation issues arise, planning studies define the relevant links in the highway system. Implementation of the study recommendations is based on provincial funding capabilities and priorities.

Whenever possible, Alberta Transportation acts to protect the provincial highways so they can function as high-speed, uninterrupted-flow routes to support efficient movement of people and goods.

4. What is the significance of Highway 3 being designated a *national highway*?

Highway 3 is designated as part of Canada's National Highway System through Alberta and is an east-west route for both trade and travel. Highway 3 links Lethbridge with the Crowsnest Pass and BC in the west and Saskatchewan and eastern centres through Medicine Hat, where it joins the Trans Canada Highway 1. National Highways will operate at a minimum 90 km/hour.

In Alberta all national highways are classified "major arterial" which means the route is intended for high speed, inter-provincial and inter-national mobility. Access to homes or businesses is not considered a primary role for national highways.



5. How does Highway 3 compare with other national highways entering BC?

Highway 3 is the second busiest entry point into B.C., after Highway 1, carrying twenty five percent of the total traffic entering B.C. It is experiencing the second highest growth rate, after the North-South Trade Corridor (Highway 43), with traffic volumes increasing 27% in the last 10 years. Highway 22 has been improved in recent years making Highway 3 a more desirable route to the U.S. via the Roosville or Kingsgate crossings in B.C. More than 40% of the truck traffic to the U.S. through these two crossings travel to/from Alberta.

Highway 3 is the only one of four National Highway routes into B.C. that is not twinned, or programmed for twinning in Alberta. Much of the North-South Trade Corridor is now twinned, or being twinned, from Coutts to the B.C. border.

6. How will provincial standards affect Highway 3 in the Crowsnest Pass?

The province typically maintains uninterrupted-flow, rural, high-speed highways, where the primary function is mobility, not access, that are intended to carry the long distance traveler. Urban development and demand for traffic signals often encroach upon a highway corridor.

A multi-lane, lower speed, possibly signalized, road (e.g. through Frank and Coleman) creates urban street conditions, resulting in high vehicle density, frequent stops, numerous access points and driveways, and increasing collision potential that further impedes traffic flow with each signal installation. If Highway 3 is twinned and is not protected for free-flow standards, it would operate more as an urban road than a long-distance national highway through the Municipality of Crowsnest Pass.

7. How is safety considered?

The safety of a highway is closely linked to variations in the speed of vehicles traveling on it. Collisions are reduced on roads that do not require drivers to make large speed adjustments and promote uniformity of speeds. The greater and more frequent the speed variations, the higher the probability of collision.

The posted speed along existing Highway 3 through the Crowsnest communities ranges from 100 km/h on the upgraded sections to 50 km/h passing through Coleman. The peak summertime traffic volumes often result in vehicle parking and queues along the highway through Frank and Coleman, compromising road safety and resulting in driver frustration. Introducing successive signals on an otherwise long-distance, national, highway, even with a reduced speed zone, increases this accident potential.

As well, there are no opportunities to pass along Highway 3, from Sparwood BC to just inside Alberta. This also contributes to driver frustration and unsafe passing manoeuvres through the Crowsnest communities. This again shows the undesirable, and sometimes unsafe, mix of through and local traffic.

The local Crowsnest Pass area traffic, e.g. business, shopping, school, personal trips, etc., should be carried by a separate local road network, for safety and efficiency.



ACCOMMODATING LOCAL TRAVEL**8. Will opportunities exist to enhance local travel between communities?**

The increasing local commuter volumes along Highway 3, between Bellevue/Hillcrest in the east to Coleman in the west, will impact the traffic flows in the long-term compared to typical rural provincial highways. Since 1988, traffic volumes between Frank and Coleman have grown at twice the rate of traffic growth entering or exiting the municipality, east and west. Truck traffic is experiencing the highest proportional rate of growth compared to the other vehicle classifications and confirms Highway 3's strategic role as a national highway and its economic importance to Alberta and BC.

Compared to a typical rural highway, increasing local traffic volumes on Highway 3 will create traffic conditions that resemble a typical urban commuter road:

1. High percentage of short, local trips.
2. Frequent business and private access, resulting in many conflict points and collision potential.
3. High summer-time localized, congestion-level, peak flows.
4. Undesirable mix of long-distance through traffic with low-speed, short-trip, local traffic.

These conditions would be worse for left-turns off/on a four-lane, instead of two-lane, highway. If a new Highway 3 route passing Coleman is selected, it would provide the opportunity to leave the old highway as a local road connecting Frank, Blairmore, Coleman and Sentinel. This will offer travelers a choice of routes, and improve traffic flow through the communities.

STUDY PROCESS AND TIMELINE**9. What is the study process and timeline?****A. Project Appraisal (collect information – Spring 2003)**

This phase is a reconnaissance-level overview through the broad study corridor.

B. Development of Alternatives (preliminary route options – Fall 2003)

A high-level analysis and evaluation of alternatives was conducted to identify a broad range of preliminary route options through the corridor.

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| a. Corridor-Level Assessment | 450 options |
| b. Route-Level Assessment | 180 options |
| c. Base Alternatives | 4 primary options (plus municipal concepts) |



C. Open House #1 (held January 20, 2004)

The first open house was held to invite the community to view the project information and preliminary concepts (base alternatives) and to discuss concerns with project staff. The study team collected additional information and further defined study issues. See separate public input summary.

D. Identification of Preferred Alternative (current phase)

This phase will select a Preferred Alternative, which is desirably only one of the Base Alternatives. The alternatives are ranked and evaluated based on :

- Public input received at and following Open House #1.
- Input received from other stakeholders (partial list provided at open house);
- Input from the regulatory agencies, both provincial and federal, governing environmental, historic, and crown land resources;
- Input from the Municipality, affecting such things as infrastructure, municipal development plan, local road network, socio-community values, etc.;
- Achievement of the technical standards set for the roadway under study, affecting highway safety and maintenance;
- Right-of-way and construction costs;
- Regional impacts, affecting the local road network, community development, etc.; and
- Property impacts, affecting existing development.

This phase concludes with development of a preferred alignment, for the selected Base Alternative.

E. Open House #2 (Preliminary Route Evaluation – June 29, 2004)

The second open house will be held to invite the community to view the project information, including the results of the route evaluation process, public input received to date and to discuss concerns with project staff.

F. Prepare Preferred Functional Plan

The team will review public input from Open House #2 and from other stakeholders, to select and develop the preferred functional plan and corridor strategy.

G. Open House #3 (Preferred Plan – November 2004)

A formal recommendation is made to the Municipality and Alberta Transportation, including identification of study issues and risks.

H. Final Report Approval by Alberta Transportation (Winter 2004)



10. How are “requests for information” handled?

The public consultation part of the study process is intended to provide as much information to the public as reasonably possible through the open house venues. Although public input is welcome throughout the study, the detailed information that is collected and assessed during the study process, and the work in progress, can only be made available to the public at the open houses.

The structure within which these studies are conducted is essential to achieve timeliness, efficiency and focus. The study's final report is intended to be comprehensive and transparent.

FUNCTIONAL PLANNING

11. What is the objective of the Highway 3 Functional Planning Study?

The objective for the Highway 3 study is to recommend the optimum plan for the highway corridor to ultimately provide free-flow travel. The functional plan will identify planning issues and develop a preferred plan based on public input and an understanding of the technical issues. The report will document the results of three open houses and the issues and concerns brought forward by stakeholders.

How is the Plan Prepared?

A Functional Planning Study is intended to present alternatives at the first stage of project development. Accuracy must be sufficient to identify and evaluate competing alternatives at the corridor level. A functional plan is prepared for the selected alternative based on criteria considered at the route or macro level, as follows:

- i. Highway classification and corresponding design standards.
- ii. Overall level-of-service, movement of traffic, service life of project.
- iii. Access management and provision of service roads.
- iv. Interchange configurations and bridge alternatives.
- v. Ultimate road alignment, including elevations.
- vi. Overview of environmental and historical conditions, based on site inspection.
- vii. Appraisal of geotechnical issues based on site reconnaissance and select test holes.
- viii. Definition of property requirements and impacts.
- ix. Overview of macro socio-economic and community planning issues.
- x. Preliminary or “order-of-magnitude” cost estimates.



How are Costs Estimated?

A Functional Planning Study is the earliest stage of project development. An “order-of-magnitude” accuracy is sufficient to discriminate between competing corridor-level alternatives under consideration and to identify long-term funding requirements. The accuracy of project cost estimates, for construction and property, increases with increasing levels of project planning and design detail. As project detail evolves through future phases, increasing accuracy ensures project budgets are adequate and various options, internal to the selected alternative, are further evaluated.

STUDY TEAM

12. Who is on the study team?

Alberta Transportation retained McElhanney Consulting Services to conduct the functional planning study. The study team is organized as follows:

- McElhanney Consulting Services Ltd. (Prime Consultant)
 - Highway Planning and Design
 - Public Consultation
 - Qualitative Overview of Macro Socio-Economic and other community Issues
- EBA Engineering Consultants
 - Environmental and Historical Resources
 - Geotechnical Engineering
- Scott Land and Lease
 - Right-of-Way Requirements and Property Appraisal
- Terrace Engineering
 - Bridge and River Planning
- Oldman River Regional Services Commission
 - Socio-community planning

The study is managed by a Technical Review Committee. This committee monitors study progress and issues and is comprised of representatives from the Municipality of Crowsnest Pass, Alberta Transportation and the study team.

Consultants that provide engineering services to Alberta Transportation demonstrate that they possess the qualifications, experience and staff necessary to perform transportation and highway work for the Province. An annual Prequalification Process ensures that the consultants understand the technical standards, regulatory requirements, project management methods, public consultation procedures, and in the case of highway planning, system performance, local road network and community development and growth issues.



ENVIRONMENTAL ISSUES**13. Will wildlife corridors be protected?**

Wildlife resources are important in the study area, and future highway development would be designed accordingly. A new highway route would include wildlife crossing measures to ensure that wildlife has the ability to move across the corridor safely. As well, the study team will identify natural areas within the valley that would be beneficial to designate as contiguous wildlife corridors. A new highway route would pull the higher-speed through-volumes off of the existing highway, and should improve overall conditions for safe animal passage across the valley and existing corridor.

Regulatory requirements will determine the need and warrant for provision of special wildlife crossing or mitigation features. Future measurement of field data and successful experience elsewhere (best practices) would influence design. The detailed field assessments for this study will be performed when actual design and construction approaches. The current process could only speculate on future warrants and treatments.

Addressing current highway/wildlife conditions are subject to annual operational requirements and must compete for funding with other Province transportation priorities.

14. Will water quality and the Blairmore Aquifer be protected?

Historically, new highway developments coexist successfully with urban centre water supplies using various proven design measures. The Team remains confident that mitigation strategies can be recommended to address this issue at the route-selection level. A comprehensive and detailed solution would normally be developed following data collection when the design process actually commences.

15. Will this study consider air quality?

Ambient air quality as it relates to transportation can be viewed at three levels.

- i) At the provincial-level, the Province is addressing its response to the Kyoto Agreement.
- ii) At the regional level, it is largely a municipal issue, addressed by transit, and other local modal initiatives.
- iii) At the project-level, an individual air quality strategy is not developed or particularly useful in isolation.

At the local or municipal level, the present slow speed, stop-and-go, traffic conditions along the existing Highway 3 corridor results in unnecessary vehicle acceleration and increased vehicle density on the road. The improved roadway speeds and more free-flow design, particularly for truck traffic, should improve local ambient air quality as roadway operating conditions and therefore vehicle travel efficiency improves.



NOISE ATTENUATION**16. Will excessive noise levels be mitigated?**

Alberta Transportation determines if noise mitigation measures are warranted along highways in cities and urban areas at the time highways are constructed or expanded. In areas where a residential development is constructed adjacent to an existing highway, the developer is responsible for noise attenuation.

PROPERTY ACQUISITION**17. How does the province acquire the land needed to build a highway?**

The present project planning process will identify right-of-way requirements for the recommended plan. After a project plan has been approved by Alberta Transportation, provincial property agents will begin negotiations with the landowners one or two years before construction is scheduled to begin.

18. How will fair compensation for acquired property be determined?

Compensation is based on “market value plus related or applicable damages”. Market value is based on comparable sales in the study area and is a negotiated item between the property owner and the province. Alberta Transportation negotiates fairly and openly with landowners for the acquisition of needed highway right-of-way lands. Negotiations are based on mutual respect and cooperation to create a partnership for future highway construction success.

