ACCESS ROAD

Essential Facts

McElhanney Consulting Services has been studying the road issues for Jumbo Glacier Resort (JGR) since the mid 1990s and has reviewed them year-by-year with the project planning team and with government staff. Their representatives participated in the public process and their *Route Study Report* is part of the project's documentation.

TRAFFIC

- Road traffic in the region is increasing regardless of the JGR project. In 1996, the two-way average annual daily traffic (AADT) on Highway 93/95 between Radium and Invermere was 4,605 in 2005 it was 5,738.
- Traffic in the region is highly **seasonal**. Monthly daily average traffic in July is 9,243 (peak days approach 11,000) whereas winter averages are reduced to 3,539 in January and 4,469 in February when the ski resort demand is at its peak.
- McElhanney projects a traffic contribution by JGR in high season in winter ranging from a 450 trips per day at the end of phase 1 (5 years after the project begins) to approximately 1,470 trips per day on completion (approximately 25 years after the project begins). Peak traffic periods would be in winter, when traffic elsewhere in the valley is at its lowest. Also, most of the traffic is uni-directional comprising approx. half of the vehicles at the beginning and end of each day.
- Peak traffic after the development of JGR on highway 93/95 will continue to be in the summer months and it currently approaches 11,000. JGR will contribute approximately 200 trips initially and 500 trips at the end of the development. This is less than a 5% increase relative to current traffic, but after 20 years.

Projected¹ Summer Daily 2-way Traffic Highway 93/95 South of Radium Based on Current Trends

Year	July 2005 (actual)	July 2010	July 2015	July 2020	July 2025
Average Daily Traffic	9,243	9,982	10,781	11,643	12,691

Projected Winter Daily 2-way Traffic Highway 93/95 South of Radium Based on Current Trends

Year	February 2005 (actual)	February 2010	February 2015	February 2020	February 2025
Average Daily Traffic	4,469	4,827	5,213	5,630	6,137

Projected Peak (February) Daily 2-way Traffic for Jumbo Glacier Resort

Year	Phase One (after five years)	Phase Two (after 10 years)	Phase Three (after 25 years)
Average Daily Traffic	490	860	1,470

• Panorama contributes approximately the same amount of traffic through Invermere as will Jumbo Glacier Resort in Phase 2 of its development (approximately 10 years after the project begins). Panorama has not been asked to contribute to Invermere for its road access. The road to Panorama has been built and maintained without direct contributions by Panorama (although their taxes contribute to local and provincial coffers, as will JGR's).

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¹ Assuming a 2005 project start date.

THE ROUTE

- The access route follows existing mining and forestry roads. A new main alignment has been chosen among existing routes, eliminating creek crossings. The road from Panorama to the Mineral King Mine is approximately 19 km and from the mine to the sawmill site at the proposed resort location will be approximately 16 km. Total will be 35 km.
- The road to the Mineral King Mine on Toby Creek past Panorama is a public highway with gravel surface, improved and maintained by the Ministry of Transportation. The main user in winter is R.K. Heli-Ski, which uses the road to deliver and pick up heli-skiers at the Mineral King Mine site instead of at Panorama. The heli-ski company does not contribute to the road's maintenance despite the fact that it received a generous grant to build the Hal Bavin Heli-Plex at Panorama and that their heli-ski contributions in fees to the Province are in the range of \$10,000 to \$20,000 per year (winter road maintenance and avalanche protection expense by the Ministry of Transportation is reported to exceed this amount).

ROAD COST

- McElhanney's projected road costs for improved access to JGR are for road design speeds in the range of 50 to 60km/h, depending on the road sections. They are comparable to the cost of the road upgrade to Kicking Horse Mountain Resort, which was in the range of \$200,000 to \$250,000 per comparable kilometre (not including the hairpin turn, which is not required for the JGR access). The order of magnitude of the upgrades required from Panorama to the JGR resort base is in the range of \$8 to \$12 million.
- The proponent for JGR has stated from the beginning that it was prepared to pay for the road upgrades, and that the project is capable of financing the road construction.
- The proponent's consulting team believes that it is necessary that equal policies and treatment be available to all citizens, companies and projects. JGR will follow any coherent government policy.

AVALANCHE MITIGATION

• Peter Schaerer, an Order of Canada recipient for his work on avalanche control, has reviewed and evaluated since 1991 avalanche risk, mitigation and control costs for the access road and the project with the planning team. He is the former head of the National Research Council's Snow Avalanche Section and a past President of the Canadian Avalanche Association.

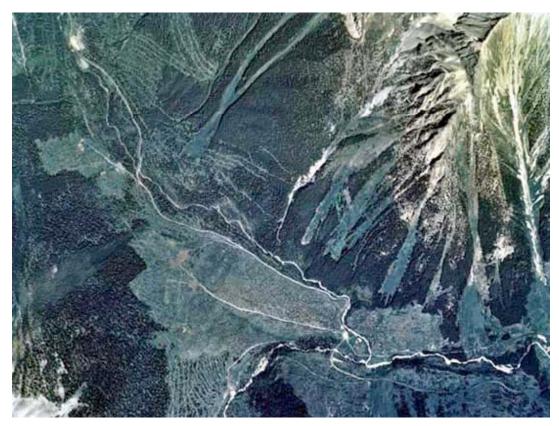
THE ATHALMER HIGHWAY FUNCTIONAL PLANNING STUDY

The District of Invermere and the Ministry of Transportation commissioned a study to Urban Systems, dated February 2006, which concluded recommending a "Retrofit Package", rather than a by-pass route, to address future traffic requirements. The study indicated that future traffic increases are expected to occur regardless of the occurrence of the Jumbo Glacier Resort project, and that its traffic impact on the Athalmer Highway will be of little significance when compared to the traffic increase expected from the projects already approved and anticipated in the valley, in addition to historical growth patterns.

Aerial Images



1. The former sawmill site/future resort base site in the Upper Jumbo Creek Valley.



2. The junction between the Upper Jumbo Creek Valley, the Leona Creek drainage, and the Lower Jumbo Creek Valley. The former sawmill site clearing and the location of the future resort base site can be seen in the upper left hand corner of the photo. The lighter shades of green in the photographs show where the forest has been harvested.



3. The upper part of the Lower Jumbo Creek Valley. Jumbo Creek is the bright squiggly line across the middle of the photo. Existing roads are visible on either side of Jumbo Creek.



4. Moving westward along the Lower Jumbo Creek Valley, road alignments on both the north and south sides of Jumbo Creek are visible.



5. Continuing to move westward along the Lower Jumbo Creek Valley, road alignments on both the north and south sides of Jumbo Creek are still visible.



6. The junction of the Lower Jumbo Creek Valley with the Toby Creek drainage at the Mineral King Mine site. The mine's tailings are clearly visible (the big white area) and road alignments exist on both the north and south sides of the tailings. Toby Creek is the large light colored squiggly line that runs from the bottom left hand corner of the photograph to the upper right hand corner. Jumbo Creek intersects Toby Creek just before the mine tailings.