## Proposed Alaska Canada Rail Link

# **Summary of Data Gaps**

# Work Package B1b Review of Available Data

Prepared for:

Yukon Economic Development

Prepared by:

Yukon Engineering Services Whitehorse Yukon.

#### Introduction

Yukon Engineering Services has been retained to investigate available information with respect to the proposed Alaska Canada Rail Link along the Yukon sections of the proposed routes. The searches have turned up good results in areas that have seen highway construction or have been studied in the past for the Alaska Highway Pipeline. Areas with little or no history of construction have very limited data available. Amount of available information depends on the route of the railway, and the history of activity along that route.

## Methodology

Yukon Engineering Services Inc has investigated the available information with respect to available geotechnical, geological and hydrological information. Sources of this information have been:

- Government of Yukon, Energy Mines and Resources Library
- Government of Yukon, Transportation Engineering Branch
- Foothills Pipeline
- Trans Canada Pipelines
- EBA Engineering Consultants
- University of British Columbia Geological Library
- Public Works Canada
- University of Alaska Library
- General Searches on the Internet

The above sources were searched using place names, key words, and coordinates for available documents and the search results were sorted by applicability for inclusion. The sorted documents were then tabulated in a spreadsheet bibliography and posted to the feasibility study website.

#### Results

#### General

The office of Representative Jeannette James of Juneau Alaska investigated a railroad / transportation / utility corridor and a report is available of the findings. The office of Alaska Senator John J Cowdery conducted a similar exercise, which is also available. Both reports gathered previous studies as well as newspaper reports pertaining to the project. The Cowdery document also included notes from the Alaska Canada Rail Conference held in Juneau in January of 2004. Previous studies include a survey done in 1942 by the U.S. War Department, the Yukon Railway Study by Canadian Pacific Consulting in 1975 and the Yukon Railway Feasibility Final Reconnaissance Report. by Canadian National Railway, June 1969.

#### Alaska Highway Route

This route leaves the Alaska - Yukon border near Beaver Creek Yukon and follows the Alaska Highway along the Shakwak Trench to Haines Junction. The railroad then leaves the Shakwak Trench and follows the Alaska Highway to Whitehorse, the Capital of Yukon. From Whitehorse the Rail will follow the Alaska Highway to the British Columbia - Yukon Border near Watson Lake.

This route has much information available. The history of construction and maintenance of the Alaska Highway has created much detailed information since the construction of this highway in 1942. Government of Yukon holds highway construction and maintenance information for the Yukon section of the Alaska Highway.

Perhaps the most valuable to the Rail Project is an environmental study undertaken by Foothills Pipelines to construct the Alaska Highway Pipeline in the late 1970's. Much of the information compiled under this study was consolidated into a document called the "Foothills Pipeline Geotechnical Atlas". This document is held by Trans Canada Pipelines Ltd.

For areas that the Alaska Canada Rail Link will depart from the Alaska Highway Right of Way or the Foothills Pipeline Right of Way the available information will get sparser. The further the rail goes from these routes the less detailed the information gets.

#### Northern/Tintina Route

The rail will leave the Alaska Canada border at the Ladue River. The rail will follow the Ladue River to its confluence with the White River and follow the White to the Yukon River. At the Yukon River the rail will turn south and follow the Yukon River to Carmacks, where it will turn southeast and follow the Campbell Highway along the Tintina Trench to Watson Lake.

Very limited information is available for the northern section of this route. The Ladue and White Rivers have very little data available. Geological Survey of Canada investigated the area to a small extent in the early 1900's, and the geology of the area is defined very generally. Geotechnical, hydrological, and physical hazards information for the area did not become apparent in our search.

From Carmacks south the rail follows the route of the Campbell Highway. Government of Yukon has compiled data for the Campbell Highway with respect to geotechnical, hydrological and geology, however the data is not as detailed as the information for the Alaska Highway Route. The Campbell Highway is a minor road and does not have the history of the Alaska Highway.

Very spotty geological information is available for this route due to corporate investigations of mineral deposits in the area. The Finlayson Lake and Wolverine Lake areas have been explored with mineral development in mind, however due to the focus of the geologists this information is limited in its use to the rail project.

### Conclusion

As can be expected, there is a lot of information available for those areas that the proposed rail will follow a highway. A very important source of information to the project will be the Foothills Pipelines Study that was undertaken in the late 1970's. Those areas that the rail will not follow a road are not as well defined. There is very little information available for the northern route from the Alaska border to Carmacks.