

## **EXECUTIVE SUMMARY**

The Matanuska-Susitna Borough (MSB) and the Alaska Railroad Corporation (ARRC) propose to connect Port MacKenzie to ARRC's rail system by constructing and operating a new rail line. The new rail line would extend from Port MacKenzie to the ARRC's existing main line between Wasilla and north of Willow. Port MacKenzie is a deepwater port on the north side of Knik Arm in upper Cook Inlet, located in Southcentral Alaska.

The purpose of the Port MacKenzie Rail Extension project is to establish a rail link between Port MacKenzie and the Alaska Railroad, providing Port MacKenzie customers and shippers cost effective rail transportation between the Port and Interior Alaska. Presently, the only surface mode of freight transport available to the Port is trucking. The construction of a rail line would satisfy the need for an additional mode of transportation to Port users, providing an economical alternative for movement of bulk materials.

The MSB began investigating development of Port MacKenzie and supporting infrastructure in the 1970s. In 1993, the MSB established the Port area as a Designated Major Energy Facility intended to facilitate the growth and development of the Port. The 1997 MSB Long Range Transportation Plan described the need for rail and improved road access to the Port.

In 2007, the State of Alaska granted to the MSB an appropriation to perform conceptual engineering and environmental documentation for the Port MacKenzie rail extension, which is the subject of this document. In November 2007, the MSB Assembly passed a resolution recognizing the need for further study and asking the Surface Transportation Board (STB) to include a thorough evaluation of local issues in the National Environmental Policy Act document that would be prepared.

Major elements of the Port MacKenzie Rail Extension Project would include between 30 and 45 miles of new railroad track; a 200-foot-wide right-of-way; crossings of local roads, streams, trails, and utility corridors; sidings; and ancillary facilities. The anticipated train traffic would be two trains daily, which would entail one train traveling in each direction.

The STB must examine the potential environmental impacts of a proposed action under the NEPA in considering whether to grant authority to construct and operate the new rail line. This report provides background information on the project area and evaluation of preliminary alternatives and environment of the project area.

Based on a constraints analysis approach, eight possible alignment configurations were developed. The alignments are composed of two southern and three northern segments (with one northern segment having two variants). The southern and northern segments are linked by connectors.

The project team developed a preliminary description of the natural and human environment and preliminary evaluation of potential impacts of the alternative alignments based on environmental factors and issues specific to the project area.

Surface and shallow subsurface drainage in the area of the alignment alternatives is generally to the west and south. Each of the project alternatives crosses wetlands, which may require excavation and filling for construction of a rail bed. Wetlands are widely distributed throughout the project area and complete avoidance of wetlands is not possible for any alternative. Each of the alternatives would cross anadromous fish streams.

The relatively undisturbed portions of the project area provide habitat for wildlife, including the main large species: moose, black bear, and brown bear. Upland and wetland bird species are also common in the project area.

Land in the project area is owned by government, as well as private and institutional land holders. Government land is owned primarily by the State and MSB. The MSB does not have a Borough-wide zoning code but it regulates land use through special land use districts, residential land use districts, and other mechanisms. A large percentage of the land in the project area has not been developed. For the developed parcels, the current land uses are diverse, but the dominant land use based on number of parcels is residential. Other land uses include commercial, industrial, institutional, and agricultural.

Designated parks, refuges, and recreation areas in the project area include the Willow Creek State Recreation Area (SRA), Nancy Lake SRA, Little Susitna River Recreation River, Little Susitna Public Use Facility, Susitna Flats State Game Refuge (SGR), Goose Bay SGR, Fish Creek Park, Big Lake North and South State Recreation Sites, and Rocky Lake State Recreation Site. In the MSB, trails are an important recreational and transportation resource. Trails serve as recreational, training, and competition areas for snowmachining, dog mushing, skiing, and skijoring. They also serve as the primary means of accessing many of the cabins and other recreational properties throughout the area. For the purpose of this project, the project team has defined officially-recognized public trails as those located on publicly-owned land or located within a properly obtained easement. Crossings of the official trails are intended to be grade-separated.

The MSB is the fastest growing area in the State. Approximately 4,300 people live in the project area, the majority living in the Willow, Houston, and Big Lake areas. The rest of the project area is more sparsely populated. There are approximately 1,600 households in the project area. The largest minority population in the area is American Indian and Alaska Native. The mean median household income of the project area is \$40,162. It is less than both the state as a whole and the MSB as a whole.

The current noise environment in the project area ranges from undeveloped areas with minimal human-generated noise, to rural areas with minimal or occasional human noise impacts, to residential and moderately urban areas with higher levels of road traffic noise, particularly adjacent to the Parks Highway.

The entire project area is located within the coastal zone as identified by the MSB Coastal Zone Management District and the Alaska Coastal Zone District boundaries.

A preliminary review of known contaminated sites indicates that there is one contaminated site located within the current range of alternatives. This site is located within existing ARRC right-of-way (ROW) near the tie-in of the Houston South alternative with the existing main line.

The project team used quantitative measures to compare the strengths and weaknesses of the Port MacKenzie Rail Extension project alternatives. The project team developed a matrix evaluation based on STB criteria and environmental and engineering criteria specific to the project area. Criteria were selected based on availability of a quantifiable measure and differences in measurements for alternatives that allowed comparison. Criteria included in the matrix included poorly or highly compressible soils, number of new road crossings, land availability, number of developed parcels, designated land use, train energy, wetlands, number of anadromous fish stream crossings, high potential for archaeological sites, fragmentation of a designated refuge and recreation area, and construction costs. Based on the results of the matrix, the various alternatives were described by their strengths and weaknesses.