



Nenana Rail Line Relocation

Project Description

The Alaska Railroad Corporation (ARRC) proposes to relocate the railroad main line track around the downtown area of Nenana, Alaska. The track would be relocated outside of the existing right-of-way north of the airport and southeast of town, over the Parks Highway (as generally depicted by the Proposed Alignment on *Figure 1*). The existing track structure through Nenana would be maintained to support port and potential passenger activities.

Purpose and Need

Built about 1920, the existing alignment parallels the Tanana River along the city's water-front. To serve the waterfront, the tracks were placed in large curved sections in downtown. The track was then curved again to gain elevation from the port to the high bridge across the Tanana River. This alignment has not changed since original construction, and the issues of community growth, public safety, and railroad operational efficiency now need to be addressed:

- **Curvature:** Several curves exceed modern design standards and some are relatively sharp at 12 degrees. As a result, trains must operate slower, derailment risk is higher, and the force of heavy trains on this curved track requires intensive, expensive maintenance.
- **Crossings:** Six at-grade crossings pose safety concerns within Nenana. This includes the potential for train-vehicle collisions, as well as occasionally blocked crossings, which could delay access to key facilities such as the medical clinic.
- **Downtown Location:** Trains run through downtown Nenana, subjecting the more populated areas to noise and vibration, as well as risk involved with the transit of hazardous materials.

Benefits

The project's primary objectives are to improve the safety of railway/roadway crossings and railroad operations, reduce rail transportation times, and reduce operating costs. The project also provides other opportunities for community-based improvements. Specifically, benefits derived from a new track relocation include:

- At-grade crossing safety concerns would be addressed by the possible elimination of some crossings, and a dramatic reduction in the rail traffic on others.
- The new alignment would grade separate road crossings (Parks Highway, Airport Access, and 9th Street) — where trains go over the road — nearly eliminating the risk of train/vehicle collisions.
- The new alignment would also reduce train traffic running through downtown Nenana, thereby reducing the transportation of hazardous materials through downtown, and reducing disturbance from noise and vibration.
- Straighter track alignment would significantly reduce derailment risk, while increasing train speeds. The proposed alignment would reduce the length of the track by nearly 2 miles and save as much as 6-8 minutes in through train running time.
- The new track structure would be much less maintenance intensive, and existing railroad maintenance facilities may be relocated.
- Rail service to the Port of Nenana would be maintained, and the project would provide an opportunity to serve the Nenana Airport with a rail spur.

Project Scope

Design of the new rail relocation outside of the existing right-of-way will address several issues, including improved operations, improved safety and reduced maintenance.

The project will create elevated earthen track grade, include utility relocation and potential flood control elements (i.e., dikes, culverts, etc.).

The rail relocation project acknowledges and supports planning and coordination for road improvements to 9th and K streets. Any road improvements made within the proposed rail realignment area will be relocated or replaced by the Alaska Railroad in conjunction with the rail relocation project.

Status

- Environmental field work and documentation were conducted in spring 2003, followed by a public scoping meeting in Nenana, and an agency scoping meeting in Fairbanks.
- A noise and vibration study was conducted in July 2003.
- An Environmental Assessment (EA) was initiated in fall 2003 to consider three alternative realignment routes, and a “no action” alternative.
- The EA was released for public review in October 2004. A public meeting was held October 26, 2004, in Nenana.
- The Federal Transit Administration (FTA) issued a finding of no significant impact (FONSI) in mid-December 2004.
- Consulting teams began final design in 2005, which included survey and geotechnical work.
- Right-of-way acquisition began in 2006 and was completed in 2009.
- A hydrology study completed in 2010 was used to pursue flood plain permits in 2010 and 2011. The study furthers final engineering and will enable faster start-up of final design and construction.

- The City of Nenana approved a flood plain permit for the project in 2011.

Costs and Funding

- \$1 million for engineering/design, environmental studies, public involvement and land acquisition, funded 91% by FTA and 9% by ARRC.
- Approximately \$2 million for land acquisition is funded by the Federal Highway Administration, administered by FTA, and includes a 9% match by ARRC.
- \$225,000 for the hydrology study funded 100% by the 2009 American Recovery and Reinvestment Act through a grant administered by FTA.
- The estimated cost for final design and construction is \$37.7 million. Funding is not identified, however, the Alaska Railroad continues to seek funding sources for construction.

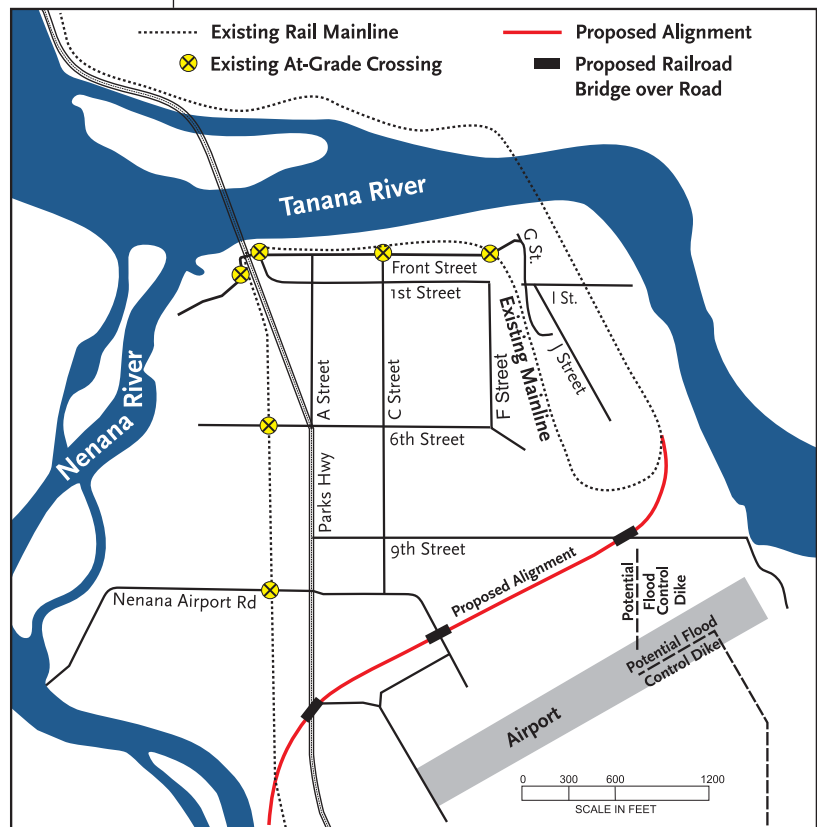


Figure 1. Proposed Rail Line Relocation.