

Appendix A – Summary of Recent Plans and Projects

1 Relevant Rail-related Plans and Projects Managed by Other Agencies/Entities

While the Alaska Department of Transportation and Public Facilities (DOT&PF) and the Alaska Railroad Corporation (ARRC) have the primary responsibility for rail planning, policy, and project development, a number of other state and local agencies have an interest in the state rail system. This appendix summarizes recent plans and projects managed by other agencies or entities in Alaska that have applicability to rail.

Rail operations are of increasing interest at the local level of government. At the local level, the agencies most involved in rail planning are Metropolitan Planning Organizations (MPOs). MPOs are federally mandated and funded policy-making organizations consisting of local government and transportation officials. The formation of an MPO is required for an urbanized area with sufficiently dense development and a population over 50,000. A MPO is required to maintain a Long-Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP). A TIP is a multi-year program of transportation projects to be funded with federal and other transportation funding sources. Federally funded projects within each MPO's geographic area, such as a grade crossing improvement project, must be included in the agency's TIP.

There are two MPOs in Alaska: the Anchorage Metropolitan Area Transportation Solutions (AMATS) and the Fairbanks Metropolitan Area Transportation System (FMATS). The Matanuska Susitna Borough (MSB) as well as the Anchorage and Fairbanks MPOs are the agencies engaged with the ARRC in planning, partnering, and funding. Other agencies include: the City of Skagway, which is engaged in port development planning that will affect the WP&YR; and the University of Alaska Fairbanks, which is working on the Alaska-Canada rail link and in-state rail extensions to Livengood, the Yukon River, and Delta/Greely.

1.1 Anchorage Metropolitan Area Transportation Solutions (AMATS)

AMATS is a multiagency, federally recognized MPO tasked with planning and funding the transportation system within the Anchorage Bowl and Chugiak-Eagle River areas. AMATS is funded by U.S. Department of Transportation (USDOT) programs, State of Alaska appropriations and general obligation bonds, and local municipal bonds. These funds are expended on items in the AMATS TIP, which implements elements of the *2035 Metropolitan Transportation Plan (MTP)*. AMATS does not operate rail service but ARRC is represented on the AMATS Technical Committee, and it coordinates with the ARRC on railroad activities within the AMATS area.

The AMATS Policy Committee approved the 2035 MTP on May 3, 2012. The MTP guides nearly \$4 billion in transportation network improvements between 2012 and 2035. The MTP cites the rail system as an important component of the regional transportation system, particularly in connection with freight movement to and within the region. The MTP cites a number of ARRC infrastructure development

plans, including collaboration with the Dimond Center in Anchorage to develop an intermodal center, and upgrading its Ship Creek rail facilities and headquarters complex. The MTP also suggests safety reinforcements at of the following at-grade crossings in Anchorage, at a minimum: C Street, Arctic Boulevard/Dowling Road, and International Airport Road/Jewel Lake Road. These identified crossings are of particular concern because of relatively high vehicle traffic (AMATS 2012).

The MTP recommends the implementation of electronic motorist-warning systems at rail crossings to provide greater safety assurance until planned roadway-rail grade separations can be completed. The MTP also recommends that the currently planned ARRC improvements be continued, including:

- Construction of additional track to expand capacity
- Continued development of passenger facilities
- Continued realignment of tracks within the existing rail corridor
- Design and development of an intermodal transportation facility at Ship Creek
- Pedestrian improvements and enhancements
- Rolling stock rehabilitation
- Improved rail crossing – intersection signalization
- The Port Mackenzie Rail Extension Project

In addition, the MTP also discusses the possibility of using the ARRC for rail commuter service between Palmer, Wasilla, and Anchorage, a scenario that has been studied and discussed for 35 years.

1.2 Fairbanks Metropolitan Area Transportation System (FMATS)

The Fairbanks Metropolitan Area Transportation System (FMATS) is the official MPO for the Fairbanks area. Like AMATS, FMATS is also funded by USDOT programs, State of Alaska appropriations and general obligation bonds, and local municipal bonds. These funds are used through the TIP to implement the FMATS MTP.

The FMATS Policy Committee approved the 2010 – 2035 MTP on July 12, 2012. The MTP cites the history of railroads serving Fairbanks. As of the drafting of the ASRP, Fairbanks is the northern hub of the ARRC, serving as a critical intermodal freight transfer center for Interior Alaska. Rail freight operations in Fairbanks also serve oilfield service companies, the two military bases (Eielson Air Force Base and Fort Wainwright Army Base), an oil refinery in North Pole (now closed), and coal deliveries for four coal-fired power/heating plants (FMATS 2012).

Like the AMATS MTP, the FMATS MTP also calls for safety improvements at a number of at-grade crossings in Fairbanks. There are approximately 50 at-grade crossings of public roadways within the FMATS area (FMATS 2012). The most significant at-grade arterial roadway crossings are:

- University Avenue
- Richardson Highway at three locations: 3-Mile Crossing, Peridot Crossing and Moose Creek Crossing
- College Road
- Old Steese

- Steese Expressway

Future grade separations have been proposed and studied for several crossings, including the University Avenue Crossing (Main Line), the Richardson Highway/3-Mile Crossing (Airport Spur Line) and the Richardson Highway/Peridot and Richardson Highway/Moose Creek Crossings (Eielson Branch Line).

The MTP includes a number of major projects that the ARRC has proposed. These projects are described in Sections 1.2.1, 1.2.2, and 1.2.3.

1.2.1 SR-7 North Pole, Alaska, Road/Rail Crossing Reduction Project

According to the FMATS MTP (FMATS 2012), this project will realign the railroad track along a portion of the ARRC Eielson Branch to enhance safety by reducing the number of at-grade road/rail crossings in the City of North Pole. It includes elimination of a major at-grade road/rail crossing of the Richardson Highway, a National Highway System (NHS) roadway. The project will relocate the railroad away from North Pole's population center to a rural area along or near the Tanana River Levee structure. The project will extend from Richardson Highway Mileposts (MP) 355 to 347, popularly known as Mile 9, to the eastern portion of the City of North Pole.

The FMATS MTP (2012:Table 8-1) reports that \$4.0 million is anticipated for spending between 2011 through 2015 for the North Pole, Alaska, Road/Rail Crossing Reduction Project. This is expected to be DOT&PF's contribution to this project, largely through the distribution of reappropriated funds from a Section 115 earmark for right-of-way acquisition and engineering costs. The ARRC has estimated the total project cost to be approximately \$62 million.

Of this \$62 million, it is anticipated that approximately \$9.4 million will come through Federal Rail programs and General Funds. The ARRC anticipates funding the remainder primarily through FHWA and DOT&PF matching funds, with the ARRC providing the local match portion of these funds, or through utilizing its own funds entirely for certain sections of the project.

1.2.2 VLR-13 Fairbanks Rail Realignment

According to the FMATS MTP (FMATS 2012), the ARRC proposes to optimize the alignment of its mainline and branch track within the Fairbanks area to improve safety and customer response as well as minimize transportation conflicts with the adjacent communities. A Memorandum of Understanding between the Fairbanks North Star Borough and ARRC is the guiding policy for implementing this project (PL108-199, Div. F, Title I, Sec. 115). The FMATS MTP (2012:Table 8-1) reports that this projected is estimated at \$280 million and is unfunded.

1.2.3 Other ARRC Projects in the Fairbanks Area

The ARRC also has a number of other projects planned that will impact the Fairbanks area. These projects may or may not occur within the planning horizon. They are listed here and described below:

- Fairbanks Freight Intermodal Improvements
- Fairbanks Area Rail Line Relocation
- Northern Rail Extension

As discussed in the FMATS MTP, while the cumulative effects of these projects on rail volumes are currently unknown, they will result in improved operating speeds, reduced safety concerns, and a slightly expanded service area. This could support, or even encourage, an increase in rail volumes that are higher than the current “Expected Growth” scenario.

1.2.3.1 Fairbanks Freight Intermodal Improvements

The Fairbanks Freight Intermodal Improvements project entails various improvements to the existing freight intermodal area of ARRC’s Fairbanks Rail Yard. The existing rail yard does not have adequate space for handling containers and Trailer on Flatcar (TOFC) traffic, creating a bottleneck in the system. Primary improvements include grading and placing E-1 compacting material, along with drainage, in the intermodal unloading area; moving and improving existing at-grade crossings to allow longer trains to be spotted (parked) without blocking truck departures; and constructing a centralized trailer parking area with space for up to 80 units. This facility is estimated to cost approximately \$18 million.

1.2.3.2 Fairbanks Area Rail Line Relocation

The Fairbanks Area Rail Line Relocation has been a project that has been under consideration for more than a decade (ARRC 2011). The primary purpose of the Fairbanks Area Rail Line Relocation project is to resolve safety concerns created by development that has occurred around the railroad tracks over the last 80 years. Additionally, the project would reduce travel times, improve operational efficiency, and accommodate mass transit/passenger service. The realignment is not expected to result in additional rail traffic.

The project would optimize the main line and branch line track within the Fairbanks area to improve safety and minimize transportation conflicts with the adjacent communities. A number of the at-grade crossings in Fairbanks and Fort Wainwright would be eliminated. A number of studies have been prepared and funded by a variety of agencies, including ARRC, Department of Defense via FRA, Federal Transit Administration (FTA), and Federal Highway Administration (FHWA).

The Fairbanks Area Rail Line Relocation project consists of three phases:

- Phase 1 - From near 9-mile on the Richardson Highway (MP 353) to Southeast North Pole, near Moose Creek. This phase is also known as the North Pole Road/Rail Crossing Reduction Project.
- Phase 2 - From MP 353 on the Richardson Highway to 3-Mile Gate on Fort Wainwright’s western border.
- Phase 3 - Area west of the 3-Mile Gate, past Chena River.

Phase 1, which has its own utility and can be constructed independently of the other 2 phases, would provide immediate safety benefits. Under this phase, the ARRC proposes to reduce the number of at-grade crossings on a portion of its Eielson Branch track (from Richardson Highway MP 9 to the Chena River Floodway) that runs through North Pole, Alaska. The proposed alternative would realign the track on the landward side of the Tanana River Flood Control Levee. It would close nine at-grade crossings within the City of North Pole, and relocate the existing crossing of the Richardson Highway, replacing it with a separated grade crossing. A finding of no significant impact (FONSI) was finalized for Phase 1 by the FRA on December 7, 2012. FHWA issued a FONSI for the project on January 18, 2013.

Funding for final design and construction has not been identified. The cost estimate for Phase 1 is \$65 million which includes a grade separation at Richardson Highway (ARRC MP G9) and Rental Street. Phase 2 is estimated at \$10-20 million.

FMATS MTP Projects SR-7 (North Pole, Alaska, Road/Rail Crossing Reduction Project), VLR-6 (Richardson Highway: 3-Mile Railroad Crossing Overpass), and VLR-13 (Fairbanks Rail Realignment), described in Sections 1.2.1 and 1.2.2, are all components of this effort.

1.2.3.3 Northern Rail Extension

In 2010, the Surface Transportation Board (STB) granted ARRC authority to construct and operate the Northern Rail Extension. If fully implemented, the Northern Rail Extension project would extend the existing Alaska Railroad track 80 miles. The extension would connect the existing Eielson Branch rail line at its terminus near the Chena River overflow structure near North Pole, crossing the Tanana River and traveling through the military training grounds at the Joint Pacific Area Range Complex (JPARC), to a location slightly southeast of Delta Junction (ARRC 2011).

The proposed rail line would provide freight and potentially passenger rail services serving commercial interests and communities in or near the project corridor as well as provide military support. The extension would be available to military, general public, and commercial shippers, including agricultural and resource development businesses. The extension could support transit operations between Fairbanks, North Pole, Salcha, and Delta Junction. This extension is not expected to amount to a net increase in train traffic entering and exiting Fairbanks to and from Anchorage.

In 2011, ARRC began construction of Phase 1 of the project, which includes the construction of a bridge, approach road, and levee associated with the crossing of the Tanana River near Salcha. Construction began in 2012 and was completed in August 2014. Phase 2 includes rail construction from Moose Creek to the Salcha crossing; Phase 3 includes rail construction from the Salcha crossing to the Donnelly Military Training Area; and Phase 4 includes construction of the rail from Donnelly to Delta Junction.

The Northern Rail Extension project is estimated at approximately \$800 million, of which \$189.0 million has already been expended to complete Phase 1. Phases 2, 3, and 4 are currently unfunded.

1.2.3.4 Other FMATS Plans

Other FMATS plans that are associated with rail include:

- 2005 - FMATS Long Range Transportation Plan
- 2006 – FNSB/City of Fairbanks – The Historic Preservation Plan
- 2007 - Airport Way Improvements Reconnaissance Study
- 2008 - Vision Fairbanks Downtown Plan
- 2010 - North Pole Land Use Plan 2010 – Governor’s Coordinated Transportation Task Force Recommendations Report
- 2010 – Seasonal Mobility Task Force Recommendations Report
- 2010 – Updated FMATS Metropolitan Transportation Plan including a Freight Element
- 2010 – Updated Public Participation Plan

- 2010 - Update of the BIKEWAYS Map
- 2010 – Steese Highway/Johansen Expressway Area Traffic Improvements
- 2012 – Planning documents for the FMATS Safe Routes to School Program
- 2012 - FMATS Non-Motorized Transportation Plan
- 2012 – FMATS Art Selection Advisory Committee formed
- 2012 - Richardson Highway/Steese Expressway Corridor Study Initiated (DOT&PF)
- 2014 – College Road Corridor Study Completed
- 2013 – Conducted a Household Travel Survey and update of the TransCad Travel Model (DOT&PF)
- 2014 – Update of the FMATS Bikeways Map
- 2015 – Updated FMATS Metropolitan Transportation Plan
- 2015 – Updated Bikeways Map

1.3 Matanuska-Susitna Borough Planning

While not an MPO, the MSB has become involved in discussions and planning for rail transportation. The MSB is the owner of the PMRE project (see Section 1.1.1) and is supportive of commuter rail service between the MSB and Anchorage (Hollander 214; Wellner, 2014).

In its most recent LRTP (2007), the MSB recognizes the fundamental role the ARRC has had in the development and economy of region. The MSB LRTP aspires to better utilize the rail system in order to prompt economic growth (MSB 2007). The LRTP cites the PMRE project as a key element in the long-term growth of Port MacKenzie and development of industry in the Mat-Su Valley. As of 2014, the project is under construction and is expected to be complete by 2018, dependent on funding.

The MSB also aims to continue its work with the ARRC, the Municipality of Anchorage, and the State of Alaska to develop commuter rail service between the Mat-Su Valley and Anchorage. The MSB started the update of its LRTP in 2014.

1.4 Planning in Other Parts of the State

1.4.1 Port MacKenzie Rail Extension Project

The Port MacKenzie Rail Extension (PMRE) project is an MSB project being constructed in cooperation with the ARRC. The project is building a new 35-mile track connecting Port MacKenzie, a deep-draft dock on the Knik Arm of Cook Inlet, to the ARRC mainline track near Houston. When complete, the new rail line would operate as part of the ARRC system. The port has adequate acreage to accommodate bulk resource storage, transport, and processing facilities, as well as rail and terminal facilities for efficient train loading and unloading.

As of 2014, the project is under construction and is scheduled to be completed by 2018 depending on availability of funding. A September 2014 estimate indicated that the project will exceed \$300 million¹. All of the funding has come from state grants.

1.4.2 Skagway Port Development Plan

Increased mining activity within the Yukon Territory prompted the Skagway Port Development Steering Committee (PSC) to create the 2008 Skagway Port Development Plan (PSC 2008). The purpose of the plan was to assess the current condition of the port, suggest improvements, and provide the framework to be the primary port of the Yukon Territory, both for the export of raw materials and import of project and re-supply traffic. While the plan is not contingent on any changes to the WP&YR, it is suggested that the route, which is currently utilized for passenger rail, could be extended by re-opening the track between Carcross and Whitehorse. Operation of the entire historical extent of the WP&YR and reinstatement of freight service would make it possible to once again haul freight on the line. However, in 2013, the WP&YR considered and rejected the option of providing freight service.

1.4.3 University of Alaska Fairbanks, Institute of Northern Engineering

The University of Alaska Fairbanks has completed several projects that have analyzed the economic feasibility of both extending the Alaska Railroad in-state as well as connecting the Alaska Railroad to the North American Railroad grid. Funding for the work conducted by the university has come from a variety of sources, including the U.S. Department of Defense (DOD), the U.S. Department of State, and the USDOT, and passed through the DOT&PF. Most recently, the 2012 State Legislature approved \$1.1 million for an Alaska Canada Rail Link Phase II Feasibility Study (see Section 1.4.3).

1.4.4 Alaska-Canada Rail Link

A railway linking Alaska to the Lower 48 States through Canada has been under consideration for nearly a century. This project was previously included in the 1985 *Alaska State Rail Plan*. In recent years, the effort to establish the Alaska-Canada Rail link has seen renewed interest, with proposals to develop natural resources and mineral deposits along the path of a connecting line in both Alaska and Canada. In July 2005, the governments of Alaska and the Yukon Territory started an initiative to determine the feasibility of connecting Alaska and Yukon with the North American railroad system.

Recent efforts include the 2007 *Alaska-Canada Rail Link Phase 1 Feasibility Study*. This study analyzed the identified ideal rail corridors for any potential long-term benefits to the public, and to determine the technical and economic feasibility of the corridors. The study determined the project was not economically feasible and would not create enough revenue to support the project's cost.

1.4.5 Alaska-Alberta Rail Link

As of early 2013 another separate proposal, the Alaska-Alberta Railway, was made to construct a railroad that would link Alaska, the Yukon Territory, northern British Columbia, and northern Alberta to transport oil products. One proposal would create a rail connection between Fort McMurray, Alberta and Delta Junction, Alaska. At Delta Junction, oil products from Canada would be added to the Alyeska

¹ As reported by PMRE Executive Director, Joe Perkins, at an August 5, 2014 meeting of the MSB Assembly and reported by KSKA on August 6, 2014.

Pipeline. This connection would transport Alberta oil to the Trans Alaska Pipeline System (TAPS), where it could be exported from Valdez. Project proponents, a group from Vancouver, B.C., called G7G, were able to get the Alberta government to provide \$1.8 million (Canadian dollars) to conduct a pre-feasibility study. The outcome of that work was not available by the time the ASRP was published for public review in the fall of 2014.

2 References

Anchorage Metropolitan Area Transportation Solutions (AMATS). 2012. *2035 Metropolitan Transportation Plan*. Prepared for Municipality of Anchorage, AMATS by Kittelson & Associates, Inc., Brookes & Associates, CH2M Hill, and Word Wrangling. Available at: www.muni.org/Departments/OCPD/Planning/AMATS/Pages/adoptedplans.aspx.

ARRC. 2011a. Fairbanks Area Rail Line Relocation Project Facts Sheet. Available at http://alaskarailroad.com/Portals/6/pdf/projects/2012_01_04_Fairbanks_Area_Rail_Line_Relo_FS_PROJ.pdf.

ARRC. 2011b. Northern Rail Extension Facts Sheet. Available at: <http://www.northernrailextension.com/documents/2012NorthernRailExtension.pdf>.

FMATS. 2012. *Fairbanks Metro 2035: A Plan to Keep YOU Moving*. 2010 – 2035 Metropolitan Transportation Plan, Fairbanks North Star Borough, City of Fairbanks, and City of North Pole by Kittelson & Associates, Inc., Cambridge Systematics, and Kelly Hegarty & Assoc. Available at <http://fmats.us/wp-content/uploads/2012/08/FMATS-MTP-7.21.10-approved.pdf>

Hollander, Zaz. 2014. Mat-Su Train Service Still a Long Way Down the Track, Railroad Says. *Alaska Dispatch News*. Available online <http://www.adn.com/article/20140724/mat-su-train-service-still-long-way-down-track-railroad-says>

Matanuska Susitna Borough (MSB). 2007. *Mat-Su Borough Long-Range Transportation Plan Final Report*. Prepared for MSB by HDR Alaska, Inc.

Skagway Port Development Steering Committee (PSC). 2008. *Skagway Port Development Plan*. Available at <http://www.skagway.org/vertical/sites/%7B7820C4E3-63B9-4E67-95BA-7C70FBA51E8F%7D/uploads/%7B3EAF38C3-7DFE-49D9-9D58-2B857E0F30AA%7D.PDF>

Wellner, Andrew. 2014. Anchorage, Mat-Su Assembles Talk Commuter Rail, Bridge. *Mat-Su Valley Frontiersman*. Available online http://www.frontiersman.com/news/anchorage-mat-su-assemblies-talk-commuter-rail-bridge/article_d3b0dede-8bb6-11e3-aa72-0019bb2963f4.html