

SCOMM

1 46:4

At this time we will call the meeting to order.

Let the record reflect the time is 11 am on Tuesday, February 20, 2007.

Let the record show that

- ☐ Representative Gatto
- ☐ Representative Lynn
- ☐ Representative Kohring
- ☐ Representative Johansen
- ☐ Representative Doll
- ☐ Representative Doogan
- ☐ And myself Representative Neuman

and that we have a quorum.

(Let the record also reflect that _____ has been excused from the committee meeting today.)

Today we will be hearing a:

Moving Alaska's Economy - by the Alaska Railroad Corporation
Presented by Patrick Gamble, President & CEO

Before you start please, state your name for the record.

Does the committee have any questions?

Thank You.

This committee is adjourned



Alaska Railroad 2007 Program of Projects

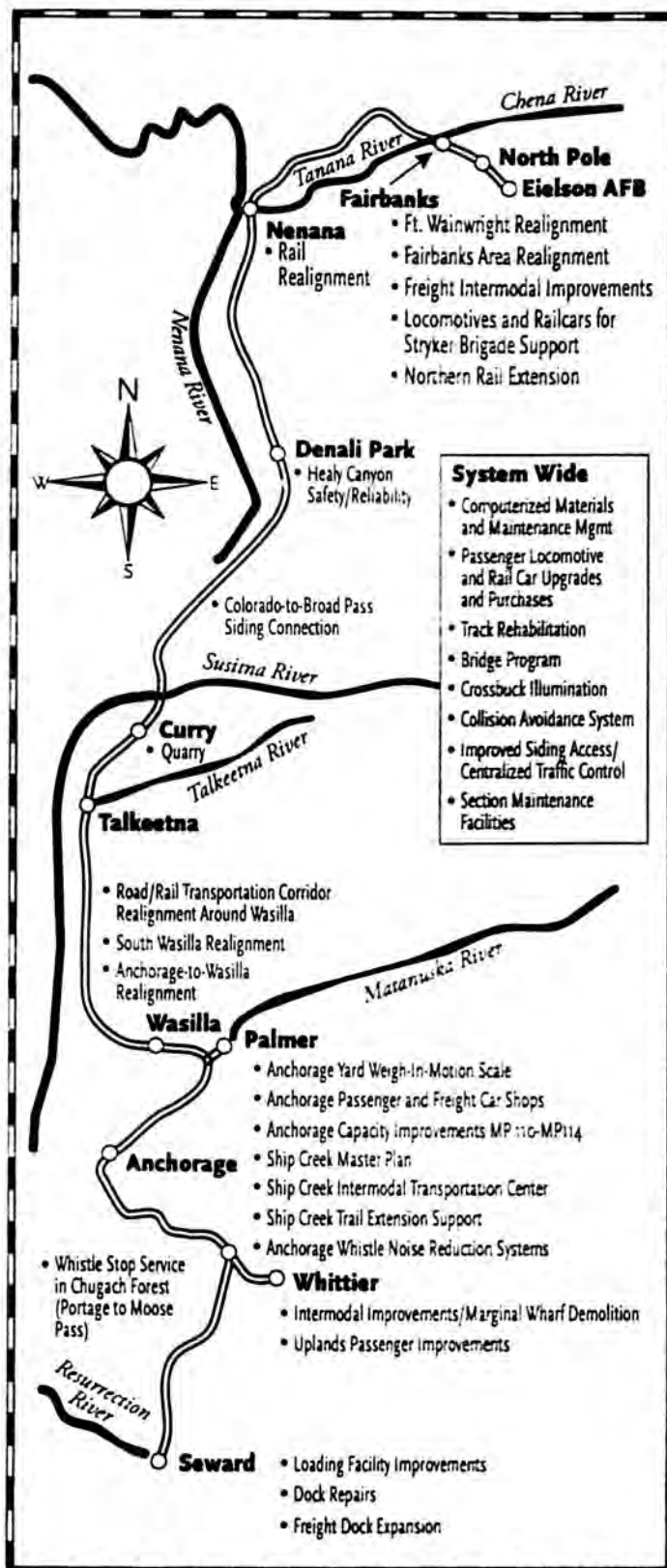
The Alaska Railroad Corporation (ARRC) continues to pursue a comprehensive program of capital improvements. ARRC is investing millions on rail, ties and ballast to aggressively improve infrastructure. Safety and efficiency upgrades include projects to straighten the main track in several areas, build longer sidings (railroad "passing" lanes), add automated and heated switches, and install a collision avoidance system. The railroad is also capitalizing on opportunities to better serve Alaskans through new depots, passenger services and equipment. Detailed project descriptions are available on ARRC's website, www.AlaskaRailroad.com.

Established in 1923, the Alaska Railroad is the last of the full-service railroads in the United States, offering both freight and passenger service. From tidewater at Whittier and Seward to the heart of Interior Alaska, our route covers more than 500 miles. ARRC is a state-owned corporation, however it does not receive state funding to operate. ARRC relies on passenger, freight and real estate revenues to operate its trains and maintain tracks and facilities.

Capital Project Funding

There are several sources of funding for capital improvements that have been made over the past decade, since 1996:

- **Federal Agencies:** Approximately \$580 in federal grants received to date, including approximately \$51.3 million for 2007.
- **Required Match:** Some federally-funded projects require a funding match of between 9% and 25% from the Alaska Railroad. Since 1996, ARRC has provided \$32.8 million in matching contributions, including \$3.4 million in 2007.
- **ARRC Internal Fund Investments:** Beyond a match to federal funds, ARRC invests millions of internally-generated dollars each year on many capital projects that are not federally funded. Since 1996, ARRC will have spent an additional \$158 million of its own income on capital improvements, including \$15.6 million in 2007.
- **Revenue Bonds:** The Alaska Railroad sold \$76.1 million worth of revenue bonds in 2006, primarily to accelerate track rehabilitation efforts. \$30 million of these funds will be expended on Track Rehabilitation in 2007. Bonds will be repaid with future Federal Transit Administration formula fund appropriations.



Frequently used acronyms:

- ARRC = Alaska Railroad Corporation
- FTA = Federal Transit Administration
- FRA = Federal Railroad Administration
- FHWA = Federal Highway Administration
- DOD = Department of Defense
- EA = Environmental Assessment
- EIS = Environmental Impact Study

Seward Loading Facility

ARRC acquired the Seward Loading Facility in 2003 and made subsequent improvements in order to increase facility efficiency, driving down the cost of operation, thus making Alaska's coal resources more competitive in the global market. ARRC completed an EA of proposed improvements and upgrades in 2004. The first phase of conveyor speed upgrades was completed in 2005. In 2006, ARRC obtained permits to make a 6-acre expansion of the coal stockpile area in order to meet market demands. FRA provide the original \$9.54 million grant, with \$8.3 million spent on acquisition and associated studies and \$1.24 million used for inspections, repairs and improvements. With no additional federal money in place, ARRC is funding minor ongoing capital improvements.



The Seward loading facility dock loads a coal ship.

Seward Freight Dock Expansion

ARRC proposes to expand its freight dock in Seward in phases to improve safety, efficiency and capacity of freight intermodal operations (ship-to-train, ship-to-truck, ship-to-barge). Constructed between 2000 and 2002, the existing freight dock is 200 by 620 feet. Phase I of the expansion would widen a portion of the dock from 200 feet to 320 feet. Later phases would widen the entire dock to 320 feet, essentially doubling the dock's 5.3 acre footprint to 10.6 acres. Permit applications submitted in 2006; expansion efforts could begin in 2007 and be complete by 2008. \$2.2 million budget for Phase I, funded by ARRC.

Whittier Master Planning

ARRC is pursuing a Whittier Master Plan to guide development of improved railroad infrastructure. Several previous planning efforts have contributed to the Master Plan, and have spurred several infrastructure improvement projects in

recent years. Future actions recommended by the Master Plan include: a) passenger intermodal improvements including demolition of the condemned Marginal Wharf and construction of improved public use facilities; b) railyard reconfiguration and track improvements to separate freight and passenger activity; c) security measures including yard fencing and lighting, camera installation, and detection equipment for passenger facilities; and d) freight operational improvements, including barge slip replacement. \$2.1 million to demolish and remove the Marginal Wharf, funded by 91% by FTA and 9% by ARRC.

Whistle Stop Service in Chugach National Forest

ARRC and the U.S. Forest Service (USFS) are partners in developing a whistle stop service in Chugach National Forest, with up to six recreational sites between Portage and Moose Pass that will be accessible by rail and interconnected by trail. Sites include passenger rail platform, passenger shelter, toilets and interpretive signage. Other features may include picnic, camping and wildlife viewing facilities. The project also calls for purchase of two self-propelled rail cars (DMU). An EA began in 2005 and was complete in 2006. Construction at the first stop at Spencer began fall 2006, and will be complete in 2007. \$1.6 million for environmental and planning, and Spencer site construction, funded by USFS and ARRC. USFS funded \$4.7 million for a double-deck DMU for delivery in 2008. Estimated \$14 million is needed to construct infrastructure and recreational facilities at all six sites. Funding is not yet identified.



Above: a double-decker self-propelled (DMU) "commuter" railcar demonstration model. Below: proposed whistle stop sites.

Anchorage Rail Capacity Improvements MP 110-114

ARRC is investigating alternatives to increase capacity along the mainline track from the Anchorage International Airport Spur (near MP 110) to the Anchorage Rail Yard (MP 114), in order to alleviate congestion, enhance safety, increase operational efficiency, and prepare the Railroad to better handle future passenger and freight train demands. Alternatives fully analyzed in the EA include a) no action and b) double track the entire corridor. A siding and double track of part of the corridor (between Westchester Lagoon and the Anchorage Yard) were also originally considered as alternatives, but were later dismissed because they would not accomplish the needed capacity improvements. A draft EA is expected to be sent to the FTA for consideration in 2007. \$1 million budget for the EA and public involvement is funded 80% by FTA and 20% by ARRC. Double track option is estimated to cost \$40 million.

Whistle Noise Reduction Systems

ARRC tested and is installing train whistle noise reduction systems at at-grade (same level) road-rail crossings in Anchorage. One system involves wayside horns located at the crossing, which direct a whistle-like warning toward vehicle traffic. The other system involves concrete barriers running up to 100 feet down the roadway median on either side of the crossing. The purpose of this project is to reduce noise and confirm that the whistle reduction systems can operate reliably in the Alaska environment. The budget to test two sites was \$221,300. An additional \$994,100 is being used to establish a Quiet Zone from the Anchorage Rail Yard to Klatt Road. Funded by FRA.



A median barrier is installed at an Anchorage crossing.

Anchorage Yard Passenger and Freight Car Shops

ARRC proposes to build a new freight car repair shop and to remodel the existing car shop into a service and repair facility dedicated to passenger cars. Both shops would be located within the Anchorage Railyard. The project would separate passenger and freight operations, allowing more timely and efficient repair and maintenance of the railcar fleet. Investigation and evaluation of potential car shop sites began in 2006. Site evaluation and conceptual design is expected to be complete in 2007. \$300,000 for environmental compliance and conceptual design funded by revenue bonds underwritten by FTA. Final design and construction estimated at \$40 million; funding not yet identified.

Anchorage Yard Weigh-In-Motion Scale

ARRC is purchasing and installing a weigh-in-motion scale to replace the current static scale in the northeast area of the Anchorage Railyard. The new system can weigh entire trains, a group of several cars, or individual cars as they pass over the weigh bridge at speeds of up to 10 mph. The weigh-in-motion scale will greatly reduce employee exposure to pinch points and slip-trip-fall injuries by avoiding rail car coupling and uncoupling. It will also enhance operational efficiency by speeding up the weighing process. Equipment purchase and installation estimated to cost \$360,000, funded by ARRC.

Ship Creek Intermodal Transportation Center

ARRC is designing and engineering an Intermodal Transportation Center (ITC) and associated improvements (pedestrian amenities, transit infrastructure, parking, track modifications, etc.) in the Ship Creek area. The ITC will facilitate connections from one transportation mode to another – rail, public transit, air, marine, bus, taxi, private vehicle, bicycle, and pedestrian – and improve links to Anchorage's downtown business district to meet passenger transit needs over the next 30 years. Construction on the first phase will begin in 2007, and will entail relocation of utilities, construction of two new tracks and rehabilitation of two tracks between the existing depot and Ship Creek Avenue. Future phases will include constructing a service / office building, rehabilitating the historic depot, and constructing a new departure lounge over the tracks and a pedestrian skybridge connecting to downtown. \$19.3 million for conceptual and environmental work, preliminary design, and Phase I final design and construction is funded 91% FTA and 9% ARRC. Total cost is estimated at \$60 million (2005 dollars).



A model of the Ship Creek Intermodal Center concept.

Support of Ship Creek Trail Extension

ARRC is supporting a Municipality of Anchorage (MOA) effort to complete the Ship Creek Trail Extension project. The Railroad became involved in 2001 to help build a trail bridge over the mainline tracks. MOA and the Railroad began design work on the trail bridge in 200. Bridge construction began in spring 2006, with completion anticipated in 2007.

Anchorage-to-Wasilla Track Realignments

ARRC is realigning 44 miles of mainline track, straightening about 70 curves, between Anchorage and Wasilla. The project will increase the speed that trains can safely travel, significantly improving operational efficiency and reducing operational costs. Travel time between Anchorage and Wasilla is expected to drop from 90 minutes to less than an hour, making rail commuter service feasible. Straighter track also lessens the risk of derailment, and reduces rail maintenance and wheel repair. The project was substantially complete in 2006, except for the Knik River Bridge (scheduled for completion in 2007) and straightening of curves at MP 133 (on hold indefinitely due to an underground ice lens). The Eagle River-to-Wasilla budget is \$22.3 million, funded 80% to 91% by FTA and 9% to 20% by ARRC. The Anchorage-to-Eagle River (military installations) budget is \$55.2 million, funded primarily by the U.S. Department of Defense.



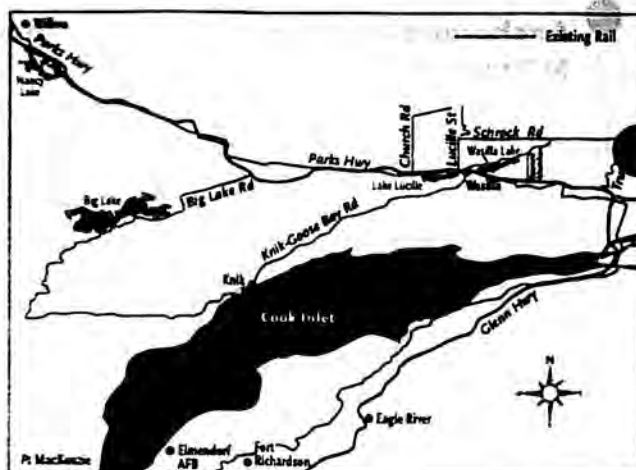
Intersection of new and old alignments at MP 126, near the end of the realignment on Fort Richardson.

South Wasilla Track Realignment

ARRC plans to straighten curves along the mainline track in South Wasilla, between ARRC MP 154 and 158. Realignment and track straightening would eliminate five at-grade crossings, reduce derailment risk, reduce operational and maintenance costs, and allow for faster train speeds. An EA of alternative realignment routes was completed in 2005. \$246,000 for conceptual engineering and the EA and \$2.72 million for preliminary engineering and land acquisition, funded by FTA with matching funds from ARRC. \$3.35 million to continue right-of-way land acquisition funded 91% by FHWA and 9% by ARRC. Total cost for construction of Phase One (MP 154 to 156) is estimated at \$24 million.

Road/Rail Transportation Corridor Realignment Around Wasilla

ARRC, Alaska Department of Transportation and Public Facilities (ADOT/PF), City of Wasilla (City), and Matanuska-Susitna Borough (MSB) are cooperating in the planning and development of an environmental impact study (EIS) for a multimodal corridor within Wasilla and the Mat-Su Borough. The EIS, which expected to begin in 2007, will entail extensive public involvement, and in-depth analysis of environmental impacts for alternative alignments. As the lead agency, ADOT/PF has committed \$2 million toward the environmental work; ARRC has committed \$800,000 thus far.



Wasilla Road-Rail Realignment Study Area.

Curry Quarry Development

ARRC is developing a 10-acre quarry site located within its Curry Reserve, about 22 miles northeast of Talkeetna. The quarry will provide ballast, riprap, armor stone and other rock materials for construction and maintenance of the railroad's track. The project includes a 1-1/2 mile truck access road. Design was complete in 2005. The access road was constructed in 2005 and 2006. In 2007, new facility tracks will be constructed and the site prepared for mining. \$4.5 million budget funded by ARRC.



Curry quarry site development plan.

Colorado to Broad Pass Siding

ARRC proposes to connect the siding at Colorado (60 miles south of Healy) with the siding at Broad Pass (seven miles north of Colorado) by adding approximately 6.1 miles of new siding track and signal control. The project effectively creates a strategic section of double track, facilitating greater flexibility when trains meet on the single mainline track, thereby reducing run time between Anchorage and Fairbanks. Field work and data collection began in 2004 and was completed in 2005. Final design and construction is scheduled to begin in 2010. \$100,000 for environmental and engineering work funded by ARRC. Construction is conceptually estimated to cost between \$28 and \$32 million; funding is not yet identified.

Healy Canyon Safety and Reliability Program

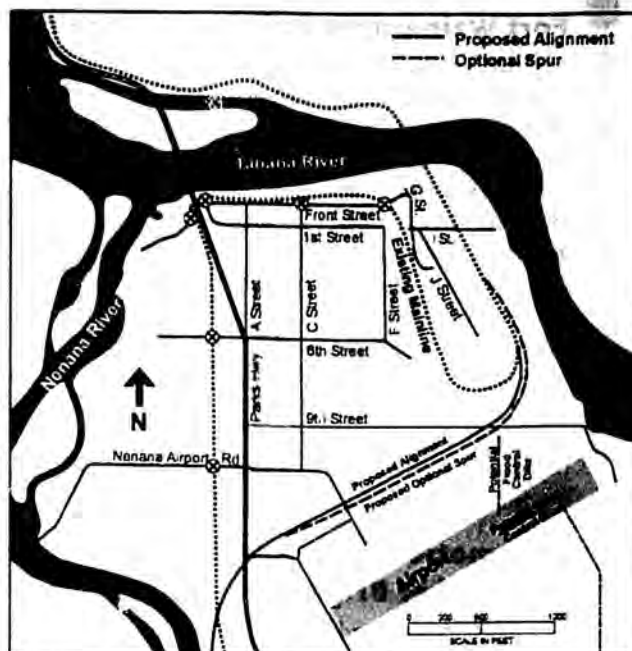
Healy Canyon lies between Denali Park Station and Healy. The tracks follow the Nenana River gorge on a narrow grade requiring two tunnels. ARRC proposes a series of projects to 1) stabilize the track bed in Healy Canyon; 2) control the rock fall problems; 3) "daylight" Moody Tunnel, i.e. removing the top of the tunnel; 4) realign tracks around Garner Tunnel; and 5) realign the tracks to straighten the corridor. The purpose is to enhance safety by addressing problems associated with the area's steep slopes and erosion-prone soil; to enhance reliability by decreasing delays; and to reduce operational costs by increasing speeds along straighter track. Total cost is estimated at \$74 million. \$2.9 million in FRA funds have been used on Healy to date. \$1.7 in FTA revenue bond money is budgeted for 2006 and 2007, and \$900,000 in FTA funds is budgeted for 2008.



Track is aligned around Garner Tunnel, and the tunnel is sealed, in 2005.

Nenana Rail Realignment

ARRC proposes to realign the railroad mainline track around the downtown area of Nenana, following a route outside of the existing right-of-way, north of the airport and southeast of town, over the Parks Highway. The track structure through Nenana would be maintained to support port activities. The purpose is to improve the safety of rail/highway crossings and railroad operations, reduce transportation time, and reduce operating costs. ARRC completed an EA of three alternative realignment routes and a "no action" alternative in 2004. Final design began in spring 2005. Right-of-way acquisition began in 2006 and will continue through 2007. \$1 million budget for the EA funded 91% by the FTA and 9% by ARRC. For 2006-2007, \$947,319 for land acquisition funded by FHWA and administered by FTA, with a 9% match from ARRC. Estimated \$25 million budget for construction and land acquisition for preferred alternative. Funding for construction has not yet been identified.



Nenana Rail Realignment preferred alternative.

Fairbanks Freight Intermodal Improvements

ARRC and the ADOT/PF are pursuing projects that will improve the Freight Intermodal area of ARRC's Fairbanks Rail yard. ARRC is leading improvements to Danby Street intersection access by moving and improving at-grade crossings, constructing a centralized trailer parking area near the entrance and adjacent to Danby, paving Danby Street access, paving and striping the intermodal unloading area and improving drainage. Future improvements call for 100-foot high mast lighting. ADOT/PF is leading improvements to Phillips Field Road by resurfacing and strengthening existing pavement, widening the shoulders, replacing and improving guardrail, and removing vegetation and other sight obstruction. FHWA is funding 91% of the projects with a \$5 million grant through ADOT/PF. ARRC and ADOT/PF will provide a 9% match to the grant; ARRC's match contribution is \$248,000.

Fairbanks Area Rail Realignment

ARRC is analyzing options to a) realign and improve safety of the mainline track, including potential realignment outside the more populated areas of Fairbanks (*previously known as the South Fairbanks Rail Realignment - SFRR - 2006*); and b) realign and improve the Eielson Branch, from the new Fairbanks depot to the end of the branch near Eielson AFB (*previously known as the Eielson Branch Rail Realignment EA - EBRR EA - in 2006*). In December 2006, the Ft. Wainwright segment of the EBRR EA was separated. For 2007, SFRR and EBRR efforts were combined into the Fairbanks Area Rail Realignment (FARR), which will likely require an Environmental Impact Statement. Until EIS funding is identified, FARR will move forward with an alternatives analysis that incorporates the findings of previous studies. \$250,000 is budgeted in 2007 funded 91% FTA and 9% ARRC.

Fort Wainwright Rail Realignment

ARRC proposes to improve and/or realign five miles of track through Fort Wainwright. Part of the Eielson Branch, the segment lies between MP G3.0 (Trainer Gate Road), and MP G8.0 (Badger Road). The fort segment was included in the EBRR EA, however, through public involvement, it became clear that part of the branch realignment would be better addressed in a broader study that included track realignment around Fairbanks. This broader effort is now known as FARR. Because the Ft. Wainwright Rail Realignment (FWRR) has immediate need and independent utility federal funding agencies agreed to pursue FWRR as a separate EA. Remaining DOD funding for EBRR is redirected to FWRR. DOD appropriated an additional \$12 million to finish design and begin construction in 2007. An additional \$25 million is needed to complete FWRR construction.

Locomotives and Railcars to Support the Stryker Brigade

ARRC has ordered four SD70MAC locomotives and 30 flat cars to enhance its capability to support the 1st Stryker Brigade, 25th Infantry Division, at Fort Wainwright. Additional locomotives and railcars will provide more flexibility and capacity to meet the brigade's demands for reliable transport. Delivery of the flat cars and locomotives is expected in 2007. \$16 million budget funded through DOD and administered through FRA.



ARRC crews load 1st Stryker Brigade vehicles and equipment.

Northern Rail Extension

ARRC proposes to extend its mainline track from Eielson AFB, about 80 miles southeast to Delta Junction. The extension may include a 15-mile spur from Flag Hill to Blair Lakes Military Training Area. The project would offer a) commercial freight service supporting communities and commerce in the corridor; b) a passenger transportation alternative to the Richardson Hwy; c) support of military training; and d) support of regional tourism. ARRC initiated the conceptual development in 2004. The Surface Transportation Board initiated an EIS in fall 2005. The EIS, preliminary engineering and design is estimated to cost \$12.5 million, funded by a DOD appropriation, administered by the FRA. Construction cost is estimated at \$450 to \$800 million. Funding is not yet identified.



Northern Rail Extension: Potential alternatives for a proposed railroad extension from Eielson AFB to the Delta Junction area.

Passenger Locomotives and Cars

ARRC has a fleet of 58 passenger-related train vehicles, including 14 locomotives, 3 power/cab cars, 37 locomotive-hauled cars/coaches, and four self-propelled rail diesel cars. This equipment varies in age and condition. For 2006-07, \$7.15 million was budgeted to purchase two bi-level dome coaches and \$5.4 million is budgeted to purchase two low-level dome coaches, funded 91% by the FTA and 9% by ARRC. Also in 2006, \$1.55 million was spent to rebuild the *Denali Car* to include a bedroom suite, full kitchen, dining and conference areas; funded \$800,000 by the Rasmussen Foundation/Ed Rasmussen and the remainder by ARRC.



The new bi-level dome coaches offer first class service for the first time during the 2005 summer season.

Improved Siding Access

ARRC is improving signalization and access to sidings (turnout passing lanes) by replacing manual switches with remote controlled switches, heating switch locations, lengthening existing sidings to accommodate longer trains, upgrading rail and ties on existing sidings, building new sidings, and installing Centralized Traffic Control (CTC). These efforts are enhancing efficiency by enabling movement of more and longer trains in meet-and-pass situations. The risk of injury and incidents is reduced with the introduction of a fail-safe system to determine switch status. FRA provided more than \$24 million between 2001 and 2005, \$2.5 million in 2006 and a budget of \$3.066 million in 2007 funded 91% by FTA and 9% by ARRC.

Collision Avoidance System

ARRC is developing a multi-phased program to design, develop, and implement a communication-based train control system that uses data radio communications between train dispatchers and train crews, or dispatchers and roadway workers. The Collision Avoidance System (CAS) project is comprised of a Computer Aided Dispatch (CAD) system, an on-board computer system, VHF packet data radio technology, and GPS locator technology. The CAS will provide improved information for decision-making, and will also detect infrastructure failure and potential operations violations quickly, and intervene when necessary. The CAS is being accomplished in five phases, each achieving incremental safety benefits. FRA previously funded \$11.9 million, \$4.48 million in 2006, and \$7.5 million budgeted for 2007, funded 91% by FTA and 9% by ARRC.

Track Rehabilitation

ARRC continues an aggressive track rehabilitation program in 2007 that calls for replacement of rail, ties and ballast in areas of critical need. Each year, ARRC converts several miles of track into continuously welded rail, which dramatically decreases maintenance costs and improves ride quality [MP 181 to 187 (Willow) and MP 280 (Hurricane) to 311 (Broad Pass) in 2007]. Each year, ARRC also replaces a portion of its nearly two million wooden ties (64,000 ties in 2007), and installs concrete ties along curves and other high-use stretches (curves north of Nenana and south of Denali Park in 2007). In 2007, ARRC plans to resurface about 200 miles of track using 100,000 tons of ballast rock. \$31.7 million budget in 2007, funded through the sale of ARRC revenue bonds backed by annual FTA formula funds.



Crews install concrete ties.

Computerized Materials Maintenance Management System

ARRC is acquiring a fully integrated Computerized Materials and Maintenance Management System (CMMS) in phases, beginning in 2002. The CMMS is providing a flexible, cost-effective and automated system to support and manage equipment maintenance, facilities maintenance, purchasing and inventory. CMMS meets maintenance needs in several areas, including heavy equipment, mechanical (locomotives and rail cars), bridges, buildings, facilities, signals and crossings. The system will lead to safer, more reliable equipment, translating to better customer service. ARRC also anticipates substantial cost-savings as inventories are consolidated and reduced. 2005-2007, ARRC continues to expand CMMS into additional company departments and systems. The FTA assisted with start-up in 2002, funding \$800,000. ARRC has funded the remaining implementation costs totaling more than \$3.3 million between 2002 and 2007.



Use of CMMS is contributing to ARRC's goal of Reliability Excellence.

Bridge Program

ARRC's 500-plus miles of mainline track includes 162 bridges that cross barriers ranging from streams to gulches. ARRC's 2007 Bridge Program calls for major maintenance, overhaul and replacement needed to maintain railroad integrity, safety and efficiency. In 2007, ARRC plans to finish replacing two aging timber trestle bridges with culverts, and to replace eight timber trestle bridges with ballast deck, concrete deck or steel bridges. Upgrades are planned for 11 other bridges. \$7.1 million budget (\$5.3 million by FTA, \$1.8 million by ARRC).



At Knik River Bridge (MP 146.1) new piers and a new south span were constructed in 2005-2006. Demolition of existing piers is scheduled to be complete in 2007.

Crossbuck Illumination Test

ARRC is testing the effectiveness of experimental illumination materials installed on railroad crossbucks, the familiar X-shaped warning signs that indicate a railroad crossing is present. ARRC will affix the luminescent material at select crossings that are not equipped with signals (flashing lights) and gates. The material is designed to retain light absorbed during the daylight hours, so that it radiates light during hours of darkness. Based on initial tests in 2005, material was reformulated for retesting in 2006 and 2007. \$992,500 budget funded by FRA.



Experimental illumination material may make railroad crossbuck warning signs more visible during the dark night time hours.

Section Maintenance Facilities

ARRC plans to build up to six steel-framed heated section maintenance facilities (SMF), which will house an office, restroom, utility room and open shop area for rail maintenance equipment and trucks. Cantwell is the site for construction of the first SMF. Other locations include: Hurricane, Portage, Talkeetna, Wasilla and Nenana. This project will bring uniformity to section architecture and infrastructure, lowering operating costs and supporting continued growth. The facilities will also improve employee conditions in semi-remote areas. Construction on the Cantwell SMF began in 2005 and was complete in fall 2006. Construction of facilities at other locations will follow over the next few years. \$750,000 to \$1 million budget per facility, depending on facility size and location; funded by ARRC.



The first Section Maintenance Facility was built in Cantwell in 2006.

current as of 1/29/2007

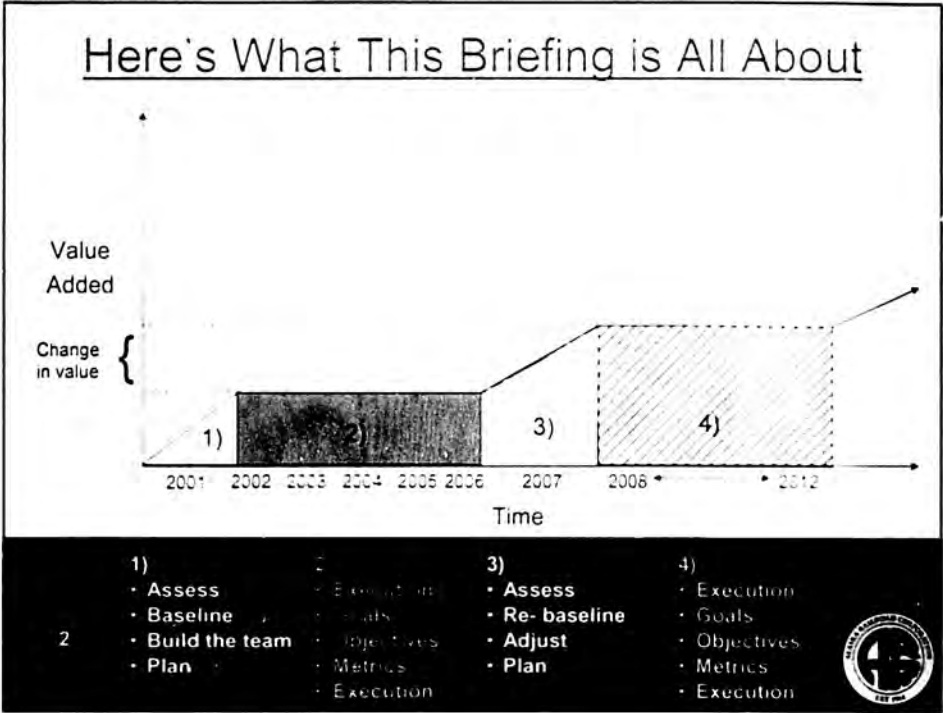
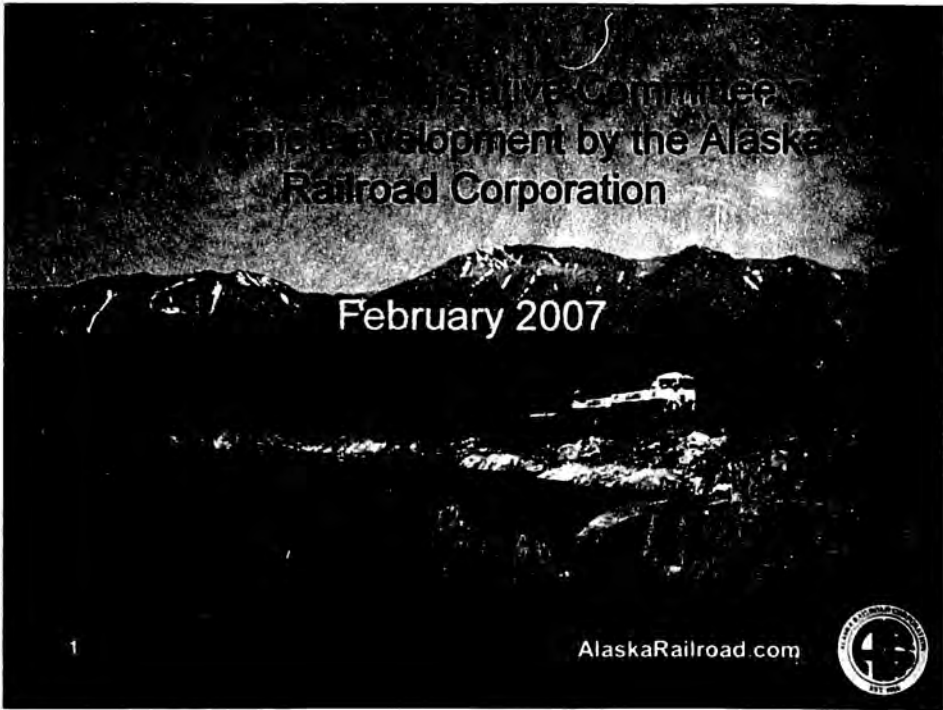
Alaska Railroad Corporation 2007 Program of Projects

At the beginning of each calendar year, ARRC conducts open house events in Anchorage, Fairbanks, Seward and the Mat-Su Valley to inform the public about the proposed Program of Projects (POP) for the year. While these events provide a good forum for residents to comment on any or all projects, the public is not limited to commenting at these events. Public input is accepted year-round, and in a variety of formats as outlined at the right. Detailed project descriptions are provided within fact sheets that are created for major federally-funded and internally-funded capital improvement efforts. These are accessible at the Alaska Railroad web site www.AlaskaRailroad.com (click first on "INFORMATION", then on "PROJECTS").

Public Input:

Public comment on any or all of these projects may be submitted via:

- Mail to: Capital Projects
Alaska Railroad Corporation
P.O. Box 107500
Anchorage, AK 99510-7500
- E-mail to public_comment@akrr.com
- Fax to (907) 265-2365
- ARRC's TTY/TTD 265-2620
or voice 265-2494 or Alaska Relay TTY 800-770-8973 or voice 1-800-770-82555



Alaska's Railroad

Spending on operations and capital projects

- Increases in construction, health care, business services, and retail payrolls
- Efficient way to transport heavy and/or bulk commodities
- Principal mover of jet fuel to Anchorage International Airport.
- Provides a viable alternative to long-distance driving
- Supports the U.S. military with the transport of equipment to and from the "DOD Strategic Port" of Anchorage
- Reduces pressure on State road system

Creates 3,000 jobs and \$150 million in payroll across the State

Source: "Economic Significance of Alaska Railroad" December 2004, ISER report, University of Alaska

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ARRC Mission

Be profitable while delivering safe, high quality service to our freight, passenger, and real estate customers. Foster the development of Alaska's economy by integrating Railroad and railbelt community development plans.

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2001: A Year of Baselineing

- Safety An immediate priority
- Build the team
 - Include succession planning
- Organize for success
- Design legislative game plans
 - Washington, DC - Juneau, AK
- Restructure the budget process
- Self-assessment
- Intensify community outreach

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Create The "To Do" List

- Provide better leadership / management / supervision
- Change the safety culture
- Feedback... What are employees saying?
- Deal with imminent loss of federal Earmarks
- Pay and benefits need a comprehensive assessment
- Plan and exercise to meet tough Spill Response challenges

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"To Do" (continued)

- Seamless freight / passenger operations integration
- Technology application and integration assessment
- Bridge / siding comprehensive assessment
- Equipment comprehensive assessment
- Facility comprehensive assessment
- Create Code of Conduct

Build a Strategic Plan

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Planning Ahead

- Plans are a VECTOR.. magnitude + direction
- Plans create conditions for success that everyone can see more clearly
- Plans reduce county option and "I've Got a Secret"
- Plans force us to measure progress and be accountable

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1st Five Year Plan



2002 - 2006

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Management's Challenge:

Think strategic, become more demanding, more analytical, more disciplined

- Demand accountability
- Embrace change
- Insist on fact-based decisions
- Think programmatic solutions

We must improve "The Business of the Railroad" as we go about daily conducting the "The Railroad Business"

- Risk Management
- Entrepreneurship
- Investment Strategy
- Productivity
- ROI
- Cash Flow
- CapEx
- Strategy to Task
- Expense Control
- Revenue Entitlements
- Excellence

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Management's Challenge:

Bottom Line:

Make decisions that add value to the Alaska Railroad, and the State of Alaska

- Financial Value
- Beneficial Value

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How Did We Do?



2002 – 2006

Outcomes
Measurements

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2006 Earning Results (unaudited)

- Solid revenue growth overall
 - Total revenue exceeded budget by \$2.0 million (1.6%)
- Expense increases effectively mitigated where possible
 - Total expense under budget by \$840,000 (0.7%) despite significant employee benefit and extreme fuel cost increases

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2006 Balance Sheet / Cash Flow Highlights

- Strong Balance Sheet
 - Assets total \$725 million, equity rises to \$181 million
 - Very good liquidity
 - Current ratio – 1.83 (current assets / current liabilities)
 - Quick ratio – 1.52 (cash and receivables / current liabilities)
- More than \$24 million in cash flow (earnings plus depreciation) generated

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Year-End Status of Benefit Trust Funds

- Defined benefit pension fund totaled \$66 million
 - Up \$9.0 million from year end 2005
 - Funding exceeds liability by \$9.5 million
- Retiree medical trust fund totaled \$13.2 million
 - Up \$5.4 million from year end 2005 (inception year)
 - On-track for full-funding by end of 2009

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Outcomes

(in millions of dollars)

	2002	2003	2004	2005	2006
Assets	367	440	516	574	725
Net Assets	119	137	150	171	181
Freight Revenue	76	85	86	94	90
Passenger Revenue	14	14	17	19	21
Real Estate	11	14	13	14	12
Total Revenue (w/ Grants)	106	127	129	144	147
Net Income	8.9	14.5	15.4	12.7	10.2
End of Year Cash	19	26	10	2	13
Operating Ratio	.98	.89	.91	.95	.96
Cap Ex	66	81	102	90	107

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Outcomes

(in millions of dollars)

	2002	2003	2004	2005	2006
Retirement Obligation	38	45	56	53	56
Employer Contribution	1.4	1.6	1.5	.67	0.61
Retirement Plan Assets	32	44	51	57	66
Retiree Medical Obligation	14.3	14.1	15.8	16.4	22.6
Employer Contribution				7.7	5.0
Retiree Medical Assets	0.6	0.8	0.9	7.6	13.2



Wholesale Change in Safety Culture

- 65% reduction in FRA reportable injuries
- 72% reduction in derailments
- ARRC FRA reportable train accidents 82% below US Railroad average
- Employee lost time down 60%



Safety Achievements

- Incident Command Center
- Response plan, training, exercises
- Employees create a user friendly Safety Manual
- National Safety Employee of the Year
- Harriman Award

Four record years out of last five

2006 Best Ever !!

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Track Rehabilitation Program (TRP)

2006 = Year 1

<u>Project</u>	<u>2006 Planned</u>	<u>2006 Actual</u>	<u>2001</u>
Wooden Ties	50,000	40,000	30,600
Concrete Ties	flexible	21,000	-0-
Welded Rail	61.5 miles	85.2 miles	7.6 miles
Rail Replaced	56.8 miles	56.8 miles	11.0 miles
Resurfacing	300 miles	300 miles	242 miles
Rail Grinding	500 miles	500 miles	-0-
Rail Detection	2,000 miles	2,000 miles	
Bridge Replace/Rehab	10	10	6
Siding Upgrades	0	1	3

Productivity!

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Infrastructure

- Rebuilding the Main Line 10 Years Faster
 - Secured \$165 million in tax exempt bond authority
 - First issuance, summer 2006, for \$76m
 - Funds concrete ties (for use on sharp curves), continuous welded rail, wood tie replacement, bridge improvements, technology
 - Accelerates line rehab from Anchorage to Fairbanks
- Technology Application
 - Implementation of Collision Avoidance System, PTC
 - Track integrity sensor system allows railroad to pinpoint rail breaks in "dark territory"
 - Estimate investment will reach \$ 47M when totally completed
- Curry Quarry Initiative
 - Annual Savings \$.75 million, IRR 24%

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Real Estate

- New facilities on line
 - Airport, Denali and Fairbanks Depots
 - Anchorage Operation Center
 - Consolidated Projects and Signals Buildings
 - Seward Freight Dock
 - Seward Intermodal Facility upgrades
 - Railroad Police / Security Building
- Ship Creek property development continues
 - The Bridge Restaurant
 - C-Street Park
 - Paved parking lots, curbs, landscaping
 - Purchased Railroad HQ building
- Fairbanks Heat Conversion Project completed

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Passenger Service

- 2006 sets revenue record
- GoldStar... first class upgraded service a big winner
- New coaches ordered to fit growing demand
- New charters:
 - Cruise Train and Princess "Straight to the Wilderness"
- New Services
 - Spencer Glacier Day trip, added tour packages, Curry and Forest Service Whistle Stop excursions on the horizon

Continued passenger growth of 3-5 percent projected

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Seeking More Business Building Stronger Business Partnerships

- Whittier Barge Dock improvement for Lynden / CN barges
- The "Bridge" restaurant agreement
- Princess "Straight to the Wilderness" from Whittier to Denali
- Usibelli Coal Mine ... spot market support
- TOTE Corp.
- Agrium Corp.
- Flint Hills Corp.

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Corporate Recognition

Operations Awards

- 2005: Dwight West for Safety Person of the Year, American Short Line and Regional Railroad Association (ASLRRA).
- 2004, 2005: "Jake" Award from the ASLRRA for exceeding the industry safety average.
- 2006: Wasilla Chamber "Gold Award" for significant contributions to the visitor industry

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Corporate Recognition

Marketing Sales & Service Awards

- 2003: Seven awards given from *Onboard Services*. Overall best Railroad; 1st place in safety, Equipment, entertainment, uniforms, and food services; 2nd for onboard services.
- 2004: Rob Halpin receives Distinguished Service Award from National Defense Transportation Association

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Corporate Recognition

Public Relations Awards

- 2004: Public Relation Society of America (PRSA):
 - Award of Excellence for 2004 Annual Report
- 2005: International Silver Davey Awards:
 - Consumer Magazine Advertisement – Industrial Strength
 - Print Collateral Annual Report – Alaska Railroad Annual Report
 - Print Collateral (safety advertisement) – Planes, Trains

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What's in Our Future?



Second
Five Year
Plan

2008 – 2012

A Peek Under the Tent

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A Robust 2007 Capital Budget

• Rail	\$15.3M
• Ties	\$12.0M
• Ballast/Surfacing	\$ 4.3M
• Bridges	\$ 7.3M
• Track, Sidings, Realignment	\$21.0M
• Equipment	\$ 2.9M
• Technology/Signal	\$10.4M
• Rip Rap	\$.7M
• Mechanical	\$.8M
• Facilities	\$ 5.5M
• Passenger Equipment	\$.75M
• Other	\$18.8M
Total	\$99.75M



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Seward Projects

- Freight Dock Expansion
- Seward Highway mile 0-8 trail support
- Coal Loading Facility improvements
- Yard Expansion



Above: Seward Freight Dock

Below: Seward Coal Loading dock next to cruiseship at ARRC's Passenger Dock.

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Whittier & Turnagain Arm Projects

Whistle Stop Service location and proposed self-propelled railcar



- Whittier Master Plan
- Whittier Passenger Intermodal Facility
- Barge slip upgrades
- Marginal Wharf
- Chugach Forest Whistle Stop Service with DMUs



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Anchorage Area Projects

- Ship Creek Historic Depot renovation and intermodal expansion
- Quiet Zone through Anchorage
- Anchorage Car Shop
- Reorganization of Anchorage Rail Yard
- Capacity improvements – possible double track extension to Anchorage Yard



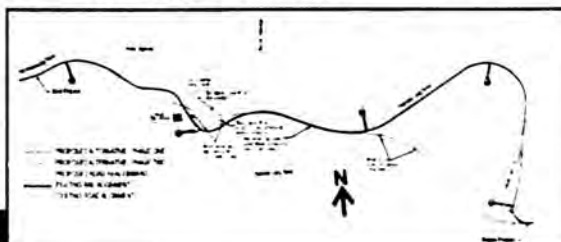
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Mat-Su Projects

- South Wasilla Rail Realignment
- Joint Transportation Corridor around Wasilla
- Community projects with Railroad interest
 - Willow to Port McKenzie Rail Spur
 - Mat-Su Ferry connections
 - The Great Wall of Wasilla



South Wasilla
Track
Realignment

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Fairbanks and Interior Projects

- Eielson Branch Realignment
 - Ft. Wainwright Base Realignment
- Tanana Bridge
- Fairbanks Freight Rail Realignment
 - Alternative Analysis
- Northern Rail Extension (From North Pole to Delta)
- Nenana Realignment
- Healy Canyon repair / upgrade
- Alaska Canada Rail Link Study



Healy Canyon stabilization efforts include a recent realignment around Garner Tunnel.

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Regional Transportation Outlook

- ARRC supports a regional transportation planning approach
- Commuter Rail... next steps:
 - Railroad will provide shuttle and other enhanced transit services to better utilize airport depot and introduce public to growing commuter potential.
 - Regional Transportation Authority needs to be formed to advance commuter rail service
- Intermodal is the way to go

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Community Development

ARRC and communities... Integrated planning for access and economic growth.

- Comprehensive Plans
- Trails in ROW
- Crossings
 - Split grade
 - Culverts
 - Ownership
 - Indemnity
- Crossing Closures
- Trespass issues
- Eminent Domain

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Report to the State of Alaska

January 2007

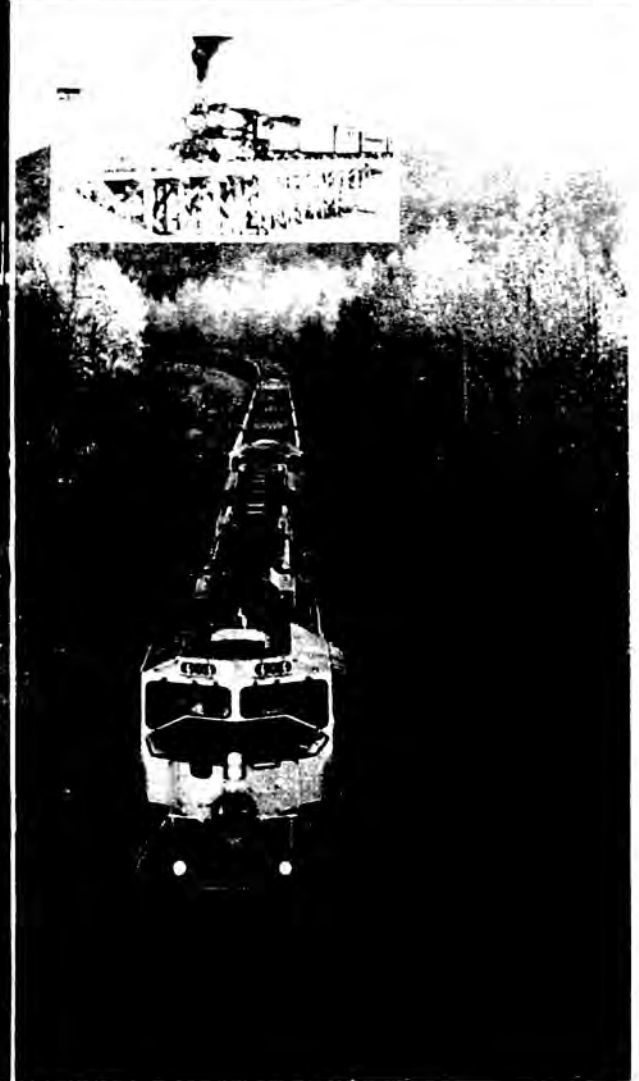
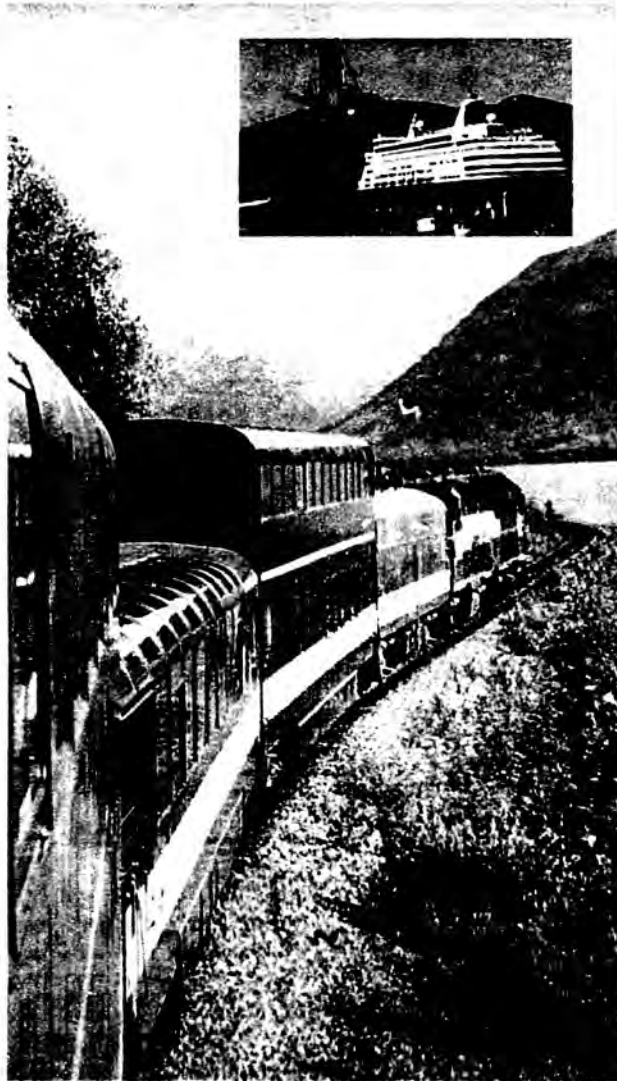




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ARRC Guiding Principles

ARRC Mission

- To be profitable by focusing on safe, high quality service to our freight, passenger, and real estate customers.
- To foster the development of Alaska's economy by integrating railroad and railbelt community development plans.

ARRC's mission stems from language found in the Alaska Railroad Corporation Act.

ARRC Vision

"Building a great Railroad across the Greatland."

An important element in fulfilling this vision is ARRC's success since 1996 in qualifying for federal funding...an entitlement afforded the railroad's public status and its passenger service mission. As a result, ARRC has been able to greatly accelerate long overdue mainline maintenance and upgrades.

In addition, other federal grants for facility improvements, such as intermodal facilities and docks, as well as improved technology, have come to ARRC via recent major federal transportation and transit bills.



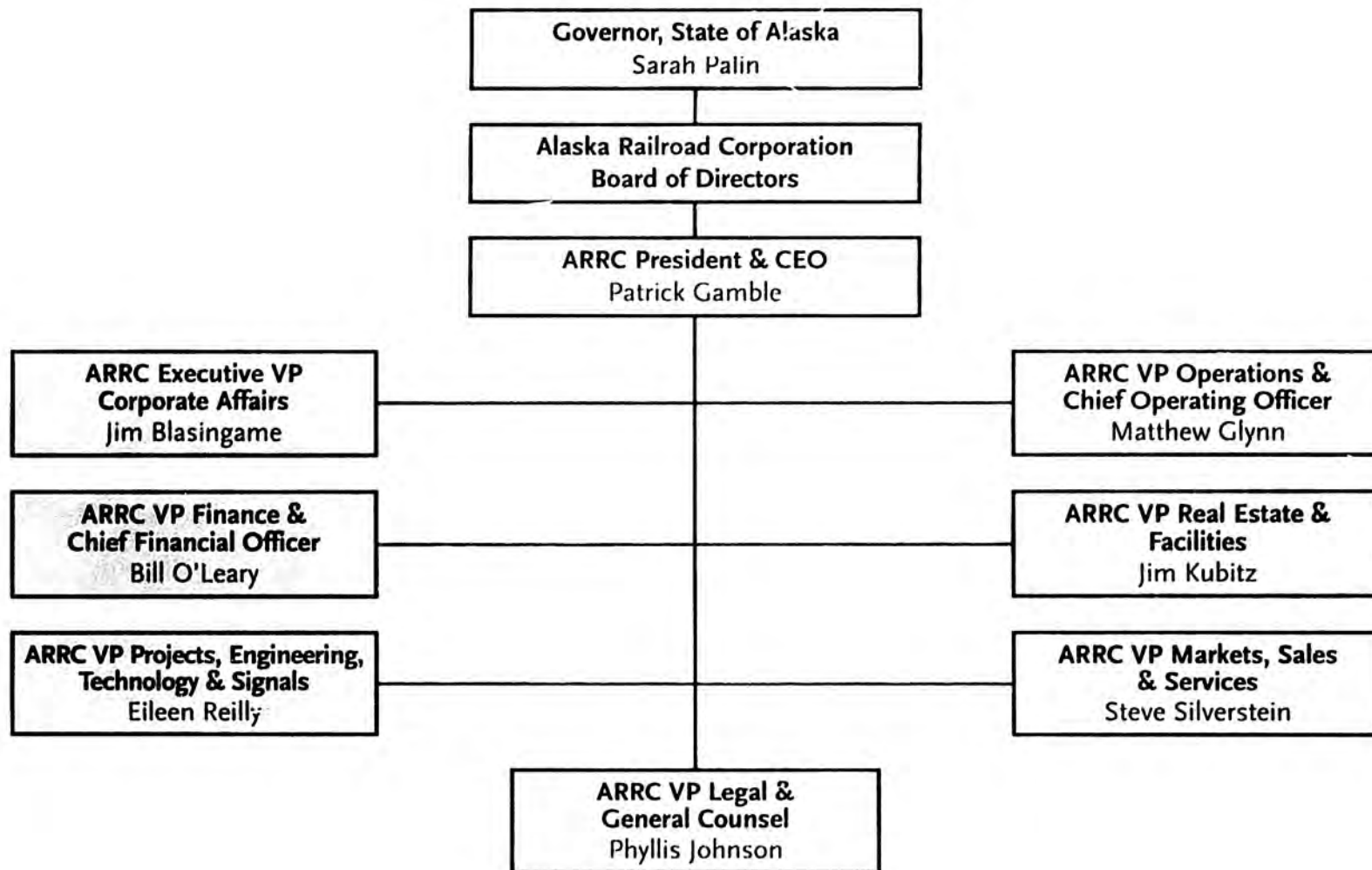
ARRC Values

We are a values based organization. Values are all about people, not things. We are all about taking care of our people. We believe who you are is as important as what you do. Character counts. Many of our values are embodied in our corporate Code of Conduct. Our fundamental core values consist of integrity, excellence, and service.

As a responsible partner, in order to accomplish the ambitious goals we set out for ourselves in conjunction with those of others along the railbelt, the ARRC must be a safe, secure, customer responsive, financially and environmentally sound, employee friendly corporation. We must provide a stable, reliable foundation that can be counted on to enhance the future economic growth of the state and the municipalities we support. If our corporate foundation is not sound, support for further state growth and development becomes problematic at best. Values and high standards are the building blocks of that foundation.



Organizational Chart





Alaska Railroad Quick Facts

Purchase Price (January 5, 1985)

Paid to federal government	\$22.3 million
Start-up costs & contributed capital	<u>\$11.9 million</u>
Total Investment-State of Alaska	\$34.2 million

Organization (following State purchase)

- Independent corporation owned by State
- Managed by a seven-member board of directors. Position qualifications are spelled out in law, members appointed by the Governor.
- Mandated to be self-sustaining, responsible for all its own financial and legal obligations

Financial Statistics

January 1-December 31, 2006 (unaudited)*

Total Assets	\$ 725 million
Total 2006 revenues	\$ 124.3 million
Total 2006 expenses	\$ 114.1 million
2006 net income	\$ 10.2 million
2007 net income budget	\$ 11.5 million

Operating Data

Miles of main line	467
Miles of branch line	77
Miles of yards and sidings	107
Total miles of track	651
Freight cars (owned & leased)	1,643
Passenger cars	48
Locomotives	59

Operating Statistics

January 1-December 31, 2006

Passenger ridership	525,293 passengers
Freight tonnage	7.67 million tons

Employees (as of January 2007)

Number of year-round employees	777
Average years of service	10.6
Average age	44.05
Male	636
Female	141

Unions (as of January 2007)

Most of ARRC employees are members in one of five unions:

United Transportation Union	137
Transportation Communication Union	45
International Association of Machinists	62
American Federation of Govt. Employees	303
American Train Dispatchers Department	10

Benefits

- Corporation provides a fully funded defined benefit pension plan
- Corporation provides for health and life insurance
- Corporation provides for retiree medical benefits

* ARRC audits are normally complete by March 31.



Alaska Railroad "At A Glance"

Corporate History

The Alaska Railroad was built by the U.S. government between 1914 and 1923. It was operated by the federal government until January 1985 when it was purchased by the State of Alaska for \$22.3 million to serve Alaska businesses and communities as an engine of community development and economic growth. The Alaska State Legislature created the Alaska Railroad Corporation (ARRC) in 1984 as the entity to own and operate the railroad and to manage railroad property after transfer.

The legislature appropriated \$11.9 million to the new corporation for start-up costs because the U.S. government retained control of the railroad's bank accounts at the time of transfer (January 5, 1985). The legislative appropriation was sufficient to cover two payrolls and the costs of several ongoing capital projects.

Board of Directors

ARRC is a statutory corporation, managed by a board of directors whose positions are described in law and appointed by the Governor. The seven-member board consists of the Commissioner of Transportation & Public Facilities, Commissioner of Commerce, Community & Economic Development, one member of the board must have at least 10 years of management experience on a U.S. railroad, one member must be an executive with a U.S. Railroad, while one director must be an employee-member of ARRC's labor unions. Two positions are designated for residents of the two judicial districts in which the railroad operates.

Employees (as of November 2006)

ARRC employs approximately 785 full-time employees and another 150 seasonal employees from May through September. ARRC employee wages and benefits (approximately \$57.5 million in 2006) are paid through earned corporate revenues and grant activities.

The enabling act of the Alaska Railroad Corporation (AS 42.40) specifies that the employees of the corporation are not state employees. ARRC employees are not covered by state public employee contracts, nor do they receive state-funded benefits. Approximately 565 of ARRC's employees are represented by five different unions that negotiate separate contracts with the corporation.



Business Facts

While wholly owned by the State of Alaska, the Alaska Railroad is responsible for all of its own financial and legal obligations. According to statute, ARRC is mandated to be a self-sustaining corporation—that is, required to conduct its business without operating subsidies from the state. ARRC serves ports and communities from the Gulf of Alaska to Fairbanks. It is the only full-service railroad in the United States providing both regularly scheduled year-round freight and passenger services. From tidewater at Whittier and Seward to the heart of Interior Alaska, ARRC's route covers more than 500 miles (with 651 total miles of track including spurs, industrial and yard track).

ARRC's operations are supported through revenues generated by freight, passenger and real estate services. Maintenance and operations centers are located in Anchorage, Cantwell, Fairbanks, Healy, Hurricane, Nenana, Portage, Seward, Talkeetna, Wasilla, and Whittier.

ARRC's fleet includes:

- 59 locomotives
- 48 passenger cars including three power cars and four rail diesel cars
- 1,643 freight cars (owned and leased)

Finances

With total revenues of \$124.3 million and total expenses of \$114.1 million, the Alaska Railroad netted \$10.2 million in 2006. Transportation of petroleum products, gravel, coal, oilfield and mining supplies, chemicals and consumer goods account for more than 73 percent of ARRC's gross revenues. ARRC serves more than half a million passengers each year, accounting for approximately 17 percent of gross revenues.

ARRC owns approximately 36,000 acres of land. Of that, 14,000 acres are right-of-way and 8,000 acres are used in operations. The remaining land can be leased or permitted to help generate revenue for ARRC. Real estate revenues generally account for about 10 percent of the corporation's gross revenues.

The railroad invests all cash flow from its annual net earnings and depreciation on capital improvements to its 651 miles of track, 151 bridges, 81 crossing signals, the roadbed, technology application and other assets. Additionally, significant amounts of operating dollars are spent on maintenance of rail cars, locomotives, and rail infrastructure.

Safety & Security

Safety is all about risk management and good judgment. They are fundamental components of our safety culture. The corporate vision and mission are not achievable without a highly effective safety culture at work throughout the Alaska Railroad. The Railroad will expend significant resources to reinforce and improve safety, even to the extent that Return on Investment (ROI) for safety projects may be intentionally of less financial value and more of beneficial value.

"Security" no longer refers to just resource protection against theft or vandalism. The Department of Homeland Security (DHS) has implemented

numerous mandatory federal regulations and programs on U.S. railroads, including the Alaska Railroad. The Alaska Railroad has extensive port facility holdings between Southcentral Alaska and Seattle, which are fast coming under a growing list of U.S. Coast Guard (USCG) regulations. Associated with these requirements are both funded and unfunded mandates. Administrative competency has become a requirement for regulatory compliance, as well as a competitive skill for capturing federal grant allocations to help fund security initiatives. The Alaska Railroad is visited and inspected on a regular basis by DHS and USCG.



How ARRC Differs from State Agencies

The Alaska Railroad Corporation Act of 1984 established an independent state-owned corporation that is governed by a seven-member board of directors appointed by the Governor. The President and CEO of the corporation reports to the board.

Unlike other State business enterprises (such as the Alaska Housing Finance Corporation and the Alaska Industrial Development and Export Authority), ARRC's enabling statute specifically requires that all revenue earned by the railroad shall be retained by the railroad. The federal transfer act also contains this requirement. The intent was to ensure the railroad had the money it needed to meet basic maintenance and capital needs, improve safety and increase profitability, thereby avoiding dependence on the state general fund. The corporation's annual earnings are invested entirely back into the corporate capital program.

Although ARRC is not covered under the State's Executive Budget Act, the state government ensures oversight of ARRC's operation and management practices through the following controls:

- The ARRC Board of Directors is responsible for initiating both a financial and a performance audit each year conducted by independent financial and management companies. The annual performance audit is conducted by a recognized railroad management expert to ensure that ARRC is being managed and operated effectively and efficiently.
- ARRC must file an oversight report with the Legislature and Governor before it undertakes certain expansion, reduction, or diversification of services.
- Legislative approval is required for certain corporate actions, such as sale or transfer of the Railroad's entire interest in land, or leasing land for longer than 55 years.

- The Legislative Budget and Audit Committee reviews ARRC's operation and management practices.
- ARRC's procurement procedures are required to be substantially equivalent to state procurement requirements.
- ARRC employees and directors are subject to the Executive Branch Code of Ethics.
- ARRC's spill prevention and response plans are filed and regulated by the State and ARRC is required by state law to show sufficient financial responsibility to respond to spills.
- Bond sales must be approved by the Legislature.





Alaska Railroad Mileposts

Each year the Alaska Railroad takes stock of both its accomplishments and unmet challenges. From this annual analysis, the management team establishes a new baseline of goals and objectives for both the short and long terms.

ARRC Five-Year Objectives

- Reduce employee injuries to no more than 2.0 per 200,000 man hours.
- Eliminate 25% of at-grade highway/railroad crossings.
- Achieve and sustain an operating ratio of at least .98 by 2011
- Generate and sustain company-wide cash flow, measured as net earnings plus depreciation, of \$39 million per year by 2011.
- Generate and sustain cash flow from real estate activities of \$9 million per year by 2010.
- Fully implement Collision Avoidance System technology by 2008.
- Reduce average running time for freight trains between Anchorage and Fairbanks to consistently under 10 hours.
- Complete the entire Reliability Excellence transition plan by 2009.
- Set up an annual programmatic investment plan for ARRC facility infrastructure, including yards and marine facilities, to meet business, growth, employee, and community requirements.
- Ensure ARRC attracts and retains excellent employees by being known as a premier Alaskan employer and by continuously improving our employee training working environment, remuneration, and benefits.
- Work to harmonize ARRC business and development plans with railbelt community business and development efforts.
- Maximize return from existing business relationships and seek out new profitable opportunities without sacrificing world class customer service.
- Build the bridge across the Tanana River.
- Extend the rail line to Delta Junction.
- Complete the accelerated Track Rehabilitation Program (TRP) plan by 2012.



2007 Corporate Goals

Safety

- Achieve the 2007 individual Safety goals, with special emphasis on the human factor

incidents listed below achieving "0" violations:

- Blue flag violations
- Switch run throughs
- Runaway cars

Security

- Complete the ARRC Security Plan
- Conduct the first live training exercise

Financial

- Complete year 2 of the Track Rehabilitation Program (TRP) plan as scheduled
- Generate \$26.6 million in cash flow company-wide with Real Estate activities contributing \$6.8 million to that total
- Enhance and expand the on-line financial metrics dashboard suite
- Implement an improved capital project monitoring/reporting solution
- Continue implementation of the Real Estate acquisition strategy, focusing on Whittier

General

- Complete 2007 Capital Work Plan with less than \$1.5 million project carry over at year end
- Implement CMMS Inventory Management for Signals/Telecom & Facilities Maintenance
- Establish the Locomotive Power Management functions within the Mechanical Department
- Conclude the Ship Creek basin EPA consent decree. Engage FRA for reimbursement
- Run Anchorage to Fairbanks 75% of the time within 12 hours
- Engineer startup of a Regional Transit Authority in Southcentral
- Complete at least one major Ship Creek development project or initiative
- Conclude the Eklutna quarry and land swap agreements

Five-Year Forecast — Capital Budget

(in millions)	2007 Budget	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast	TOTAL
ARRC Internally Generated	\$ 15.6	\$ 18.9	\$ 23.0	\$ 28.6	\$ 32.0	\$ 118.1
Bond Funded	\$ 31.1	\$ 22.2	\$ 25.9	\$ 22.6	\$ 20.8	\$ 122.6
Federal Railroad Administration	—	—	—	—	—	—
Federal Transit Administration	\$ 35.1	\$ 38.1	\$ 40.5	\$ 41.7	\$ 42.9	\$ 198.3
Federal Highway Administration	\$ 1.7	\$ 1.7	\$ 1.7	—	—	\$ 5.1
Department of Defense	\$ 16.0	\$ 12.0	\$ 12.0	—	—	\$ 40.0
Total	\$ 99.5	\$ 92.9	\$ 103.1	\$ 92.9	\$ 95.7	\$ 484.1

Five-Year Capital Project Plan — Internal Funding

	2007	2008	2009	2010	2011	TOTAL
Vehicle and Equipment Program	2,910,000					2,910,000
Maintenance	3,170,000					3,170,000
Mechanical	672,130					672,130
Transportation	604,000					604,000
Passenger Operations	318,000					318,000
Health, Safety & Environmental	443,750					443,750
Markets, Sales & Services	2,807,500					2,807,500
Human Resources	50,000					50,000
Security	85,000					85,000
Corporate	278,200					278,200
Finance	50,000					50,000
Accounting	500,000					500,000
Engineering	110,000					110,000
Information Services	601,000					601,000
Signaling/Telecommunications	939,545					939,545
Real Estate	2,024,000					2,024,000
Nondiscretionary Projects		5,499,690	6,184,800	6,694,200	7,999,351	26,378,041
Continuing Programs		3,120,075	2,548,883	2,367,500	1,956,000	9,992,458
Management Improvement Initiatives		1,168,200	850,000	1,300,000	1,700,000	5,018,200
Ranked Projects		9,123,753	13,446,099	18,268,926	20,372,552	61,211,330
Total ARRC Internal Capital Funding	15,563,125	18,911,718	23,029,782	28,630,626	32,027,903	118,163,154

Five-Year Capital Project Plan — Federal and Bond Funding

	2007	2008	2009	2010	2011	TOTAL
Federal Transit Administration						
Passenger Equipment: Repaint Bag Car 102	75,000					75,000
Fairbanks Realignment Alternative Analysis	250,000					250,000
South Anchorage Wilder Loop Upgrade	135,000					135,000
Track Rehabilitation	1,092,450	12,413,716	9,887,691	9,948,259	13,962,436	47,304,552
Siding Extensions/Upgrades	3,066,000	2,691,000	1,000,000	1,000,000	1,000,000	8,757,000
Track/Realignment Subtotal	4,543,450	15,104,716	10,887,691	10,948,259	14,962,436	56,446,552
Bridge Replacements/Upgrades:						
Bridge 227.9 Billion Slough	1,900,000					1,900,000
Bridge 352.7 Sheep Creek	250,000	500,000	250,000			1,000,000
Bridge 148.3 Matanuska River	3,000,000	500,000				3,500,000
Bridge 432.1 permafrost bridge	150,000	2,750,000				2,900,000
Bridge 422.9 permafrost bridge			1,000,000			1,000,000
Bridge 447.7 permafrost bridge				600,000		600,000
Bridge 29.5 Trail Lake		1,000,000	2,000,000			3,000,000
Bridge 284.2 Hurricane Gulch				3,000,000		3,000,000
Bridge Program Subtotal	5,300,000	4,750,000	2,250,000	3,600,000		16,900,000
Facilities: Whittier Marginal Wharf	500,000					500,000
DBE Disparity Study	33,625					33,625
Wasilla Transportation Corridor Study	200,000					200,000
Project Planning (Study) Subtotal	233,625					233,625
2006 Bond Issue Debt Service	7,426,050	7,206,015	7,186,144	7,192,245	7,171,655	36,182,109
2008 Bond Issue Debt Service			8,279,201	8,279,201	8,279,201	24,837,603
Debt Service Subtotal	7,426,050	7,206,015	15,465,345	15,471,446	15,450,856	61,019,712

continued on next page

Five-Year Capital Project Plan — Federal and Bond Funding (continued)

	2007	2008	2009	2010	2011	TOTAL
FTA... continued						
Preventive Maintenance Reimbursement	9,122,964	9,807,187	10,542,726	11,333,430	12,183,437	52,989,744
Collision Avoidance	7,500,000					7,500,000
Moody Tunnel Rehabilitation		900,000				900,000
CMMS Preventive Maintenance System	220,000	100,000	100,000	100,000	100,000	620,000
Transit Security (1% of 5307 appropriation)	182,129	197,516	210,118	216,421	222,914	1,029,098
Preventive/Safety/Security Subtotal	<u>17,025,093</u>	<u>11,004,703</u>	<u>10,852,844</u>	<u>11,649,851</u>	<u>12,506,351</u>	<u>63,038,842</u>
Total Federal Transit Administration	35,103,218	38,065,434	40,455,880	41,669,556	42,919,643	198,213,731
FTA-Backed Revenue Bonds (2006)						
Passenger Equipment		2,000,000				2,000,000
Moody Tunnel	850,000					850,000
Track Rehabilitation Program	18,149,058	9,118,619				27,267,677
Track Rehabilitation Program- 2007	<u>12,100,000</u>					<u>12,100,000</u>
Total Revenue Bonds Series 2006	31,099,058	11,118,619				42,217,677
FTA-Backed Revenue Bonds (2008)						
Track Rehabilitation Program		11,111,446	25,876,680	22,615,129	20,788,719	80,391,974
Federal Highway Administration						
South Wasilla Realignment Land Acquisition	870,617	870,617	870,617			2,611,851
Fairbanks Freight Intermodal	<u>824,648</u>	<u>824,648</u>	<u>824,648</u>			<u>2,473,944</u>
Total Federal Highway Administration	1,695,265	1,695,265	1,695,265			5,085,795
Department of Defense						
Fort Wainwright Realignment (MP G3-G8)	12,000,000	12,000,000	12,000,000			36,000,000
Northern Line Extension	<u>4,000,000</u>					<u>4,000,000</u>
Total Department of Defense	16,000,000	12,000,000	12,000,000			40,000,000
Total Federal & Bond Funding	<u>83,897,541</u>	<u>73,990,764</u>	<u>80,027,825</u>	<u>64,284,685</u>	<u>63,708,362</u>	<u>365,909,177</u>

Five-Year Plan — Operating Budget

<i>(in millions)</i>	2007 Budget	2008 Plan	2009 Plan	2010 Plan	2011 Plan
Operating Revenues	\$ 116.96	\$ 120.09	\$ 123.76	\$ 127.03	\$ 130.84
Operating Expenses	\$ (105.66)	\$ (106.54)	\$ (108.69)	\$ (110.02)	\$ (111.78)
Net Income — Operations	\$ 11.31	\$ 13.55	\$ 15.07	\$ 17.01	\$ 19.06
Net Income — Real Estate	\$ 7.64	\$ 8.07	\$ 8.52	\$ 8.99	\$ 9.49
Other Income	\$ 0.79	\$ 0.85	\$ 0.92	\$ 0.99	\$ 1.06
Net Income (before depreciation & interest)	\$ 19.74	\$ 22.47	\$ 24.51	\$ 26.99	\$ 29.61
Depreciation	\$ (15.07)	\$ (16.55)	\$ (17.47)	\$ (18.87)	\$ (20.43)
Interest Expense	\$ (1.56)	\$ (1.62)	\$ (1.62)	\$ (1.44)	\$ (1.61)
Net Income (without preventive Maintenance)	\$ 3.11	\$ 4.30	\$ 5.42	\$ 6.68	\$ 7.57
Preventive Maintenance Reimbursement	\$ 8.42	\$ 9.05	\$ 9.72	\$ 10.45	\$ 11.24
Net Income	\$ 11.53	\$ 13.35	\$ 15.14	\$ 17.13	\$ 18.81
Operating Ratio*	1.02	1.01	1.00	0.99	0.98

* Operating Ratio is Operating Expense divided by Operating Revenue. The Operating Expense number used to calculate Operating Ratio includes the portion of Depreciation attributable to Operations.



Issues: ARRC Positions on Hot Topics

Federal Transportation Funding

- **Background:** When the State of Alaska purchased the Alaska Railroad in 1985, it received a railroad in disrepair. While the federal government partially rehabilitated the badly worn out railroad after World War II, it invested very little in maintenance after that effort. Today, Alaska's congressional delegation works hard to ensure that the ARRC is on equal footing with other railroads, including transit systems that provide passenger services. As a result, SAFETEA-LU provided an authorization for increased annual appropriations in the form of formula funds to ARRC to maintain and improve its passenger-related facilities and mainline track complex.
- **Position:** ARRC is entitled to continued capital grant assistance from the federal government to rehabilitate infrastructure and to improve passenger services, including preparations that will eventually lead to commuter rail. ARRC had worked hard in Washington DC with all three congressional delegates to position itself in the federal formula funding process to offset reliance on unpredictable annual earmarks. SAFETEA-LU was reauthorized in FY 2006 and secured our enhanced position in the FTA formula as planned.

Railroad Tax-Exempt Bonding Authority

- **Position:** ARRC intends to use its tax-exempt bonding authority to support projects that benefit the State or its railbelt cities – such as energy projects or rail line extensions. These types of projects fall in line with the railroad's mission to foster state economic development. Collecting issuer transaction fees as compensation for assuming the fiduciary responsibility of administering such bonds over their lifetime would be appropriate.

Any revenue generated from fees would be directed back into railroad capital infrastructure.

Public Involvement Policies

- **Position:** The Alaska Railroad is committed to coordinating our planning, projects and real estate activities with railbelt communities to incorporate their community planning efforts and needs as best we can.

We emphasize a proactive public involvement process that encourages communities to participate in ARRC project decisions. This process includes our "heads up" direct mail correspondence initiative, our open house events, up-to-date information on our web site, a dedicated public involvement e-mail address, public comment hotlines, and regular community meeting presentations by executives and staff.

Partnering with Communities

- **Position:** ARRC is seriously committed to partnering. Collaborative support for important community, borough and private sector initiatives can enhance prosperity along the railbelt and create conditions for success that enable a more prosperous Alaska. Examples of partnering include the following:

Depots and Intermodal Facilities

- **Palmer Alaska State Fair Intermodal Commuter Center:** The ARRC administered funds and oversaw project management on behalf of the Alaska State Fair Intermodal Commuter Center in Palmer. This project was completed just prior to the start of the 2004 State Fair, offering better transportation choices for fair attendees through the use of

expanded direct rail service. This project is also a step towards improved transportation infrastructure for an increasing number of travelers moving to and from the state's fastest-growing area—the Mat-Su Valley.

- **Ship Creek Intermodal Facility:** The ARRC is working with the community of Anchorage on plans to construct an Intermodal Transportation Center, along with other related improvements, in the Ship Creek basin. The project calls for pedestrian amenities and a connection to downtown, transit infrastructure, parking, and rail modifications that will meet projected transportation growth for the next 30 years.
- **Fairbanks Intermodal Facility and Depot:** In 2005, the ARRC completed the new Fairbanks depot and associated loop track. This project allows faster on and off load of longer passenger trains, reduces the blocking of local crossings by standing trains, reduces operations and maintenance costs, and meets future growth in rail business demands within Alaska's interior.

Community Projects

- The ARRC is committed to improving the quality of life for Alaskans by contributing to a number of community-based projects. Through funding and land permits ARRC is partnering with many communities as well as the State Department of Transportation & Public Facilities (ADOT/PF) to build safe pedestrian trails and access. The Ship Creek Trail in Anchorage, Mile 0-8 Trail in Seward, the Palmer Trail/Skateboard Park and the Old Richardson Highway Trail in North Pole, are four current examples. In Palmer, ARRC worked with the City of Palmer to facilitate installation of water/sewer lines along ARRC's right-of-way to service the new Valley hospital.

Planning

- ARRC has contributed both money and considerable staff time to several formal railbelt community planning efforts such as the Talkeetna Community Plan to enhance our mutual property interests, especially as they relate to building and improving Alaska's transportation infrastructure. ARRC is currently working with the Metropolitan Planning Organizations in Fairbanks and Anchorage to update their long-range transportation plans. In Whittier, where ARRC is a significant landowner, we are coordinating closely with the City of Whittier on a comprehensive planning effort. ARRC is actively engaged in development of the Matanuska-Susitna Borough long range transportation plan. ARRC is a participant in the Port of Anchorage Working Group to facilitate the development of the Port of Anchorage and support the movement of military resources to and from this strategic port. And finally, ARRC works closely with ADOT/PF to plan crossing or right-of-way projects that provide mutual benefit.

Corporate Giving

- The railroad and its employees support communities through charitable giving, school business partnership programs, the United Way match program, and membership participation in many civic organizations. The ARRC also donates a number of different special event trains at reduced cost or free of charge. These trains, such as the Sea Train in 2006 that moved over 4,000 fifth graders from the Anchorage School District to Seward to learn about natural sciences, are ways the ARRC is able to give back to the communities we serve. Other types of donations include over 250 seats donated for family members of the 172nd Stryker Bridge to ride back to Fairbanks for "Operation Breakaway," special Holiday trains for the communities of Seward and Palmer, and the Artrain, a five-car rolling museum (up from the lower 48) that held school tours and public events along the railbelt from Seward to Fairbanks. A special Citizens Advisory Board (CAB), made

up of six individuals from across the railbelt, oversees a portion of our charitable program. The CAB is in the best position to let us know the needs of the communities we serve. Under parameters set by the Railroad Board, the railroad will lease land to communities at less than fair market value for trails, parks and other public amenities.

Regional Transportation Planning

- **Position:** ARRC fully supports local regional transportation planning and serves on a number of planning groups, including AMATS and FMATS. Local officials often seek out a broader perspective on how their projects might impact state transportation beyond local jurisdiction. ARRC believes transportation projects sell better when they are imbedded in the context of a regional plan. Accordingly, we advocate transportation analysis that is keyed on transportation nodes, linkages, and the intermodal transition points that join them. This preferred methodology consists of a more rigorous examination of the intended effects and unintended consequences of proposed city and state transportation projects. ARRC believes ADOT/PF should be the cognizant authority over local community projects that create important regional impacts.



Rail Extensions

- **Position:** ARRC will take its lead from state and federal policy makers regarding rail extension initiatives. ARRC supports extending or building new railroad lines in Alaska and believes this falls under its mission to foster state and community economic development. ARRC does not gener-

ate enough capital funding necessary to proceed with some of the larger proposed rail extension projects (projected at \$4-\$10 million/mile), but stands ready to provide planning, technical, engineering and operational expertise should funding be identified. ARRC assumes it will always be expected to generate sufficient revenues to pay the operating expenses of any rail extensions, and that any political decision to extend Alaska Railroad track will be made with that obligation in mind.

- **Canadian Rail Extension:** To reach the Alaska/Canadian border, approximately 270 miles of track would need to be constructed in Alaska. Approximately 1,000 miles would need to be constructed in Canada to connect the border to the Canadian rail system. ARRC has been supportive of recent legislative and congressional efforts to study such an initiative and will continue to lend its planning expertise to the process.
- **Rail Extension to Fort Greely:** We believe the time is right to extend the railroad to Fort Greely to support national defense objectives. To further promote this project, ARRC can provide use of its tax-exempt bonding authority to help buy down the project cost (\$500 million in bonding authorization was pre-approved by the state legislature in 2004). ARRC will also lend staff resources and planning expertise to the process. This extension conveniently aligns with proposed legislation to extend the rail to Canada and passes close by potential agricultural and mineral developments. Moreover, it aligns with a proposed state corridor that might include provisions for a natural gas pipeline.
- **Northwest Arctic Rail:** Extremely expensive, this initiative nonetheless opens up previously inaccessible energy and mineral resources to developers. Should such an initiative take root, ARRC would be pleased to be a member of the planning group.

Rail Realignments

- **Position:** ARRC supports realigning its main line track out of Alaska communities that have grown up along the route. The issue is one of enhancing safety and efficiency, as well as local quality of life. Fairbanks and Wasilla realignments would each eliminate numerous dangerous at-grade crossings as well as reduce the running time on our interior train routes. Both realignments are significant undertakings, and the railroad does not yet have enough internal or federal funding to fully proceed with either project on its own. We will continue working to integrate our recommendations with community and ADOT/PF planning efforts. We will be ready with plans when federal funding becomes available.
- **Fairbanks Realignment:** Could eliminate up to 45 crossings
- **Wasilla Realignment:** Could eliminate up to 11 crossings
- **Nenana Realignment:** Reduces potential for crossing accidents at 6 at-grade crossings when the highly circuitous main line becomes a spur.

Planning & Zoning Jurisdiction Over the Railroad

- **Background:** Several federal laws contain language that essentially pre-empts or eliminates state and local regulatory authority over the railroad except in very limited circumstances. For years, records indicate local governments and states have attempted to restrict railroad hours of transportation, speeds, loading requirements, routes, etc., and the federal government has been vigorous in defending railroads' rights nationwide to operate without local interference in order to protect interstate commerce. To that end, ARRC remains under the jurisdiction of the Federal Railroad

Administration and the federal Surface Transportation Board. In addition to its federal status, ARRC is also an instrumentality of the State of Alaska.

In 2004, the Alaska Supreme Court held that ARRC is not automatically exempt from local planning and zoning land use regulations, despite its status as a state instrumentality. As a result, until the state legislature decides to pass clarifying language on the issue, the Supreme Court decision requires the Railroad to first attempt to comply with local planning and zoning land use procedures when undertaking an activity traditionally regulated by local governments. If the result of the local process is unsatisfactory for the Railroad, the courts must resolve the intergovernmental dispute by applying, in each case, a "balancing of interests test" to determine whether the legislature intended the Railroad to be immune from local zoning in that particular situation. Each decision is then subject to appeal by either side.

- **Position:** ARRC travels through 13 recognized municipal and borough governments between Seward and North Pole. If both the federal and state exemptions were removed, local communities could dictate inconsistent and onerous planning and zoning restrictions which would negatively impact the railroad's ability to offer efficient, economical and reliable service to its freight and passenger customers. ARRC is comfortable with the clear protection of its core operations by federal regulations on behalf of interstate commerce. However, the lack of precision on what are "core operations" and the often-shifting status of the Railroad's non-operating lands may lead to unpredictable results, and precipitate lawsuits that will greatly slow economic development projects. ARRC would be pleased to work with any legislative initiative to clarify the situation.



Anchorage International Airport Rail Station Operation & Marketing Plan

- **Position:** ARRC is working with its transportation partners and the Ted Stevens Anchorage International Airport to provide rail service to the airport that responds specifically to all our customers needs.



Beginning with the 2003 season, we ran two trains five days per week to serve cruise ship passengers (the trips into and out of the facility are each considered a train.) Current plans do not yet include a transit airport shuttle service from ARRC's downtown depot. However the railroad will remain flexible to customers and market demand. Beginning in the summer of 2008, ARRC intends to initiate a wintertime transit service with connectivity between the Airport, Dimond Center, downtown depot and possibly Girdwood using new, modern commuter equipment.

Commuter Rail Service

- **Position:** ARRC supports developing Alaska's intermodal and commuter rail services as transportation options for the traveling public. We are prepared to assist the local communities if policy makers and residents decide to initiate commuter rail service. ARRC does not necessarily see itself as the sole proprietor of commuter rail operations. A Regional Transit Authority (RTA) would function better in that role. In the meantime, ARRC will continue to plan and build infrastructure in a way that can enable and support such services when we are called upon to implement.

Knik Arm Crossing

- **Position:** Rail is not currently planned for the Knik Arm Bridge and must therefore continue through Wasilla for the extended foreseeable future. Accordingly, efforts to straighten the track from Anchorage to Wasilla, and the project to realign track around Wasilla, have taken on a new sense of planning urgency. If commuter service is to be viable, track speeds must increase overall. Once trains reach Wasilla, having an alternative to running every train through the city center makes eminent sense for both the safety of the community and to enhance Railroad operations, safety and service. The success of projects throughout the Wasilla-Anchorage corridor will have a major impact on the Alaska Railroad's overall schedule effectiveness.

Trails in ARRC's Right-of-Way

- **Position:** In general, the railroad right-of-way is not a safe or appropriate location for a trail. However, ARRC will consider use of its right-of-way for trails if there are no other feasible alternatives. For the railroad, the issue is purely a matter of safety and liability risk. Because any trail seeking to use the right-of-way would expose the corporation to substantial liability, such trails must be constructed in a way to specifically mitigate the risks involved. Furthermore, such trails must not negatively impact railroad operations, they must be maintained and insured by an entity other than the Railroad, and that entity must agree to indemnify ARRC for all related claims.

Railroad Crossings

- **Background:** The Alaska Railroad has hundreds of crossings along the railbelt from Seward to the interior. Many of these crossings (293) are at-grade crossings (road and rail crossing at same level) that present safety and liability risks to the railroad, the traveling public and other local and state agencies. The Railroad is dealing with an increasing number of

requests to approve even more at-grade crossings, most of which are trying to conveniently broaden access to new private developments, often-times well after construction has started. In some cases, people are even buying raw land with no access, fully aware that any access to their land will have to cross existing track.

- **Position:** The Railroad is committed to protecting the public and its employees in its day-to-day operations. At-grade crossings are inherently a risk to both. In the United States the average is one death per day at a railroad crossing. The Alaska Railroad is reviewing all of its crossings to ensure each constitutes a valid need, proper protective devices are installed, and maintenance and liability agreements are in



place. Railroad surveys suggest that up to 25% of the at grade crossings in Alaska are probably unnecessary and it has adopted a five-year objective to eliminate these crossings. Some major road crossings are scheduled for grade separation as part of ADO/I/PF road projects. But many others merely provide redundant access, are not covered by a permit, or present tremendous safety concerns. They will be targeted for closure. The Alaska Policy on Railroad/Highway Crossings, which utilizes a diagnostic team assessment consisting of local, state and railroad participants, will validate crossing decisions. The Alaska Railroad will also implement a comprehensive public involvement plan for each proposed closure, to identify property access challenges and other community issues prior to making the final determination. ARRC is soliciting legislative understanding for this safety initiative, even though it is often quite unpopular with affected individual constituents.

Crossing Closures

- **Background:** Currently there are several crossings for which no individual or organization is responsible for the crossing's maintenance or liability. The legal effect of such "orphan" crossings is that no legal access exists across the ARRC right-of-way at these locations, which can seriously impact private financing on adjacent development. In many cases, alternative access is readily available or can be constructed so that safety is achieved and the private needs satisfied. ARRC seeks to close crossings wherever these circumstances exist. Most crossing closure objections stem from minor inconvenience.
- **Position:** In order to provide safe, high quality services ARRC seeks to eliminate 25% of its crossings by 2009 and to ensure all remaining crossings are legally permitted. Before identifying individual crossings to eliminate, a systematic approach will be used to test a crossing's status keeping safety and public impact foremost in mind.

Taxing the Railroad

- **Position:** State and federal law expressly prohibit the use of ARRC revenues for anything other than Railroad purposes. But there are also practical reasons why the Railroad should retain its revenues and not be taxed. Before net earnings are calculated, ARRC pays for its operating and maintenance expenses, including all pay and benefits for its employees, who are not considered state employees. ARRC then invests its entire net earnings back into maintaining and modernizing its capital infrastructure. ARRC revenue not only effects upgrades and repairs, it is able to do so by leveraging a 10-to-1-dollar return when it provides corporate matching funds for federal grants. The backlog of ARRC capital needs is several hundred million dollars. Until such time as the ARRC is able to clear this backlog and then generate sufficient net earnings on its own in excess of annual sustainment requirements, we believe that taxing the corporation would be premature and would constitute a very poor business practice.

Chemical Weed Control as Part of Integrated Vegetation Management

- **Background:** In 1983, the federal railroad stopped using chemical weed control in the face of public controversy and litigation. Since the state took over the Railroad, we've spent millions of dollars on non-chemical methods and research. We cut brush with machinery and hire people to pull and hack weeds manually. In the end, these methods are simply not effective, or practical, in keeping the weeds at bay



between the rails and ends of the ties along more than 600 miles of main, siding, branch and yard track. The cumulative effects of inadequate vegetation control are impossible to ignore. Entrenched root systems are collecting water in the ballast. The freeze-thaw cycles are eroding the track bed. Roots cause railroad ties to heave and rail joints to connect unevenly, increasing the risk of derailment. Above ground, overgrown weeds hide hoies and hazards, increasing the risk of employee trip-slip-fall injuries. And overhanging bushes and tree branches conceal important warning and operating signs.

The Federal Railroad Administration (FRA) knows how serious uncontrolled vegetation is. That's why the FRA continues to impose fines on the Alaska Railroad for failing to adequately control vegetation.

- **Position:** Maintaining the status quo with regard to vegetation control poses an unacceptable level of risk. For this reason, ARRC has applied for an Alaska Department of Environmental Conservation (ADEC) permit to integrate chemical weed control into our vegetation management program.

Our vegetation control plan includes hiring the most qualified licensed professionals to apply the weed control products. Leading industry experts in railroad vegetation control will use state-of-the-art equipment with low-volume, low-pressure ground-directed application to target only our track bed and operating yards.

Our goal is to fashion a vegetation control program responsible and responsive to local concerns, while protecting our employees, customers and neighbors and the state's investment in our critical transportation infrastructure.

In addition to compliance with federal regulatory requirements, use of chemical weed control products as part of an integrated program will address the numerous safety issues, as well as reduce fuel for wild fires, protect recent substantial capital investment in track and infrastructure, and prevent the spread of noxious non-native invasive weeds species.

Chugach Forest Whistle Stop Service

- **Background:** The USDA Forest Service (USFS) and Alaska Railroad are partners in developing a new Whistle Stop Service that will provide a variety of world-class recreation and transportation opportunities for users of the Chugach National Forest. The project includes development of several sites between Portage and Moose Pass that will be accessible by rail and interconnected by approximately 35 miles of trail between the proposed locations. Other likely features include picnic facilities, camping facilities, wildlife viewing facilities and expanded trails.

A successful whistle stop experience requires that the rail passenger equipment be independent of other railroad operations. The current project scope calls for acquisition of two self-propelled commuter style railcars.

- **Position:** The project would provide an opportunity for visitors to connect with nature in a variety of unique, safe and memorable settings otherwise largely inaccessible. It would provide controlled access to the Chugach National Forest backcountry while protecting the forest

resources. It would provide a variety of activities for visitors with varying degrees of skill. It would support the Alaska Railroad's Anchorage-Seward operations with increased ridership. And, the project would enhance ridership on the rail route south of Anchorage and would offer an alternative to the congested Seward Highway, thereby helping to reduce heavy summer traffic. We have therefore embraced this initiative and are working closely with the USFS to make it happen.

Business with the Military in Alaska

- **Position:** The military is an important customer of the Alaska Railroad. In turn, the Railroad provides freight, fuel and mobility services that are critical to the military's mission in Alaska. Some mutually beneficial projects and agreements include:
 - Eielson Branch Rail Realignment — Funding for the environmental phase of this project is being underwritten by the Department of Defense (DOD), in large part due to the significant benefit the project will have on Fort Wainwright. Realignment of the track around the more congested areas of the Army base will enhance base security and alleviate delays to traffic and base operations caused by slow train movement through the installation, as well as returning right-of-way property to the base for construction of more Army facilities.
 - 1st Stryker Brigade, 25th Infantry Division (25 ID) Support — The Alaska Railroad has acquired additional locomotives and rail flat cars to enhance its capability to support the 1st Stryker Brigade of the 25 ID, stationed at Fort Wainwright, particularly with its rapid deployment requirements. A \$15.88 million DOD grant was funded in 2006.
 - Northern Rail Extension — This project would extend the existing rail from North Pole 80 miles southwest to the Delta Junction / Fort Greeley area. The proposed rail line would provide freight and passenger rail services serving commercial interests and communities in or near the project corridor. The rail line as planned would also provide

access to military property west of the Tanana River. It would provide transportation alternatives to support military training exercises as well as DOD passengers of all types. Because of potential benefits to the military the Environmental Impact Statement is being funded by DOD.

Reversion

- **Background:** The federal transfer act included a provision under which railroad right-of-way reverted to the U.S. (and eventually passed to adjacent landowners) if it ceased to be used by the State for transportation, communication, or transmission purposes for a period of 18 years. ARRC began to focus on this around 2000, because swapping right-of-way for various realignment projects raised the issue with other parties. Also, a couple of spurs existed that had been unused since before transfer, and 18 years was fast elapsing. Rather than deal piecemeal with separate federal legislation for projects or doing "makework" on the old spurs to qualify as use, ARRC determined it more appropriate to seek a repeal of the reversion from the transfer act. Legislation was signed into law on February 20, 2003 (Public Law 108-7).
- **Position:** ARRC believed, as a policy matter, it was important to preserve the entire rail corridor in case either the railroad or State had a transportation or utility use for it. Corridors are notoriously difficult and costly to assemble and ARRC's corridor has a lot of value for different forms of transportation (other than rail), communication and transmission purposes. For example, the old Palmer Branch could someday prove important to development of the well-known Wishbone Hill coal prospects. Any decision to convey or lose any portion of such a valuable State asset should be a State initiative, not solely ARRC's. While the subject is now removed from any automatic federal law, it is one that can be considered on a case-by-case basis at the State level when any significant realignment occurs.



2007 Potential Railroad Legislation

Land Exchanges

- Exchange land with ADOT/PF to support Fairbanks airport heavy aircraft apron parking.
- Exchange land with ADOT/PF for Parks Highway upgrade in Wasilla.
- Eklutna, Inc.

Eklutna Quarry

- Transfer Eklutna Quarry to Eklutna, Inc. fee simple. This may be possible under current authorization provided within the North Anchorage Land Agreement.

Railroad Bonds

- Agrium Corporation is considering the use of Railroad tax-exempt conduit revenue bonds to finance its Kenai Blue Sky coal gasification project. The bond debt would be repaid by Agrium.





Alaska Railroad Corporation

Program of Projects

FOR 2007

revised 1/04/2007

Alaska Railroad 2007 Program of Projects



The Alaska Railroad Corporation (ARRC) continues to pursue a comprehensive program of capital improvements. ARRC is investing millions on rail, ties and ballast to aggressively improve infrastructure. Safety and efficiency upgrades include projects to straighten the main track in several areas, build longer sidings (railroad "passing" lanes), add automated and heated switches, and install a collision avoidance system. The railroad is also capitalizing on opportunities to better serve Alaskans through new depots, passenger services and equipment. Detailed descriptions of these projects are available at the ARRC website: www.AlaskaRailroad.com.

Established in 1923, the Alaska Railroad is the last of the full-service railroads in the United States, offering both freight and passenger service. From tidewater at Whittier and Seward to the heart of Interior Alaska, our route covers more than 500 miles. ARRC is a state-owned corporation, however it does not receive state funding to operate. ARRC relies on passenger, freight and real estate revenues to operate its trains and maintain tracks and facilities.

Funding for much of the capital projects program has come from approximately \$580 in federal grants received since 1996, including approximately \$51.3 million for 2007, to date. Funds have come from the Department of Defense (DOD; \$94.4 million, including \$16 million in 2007), Federal Railroad Administration (FRA; \$225.4 million), Federal Transit Administration (FTA; \$184 million, including \$34.3 in 2007), Amtrak (\$23.2 million in 2007), Federal Highway Administration (FHWA; \$9.94 million, including \$5 million in 2007) and Congressional earmarks through various agencies, such as the U.S. Forest Service (USFS; \$7.13 million) and U.S. Fish & Wildlife Service (USFW; \$444,000), Transportation Security Administration (TSA; \$734,000), Federal Emergency Management Administration (FEMA; \$1.0 million), and the State of Alaska Division of Homeland Security (\$234,000). FTA-, FHWA- and FEMA-funded projects require 9% to 25% matching funds from the Alaska Railroad (\$32.8 million, including \$3.4 million in 2007). In addition to providing the match for federal funds, ARRC will have invested an additional \$158 million of internally generated funds in numerous other non-federal improvement projects between since 1996, including \$15.6 million in 2007.

The Alaska Railroad also sold \$76.1 million worth of revenue bonds in 2006, primarily to accelerate track rehabilitation efforts. \$30 million of these funds will be expended on Track Rehabilitation in 2007. Bonds will be repaid with future FTA formula fund appropriations.

Public Input:

To comment on any or all of these projects:

- E-mail to public_comment@akrr.com
- Mail to: Capital Projects, Alaska Railroad Corporation, P.O. Box 107500, Anchorage, AK 99501
- Fax to (907) 265-2365
- TTY/TDD 265-2620 or voice 265-2494, Alaska Relay Service TTY 1-800-770-8973 or voice 1-800-770-8255





Seward Loading Facility

Project Scope

In 2003, the Alaska Railroad (ARRC) acquired the Loading Facility located in Seward, Alaska, and recently completed various improvements to the facility. The goal of the purchase and improvements was to increase facility efficiency, driving down the cost of operation, thus making Alaska's coal more competitive in the global coal market. The facility was previously owned by Hyundai Merchant Marine (Hyundai) and the Alaska Industrial Development and Export Authority (AIDEA). Seward Terminals Inc., a subsidiary of Hyundai, has remained the operator through a lease and operating agreement with ARRC, although a new operator is expected to be retained in 2007.

The 20-year-old facility, located on ARRC land, unloads coal from railcars, conveys it to storage, reclaims material from storage, and loads it into bulk ships. It consists of the following major components (*see drawing on page 2*):

- Railcar dumper facility, with a pit and unloaders to discharge coal from hopper cars;
- Conveying systems to move coal from the railcar dumper to ships or the stockpile; and to move coal from the stacker-reclaimer through a sampling station and onto the ship loader;
- Stacker-reclaimer, which distributes the coal from the conveyor to the stockpile and, in turn, reclaims the coal from the stockpile for ship loading;
- Stationary ship loader with a conveyor system for discharging coal into the holds of oceangoing bulk carriers; and
- Two-story office/control building, a shop building, and a crew breakroom located in a portable building.



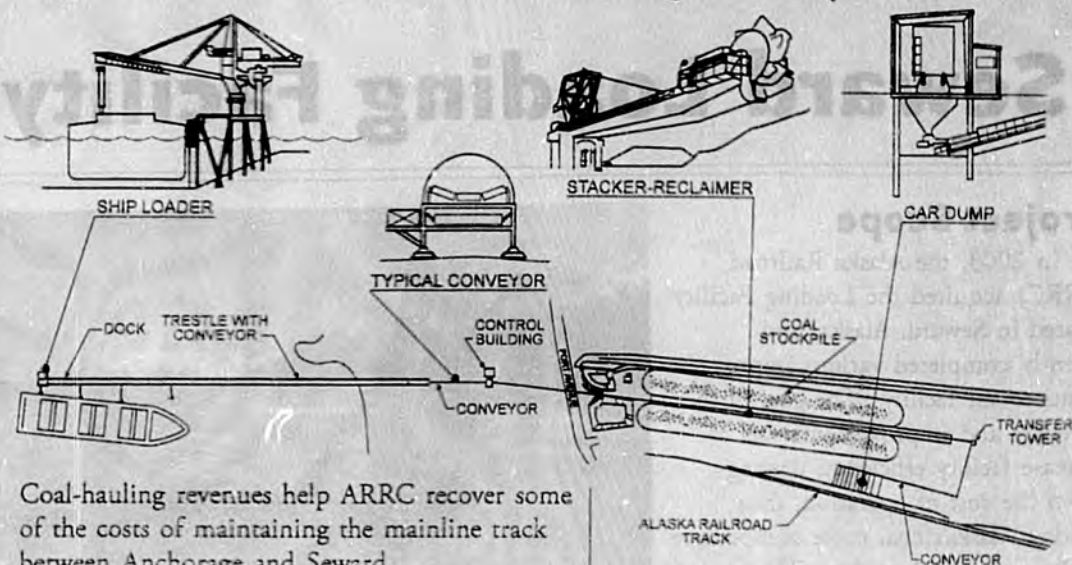
A coal ship loads at the Seward Loading Facility's conveyor-fed dock.

Through purchase of this facility, ARRC became responsible for all components of coal transport between the source, Usibelli Coal Mine (UCM) in Healy, and the ships. Using Federal funds, the ARRC recently completed the first phase of mechanical, electrical, structural and dust control improvements. Other planned improvements are several measures to alleviate difficulties associated with unloading frozen coal from railcars in winter months.

Benefits

- The acquisition essentially revived the export of coal from Alaska. Depressed coal prices, led by cheap exports from Indonesia, made the cost of Alaska coal too high compared to competing exporters from Indonesia, Australia, China, South Africa and Canada.
- The major limitations of the facility were the ship loading circuit rate and the stock piling circuit rate, both resulting in a higher cost of transporting the coal to the ships. The recent improvements have enhanced operational efficiency, thereby making Alaska coal more competitive in the global market.

Components of the Seward Loading Facility



- Coal-hauling revenues help ARRC recover some of the costs of maintaining the mainline track between Anchorage and Seward.

Status

- The ARRC hopes to keep Alaska coal competitive in the export arena by pursuing greater efficiencies in operations, plant facility and equipment; negotiating new contracts and marketing the facility.
- In 2005, ARRC proposed to expand the Seward Loading Facility by increasing its stockpile area to the north, and submitted permit applications to fill an approximately 6-acre area, including a small man-made pond. The purpose is to provide additional storage space to improve operating efficiency, accommodate an increase in demand for Alaskan coal, and to ensure sufficient coal is available when ships are ready to be loaded. The necessary permits have been issued for the project, although construction has been delayed until funding is obtained.
- A number of community members raised concerns about the proposal to expand the stockpile area. ARRC addressed to these concerns in responses to frequently asked questions (available on ARRC's website). Many of the comments related to fugitive coal dust. Recent improvements to the SLF include installation of directional chutes, often referred to as "dustless" chutes, to transfer coal and other material. These chutes reduce turbulence, thereby reducing dust generation and spillage, and improve the effectiveness of the suppres-

sion/collection systems. Also, recent improvements have reduced the operating time to load each ship. This decreases material handling time, resulting in an overall decrease in the amount of dust generated. ARRC plans to continue to work with the operator to identify other reasonable measures to reduce the potential for generating fugitive coal dust.

Cost and Funding

- In 2003, the Federal Railroad Administration awarded a \$9.54 million grant, of which \$8.3 million was used to acquire the facility, perform associated due diligence studies, evaluation and inspection. The remainder was subsequently used for inspections, repairs and improvements.
- There are not any federal grants currently in place for the facility. ARRC continues to fund ongoing minor capital improvements with the limited funds generated from rail operations.



The stacker-reclaimer moves coal to/from the stockpile.



Seward Docks and Intermodal Facility

Project Scope

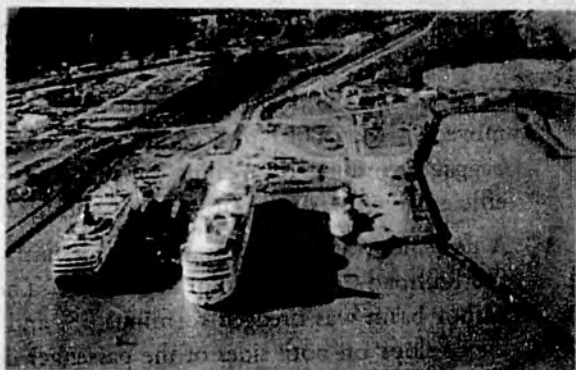
To improve safety and better meet passenger needs in Seward, the Alaska Railroad (ARRC) constructed a new freight dock and overhauled the existing dock to serve as a passenger-only facility. Previously, one dock served both types of customers. Loading ships with logs and unloading steel pipe in close proximity to tourists from cruise ships presented an unacceptable safety conflict. In addition, the United State's Coast Guard recently enacted new security regulations requiring the two operations be separated.

In addition to separating freight and passenger operations, there are improvements to the land adjacent to the docks. These are increasing safety and enhancing efficiency while passengers transfer from ship to bus, train or other mode of transportation.

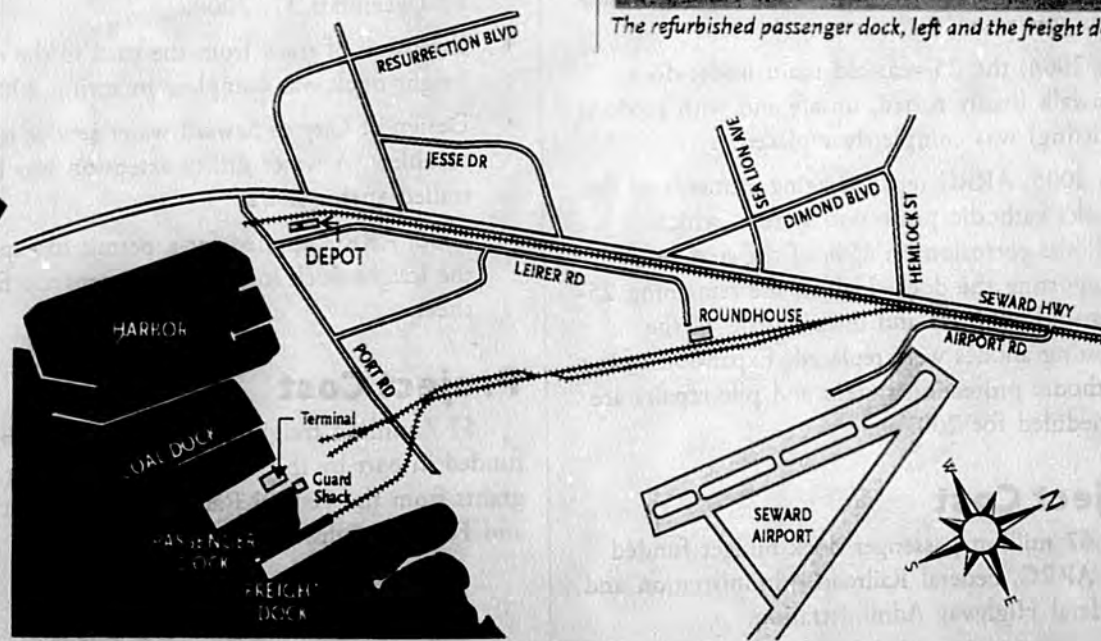
Benefits

- Separating freight and passenger operations greatly improves safety and efficiency.

- Brings existing facility into compliance with State and Federal regulations.
- Addition of a new dockface enables multiple ship berthings, improving service to valued cruise line and freight customers.
- Facility renovation provides the potential for year-round real estate development.
- Many passengers arriving at the dock require same-day transfer via bus, train, ferry or vehicle. Improvements conveniently consolidate intermodal choices at the mainline terminal, providing safe, secure and efficient transfer of people and baggage.



The refurbished passenger dock, left and the freight dock, right.





Phase I: Passenger Dock and Terminal Facility

Passenger dock improvements in 2001 included a connection to the City of Seward sewer service, an increase in interior floor square footage by covering the depressed rail track with decking, a concrete overlay floor surface to include radiant heat, new lighting and miscellaneous electrical and mechanical upgrades.

Status

- New east side dock fendering system installed in 1998.
- Adjacent three-story steel roll-on roll-off structure (Cherrier Ramp) directly east of the passenger dock was dismantled and removed to allow eastside berthings.
- Interior flooring improvements and electrical and mechanical upgrades completed March through May 2001. Additional electrical and mechanical upgrades completed spring 2002.
- Rectifiers on the dock's south end were removed in May 2001 to accommodate dock-side baggage handling from ships. Smaller, more efficient rectifiers were installed in spring 2002.
- A new mooring dolphin was installed south of the Railroad's existing dolphin in 2003. The harbor basin was dredged to minus 33, and the toe of slope on both sides of the passenger dock was steepened.
- In 2004, the 25-year-old main under-dock catwalk (badly rusted, unsafe and with sections missing) was completely replaced.
- In 2005, ARRC repaired aging elements of the dock's cathodic protection system, which inhibits corrosion on 85% of the steel piles supporting the dock. Half of the remaining 25-year-old rectifiers and three-fourths of the existing anodes were replaced. Expansion of the cathodic protection system and pile repairs are scheduled for 2007.

Project Cost

- \$2.67 million passenger dock budget funded by ARRC, Federal Railroad Administration and Federal Highway Administration.

- \$455,000 cathodic protection system repair budget funded 2005-2007 by the Alaska Railroad.

Phase II: Freight Dock

The Freight Dock Project entailed construction of a new bulkhead fill dock located 400 feet east of the Railroad's existing dock facility. The new dock is approximately 640 feet in length, 200 feet wide and includes a mooring dolphin and catwalk at the seaward end.

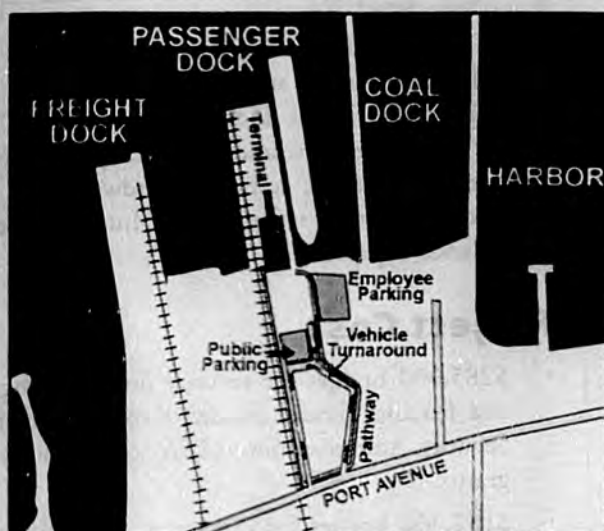
The freight dock features a modern low maintenance ship fendering system and is designed to accept a deeper mooring basin, and seaward extension if required by future vessel use. The freight dock facility accommodates both truck and rail transport. It will include new water service, new electrical service and high mast area lighting for safe year-round use.

Status

- Dock construction contract was awarded to B. West Construction Co. in February 2000.
- Fabrication of fender and dock fascia components began in March 2000. Dock construction began August 2000 and was substantially completed by December 31, 2000.
- Dock approach and mooring basin dredging began in November 2000 and was completed by December 31, 2000.
- Extension of track from the yard to the new freight dock was complete in spring 2001.
- Design of City of Seward water service is complete. A water utility extension was installed spring 2002.
- 2006: ARRC applied for a permit to expand the freight dock in phases. See separate fact sheet.

Project Cost

\$7.7 million freight dock construction budget, funded in part by the Alaska Railroad, along with grants from the Federal Railroad Administration and Federal Highway Administration.



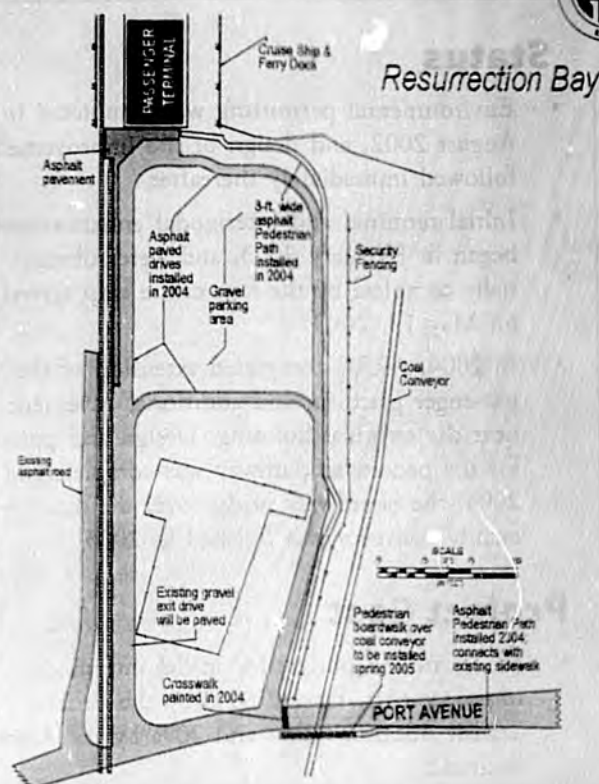
Phase III includes improvements to the "uplands" just north of, and adjacent to, the docks.

Phase III: Intermodal Enhancements

Intermodal improvements began in 2003. On the land just north of the secure passenger dock ("uplands"), existing tracks and signals have been demolished to make way for several intermodal upgrades. These include paved parking areas for ferry passengers, dock employees, rental car staging and buses. Orderly vehicle access to parking and passenger drop off sites comes by way of a one-way circular asphalt roadway, which extends off of Port Avenue, leading toward the dock. Exterior lighting adds to the safety and security of new roadways, pathways and parking areas. Widening the existing passenger platform, and extending pavement to



The passenger dock terminal is in need of security, efficiency and aesthetic upgrades.



A new pedestrian pathway leads from the terminal.

Port Avenue provides safer pedestrian access from the trains to the terminal. Also enhancing pedestrian safety is a new pathway connecting the terminal to the city's sidewalk along Port Avenue. Finally, a single track extending from Port Avenue to the northeast corner of the passenger terminal better separates the passenger and freight operations.

Additional modifications to the passenger dock include removal of four tracks and repaving of the dock surface to reduce tripping hazards and improve drainage. Changes to the terminal facility involve security checkpoints, building aesthetics, and upgrades to better accommodate passenger and baggage transfer requirements.

Status

- Environmental permitting was completed in August 2002, and design of site improvements followed immediately thereafter.
- Initial terminal and intermodal enhancements began in February 2003, and were substantially complete by the first cruise ship arrival on May 17, 2003.
- In 2004, ARRC completed extension of the passenger platform and additional pavement near the terminal building. Design and paving for the pedestrian pathway was completed in 2004; the boardwalk bridge over the loading facility conveyor was finished in 2005.

Project Cost

- \$3.77 million budget for initial intermodal improvements, funded 80% by the Federal Transit Administration and 20% by the Alaska Railroad.
- The Alaska Railroad funded the passenger platform extension, additional paving, and the pedestrian pathway at a cost of \$254,000.

Security Improvements

In response to more stringent security requirements from the U.S. Coast Guard and the U.S. Department of Homeland Security, the railroad is upgrading security features at its docks and loading facility in Seward.

In 2004, the Railroad installed security fencing and lighting to prevent unauthorized access into secured operational areas of ARRC's passenger dock. Additional security measures include enhanced dock lighting, and installation of battery backup lighting.

ARRC purchased a 27-foot, heated cab patrol boat for waterside surveillance and interception, not only for the railroad's passenger dock terminal, but also for the entire Port of Seward. Delivered in May 2004, the vessel is owned and operated by the Alaska Department of Military & Veterans Affairs. It is available to local officials for law enforcement, and could also serve as a dive platform to support underwater inspections. Fencing and lighting installation and vessel acquisition were completed in 2004.

In 2005, ARRC installed a video surveillance system to augment security at the passenger dock, freight dock and coal loading facility. The system includes video cameras, associated electrical service, computer hardware, and associated computer software with Internet-based surveillance capabilities.

Project Cost

- \$285,000 budget for security dock lighting and fencing, funded through Transit Security Administration (TSA) port security grants.
- \$152,000 budget for the vessel, funded by TSA grants.
- \$297,000 budget for the video surveillance system, funded by TSA grants.



New security fencing is installed.



Seward Freight Dock Expansion

Project Scope

The Alaska Railroad Corporation (ARRC) proposes to expand its Freight Dock in Seward in phases to improve the safety, efficiency and capacity of freight intermodal operations (ship-to-train, ship-to-truck or ship-to-barge). Expansion would occur entirely within ARRC's land reserves.

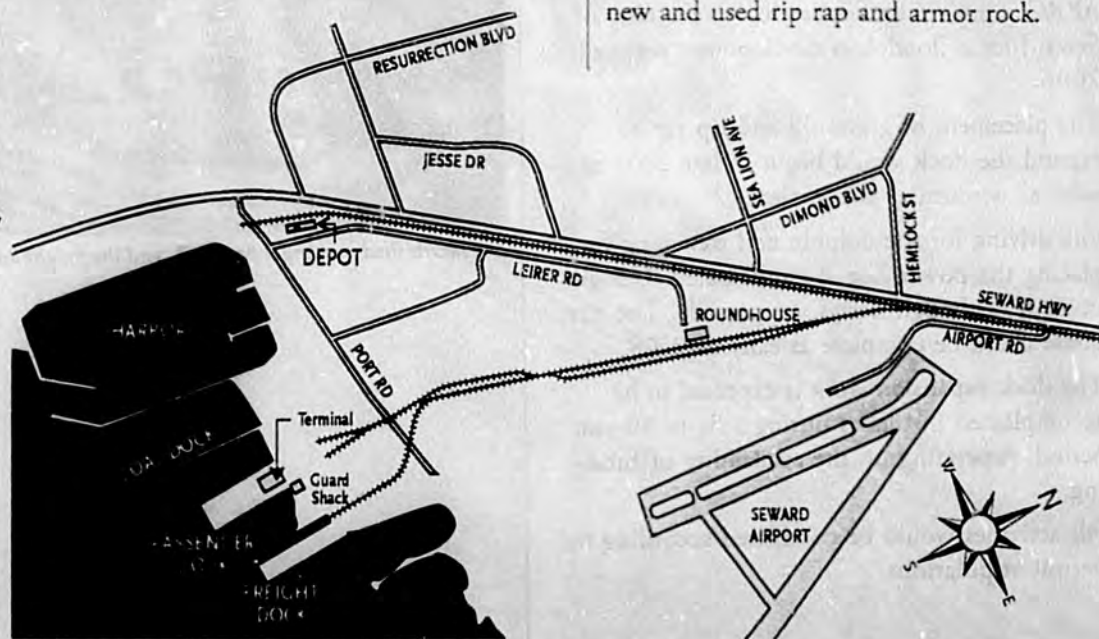
The existing freight dock was constructed between 2000 and 2002. It is supported by a sheet pile bulkhead on the west side, a riprap and armor rock fill slope on the east side, and a combination of the two on the south side. It has a series of fenders on the west side. The dock footprint, including the approach, is approximately 5.3 acres in size (200-by-620 feet), and was constructed with about 143,700 cubic yards of fill material. A catwalk and mooring dolphin were installed at the end of the dock to aid in berthing of vessels, and the basin adjacent to the new dock was dredged.

The first phase of expansion would widen a portion of the dock from 200 feet to 320 feet. In later phases, the dock would be widened the

full length of the dock to meet the existing shoreline, thus providing adequate operating area for a complete truck circuit from ships to an area where trailers are loaded and/or unloaded to/from railcars. Rip-rap and armor rock would be placed to protect the dock's east and south sides from wave action.

To aid in the safe berthing of vessels, a steel-pile mooring dolphin with appropriate navigational lighting would be installed approximately 400 feet south of the freight dock. To provide power for a motorized capstan and lighting, an electric line would be extended from the dock to the dolphin in an underground trench through the tideflats. The dolphin and electrical trench footprint is approximately 0.1 acres.

The total expansion would essentially double the dock's 5.3-acre footprint to approximately 10.6 acres. A total of 115,000 cubic yards (CY) of fill material would be brought to the site using rail cars and trucks. Existing rip rap and armor rock would be removed and reused as new fill is placed. Of the 115,000 CY of fill 92,000 CY would be below the high tide line - 86,000 of this would be gravel, and 6,000 CY would be the new and used rip rap and armor rock.



Benefits

- The first phase of the expansion will provide immediate improvements to the capacity, safety and efficiency of cargo ship loading and unloading operations.
- Construction of later phases that finish the expanded dock infrastructure will improve service to marine customers, enhancing local economic development efforts to grow freight.

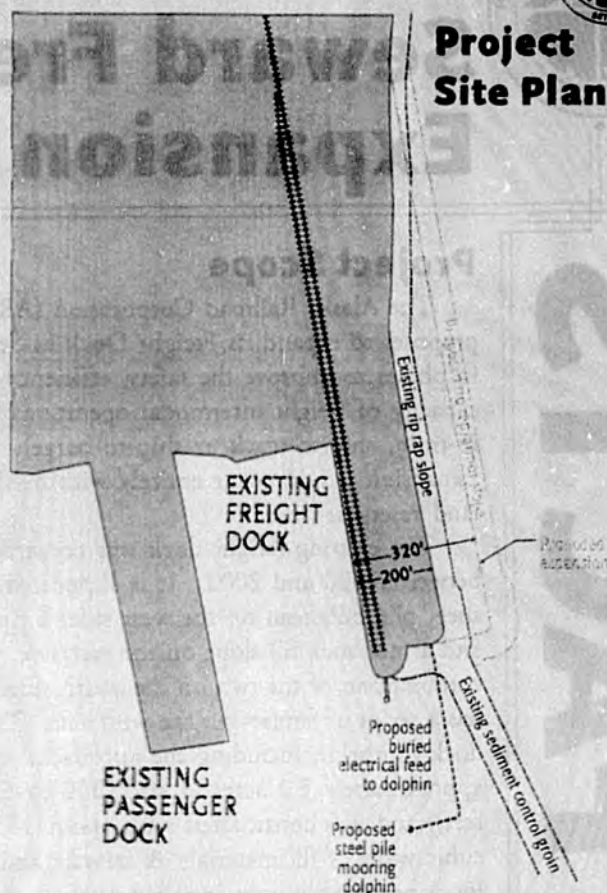
Project Cost

- The budget for constructing the first phase beginning in 2007 is estimated at \$2.2 million. Funding is from non-federal sources, including the Alaska Railroad.
- Later phases to include additional expansion of the dock surface, electric and water utility upgrades, further track work and other upgrades/modifications, are estimated to cost at least \$1.6 million. Funding is not yet identified, however, private sources are being investigated.

Status/Schedule

- In November 2006, ARRC submits an application to the U.S. Army Corps of Engineers (USACE) and the Alaska Department of Natural Resources (ADNR) to modify an existing permit that will include the expansion.
- ARRC submitted an application to the City of Seward for a floodplain development permit in 2006.
- The placement of gravel fill and rip rap to expand the dock would begin in late 2007 as soon as permitting is complete.
- Pile driving for the dolphin and trenching for placing the power line are anticipated to begin in 2007, although delays are possible. The first phase could be complete as early as 2008.
- The dock expansion work is expected to be accomplished in phases during a 5- to 10-year period, depending on the availability of funding.
- Fill activities would be conducted according to permit stipulations.

Project Site Plan



The refurbished passenger dock, left, and the freight dock, right.



Whittier Master Plan

The Alaska Railroad (ARRC) is pursuing a Master Plan to guide development of improved Alaska Railroad Corporation (ARRC) infrastructure in Whittier.

Project Scope / Objectives

Improvement objectives are:

- Accommodate anticipated increases in rail passenger and freight activities.
- Improve safety and efficiency of passenger and freight operations.
- Segregate passenger and freight operations to the extent possible.
- Promote passenger safety and convenience.
- Enhance the safety of pedestrian movements, including intermodal and marine/land interfaces.
- Reduce modal conflict between railroad operations and vehicular access between the waterfront and the city center.

Additional goals and objectives specifically related to the Whittier community are:

- Enhance the Whittier community (residents and visitors),
- Integrate the Railroad's Master Plan and the Whittier Comprehensive Plan to foster local economy development.

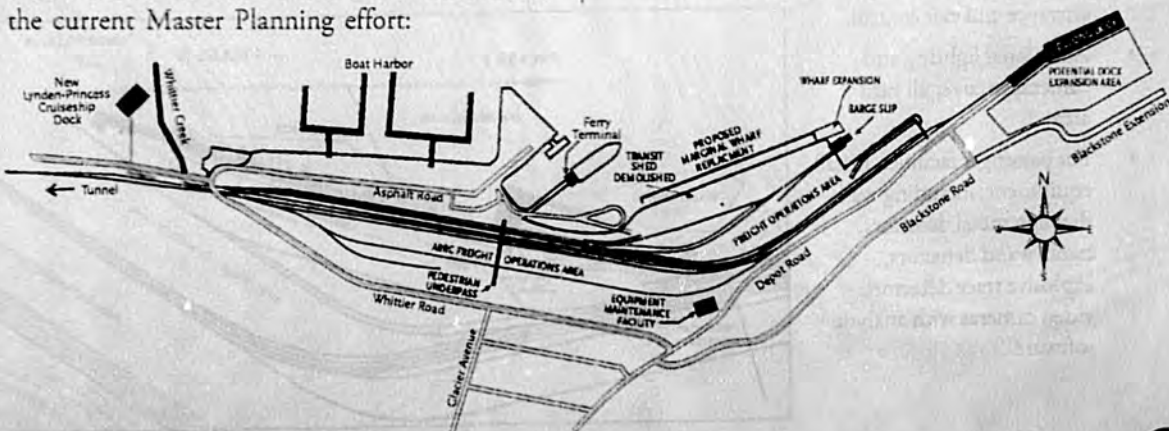
Status

A number of previous studies and planning efforts have been undertaken and contribute to the current Master Planning effort:

- Whittier Comprehensive Plan Update (City of Whittier, 2005)
- Whittier Intermodal Development Concept and Design, Draft Needs and Purpose Report (Alaska Railroad, 2004)
- Draft Whittier Intermodal: Market Forces and Revenue Estimates (Alaska Railroad, 2003)
- Phase I Environmental Site Assessment for Whittier Intermodal Development (Alaska Railroad).

Through these planning efforts, a number of projects have been accomplished.

- Yard Pedestrian Underpass – 300-foot portal for safe passage under the railyard. Completed 2002. \$2.285 million budget funded 80% by Federal Transit Administration (FTA) and 20% ARRC.
- Marginal Wharf – closed 2002 due to deteriorating infrastructure.
- DeLong Dock – fender piling, water and electrical service improvements to accommodate displaced Marginal Wharf tenants. More than \$600,000 spent since 2002, funded by ARRC.
- Equipment Maintenance Facility – new building to store and maintain heavy equipment. Completed 2003. \$2.225 million budget funded 80% FTA and 20% ARRC.
- Freight Barge Slip – repairs and upgrades to maintain and improve facility performance. Side loading structures complete in 2002; \$2.26 million budget funded by ARRC. Safety improvements in 2003 funded by ARRC. Initiated multi-year program to rehabilitate aging components in 2005.





- **Cruiseship Passenger Loading/Unloading Spur** – spur and platform constructed near Whittier Creek in 2004 to accommodate safe transfer of passengers to and from the train. Funded by ARRC.
- **Transit Shed** – demolition and removal completed in 2003. \$1.27 million budget funded 80% FTA and 20% ARRC.
- **Security Improvements** – includes security office at yard entrance, seasonal fence on the water side of the yard, and video cameras to monitor barge operations and restricted areas. Funded by ARRC.
- **Master Plan** – Initiated in 2004, work resumed in 2006, with completion expected by early 2007. \$597,000 budget, funded by 80% FTA and 20% by ARRC.
- **Passenger Intermodal Improvements** – initiated in 2006, an assessment of passenger and intermodal improvements in the marginal wharf and uplands areas. To be completed in 2007. \$2.1 million to initiate Phase I (Marginal Wharf demolition). Funded by 91% by FTA and 9% by ARRC.

Future Actions Recommended by the Whittier Master Plan

The Master Plan has identified the following actions to meet future needs.

Freight Operational Improvements

Barge business is expected to maintain at current levels, while container traffic is expected to grow 3-4% annually. To address current and future rail-barge demands:

- Replace Barge Slip within 3-10 years to accommodate railcars and forklifts, operational at all tide cycles, good visibility and communications, lighting, docking and mooring mechanisms, and other safety enhancements.

Security

- Fence the entire working yard perimeter with access-control gates.
- Card reader access for entrance and exit control.
- Additional lighting and cameras to cover all yard areas.
- For passenger facilities, install equipment, including walk-through metal detectors, hand-wand detectors, explosive trace detectors, video cameras with analytic software.

Railyard and Track Improvements

- Reconfigure track within the rail yard to separate passenger and freight train activity, and improve yard drainage and snow removal. Pending funding, these activities could be accomplished by 2008.
- Work with city to develop future options to reduce traffic delays at the major railroad/highway crossing adjacent to Whittier Creek.

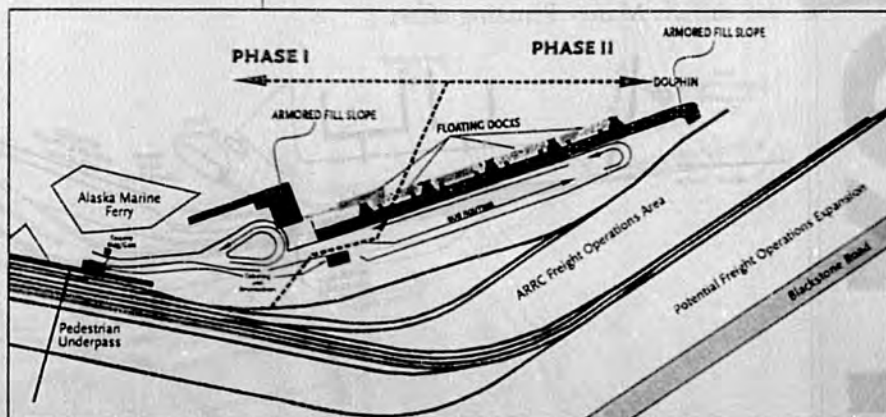
Passenger Intermodal Improvements

ARRC projects a 55% increase in passenger volume on regularly scheduled service.

- Docksider Passenger Improvements needed to address current limited dock space for day boats, multi-day small cruise boats, and cruise ships:
- Demolish and remove the condemned Marginal Wharf. \$2.1 million budget to initiate project in 2007. Currently funded 91% by FTA and 9% by ARRC. More funding may be needed to finish the demolition.
- Construct improved public use facilities, including new dock, to provide access for day boats and multi-day small ship cruise boats.

The passenger rail platform near Whittier Creek is nearly half a mile from water-borne facilities, and its location often conflicts with freight operations. Key rail passenger improvements include:

- Locate passenger facilities near the Ferry Terminal and public use dock, near the Pedestrian Underpass, and easily accessible to road and harbor.
- Pending funding a new passenger terminal and train-loading facility will remain a high priority.
- Build sheltered, Americans With Disabilities Act-compliant rail terminal, to accommodate air/marine/rail ticketing, baggage handling, passenger waiting and loading areas, bus staging and vehicle parking.
- Next to the terminal construct 500-foot covered passenger train loading facility that includes two rails for simultaneous loading of two passenger trains.



Whistle Stop Service in Chugach National Forest

Project Scope

The USDA Forest Service (USFS) and Alaska Railroad (ARRC) are partners in developing a new Whistle Stop Service that will provide a variety of world-class recreation and transportation opportunities for users of the Chugach National Forest.

The project includes development of several sites between Portage and Moose Pass that will be accessible by rail and interconnected by trail (See Figure 1 - Proposed Whistle Stop Locations, on page 2). Development at each site will vary, depending on the terrain and potential recreational opportunities. All developed sites would include an ADA-compliant boarding/unboarding platform, passenger shelter, toilets and interpretive signage (See Figure 1 - Whistle Stop Layout Concept). Other possible features include picnic facilities, camping facilities, wildlife viewing facilities and expanded trails.

The project trail system consists of approximately 35 miles of trail between the proposed Whistle Stop locations. One new trail would interconnect Luebner Lake, Spencer, Bartlett Glacier and Grandview. Spur trails leading to viewing platforms, natural features and camping facilities are planned at Spencer, Bartlett Glacier and Grandview.

A successful whistle stop experience requires that the rail passenger equipment be independent of other railroad operations. The current project scope calls for acquisition of two self-propelled railcars.

Benefits

The project would:

- Provide an opportunity for visitors to connect with nature in a unique, safe, world class and memorable setting.

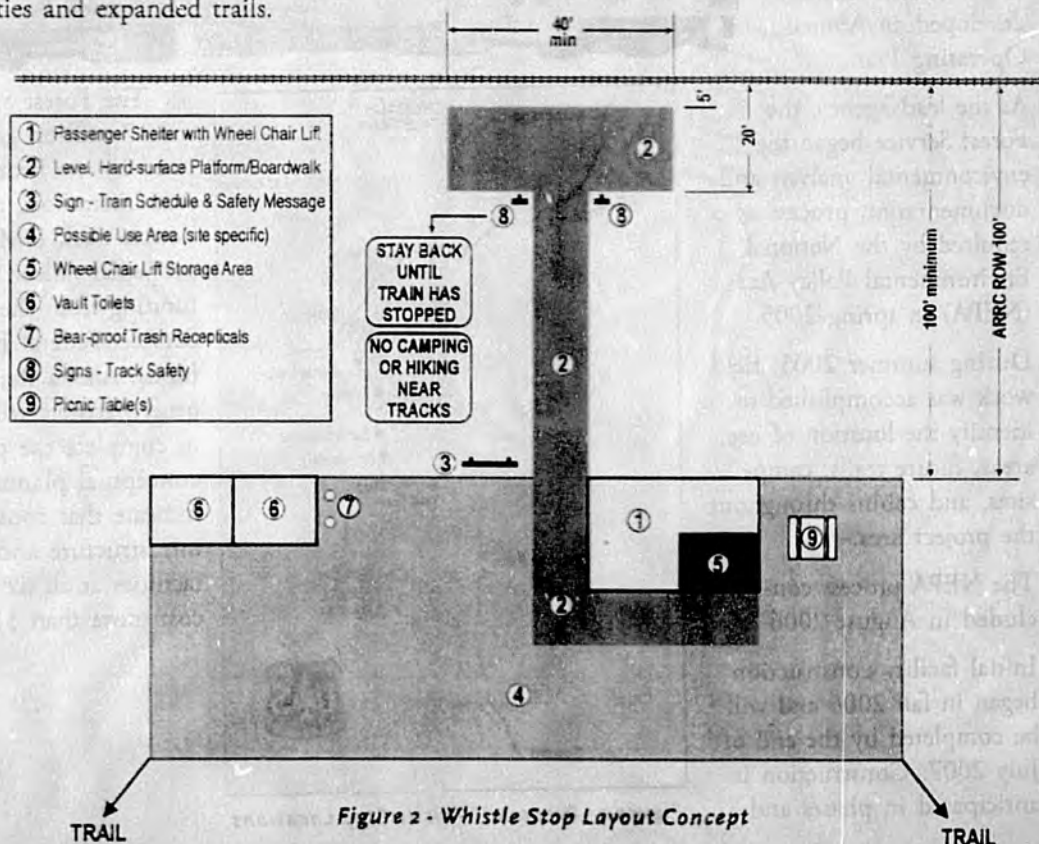


Figure 2 - Whistle Stop Layout Concept



- Provide controlled access to the Chugach National Forest backcountry while protecting the resources. Currently, access to the forest's backcountry in this area is extremely limited.
- Provide a variety of activities for visitors with varying degrees of skill.
- Support the Alaska Railroad's Anchorage-Seward operations with increased ridership.
- Development of the rail route will offer opportunities to disperse recreational activities from the congested highway, thereby reducing heavy summer traffic.

Project Status

- In 2003, the Alaska Railroad and Forest Service entered into a partnership with a Memorandum of Understanding.
- A business plan was initiated in 2004, and completed in early 2005. ARRC and USFS entered into a Challenge Cost-Share Agreement (recognizing workforce contributions from both entities), and further developed an Annual Operating Plan.
- As the lead agency, the Forest Service began the environmental analysis and documentation process as required by the National Environmental Policy Act (NEPA) in spring 2005.
- During summer 2005, field work was accomplished to identify the location of use areas, future trails, campsites, and cabins throughout the project area.
- The NEPA process concluded in August 2006.
- Initial facility construction began in fall 2006 and will be completed by the end of July 2007. Construction is anticipated in phases and

will be dictated by available funding.

- Phase I - Spencer & Grandview
- Phase II - Luebner Lake & Bartlett Glacier
- Phase III - Hunter & Trail Creek

- Funding has been approved to buy a double-deck self-propelled commuter railcar that may be similar to the bi-level DMU by Colorado Railcar pictured at right. To facilitate whistle stop service, ARRC is requesting some special features including a control cab at either end, and wheelchair lift on either side.

Project Cost and Funding

Chugach National Forest received a \$1.6 million earmark being spent as follows:

- \$600,000 for Forest Service plans, survey and design of Whistle Stop station infrastructure
- \$1 million for Alaska Railroad planning, design and construction of Whistle Stop station infrastructure.



Figure 2 - Proposed Whistle Stop Locations

The Forest Service awarded a \$4.7 million grant, administered by the Federal Transit Administration, to purchase a double-deck DMU self-propelled railcar. Additional funding from the Forest Service, Federal Highway funds, Alaska Railroad and other partners will be necessary to complete the project. Initial conceptual planning estimates indicate that construction of infrastructure and recreational facilities at all six sites would cost more than \$14 million.

Spencer Whistle Stop

Construction began on the Spencer Whistle Stop in early fall 2006. Construction of the passenger platform is complete, and earth movement activities were carried out to prepare the site for facilities and boardwalk construction in 2007.

Spencer will be the first and only Whistle Stop completed in 2007, making it possible to begin the Whistle Stop service this year. The site is scheduled to be operational in July 2007.

Design for Whistle Stop facilities was approved by the Forest Service and State Historic Preservation Office (SHPO) in December 2006. Pavilions

and toilet facilities will be representative of a historic railroad camp. Photos of the Dead Horse Creek (Curry) Railroad Construction Camp served as models for the board-and-batten theme for facility construction. All wood will be yellow cedar. Boards will vary from 6 to 10 inches and will be randomly interspersed to provide an irregular appearance. Battens (a narrow strip of lumber used especially to seal or reinforce a joint) will be a uniform 1-by-2-inches. All of the site's pavilions will be the same size (16-by-20-foot footprint), but will differ, depending on the number of sides left open, and those with board-and-batten siding and multi-pane window(s).



Pavilion sides with board-and-batten siding and window(s).



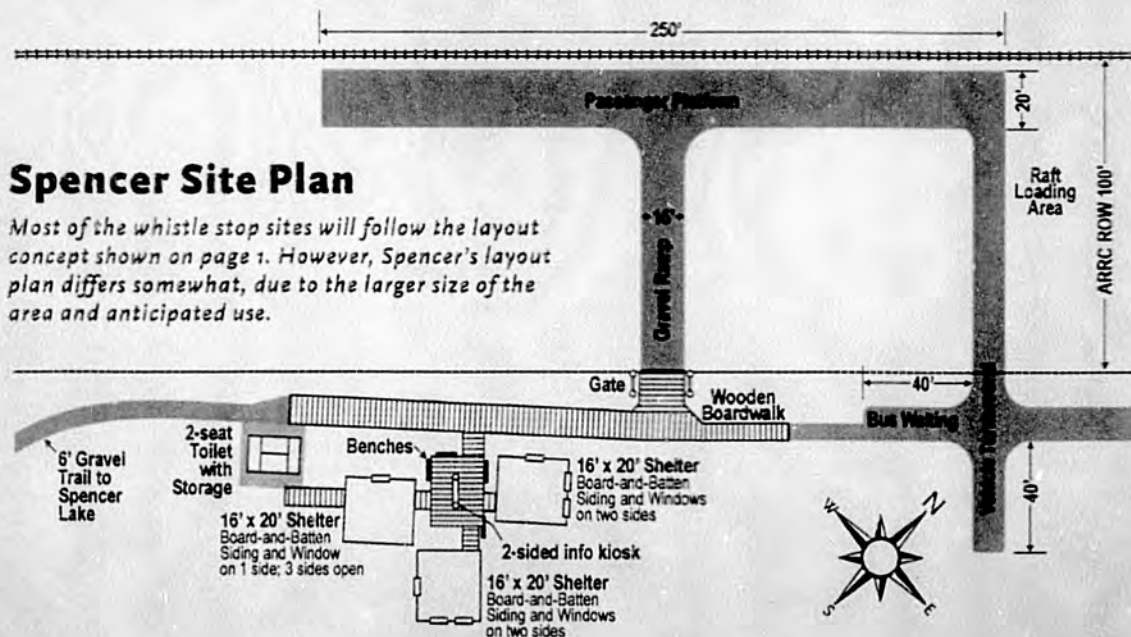
Pavilion sides left open, with no siding or windows.



North end looking south at passenger train platform.



Foreground, raft loading area; background, bus parking.



Spencer Site Plan

Most of the whistle stop sites will follow the layout concept shown on page 1. However, Spencer's layout plan differs somewhat, due to the larger size of the area and anticipated use.



Anchorage Rail Capacity Improvements MP110-114

Project Scope

The Alaska Railroad (ARRC) is investigating alternatives to increase capacity along the mainline track from the Anchorage International Airport Spur (near MP 110) to the Anchorage Rail Yard (MP 114). The capacity improvement alternatives initially considered included additional sidings (passing lanes), installing automated signals and switches, and/or extending the double track that was constructed in south Anchorage, along the mainline stretching between 120th Avenue (MP 105) and the Minnesota Drive overpass (MP 110, near the rail spur to the Anchorage International Airport). The Railroad is pursuing preliminary engineering, environmental studies required for National Environmental Policy Act (NEPA) documentation, and public involvement activities. As preliminary design activities have progressed, the alternatives have been refined such that the two alternatives that will be fully analyzed in the Environmental Assessment (EA) include "No Build" and "Double Track".

Benefits

The four-mile rail corridor from the Anchorage Yard to South Anchorage is the busiest on the Alaska Railroad. In the summer, as many as 20 trains per day use the corridor. Typical summer train traffic along the corridor includes passenger trains traveling to/from Seward, Portage, Grandview, and Whittier; and numerous trains hauling gravel, coal and general freight. The railroad also operates fuel trains running from Anchorage to Whittier and Seward. There are regularly a number of work trains and special charters that may add to the overall train activity. Projections call for rail passenger traffic to increase significantly, while the forecast for freight operations growth along this corridor is more modest.

There is growing interest in a commuter rail service connecting Anchorage and Girdwood (as

well as Anchorage and the Mat-Su Valley). This would also increase passenger train activity along this corridor. The railroad will start construction next year on a multi-year project to build an intermodal facility in Ship Creek, which may also lead to additional charter and commuter train traffic.

Capacity improvements will alleviate congestion and enhance safety for the Railroad and the community. Improvements would also increase operational efficiency and prepare the Railroad to better handle future passenger and freight train demands.

Status

ARRC initiated the following activities in 2002, with efforts continuing to the present:

- Compiled and evaluated information on existing rail use (type, number, daily and seasonal schedules), projected rail traffic increases, existing constraints (speeds, communication, grades, delays), existing and projected maintenance issues.
- Initiated a public and agency involvement program, including presentations at community council meetings, public and agency scoping meetings, and other meetings to solicit input from the affected community on its concerns about the project.
- Identified issues of community concern.
- Conducted a winter, spring and summer noise and vibration analysis, including identification of sensitive receptors, measuring ambient noise levels and train-induced noise and vibration at selected locations, projecting noise and vibration levels associated with future build conditions, and developing initial noise and/or vibration mitigation options to address potential impacts. The purpose was to determine existing conditions, seasonal variations,



impacts at various speeds, and the differences between freight trains and lighter passenger trains. Study measurements are helping to predict future noise and vibration levels given various alternatives to addressing the increasing capacity, i.e. modeling for single and double track.

- Conducted a grade-separation (overpass/underpass) feasibility analysis, field studies of potentially sensitive areas (Fish Creek crossings), aerial survey work and dispatch modeling analysis.
- Based on studies and data analysis, ARRC initiated an Environmental Assessment (EA) of two options: a) no action and b) extension of the double track from its existing termination near 44th Avenue to the Anchorage Yard. Alternatives that were considered but dismissed include construction of a siding and construction of double track between Westchester Lagoon and the Anchorage Yard. These measures would not have accomplished the necessary capacity improvements.
- A draft EA is expected to be sent to the Federal Transit Administration (FTA) for consideration in early 2007. Once the FTA approves the EA, it will be made available for public review and comment.

Project Costs

- Budget for preliminary engineering, environmental studies and public involvement is \$1 million, funded 80% by FTA and 20% by ARRC.
- Design and construction costs will depend on the option selected; however, the full double track option is expected to cost approximately \$40 million (2005 estimate). There is currently no funding for construction. Funding sources may include the FTA, Federal Railroad Administration and ARRC.





Anchorage Yard Freight & Passenger Car Shops

Project Scope

The Alaska Railroad Corporation (ARRC) proposes to build a new freight car repair shop and to remodel the existing car shop into a service and repair facility dedicated specifically to passenger cars. Both car shops would be located within the Anchorage Railyard. Constructing the new shop will separate passenger and freight car maintenance activities and allow more timely and cost efficient repair and maintenance of the railcar fleet.

Project Need & Benefit

ARRC has an ever expanding fleet of passenger and freight cars with maintenance needs that have outgrown the corporation's existing repair and maintenance facilities. The existing passenger fleet consists of nearly 50 cars and the freight car fleet numbers more than 1,000.

During the passenger season, all passenger cars are in use on a daily basis, and must be serviced and maintained each day. Day-to-day servicing includes sanitary (water and sewage), cleaning, restocking galleys, and other activities. In addition to these general service activities, various maintenance inspections are required by the Federal Railroad Administration. Daily maintenance activities require continual switching and movement of cars in and out of the shop. Additionally, maintenance crews must work around freight cars that are also being maintained or under heavy repair in the same location.

Construction of the new freight car shop will separate the passenger and freight car maintenance functions. Freight cars are periodically maintained and inspected, and are repaired when required. The new freight car shop will have different areas dedicated to routine maintenance and to heavy repair. Cars that require only routine maintenance can be moved quickly through, while cars that require heavy repair may be kept in the shop for days. Configuration

of the new shop will allow more efficient and cost effective operations by providing state-of-the-art equipment and reducing the number of times cars must be moved in and out of the shop.

With a new car shop devoted to freight maintenance requirements, the existing car shop will be available to meet the passenger-related maintenance and servicing requirements. A dedicated passenger car shop will make daily maintenance much more efficient, as many more cars will fit in the shop, requiring fewer train movements. The existing car shop will be modernized by replacing outdated electrical and mechanical systems, as well as other upgrades.

Status

- In 2006, ARRC conducted an investigation to identify and evaluate possible locations for the new freight car shop. Numerous possibilities were identified and pros and cons considered for each. The preferred location is within the Anchorage Railyard, near the Knik Power Plant on Whitney Road.
- Late in 2006, an engineering firm was selected to complete the evaluation of proposed sites and to prepare conceptual design, which is anticipated to during the summer of 2007.

Project Costs

- Budget for conceptual design and National Environmental Policy Act (NEPA) compliance is \$300,000, funded by the sale of revenue bonds, underwritten by Federal Transit Administration formula funds.
- Total project costs, including design and construction, is estimated to be approximately \$40 million (2005 dollars). Funding is not yet identified.

Weigh-In-Motion Scale

Project Scope

The Alaska Railroad (ARRC) is purchasing and installing a Weigh-in-Motion Scale to replace the current static scale, which is located in the northeast area of the Anchorage Rail Yard.

The coupled-in-motion system is designed to weigh complete trains, a group of several cars, or individual cars as they pass over the weigh bridge at speeds up to 10 miles per hour. The system is designed to automatically identify the weighing direction, initiate the weighing logic, sense the train speed, detect engines, and record railcar weights. Systems of this type can operate in both directions and completely

unattended. Train information is recorded in real time and is stored for further processing.

A railcar identification (AEI) reader will be added to the system to provide a complete record for each car being weighed. With this feature, the railcar weight and identification are automatically matched and recorded.

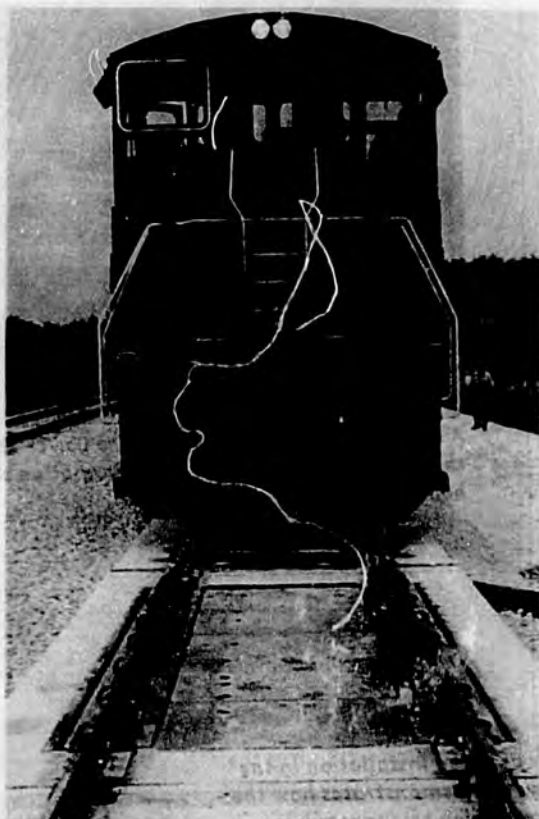
Installing the system requires demolition of the existing old static scale and scale house, as well as excavation and grading to prepare the site. Two 75-foot concrete approaches will be constructed on either end of the scale. The system weigh bridge requires construction of a foundation, as well as installation of telecommunications equipment and equipment programming. After system installation, the track will be repaired and upgraded, and the new scale house will be installed next to the weigh-in-motion scale.

Benefits

The installation of a weigh in motion scale will greatly reduce employee's exposure to pinch points and slip-trip-and-fall injuries by eliminating the need to couple and uncouple rail cars on the scale while weighing them.

The installation of a weigh-in-motion scale will save a minimum of labor equating to 4 hours per week, and 208 hours per year. The time that equipment is needed to accomplish weighing is reduced five-fold. (It currently takes an estimated 2.5 hours per week using a static scale, compared to 0.5 hours using the weigh-in-motion scale). Annual savings realized from reduced labor and equipment costs is approximately \$68,000.

Use of the scale will meet all requirements of federal (AREMA, NIST, NTEP) and State of Alaska regulations and recommended practices.



A locomotive in the Lower 48 pulls a train over a newly-installed weigh-in-motion scale bridge.

Project Status

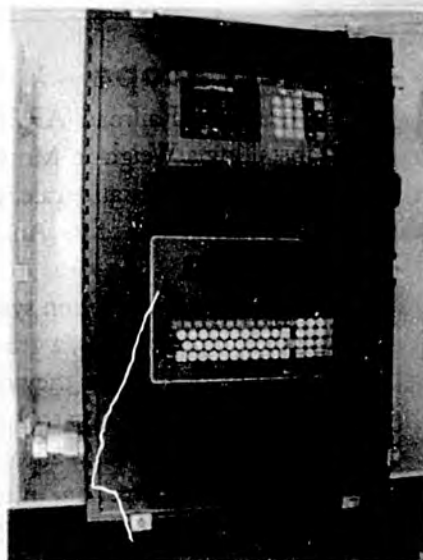
- The Alaska Railroad has purchased one unattended coupled-in-motion weigh scale with optional accessories.
- The scale will be installed in spring 2007.

Project Cost

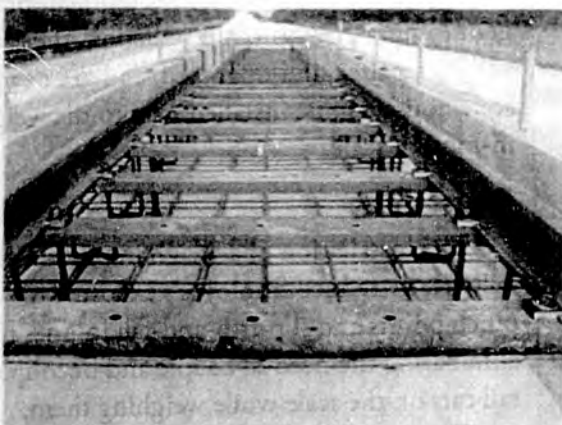
The budget for equipment purchase and installation is \$360,000, funded 100% by the Alaska Railroad.



The existing old static scale is located in the northeast area of the Anchorage Rail Yard. The new weigh-in-motion scale will be installed in this same location.



The system controller will be located in the scale house.



The 75-foot approaches on either side of the weigh bridge require concrete construction.



A construction crew member in the Lower 48 puts the finishing touches on a weigh-in-motion scale house.



The pictured installation in the Lower 48 demonstrates how the heavy weigh bridge requires use of a crane to set the structure in place upon the concrete foundation.



Ship Creek Projects

Ship Creek Master Plan

Project Scope

The Alaska Railroad (ARRC) initiated its Ship Creek master planning effort in 1998 and completed a master plan that was approved by the ARRC Board the following year.

In conjunction with the Municipality of Anchorage (MOA), the master planning effort provides for broad redevelopment of Ship Creek spanning 20 years. It considers potential uses for housing and hotels, retail, restaurants, railroad museum, trails, an outdoor plaza for a market, arts, crafts and recreation activities, parking and an intermodal facility to support commuter rail services and other forms of mass transportation. It also outlines a set of short-term achievable and implementable tasks and addresses long-term infrastructure investment with targeted redevelopment plans.

The Master Plan serves as a road map for the potential development of Ship Creek based on targeted land uses for each development district and specific development guidelines including streetscapes, lighting, landscaping, signs, and construction standards.



The plan was developed around five major components:

- Public access
- Transportation
- Environmental
- Area based land use
- Historical evaluation

Status

- The Railroad Board of Directors approved the Ship Creek Master Plan at its meeting June 9, 1999. In December 2000, the board approved the proposed Development Program and Design Guidelines. These were submitted to MOA Planning & Zoning (MOA P&Z) for review and implementation in January 2001, and the ARRC initiated preliminary marketing efforts.
- The ARRC met with Ship Creek tenants in 2001 and 2002 to inform them of plans and to keep them abreast of developments. Meetings continued through 2005 regarding intermodal planning.
- Initial development was aimed at pedestrian amenities, including construction of sidewalks and a plaza in 2001, 2002 and 2003. The ARRC initiated a plaza vendor program to increase activity in the core area as longer-term plans are implemented.
- The Railroad has continued to work with MOA P&Z to adopt the design guidelines. Initial development is allowable under current zoning.



Ship Creek development concepts are created with multi-use in mind.

- The MOA P&Z Commission approved ARRC's final design guidelines which were subsequently approved by the MOA Assembly on July 11, 2006, along with a revised Zoning Ordinance (AS 2006-46 (S)) for the Ship Creek Planned Community zoning area. Copies of the Ordinance and the design guidelines are available by contacting the Real Estate Department. These revisions essentially update uses, and offer guidelines that are conducive to foot traffic, tourism business and residential uses.

Ship Creek Intermodal

Project Scope

The ARRC seeks to develop a transportation hub in the Ship Creek area, providing bus and rail facilities, pedestrian improvements, new rail platforms, bus/van stops, retail development, airport accommodations and visitor information. Development includes elevated walkways that will connect the intermodal facility to downtown Anchorage.

Project Status

Preliminary concept work, NEPA studies, and the NEPA document are complete and the project is in the design phase. Phase I includes utility relocation, two new tracks and two rehabilitated tracks between the existing depot and Ship Creek Avenue. Design of Phase I was completed in 2006, and construction on Phase I will begin in 2007. Future phases include: Phase II - build a service/office building and rehabilitate the historic depot. Phase III - build a new departure lounge and pedestrian skybridge.

Project Cost

\$19.3 million budget for conceptual work, preliminary design, environmental documentation, final design and construction of the first phase of the project, funded 91% provided by the Federal Transit Administration (FTA) and 9% by ARRC. Total estimated budget for the first three phases is \$60 million. Funding is being sought.



Pedestrian Safety & Amenities Projects

Project Scope

Phase I improved pedestrian amenities and safety by adding sidewalks, lighting, bus gates, fencing, pedestrian rail gates and landscaping between the Anchorage Historic Depot and the long-term parking area on Ship Creek Avenue.

Phase II completes pedestrian access to the Ship Creek area by adding and/or refurbishing sidewalks a) on the south side of Ship Creek Avenue, in front of the ARRC Headquarters building, b) on the west side of North C Street between Ship Creek and 1st avenues, and c) on the north side of 1st Avenue along the west end of the depot. Pedestrian safety is further enhanced on North C Street by providing pedestrian crossing panels over the track.

Other enhancements along the new sidewalks include decorative fencing, lighting, landscaping, and interpretive and directional signs. Along the north side of Ship Creek Avenue, east of North C Street, street lighting fixtures were repaired and replaced, providing a safer environment for pedestrians during evening hours.



Project Status

Phase I was initiated and completed in 2000.

Phase II final sidewalk design drawings were completed in fall 2003, after revisions to accommodate MOA storm drain modifications. Sidewalk construction, landscaping along 1st Avenue, and light pole installation took place in 2004. I.

Project Cost

Budget for both phases is \$904,000, funded 80% by FTA, 20% by the ARRC.

Plaza Project

Project Scope

The MOA, in cooperation with the ARRC, improved pedestrian amenities in the Ship Creek area by adding a plaza at the corner of Ship Creek Avenue and C Street. The project included adding benches, landscaping and creating a central gathering place for visitors to the area.

Project Status

- Architectural contract was awarded to Land Design North on August 1, 2000. Final plan was completed summer 2001.
- Construction began in fall 2001 and was completed by early summer 2002.

Project Cost

- \$254,000 budget, \$194,000 funded by MOA through a state grant, and \$60,000 by ARRC.



Parking Improvements

Project Scope and Status

In 2004, the ARRC drained, filled and paved the parking lot adjacent to the plaza. The ARRC completed the project in 2005 with landscaping, sidewalk, striping and lighting.

Project Cost

- \$Phase I, \$400,000 and Phase II, \$360,000, funded by the ARRC.



Complementary Project

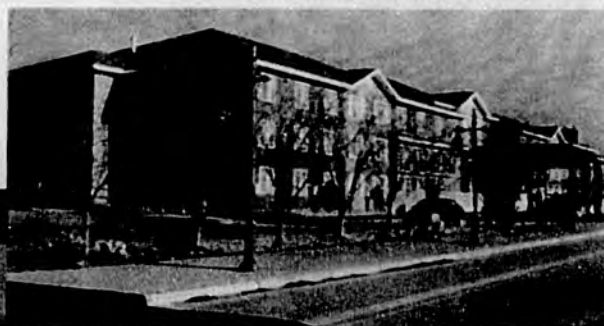
Project Scope

The American Association of State Highway and Transportation Officials (AASHTO) held its annual meeting in Anchorage in fall 2002. While here, AASHTO selected Ship Creek as the location for a Legacy Project. The project was aimed at enhancing ARRC's continuing pedestrian amenity projects. Specifically, the Legacy Project provided the following items:

- Decorative 4-panel interpretive sign kiosk at the Ship Creek Plaza
- 10-space paved parking lot for short term visitors to the plaza
- Decorative interpretive panel sign along the Ship Creek Trail
- 12-space paved parking lot for short term visitors to the Ship Creek Trail

Project Cost

- Approximate \$75,000 budget, funded by primarily by AASHTO. Other contributing agencies included:
 - Federal Highway Administration
 - Alaska Department of Transportation & Public Facilities
 - Alaska Railroad
 - Alaska Department of Natural Resources, Division of Parks & Outdoor Recreation (Office of History & Archaeology & Design Construction)
 - Municipality of Anchorage
 - Anchorage Historic Properties, Inc.



The Ulu Factory and Comfort Inn have made significant investments in new tourism-related infrastructure within the Ship Creek area.



Ship Creek Intermodal Transportation Center

PROJECT FACTS

Project Scope

The Alaska Railroad (ARRC) is in the design and engineering phase for an Intermodal Transportation Center (ITC) and associated improvements (pedestrian amenities, transit infrastructure, parking, track modifications, etc.) in the Ship Creek area.

The purpose is to facilitate connections from one transportation mode to another – rail, public transit, air, marine, bus, taxi, private vehicle, bicycle, and pedestrian – and to improve links to Anchorage's downtown business district to meet passenger transit needs over the next 30 years.

A secondary goal is to provide an efficient and safe connection between downtown Anchorage and the Ship Creek area, creating better access for residents and visitors. The Ship Creek ITC project is designed to complement existing and projected developments in the Ship Creek area. Project components include:

1. A new Intermodal Transportation Center with adequate baggage and passenger services, convenient and safe passenger boarding zones, well-defined arrival and departure areas and platforms, signage, appropriate security, and retail / office space that complements ridership – for example, news stands, beverage businesses, and transit-related office space.

2. Pedestrian connections between the ITC area and downtown Anchorage, between Ship Creek Avenue and 2nd Avenue.
3. Public parking improvements and expansion.

Project Background

The Ship Creek ITC has been part of the vision and plans for the Ship Creek and Downtown areas for several years. It has been identified in, and is consistent with, a number of initiatives:

- 1998 Ship Creek Site Assessment identified existing land uses and conditions in the Ship Creek area.
- 1999 Ship Creek Strategic Action Plan formulated by ARRC and a mayoral task force.
- 1999 U.S. Congress appropriated funding through the Federal Transit Administration, allowing ITC planning, environmental assessment (EA), and conceptual design to begin.
- 2000 Draft Ship Creek Master Development Plan by ARRC.
- 2000 Ship Creek Multi-Modal Transportation Plan, developed in conjunction with a citizen task force and adopted by MOA.



Design model view from the north.



Pedestrian bridge rendering.

Facility Site Plan



MOA Planning Department and Downtown Partnership held hearings on proposed north-south pedestrian corridors – the E Street corridor is favored.

- 2001** Anchorage 2020 Comprehensive Plan states that Downtown should connect to a redeveloped Ship Creek area and a multi-choice transportation system should be provided.
- 2003-2006** ARRC continues to work with MOA, the Downtown Partnership, and other organizations to implement the vision for Downtown Anchorage and Ship Creek.
- 2006** The original project scope included a five-track 154-foot wide railroad crossing of North C Street. Due to the width of the crossing and the number of tracks, ARRC was concerned with crossing safety. A diagnostic team consisting of ARRC, the Municipality of Anchorage, and the Alaska Department of Transportation was convened to analyze the crossing and provide recommendations with regard to safety. After several meetings, the team recommended permanent closure of the crossing. Options for traffic rerouting were developed and presented to the public at several meetings; however, many area residents and businesses were concerned that closing the crossing would have an adverse effect on the area and were opposed to the closure. After further analysis, ARRC developed another alternative that reduced the crossing to four tracks with a width of approximately 100 feet. This revised layout will allow the crossing to remain open,

but without the significant safety concerns of the original layout.

Project Benefits

- The project addresses the inadequacy of ARRC's depot. The current facility has inefficient baggage handling, limited passenger service capability, and baggage handling and passenger loading/unloading activities that share a platform, resulting in conflicts. The depot location also affords poor traffic circulation and poor pedestrian access.
- includes two new tracks and rehabilitation of two existing tracks. This will include one new passenger track and one new main that will allow passenger and freight through traffic to bypass the intermodal facility without disrupting passenger operations. The new and rehabilitated passenger tracks will provide more flexibility in operations and provide the infrastructure for commuter rail, which is anticipated to be implemented in the future as discussed below.
- The project addresses the inadequate parking areas and sidewalks leading to the depot.
- The project will accommodate an estimated 3% annual growth rate in mass transit via rail over the next 30 years. Projected rail traffic increases would require multiple trains on the platform, construction of additional tracks and platforms to enable efficient, safe boarding procedures.
- Long-term projections consider increased train activity via a shuttle service from downtown Anchorage to the Ted Stevens Anchorage International Airport (TSAIA), where ARRC's new rail station opened in May 2003. By 2030, up to 60 trains may be departing / arriving from the Ship Creek ITC per day – 10 trains would run in the critical morning time frame. This figure includes the shuttle service between TSAIA and downtown Anchorage, trains running between Anchorage and Seward, and trains running between Anchorage and Whittier. The long-term shuttle service projection assumes 30 minute headways (4 trains/hour), 12 hours per day.



- Projections also anticipate increased rail activity from development of commuter rail service to the Matanuska-Susitna Valley. By 2024, such service is expected to handle 40,000 passengers per week. This translates into an additional 1,000 commuters per day moving through the depot. The morning commuter period alone may include at least four train arrivals /departures between 7:00-9:00 a.m.
- The project takes into account other impacts from commuter service, including the need for long-term parking. This would accommodate the likely number of commuters opting to drive a vehicle into Anchorage at the beginning of the week, commute via train throughout the week, and then drive their vehicle home at the end of the work week.
- The project recognizes that the current depot was designed as a train passenger waiting area, and is ill-equipped to interface with other modes of transportation. Project plans call for facilities and infrastructure that can accommodate pedestrian and vehicle traffic circulation, and efficient intermodal transfers.

Project Status

NEPA

- Initiated public scoping on Sept. 23, 2002, regarding the project's purpose, need and proposed scope. Organized a public open house during the comment period, which ended October 24, 2002.
- An Environmental Assessment was released for public comment in mid-April 2003.
- A Finding of No Significant Impact (FONSI) was issued by FTA in June 2003.
- An EA re-evaluation was initiated in spring 2006 to consider possible closure of North "C" Street. An open house on this issue was held April 25, 2006.
- ARRC is coordinating with MOA to use a small portion of Quiana Park to accommodate parking area expansion and landscaping, and to rehabilitate the Eisenhower Memorial. ARRC anticipates MOA will solicit public comment in early 2007. This is the final step in the EA re-evaluation.

DESIGN

- A contract for design of the project was awarded to ECI/Hyer, an Anchorage-based architectural firm, in July 2004.
- Three concepts were developed and resulted in the final preferred facility layout, which incorporates continued use of the existing depot with the new facility.
- The schematic design phase was complete in July 2005. Following ARRC Board approval, the design was unveiled to the public at an open house on October 6, 2005. Final design for Phase 1 is underway, and is scheduled for completion in 2006.

CONSTRUCTION

- Construction of the project's first phase will include relocation of utilities and construction of two new tracks and rehabilitation of two tracks between the existing depot and Ship Creek Avenue. Construction of the first phase is expected to begin in spring 2007 and will likely be completed in 2008.
- It is anticipated that future phases will include the following (pending funding):
 - **Phase 2** – Construct a service/office building and rehabilitate the Historic Anchorage Depot to improve electrical and mechanical systems, expand the depot lobby, and modernize ticketing and baggage handling operations.
 - **Phase 3** – Construct the new departure lounge over the tracks and a pedestrian skybridge connecting the project with Downtown Anchorage.

Project Costs

\$19.3 million is funded for conceptual work, preliminary design, environmental documentation, final design and construction of Phase 1. Funding is 91% by the Federal Transit Administration and 9% by the Alaska Railroad. Additional funding is needed to construct later phases. Total project costs for the first three phases is estimated at \$60 million (in 2005 dollars).



Support of Ship Creek Trail Extension

Project Scope

The Alaska Railroad (ARRC) is supporting a Municipality of Anchorage (MOA) effort to complete the Ship Creek Trail Extension project.

The Municipality of Anchorage began this effort in 1999, constructing a pathway from the Chugach Electric Association Dam to Post Road. Since then, trail efforts have continued in segments. A tunnel was built under Post Road and the trail was extended east to the William Tyson School in Mountain View. On the other end, a trail was constructed from North C Street, east to the first bridge over Ship Creek. In 2004, work continued to connect these newly constructed segments of the trail.

The Railroad became involved with the project in 2001 when the trail design proposed an at-grade crossing of the mainline track. In the interest of safety, ARRC pledged \$1.5 million in FTA formula funds to grade-separate the trail and tracks with a bridge at this location.

Benefits

- The connection provides a long-awaited upgrade to the city trail system, creating commuter and recreational opportunities.
- Pedestrian activity in the Ship Creek basin has continued to increase with the Ship Creek fishery. The level of activity is expected to rise as future development expands commercial and retail businesses. Extending

the trail provides a safe avenue for non-motorized visitors to enjoy this unique area.

- The bridge over the railroad tracks just west of Post Road will enhance trail user safety, eliminating the potential risks associated with getting too close to a moving train.

Status

- MOA and the Railroad began design work on the trail bridge over the tracks in 2004. Construction is scheduled to begin in spring 2006, with completion by summer 2006.

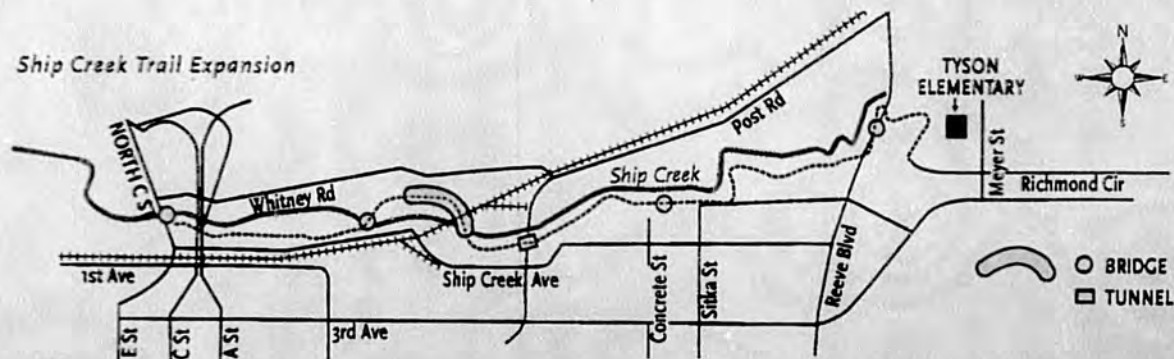
Cost and Funding

- \$1.5 million budget for the trail bridge, funded 91% by the Federal Transit Administration and 9% by the Alaska Railroad.



The Ship Creek Trail pedestrian bridge will go over the existing rail bridge and creek at this location within the ARRC Anchorage Rail Reserve.

Ship Creek Trail Expansion





Complimentary Project: Connecting Ship Creek Trail to the Coastal Trail

The Municipality of Anchorage is pursuing a project to connect the Coastal Trail with the existing Ship Creek Trail. Currently, the Coastal Trail leaves the coast at Elderberry Park to end on 2nd Avenue and H Street; and the Ship Creek Trail follows the creek, ending just west of the C Street Overpass, near the Ulu Factory. The gap lies within the Alaska Railroad's Terminal Reserve.

Work on the trail connection's environmental documentation and preliminary engineering began in 2005. Construction could begin as early as 2007 if funds are available.

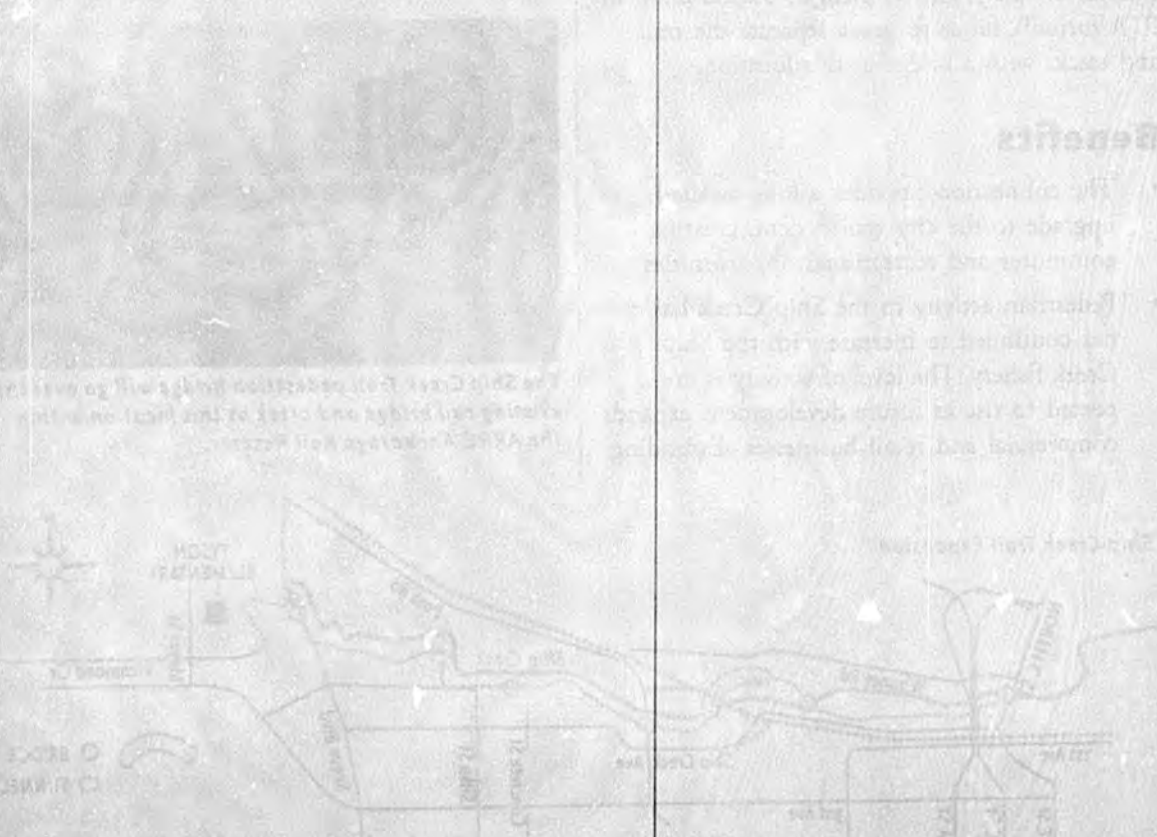
One concept for this connection, preliminarily called the Ship Creek Tideland Trail Connection, calls for a trail on fill across the mud flats to create a potential marsh area similar to Potter Marsh, with elevated boardwalks for viewing areas. ARRC



The existing Ship Creek Trail ends behind the Ulu Factory.

is supporting the MOA design efforts for this work within the rail yard reserve.

MOA is currently administering a \$3 million Federal Highway Administration grant for work on linking the Coastal Trail and the Ship Creek Trail.





Anchorage-to-Wasilla Track Realignment

PROJECT FACTS

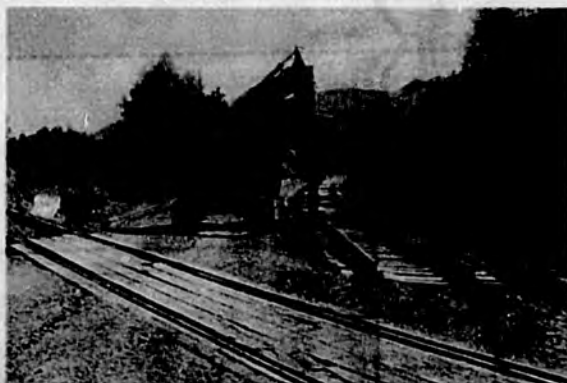
Project Scope

The Alaska Railroad's (ARRC) Anchorage-to-Wasilla track realignment projects will reduce track curvature and improve safety features along the mainline track. The effort is separated into three project sections: a) Anchorage to Eagle River Bridge, b) Eagle River to Knik River, and c) Knik River to Wasilla.

Benefits

Reducing track curvature will increase the speed that freight and passenger trains can safely travel. Speed increases will shorten passenger transit time, as well as improve freight efficiency. Once completed, train travel time between Anchorage and Wasilla is expected to drop from 90 minutes to less than an hour. Shorter travel times will reduce costs associated with relief train and engine crews, and will also make commuter rail service between Anchorage and the Mat-Su Valley a viable option.

Straighter track also lessens the risk of derailment, and reduces rail maintenance and wheel repair. In addition, Anchorage-to-Eagle River improvements will increase operational flexibility in preparing trains for northbound journeys and receiving trains in the Anchorage yard from the north.



Intersection of new and old alignments at MP 126, near the end of the realignment on Fort Richardson.

Project Costs

- The Eagle River-to-Wasilla budget is \$22.3 million, funded 80-91% by the Federal Transit Administration; 9-20% by ARRC.
- The Anchorage-to-Eagle River budget is \$55.2 million, funded primarily by the Dept. of Defense via FRA-administered grants.

Status — Eagle River to Wasilla

This section includes rehabilitation on select bridges as well as curve straightening design and construction on 42 curves between Eagle River (ARRC Milepost 127.5) and Wasilla (Milepost 159.6). The project was split into two segments to meet Long Range Transportation Plan (LRTP) requirements. These are Eagle River to Knik River and Knik River to Wasilla.

EAGLE RIVER TO KNIK RIVER

- The FTA issued a Finding of No Significant Impact on the EA (Environmental Assessment) for the Eagle River to Knik River segment in 2004.
- Track realignments on curves 129 and 130 completed in 2005.
- Grade construction for track realignments on curves 131, 132 and 132A was completed in summer 2005. Track construction will be completed in 2006.
- Work on curves 133, 133A and 133B in the Beach Lake Recreational Area, has been put on hold due to the discovery of an underground ice lens. Any of the possible engineering solutions will cost substantially more than is currently budgeted, causing the railroad to reevaluate this segment.



KNIK RIVER TO WASILLA

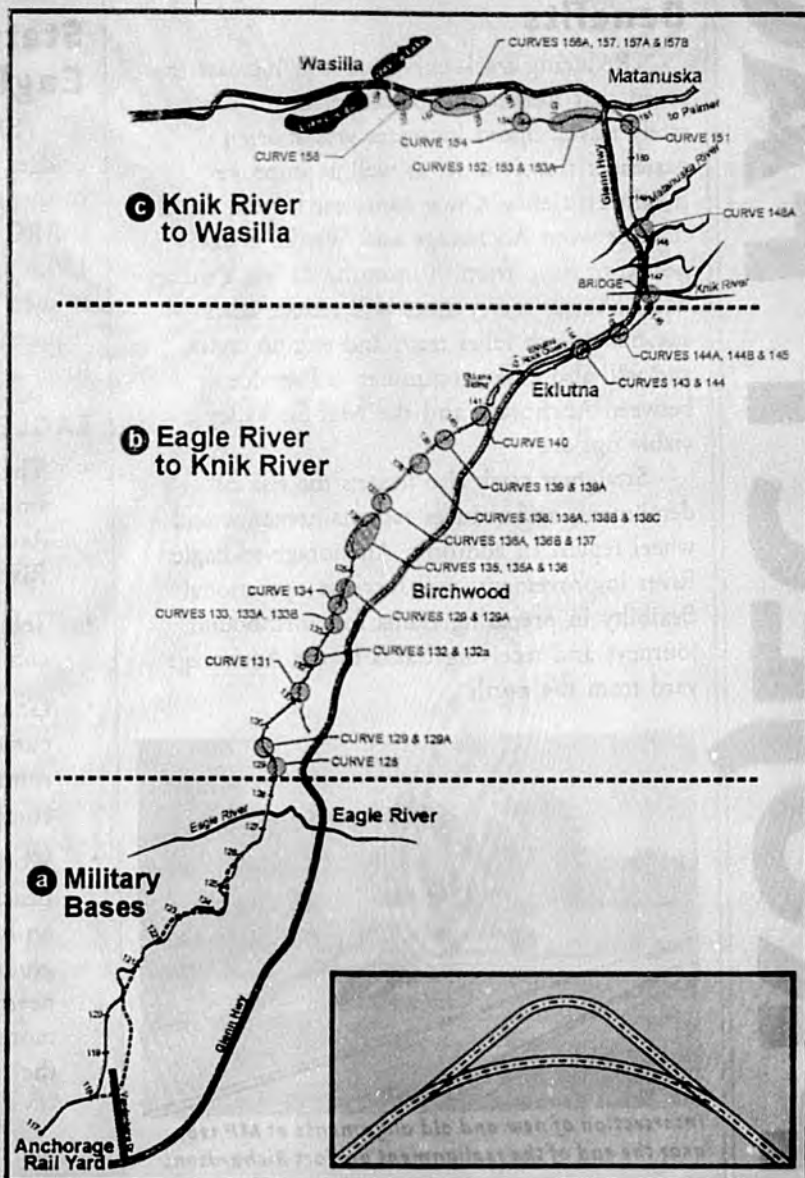
- FTA has approved the Categorical Exclusion for Knik River to Wasilla segment, with the exception of MP 154-157, which is currently undergoing an EA as the "South Wasilla Track Realignment" project.
- Final design complete for Knik to Wasilla. Construction began spring 2002, with completion expected in spring 2006.

Status — Anchorage to Eagle River

- The original alignment included numerous curves, at-grade (level with the road) crossings and ran too close to the Elmendorf AFB north-south runway. This project realigns 12 miles of the existing main-line track. Construction will straighten 28 curves and involve extensive realignment outside the existing right-of-way (ROW). This includes moving the track out of the east-west runway clear zone on Elmendorf AFB. In addition, the project constructs a second track (parallel to the existing main line) from the north end of the Anchorage Rail Yard (MP 117) to the Elmendorf AFB-Fort Richardson boundary (MP 121.3).
- Environmental Assessment is complete.
- Construction of new track from MP 117 to MP 121.6, including a grade-separated (where roads are constructed above or below the track) crossing over Vandenberg Road on Elmendorf AFB was completed in 2001. Construction of new track from MP 123.1 to MP 125 on Fort Richardson was completed in November 2003. Construction of final new track between MP 121.6 to MP

123.1 was completed during the 2004 construction season.

- Construction of new track from MP 121.6 to MP 127.5 (Eagle River Bridge) on Fort Richardson was completed in September 2004. A grade-separated crossing for Loop Road on Fort Richardson was completed in October 2006.
- Extension of double track from MP 119.8 to MP 121.3 was completed November 2006.
- With construction completed in 2006, remediation and restoration of the existing alignment will be completed in spring 2007.





South Wasilla Track Realignment

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC), in cooperation with the Federal Transit Administration (FTA), plans to straighten curves along the mainline track in South Wasilla, between ARRC Mileposts 154-158. This is part of a larger ARRC effort to reduce track curvature and improve safety features along the mainline track between Girdwood and Wasilla.

Project Benefits

- The new alignment will eliminate five at-grade (same level) road-rail crossings, thereby improving safety at crossings.
- Straighter track reduces the risk of derailment, thereby improving operational safety.
- Reducing track curvature will allow trains to travel safely at increased speeds, thereby shortening passenger train travel times, as well as improving freight train efficiency.
- Shortened passenger travel times will make commuter rail service between Anchorage and the Mat-Su Valley a viable option.
- Straighter track saves in operating costs for fuel and labor; and decreases wear and tear on train wheels and rail, thereby lowering maintenance costs.
- Does not preclude a City of Wasilla rail bypass in the future, if funded.

Status

- In spring 2003, a joint steering committee (formed in 2002 and including ARRC, Alaska Department of Transportation & Public Facilities [ADOT&PF], City of Wasilla, Matanuska-Susitna Borough, and the Mat-Su Community Transit [MASCOT]) identified the South Wasilla Track Realignment as one of six area projects to move forward for engineering and environmental analysis work.
- In late spring 2003, FTA approved advance right-of-way acquisition, so that land needed for

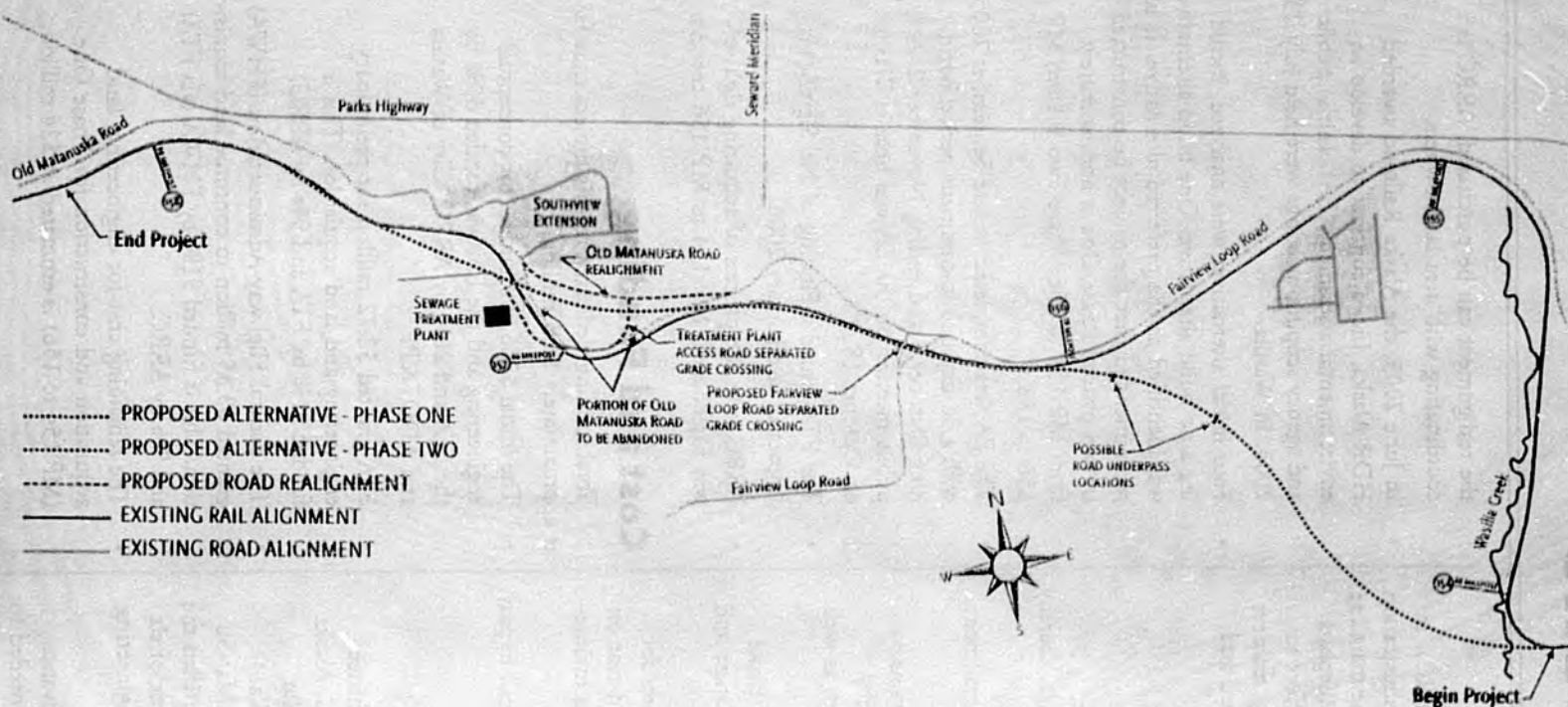
the realignment can be purchased. ARRC is coordinating with area land owners.

- In June 2003, the Alaska Railroad awarded HDR Alaska, Inc. a contract to develop an environmental assessment (EA). Initial public and agency scoping meetings were held July 23, 2003, in Wasilla.
- Four initial alternatives were analyzed, including a no build alternative. One build alternative was identified as the preferred alternative. It is recommended that the project be constructed in two phases: Phase One is approximately from MP 154 to 156; Phase Two is from MP 156 to 158.
- The EA was completed in late September 2005, with a 30-day public comment period beginning October 3 and ending November 2. A public meeting on the EA was held in Wasilla on October 18.
- The FTA issued a Finding of No Significant Impact in late January 2006.
- ARRC is in the process of acquiring right-of-way for Phase I, MP 154 to MP 156 corridor.

Cost and Funding

Total funding dedicated to this project thus far is approximately \$6.3 million.

- The initial \$246,000 budget for conceptual engineering and the EA, was funded 80% by the FTA and 20% by ARRC, City of Wasilla and ADOT&PF.
- FTA granted \$2.72 million for preliminary engineering and land acquisition. This is funded 91% by FTA and 9% by ARRC.
- The Federal Highway Administration (FHWA) granted \$3.35 million to continue land acquisition. This is funded 91% by FHWA (via FTA) and 9% by ARRC.
- The remaining cost for engineering, land acquisition and construction for Phase One (MP 154 to 156) is estimated at \$24 million.

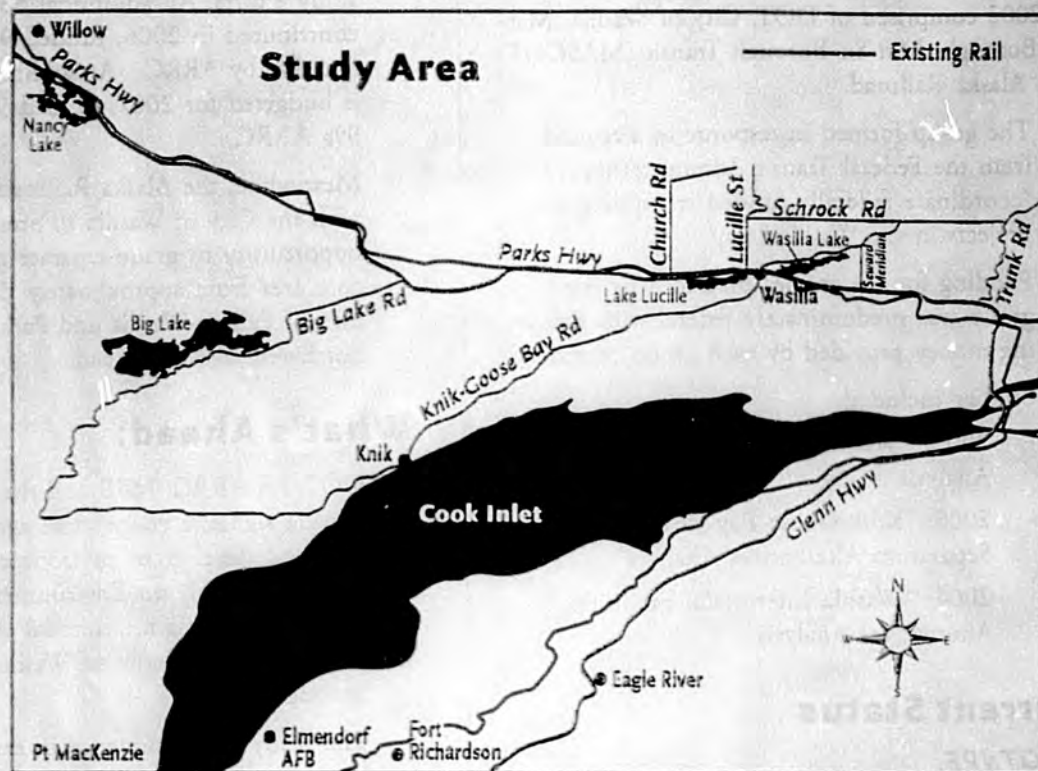


Realignment would eliminate the large curve between ARRC Milepost 154 and 156. Pictured is the tip of the curve at MP 155, near where Fairview Loop road crosses the tracks.





Status Summary: Road-Rail Transportation Corridor Realignment Around Wasilla



The Problem

- The Mat-Su Borough including the City of Wasilla and Palmer is the fastest growing region in the state
- Both the Parks Highway and the Alaska Railroad go through downtown Wasilla
- Both the Highway and the Railroad provide a critical transportation link between Interior Alaska and Southcentral Alaska
- Both Highway and Railroad are congested:
 - The Parks Highway is rapidly transitioning into more of an urban corridor, complete with traffic. Eventually the transportation corridor will need to be a freeway, limited access road.
 - The Alaska Railroad is adding more and longer trains.

- The Alaska Railroad and the community have safety concerns with at-grade road crossings in this busy area. Knik Goose Bay Road, in particular, will need to be grade separated soon.
- The City of Wasilla is concerned about road/rail congestion and safety aspects of the current at-grade crossings.

Transportation Project and Study Efforts to Date

ADOT&PF:

- Ongoing construction of 4-lane Parks Highway from Glenn Parks to Lucas Rd
- Current design project underway for Parks Highway from Lucas to Big Lake



City of Wasilla:

- 2002 "Wasilla Alaska Railroad Relocation" completed to identify potential rail corridors around the city

Joint:

The Joint Intermodal Planning Group formed in 2002 comprised of DOT, City of Wasilla, Mat-Su Borough, Mat-Su Borough Transit (MASCOT) and Alaska Railroad.

- The group formed in response to a request from the Federal Transit Administration to "coordinate federally funded transportation projects in the Wasilla area."
- Funding for the studies produced by the group was predominately federal with matching money provided by each group member
- Studies included:
 - 2005: "Wasilla Realignment Alternatives Analysis Study"
 - 2005: "Knik-Goose Bay Road Grade Separation Alternatives Analysis"
 - 2004: "Wasilla Intermodal Facilities: Alternatives Analysis"

Current Status

ADOT&PF:

- DOT/PF has programmed funds to determine if a shared highway/rail corridor around Wasilla is needed. This is expected to be a \$2,000,000 effort.
- The \$2,000,000 was included in DOT/PF's 2006 budget. The money is intended for DOT/PF to initiate a joint road/rail corridor study and represents seed money for an environmental study.

Alaska Railroad:

- The Alaska Railroad supports further study of a joint road/rail corridor because it believes a realignment around the City of Wasilla is also

the railroad's preferred course of action to deal with congestion and safety concerns.

- The Alaska Railroad committed \$300,000 from an existing grant (80% Federal Transit Administration, and 20% local match) in 2005 to help fund initial environmental study efforts. An additional \$300,000 was contributed in 2006, funded 91% by FTA and 9% by ARRC. An additional \$200,000 is budgeted for 2007, funded 91% FTA and 9% ARRC.
- Meanwhile, the Alaska Railroad is working with the City of Wasilla to preserve the opportunity to grade-separate through the core area from approximately the intersection of Palmer-Wasilla and Parks highways northwest to Mack Road.

What's Ahead:

- DOT/PF, ARRC, MSB and the City of Wasilla signed a cooperative agreement to plan and develop an environmental document - probably an Environmental Impact Study (EIS) for a multimodal corridor within the boundaries of Wasilla and the borough.
- The study will commence in early 2007, and will require public meetings, a detailed analysis of the environmental impacts, a detailed analysis of the alternative alignments including the "no build" alternative, and identification of the selected proposed alternatives.
- The environmental study will determine if the project can proceed. Assuming it can, funding would be secured for property acquisition and final design. Construction could proceed after design and property acquisition.

NOTE: There is currently a project underway to straighten a four-mile section of track located at the southeastern end of Wasilla. The South Wasilla Track Realignment (SWTR) is a separate project with independent utility that would not affect any studies or decisions regarding the transportation corridor realignment around Wasilla. A fact sheet on SWTR is available at www.alaskarailroad.com/projects.



Curry Quarry Development

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC) is planning to develop a quarry site near Curry, located approximately 22 miles northeast of Talkeetna. Curry is a remote area, accessible only by train or by boat along the Talkeetna River. ARRC owns approximately 4,000 acres along the mainline track, known as the Curry Reserve. The quarry development includes the following (see Figure 1 on page 2):

- **Quarry Site** – 25- to 40-acre area where rock mining will occur during a 50- to 100-year quarry life.
- **Quarry Access Corridor** – The existing road/trail is too steep. A wider mile-and-one-half long access road will be constructed to accommodate mining truck traffic. The road leads from the track to the mine site several hundred feet above and behind Curry.
- **Laydown, Loadout, and Process Area** – This 41-acre area will be leveled off and used to process and stockpile mined rock from the Quarry Site.
- **Track Work** – The existing historic wye will be replaced with a loop track. The wye has a relatively sharp 19-degree curvature, which contributes to higher derailment risk. The use of a wye for quarry access will also require additional switching and coupling/uncoupling activity which detracts from operational efficiency and employee safety. The loop track will better comply with industry safety and operational preferences for curvature 10 degrees or less, and will reduce switching and coupling/uncoupling activity. Mitigation for impacts to this historic resource will be in accordance with an agreement with the State Historic Preservation Officer (SHPO).

- **Communications Tower** – Included in this same general area is a communications tower that will be installed using ARRC funds to enhance safety through better communication with trains and railroad workers in that area. An access road will be extended as necessary to the tower site.

The quarry would be used for ballast, riprap, armor stone and other processed rock materials that are needed for construction projects and maintenance of the railroad's track bed. Some quarry rock materials will be used on federally-funded projects.

Purpose and Need

The Alaska Railroad is developing a cost-effective and efficient source of high quality ballast and riprap. Ballast is comprised of small, jagged rocks that fit snugly together to form a stable bed to support the tremendous weight of a train, while still providing adequate drainage.

Current ballast sources cost the railroad between \$11 and \$22 per ton. The railroad uses nearly 100,000 tons of ballast material for track bed re-surfacing each year. In addition to the high cost of ballast, the lack of a railroad-owned quarry deprives ARRC of other useful quarry byproducts, such as rip-rap and other materials for construction.

Development of the Curry Quarry will improve ballast quality because the rock is harder and more angular than current sources. Curry is located approximately mid-way along the Railroad's 466-mile mainline track, offering a centrally located supply of ballast for both the north and south sections of the Railbelt.

Curry is also situated in an area susceptible to flooding and washout conditions, due to the proximity of the Susitna River. Having a nearby rock source will facilitate faster response in repairing high water damages, and alleviate track outages caused by high water.

The track and roadway construction is also expected to improve access to Curry for recreational users. The road will be built at a grade (incline) more conducive to Nordic skiing and usable in the winter when quarry operation is impractical.

Status

The Railroad envisions a three-year development approach. The access road was built in 2005 and 2006. In 2007, the railroad will construct new facility tracks and prepare the site for mining.

Cost and Funding

The project is 100% funded by the Alaska Railroad. The approximately \$3.5 million budget includes geo-technical work, engineering and construction. \$3.117 was funded in 2005 and 2006; \$400,000 is budgeted for 2007.

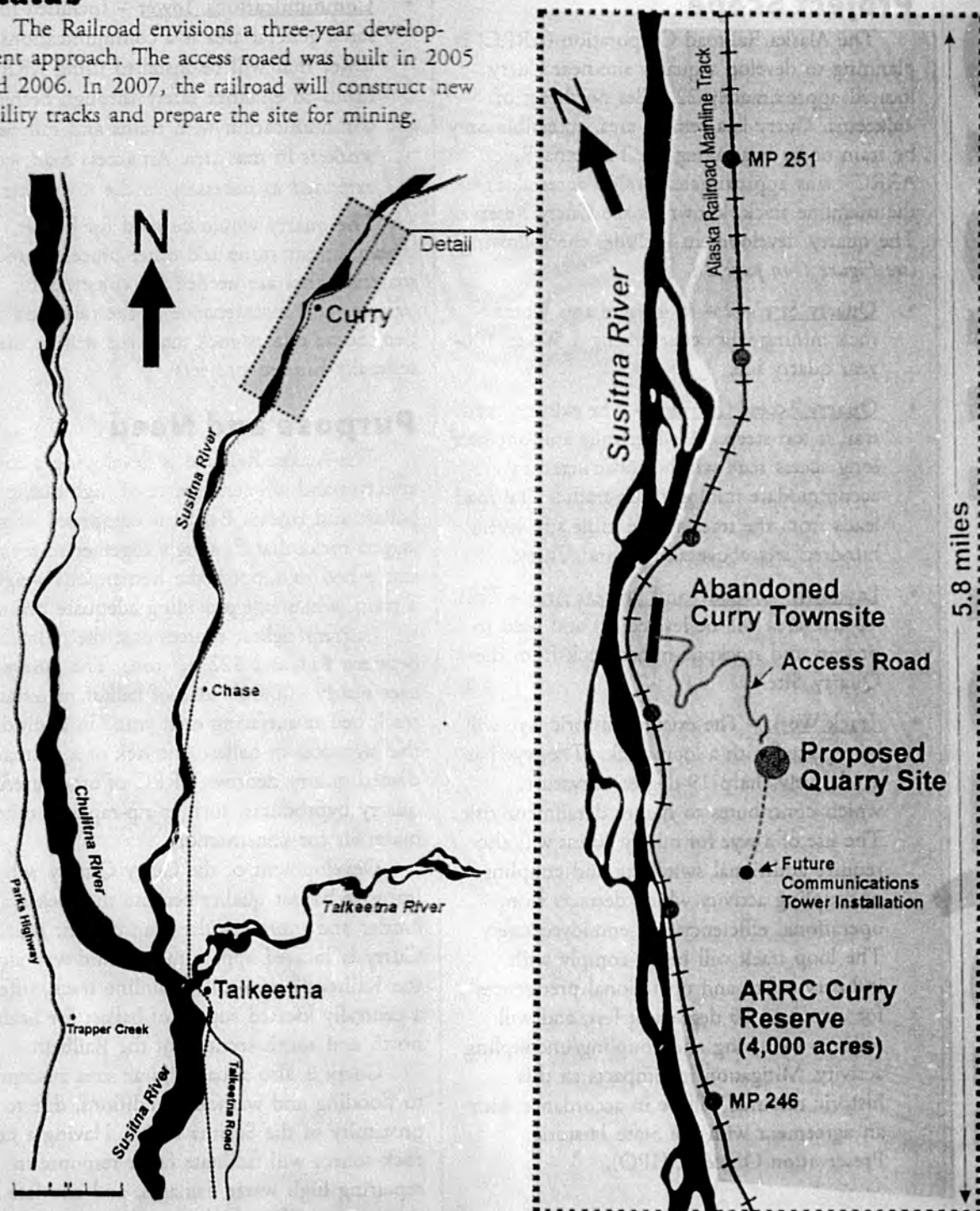


Figure 1 - Location of Curry, ARRC Curry Reserve and Quarry Site

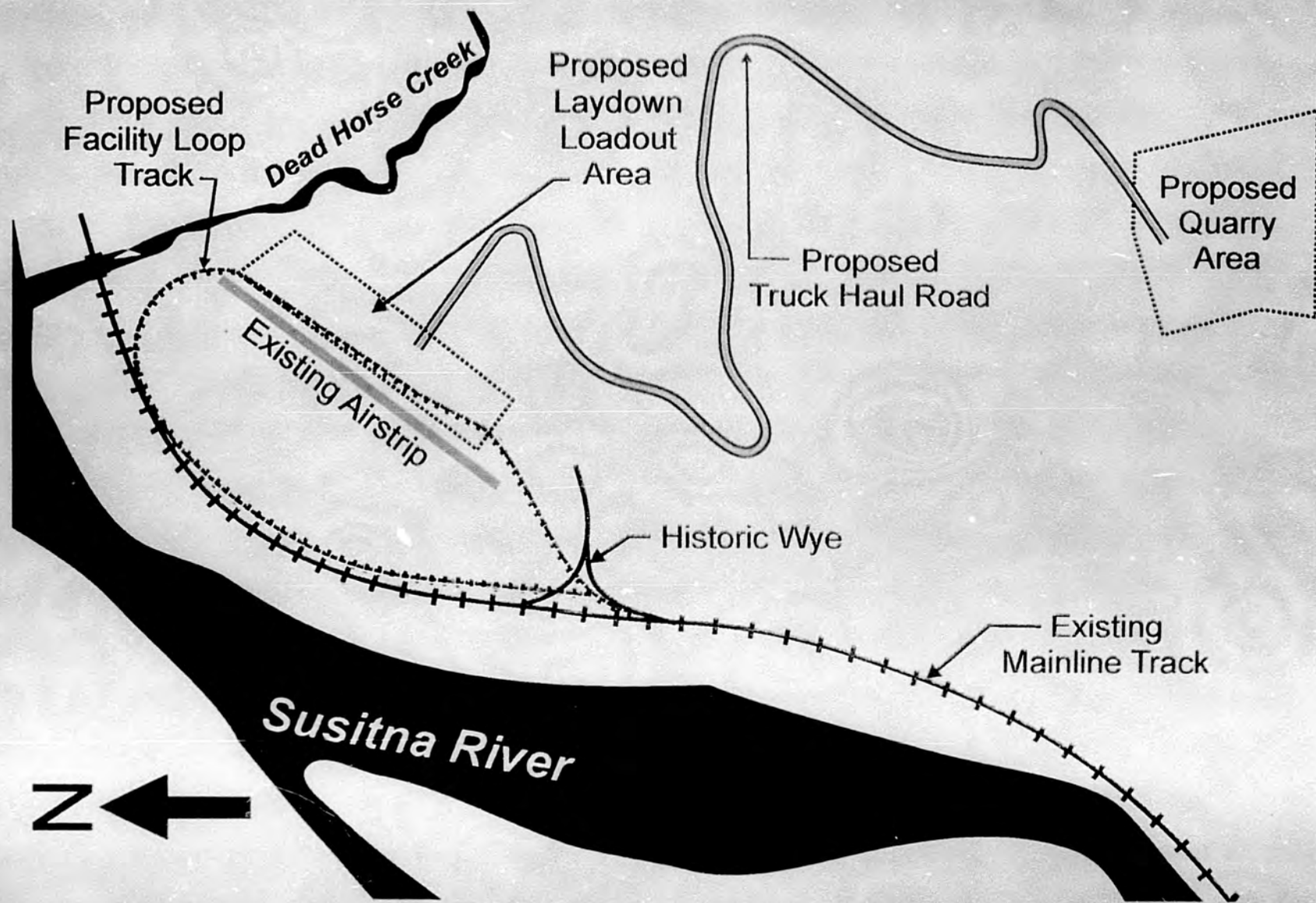


Figure 2 - Quarry Site Development Plan





Colorado to Broad Pass Siding

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC) proposes to connect the siding (train passing lane) at Colorado with the siding at Broad Pass by adding approximately 6.1 miles of new siding track. The project includes distant and intermediate signal pads, which provide signal control for the siding. The distant signal pads must be located 10,000 to 12,000 feet before the siding switches, and the intermediate signal pads must be located 10,000 to 12,000 feet apart between switches.

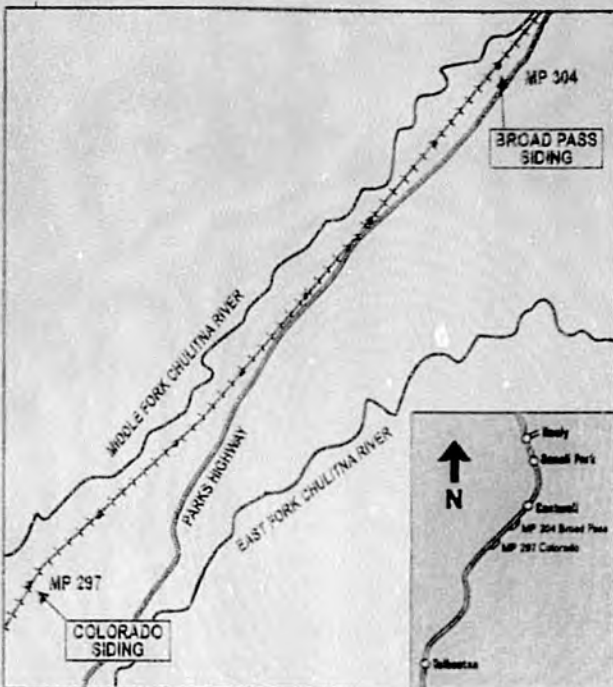
Colorado siding (ARRC Milepost 297) is located approximately 61 miles south of Healy. Broad Pass siding is located a few miles north (ARRC Milepost 304). This track corridor is on the southeast side of the Middle Fork of the Chulitna River, northwest of the Parks Highway.

Purpose and Need

The project effectively provides a strategic section of double track. This would facilitate greater flexibility when trains meet on the single mainline track, thereby reducing run time between Anchorage and Fairbanks.

The Colorado and Broad Pass sidings combined are the heaviest used sidings on the Alaska Railroad. During the passenger season, approximately May 15 to October 15, ARRC runs two passenger trains daily between Anchorage and Fairbanks, one northbound and one southbound. In order for these trains to meet and pass along a single track, one of the trains must pull into the siding and wait for the second train to pass by before the first train can pull back out onto the mainline track. Due to their location, these two sidings are used for the majority of train meet-and-pass situations.

Between March and November 2004, approximately 1,277 operational hours were lost



while a train pulled into a siding to wait for another to pass. Approximately 12% of these meets occurred either at Colorado or Broad Pass sidings, the highest use of any of the railroad's 44 sidings.

Status

- Preliminary field investigation, including wetlands delineation, occurred fall 2004.
- Additional field work and data collection was completed spring 2005.
- Final design and construction is scheduled to begin in 2010, pending funding.

Cost and Funding

- \$100,000 budget for environmental and engineering work only, funded by ARRC.
- Construction is conceptually estimated to be \$28 to \$32 million. Funding is not identified.



Healy Canyon Safety and Reliability Program

PROJECT FACTS

Proposed Project Scope

Healy Canyon lies between Denali Park Station (ARRC Milepost 348) and Healy (ARRC MP 358). The tracks follow the Nenana River gorge on a narrow grade requiring two tunnels. The Alaska Railroad (ARRC) proposes a series of projects to:

- Stabilize the track bed in Healy Canyon
- Control the rock fall problems
- "Daylight" Moody tunnel at MP 353.6 (i.e. removing the rock and soil above the tunnel, thereby exposing it to daylight)
- Realign tracks around Garner Tunnel
- Realign the tracks to enhance safety and train speeds

Benefits

- *Enhanced safety* - Proposed stabilization projects would address rock slide problems associated with the area's steep slopes and erosion-prone soil and track straightening would decrease the risk of derailment.
- *Enhanced reliability* - Track realignment and improvements would decrease delays, enhancing intercity passenger service.
- *Reduced operational costs* - Maximum train speed in the area is currently 15 mph. Track realignment would increase train speeds, reducing higher operational costs and lost revenue opportunities due to slow speeds.



2005: Track realigned around Garner Tunnel. Inset: Garner Tunnel's portal.

Project Summary and Costs

Below is a summary of projects needed to resolve the major safety and reliability problems, and improve transit times in Healy.

Project Focus Estimated Cost

Track realignment	\$ 46,238,000
Track bed and slide stabilization	15,102,000
Tunnel engineering and upgrades	11,403,000
Bridge upgrades and replacement	1,425,000
Total	\$74,168,000

Project Status

- The Alaska Railroad's Engineering Services Department began the engineering in 2002.
- While ARRC continues to seek federal funding for Healy Canyon projects, ARRC recognizes the importance of pursuing an ongoing, year-by-year stabilization and realignment improvement program in this area.
- In 2002-2004, ARRC spent \$1 million in Federal Railroad Administration (FRA) funding to stabilize the slopes above Garner Tunnel. Efforts included blasting and constructing rock barriers to control slide zones and protect against falling debris. Slide zone stabilization reduces maintenance and increases safety for passenger and freight trains moving through the area.
- In 2005, ARRC spent \$1,885,750 in FRA funds to realign track outside of Garner Tunnel, improve drainage to reduce erosion, and seal the tunnel.
- Engineering is underway and construction started in fall 2006 to remove the earthen top (i.e. "daylight") from Moody Tunnel. Construction will be accomplished over three years. Most work will be done in winter to minimize passenger train disruption.
- \$1.7 million in FTA revenue bond money is budgeted in 2006 and 2007, along with \$900,000 in FTA funds in 2008.



- Nenana Airport existing facilities and potential expansion.
- Golden Valley Electric Association (GVEA) transmission lines and facilities.
- Parks Highway.
- Land status issues, including development at the municipal airport and on other city and private land.

The NEPA process is designed to evaluate these and other areas of concern. This process will also foster inter-governmental coordination and enhance public participation in environmental planning. By early October 2004, the EA had been prepared for agency and public review and comments. This document analyzed identified concerns and project alternatives, offering a forum for public input to the decision making process.

Status

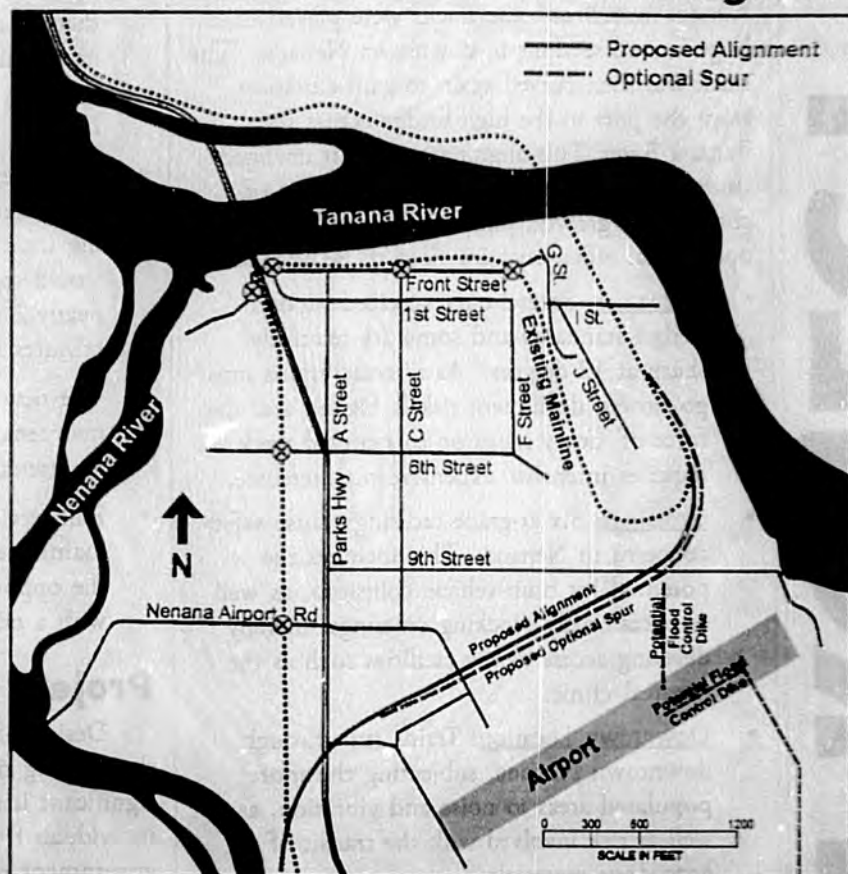
- URS Corporation was contracted to perform environmental field work and documentation in spring 2003. In early May 2003, a public scoping meeting was held in Nenana, and an agency scoping meeting was held in Fairbanks.
- A noise and vibration study was conducted July 2003.
- An environmental assessment (EA) was initiated in fall 2003 to consider three alternative realignment routes, and a "no action" alternative.
- The EA was released for public review on October 10, 2004. A public meeting was held October 26, 2004, in Nenana, with public comment on the EA accepted through November 15. The Federal Transit Administration (FTA) issued a finding of no significant impact (FONSI) mid-December 2004.

- Tryck Nyman Hayes, Inc. and sub-contractors were hired to accomplish final design, which began in May 2005. Survey and geotechnical work occurred during summer 2005 to assist in the design and to determine right-of-way requirements.
- Right-of-way acquisition began in 2006 and will continue in 2007.

Costs and Funding

- The budget for engineering/design, environmental studies, public involvement and land acquisition is \$1,000,000, funded 91% by the FTA and 9% by ARRC.
- The budget for construction and right-of-way land acquisition for the preferred alternative is estimated to be \$25 million.
- Funding for land acquisition of \$861,776 is appropriated from the Federal Highway Administration. FHWA funds will be transferred to the FTA for administration. ARRC is required to match 9% in funding.

Figure 1





Nenana Rail Realignment

Project Description

The Alaska Railroad Corporation (ARRC) proposes to realign the railroad mainline track around the downtown area of Nenana, Alaska. The track would be realigned outside of the existing right-of-way north of the airport and southeast of town, over the Parks Highway (as generally depicted by Proposed Alignment on Figure 1). The track structure through Nenana would be maintained to support port activities. The purpose of the project is to improve the safety of rail/highway crossings and railroad operations, reduce transportation time, and reduce operating costs.

Purpose and Need

Built about 1920, the existing alignment through Nenana parallels the Tanana River along the City's waterfront. In order to serve the Nenana waterfront, the tracks were placed in large curved sections in downtown Nenana. 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 go slower, derailment risk is higher, and the force of heavy trains on this curved track requires intensive, expensive maintenance.
- **Crossings:** Six at-grade crossings cause safety concerns in Nenana. This includes the potential for train-vehicle collisions, as well as occasionally blocking crossings, thereby delaying 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 rail/highway 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 alignment 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 – where trains go over the road – nearly eliminating the risk of train-vehicle collisions.
- The new alignment would also reduce trains 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 the opportunity to serve the Nenana Airport with a rail spur.

Project Scope

Design of the new realignment outside of the existing right-of-way must address several significant issues that require coordination with individuals from tribal, federal, state and local government organizations:



Fairbanks Freight Intermodal Improvements

PROJECT FACTS

Project Scope

The Alaska Railroad (ARRC) and Alaska Department of Transportation & Public Facilities (ADOT/PF) are pursuing projects that will result in improvements to the Freight Intermodal Area of the Alaska Railroad's Fairbanks Rail Yard. There are two major areas of improvement.

1 Danby Street intersection access improvements

This area is the responsibility of ARRC:

- Move and improve existing at-grade crossings to allow longer trains to be spotted without blocking truck egress.
- Construct a centralized trailer parking location (which will accommodate up to 80 trailers) near the entrance and adjacent to Danby Street.
- Pave access to Danby Street.
- Pave and stripe the intermodal unloading area.
- Improve drainage to facilitate runoff and reduce ponding.

Future improvements call for installation of 100-foot high mast lighting at key operating areas in the yard.

2 Phillips Field Road improvements

This area is the responsibility of ADOT/PF:

- Resurface and strengthen the existing pavement.
- Widen the shoulders.
- Replace and improve guardrail.
- Remove vegetation/other sight obstruction.

Benefits

Danby intersection access improvements will enable faster pick-up and drop-off by truck operators, and will enhance safety and security of train/truck operations.

Phillips Field Road improvements will enhance truck traffic efficiency and safety by improving and expanding driving area and improving visibility at intersections and curves.

Project Status

- The project concepts were developed in 2005 and 2006.
- Final design and engineering will begin in 2007. Project completion is expected by 2010.

Project Cost and Funding

The Federal Highway Administration is funding 91% of the projects, providing a \$5 million grant through the Alaska Department of Transportation and Public Facilities.

ARRC and ADOT/PF will provide matching funds at 9% of the grant. ARRC's match is approximately \$248,000.



Fairbanks Freight Intermodal Improvements



Fairbanks Area Rail Realignment

PROJECT FACTS

Project Scope - Fairbanks to North Pole

The Alaska Railroad Corporation (ARRC) proposes to improve and realign the railroad track along its Eielson Branch. The project area extends from the new ARRC depot in Fairbanks at railroad Milepost (MP) G0.0 and ends at MP G19.0, approximately three miles east of the city of North Pole, immediately west of the Chena River Floodway. The branch serves three major users, including Fort Wainwright, Eielson AFB, and a North Pole refinery.

This project was most recently included in the Eielson Branch Rail Realignment Environmental Assessment (EBRR EA), initiated in early 2006 with funding from the Department of Defense (DOD). In late 2006, the Fort Wainwright segment of the project was separated as having immediate need and independent utility, and to preserve DOD funding. Going forward, the Fairbanks-to-North Pole part of the Fairbanks area Realignment will build on preliminary engineering, public involvement and concept analysis gleaned from the EBRR EA.

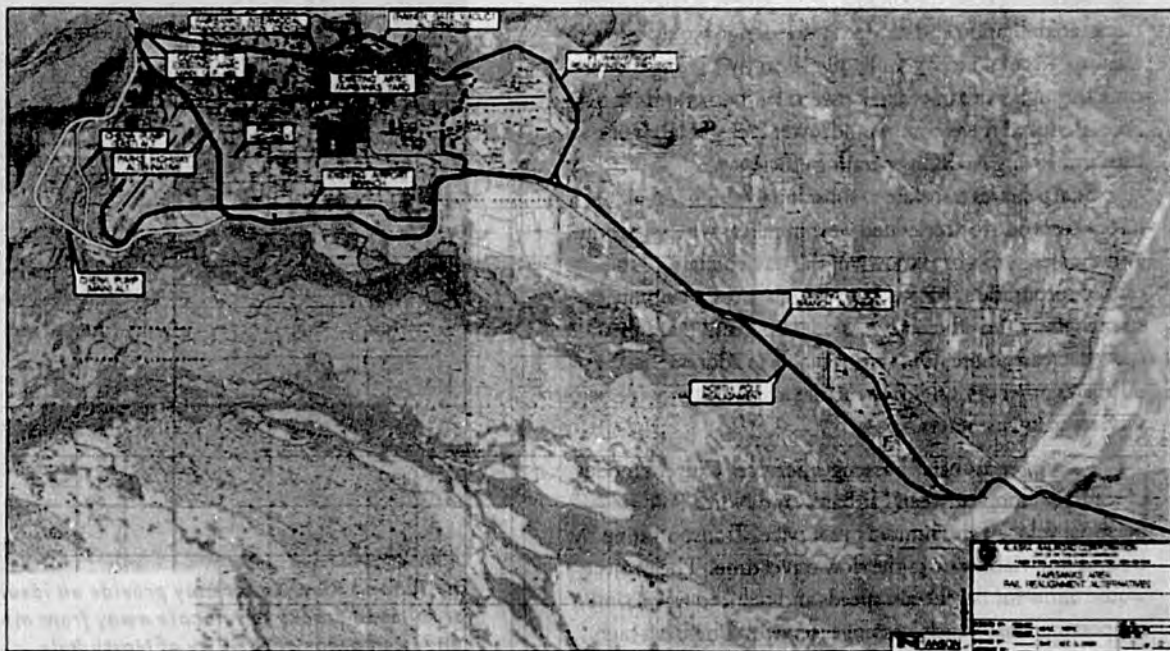
Several alternatives are being considered for realigning the track and crossing the Richardson Highway. Once south of the highway, the realigned track will likely be on, or adjacent to, the flood levee along the Tanana River.

Project Scope - South Fairbanks

In summer 2006, at the request of Fairbanks, North Pole and Fairbanks North Star Borough leadership, the Alaska Railroad Corporation (ARRC) initiated public involvement and conceptual planning activities to move forward on a project to realign and/or improve freight rail tracks through the city of Fairbanks. This effort was essentially the next step on previous studies that had conceptualized potential alignments. These studies considered new rail alignments through south and west Fairbanks and potential upgrades to the existing rail alignment. The goal of the South Fairbanks Rail Realignment was to advance to a design stage, develop additional alternatives as necessary, and hold public meetings to identify community interests and concerns. The Fairbanks-to-North Pole segment of the EBRR will be incorporated into this goal, moving forward as the Fairbanks Area Rail Realignment.

Purpose and Need

The purpose of Fairbanks Area Rail Realignment Project is to: 1) enhance the safety of rail/roadway crossings, railroad operations, and pedestrian activities



within urban/suburban Fairbanks and along the Eielson Branch; 2) reduce travel times and improve operational efficiency; and 3) accommodate mass transit/passenger service. Objectives are to construct a straighter railroad track alignment, reduce the number of at-grade (same elevation) roadway crossings, and establish a rail-based passenger system in the Fairbanks North Star Borough (FNSB).

Enhance Safety: There are dozens of at-grade road crossings within Fairbanks and along the Eielson Branch. Fewer at-grade crossings would decrease the inherent safety concerns, including the potential for accidents between trains and vehicular traffic. It would also provide reduce roadway traffic delays, including delays to emergency response vehicles.

Sharp curves on the track increase the likelihood of train derailments, while straighter track reduces the risk. In the Fairbanks Area, there are dozens of curves ranging from 1 degree (°) to 14°, and 9 curves sharper than 6°. The desired degree of curvature is between 1° to 3°, preferably less than 2°. The proposed project would straighten sharp curves along the majority of the route of less than 2°.

Currently, the track passes near four schools: Ladd Elementary and Tanana Middle schools on Trainer Gate Road in Fairbanks, and the North Pole High School and Middle schools accessible from the Old Richardson Highway. In North Pole, popular restaurants that are frequented by students are on the opposite side of the railroad tracks, and there are no controlled crossings in the area. The project would realign the track away from the Old Richardson Highway in North Pole.

Operational Efficiency: Existing track curvature limits train speed to 10-20 mph, resulting in long travel times and high operating costs (labor, fuel, etc.). Curve straightening, track rehabilitation and modern track design would allow for train speeds of 45 to 79 mph, significantly cutting travel time through Fairbanks and between Fairbanks and North Pole. Reduced travel time would lower fuel and labor costs, thus improving ARRC's operating efficiency.

Sharp curves translate to substantially higher maintenance costs due to accelerated wear in railcar wheels, the rail, and the ties, and a breakdown of the track ballast. As a public corporation, ARRC has a fiduciary responsibility to spend wisely and efficiently. As operating and maintenance costs decrease, more funds are available to address the railroad's other critical infrastructure needs and provide better services to its customers.

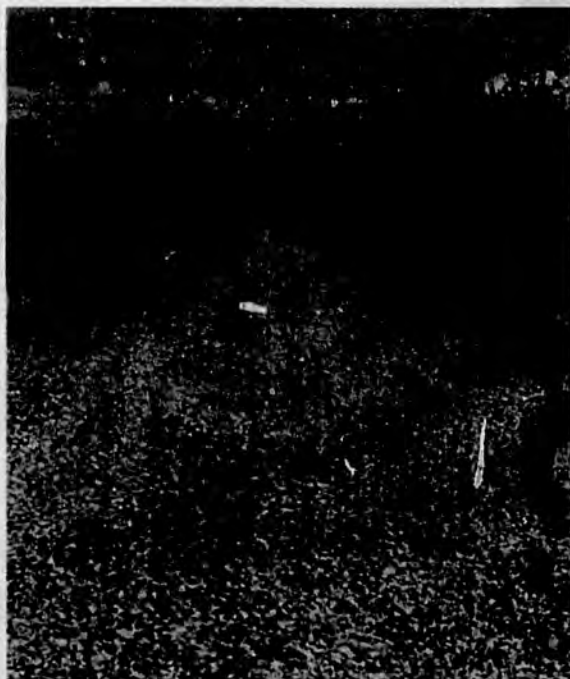
Passenger Transit / Passenger Service: Current modes of transportation between Fairbanks and North Pole are personal vehicles and limited bus service. Transportation by train is not viable due to the slow travel time. The project would allow for faster train speeds and reduced travel times, supporting mass transit/passenger services. There is a high potential for rail ridership given the location of the Eielson

Branch, service to North Pole, Fort Wainwright, the University of Fairbanks, and the commercial district of Fairbanks, linking employment and shopping centers.

Passenger transit service would be particularly important in the winter. Much of the FNSB lies within an air quality maintenance area due to carbon monoxide (CO) emissions from motor vehicles that increase in low winter temperatures. The winter driving environment frequently includes blowing snow, black ice and other cold-weather conditions that render the roadway slick and dangerous. Passenger rail service would provide a safer transportation alternative during the winter, which typically lasts 5-6 months in Alaska's interior.

Status

- Reconnaissance level engineering and phasing studies were completed in 2001 and 2002. These studies considered the feasibility of realignment outside of the more populated areas of Fairbanks and North Pole.
- Public outreach was conducted to develop consensus for the realignments. Formal resolutions of support have been received from the Fairbanks North Star Borough and the City of North Pole.
- ARRC began work on preliminary design and planning for an Eielson Branch Rail Realignment Environmental Assessment (EA) in May 2005. The Federal Railroad Administration (FRA) was the federal funding agency and both the FRA and Federal Transit Administration



The Tanana River Levee may provide an ideal "bed" for railroad tracks to relocate away from more congested areas of the City of North Pole.

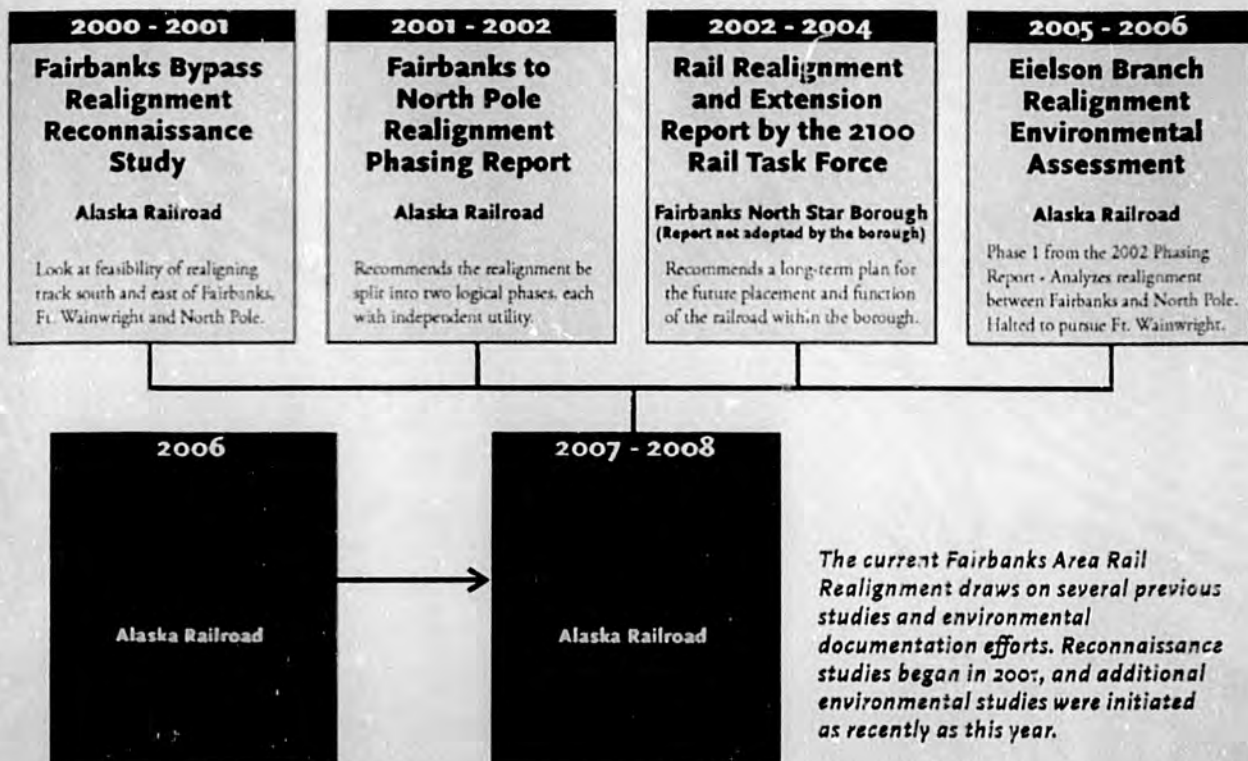


(FTA) were the lead agencies for preparation of the EA in accordance with the National Environmental Policy Act (NEPA). Funding came from the Department of Defense.

- The EA scoping (fact-gathering) process with agencies and the public began in June, with an agency scoping meeting held June 28 in Fairbanks, and public scoping meetings held July 6 in Fairbanks and July 7 in North Pole in 2006.
- In Summer 2006, the Railroad initiated action to address a rail realignment outside of the more congested areas of Fairbanks. Called the South Fairbanks Rail Realignment Study, the effort renewed public involvement activities and started some preliminary engineering and alternative analysis of options posed in previous reconnaissance studies.
- In December 2006, the Fort Wainwright component of the Eielson Branch Rail Realignment EA project was separated, effectively redirecting the EA focus to Fort Wainwright.
- For 2007 the South Fairbanks and Eielson Branch realignment efforts were combined into a Fairbanks Area Rail Realignment project, which will likely require an Environmental Impact Statement. Until funding is identified, this project will move forward with an alternatives analysis that incorporate the findings of previous studies.

Project Costs

- \$200,000 in initial funding to accomplish preliminary engineering for the South Fairbanks Rail Realignment Study was provided 91% by the Federal Highway Administration (FHWA) with a 9% match from the Alaska Railroad. Residual funds from this money will be used to pursue Alternative Analysis work for the Fairbanks Area Rail Realignment project. An additional \$200,000 is budgeted for 2007, with funding from FHWA and an ARRC match.
- The Eielson Branch Rail Realignment Environmental Assessment, including preliminary engineering was estimated to cost approximately \$1.5 million and was funded through a U.S. Department of Defense (DOD) 2005 appropriation being administered as a grant through the Federal Railroad Administration. \$2 million in additional DOD funding was appropriated in 2006. While DOD funds will be used to complete environmental documentation for the Fort Wainwright segment, work accomplished on the EA will benefit the Fairbanks Area Rail Realignment project effort. Additionally, DOD has appropriated \$12 million to begin construction on the Fort Wainwright segment in 2007.
- Project cost range for design and construction of realignment efforts are estimated to be hundreds of millions of dollars. Funding for preliminary engineering, environmental documentation, final design and construction has not been identified.





Fort Wainwright Rail Realignment

Project Scope

The Alaska Railroad Corporation (ARRC) proposes to improve and/or realign approximately five (5) miles of railroad track that runs through Fort Wainwright. Located along the ARRC Eielson Branch, the project segment begins approximately at Branch Milepost G3.0 (Trainor Gate Road) and MP G8.0 (Badger Road). To that end, ARRC proposed an Environmental Assessment (EA) that is separate from the EA that currently considers a Fort Wainwright realignment.

The track through Fort Wainwright was included in the Eielson Branch Rail Realignment Environmental Assessment (EBRR EA) project, which was initiated in early 2006 and addressed realignment and improvement of the 19-mile branch between the Fairbanks Depot and North Pole. The EBRR EA was co-led by the Federal Railroad Administration (FRA) and the Federal Transit Administration (FTA) and funded by the Department of Defense (DOD).

As the EBRR EA progressed in 2006 it became clear, through public involvement, that portions of the branch realignment would be better addressed in a broader study (likely an Environmental Impact Statement) that also included realignment of the track outside of more

populated areas of Fairbanks. This broader effort is now known as the Fairbanks Area Rail Realignment (FARR).

Realignment on Fort Wainwright has immediate need, given existing negative impacts to the installation's operations. It also has independent utility, meaning it is required regardless of the outcome of any larger project. Implementing a Fort Wainwright Rail Realignment (FWRR) would not detract from, or enhance, any options considered in the larger FARR project.

Purpose and Need

The Fort Wainwright Rail Realignment purpose is to:

- 1 Improve safety by eliminating at-grade crossings in the cantonment area;
- 2 Reduce rail-related traffic congestion, noise and interference with Fort Wainwright's operational activities in its main cantonment area;
- 3 Enhance security and provide force protection by moving the track closer to the post boundary and away from post infrastructure and personnel;
- 4 Enhance safety by relocating the railroad tracks and train traffic away from the Ladd Field immediate runway protection zone;





- 3 Provide better rail service to Fort Wainwright's proposed loading facility; and
- 6 Reduce travel times through Fort Wainwright and improve ARRC's operational efficiency in the Fort Wainwright area.

Enhance Safety: There are 10 at-grade crossings on Fort Wainwright. Eliminating at-grade crossings would decrease the inherent safety concerns, including the potential for accidents between trains and vehicular traffic. It would also avoid roadway traffic delays.

Sharp curves on the track increase the likelihood of train derailments, while straighter track reduces the risk. On the installation, there are a series of 11 curves ranging from 2° to 14°. The desired degree of curvature is between 1° to 3°, preferably less than 2°. The proposed project would straighten sharp curves reducing track curvature to 3° or less in most areas on Fort Wainwright.

Operational Efficiency: Existing track curvature limits train speed to 10 mph, resulting in long travel times. It takes from 20-25 minutes to traverse the fort. As longer freight trains travel through the area, the installation is effectively cut in half with all street access cut off due to the number of at-grade crossings. Curve straightening, track rehabilitation and modern track design would allow for train speeds of at least 35 mph, cutting travel time significantly. Reduced travel time would lower fuel and labor costs, thus improving ARRC's operating efficiency.

Sharp curves translate to substantially higher maintenance costs due to accelerated wear in railcar wheels, the rail, and the ties, and a breakdown of the track ballast. As a public corporation, ARRC has a fiduciary responsibility to spend wisely and efficiently. As operating and maintenance costs decrease, more funds are available to address the railroad's other critical infrastructure needs and provide better services to its customers.

Improved operating efficiency and reduced travel times would benefit ARRC's freight customers, including the ongoing transformation of U.S. Army infantry brigade at Fort Wainwright to a Stryker Brigade Combat Team (SBCT). The SBCT moves equipment and personnel between the Port of Anchorage and Fort Wainwright for deployment throughout the Pacific. Rail transportation is an efficient means to accomplish the deployments. The proposed project would reduce traffic delays caused by long military convoy transport on the highway, improve mobilization times, and reduce wear and tear on both military equipment and the highway.

Reduce Military Interference: The existing alignment extends through the cantonment area of Fort Wainwright. Trains slowed by curvature and at-grade crossings interfere with traffic movements and disrupt other Fort Wainwright operational activities for nearly 20 minutes, up to eight times

per day. Such disruptions affect routine military activities and emergency response and mobilization activities. Fort Wainwright has seen an increase in personnel and expects further increases as new units are added and the SCBT returns from duty abroad. Personnel growth will increase vehicular traffic on post roads and the need for housing and medical services rise. The project would move the railroad out of the main cantonment area, and away from planned housing areas and the new post hospital.

Status

- Reconnaissance level engineering and phasing studies were completed in 2001 and 2002. These studies considered the feasibility of realignment around Fairbanks and North Pole, and considered options and impacts on Fort Wainwright.
- ARRC began work on preliminary design and planning for an Eielson Branch Rail Realignment Environmental Assessment (EA) in May 2005. EA scoping (fact-gathering) meetings and dialogue with agencies and the public were pursued through 2006. Through the public process, residents and local government leaders of Fairbanks, North Pole and the Fairbanks North Star Borough, expressed the desire to see realignment of the Eielson Branch to be combined with efforts to realign the track around Fairbanks.
- By the end of 2006, ARRC requested permission from the FTA and FRA to pursue the Fort Wainwright Rail Realignment as a separate EA. The federal funding agencies agreed.

Project Costs

- Environmental analysis and preliminary engineering for the EBRR EA was originally estimated to cost approximately \$1.5 million. The EBRR EA was funded through a U.S. Department of Defense (DOD) appropriation being administered as a grant through the FRA. \$2 million in additional DOD funding was appropriated in 2006. Because DOD funding was granted for the express benefit to support the Stryker Brigade at Fort Wainwright, the DOD funds not yet spent on the EBRR EA were allocated to a component Fort Wainwright Rail Realignment EA.
- DOD appropriated an additional \$12 million to finish design and begin construction in 2007.
- It will cost an additional \$24 million to complete construction of the Fort Wainwright segment. Funding has not yet been identified, although funding will likely come from DOD.



Locomotives and Railcars to Support the Stryker Brigade

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC) plans to acquire additional locomotives and rail flat cars to enhance its capabilities to support the 172nd Stryker Brigade Combat Team, stationed at Fort Wainwright, near Fairbanks, as well as other military units in Alaska.

Over the past year, the Alaska Railroad has had a number of opportunities to prove its proficiency in moving Stryker Brigade Combat Team units that have been mobilized for duty outside of Alaska, including in Iraq. The Stryker Brigade, along with other Alaska-based U.S. Army and Air Force units, has consistently relied on Alaska Railroad infrastructure and expertise to transport equipment and personnel in support of military exercises and real-world missions.

Benefits

Purchasing additional locomotives and railcars will give the railroad more flexibility and capacity to support the Stryker Brigade's demands for reliable transport. The

brigade is outfitted with tank-like armored vehicles (Strykers) that perform a number of battle functions. Weighing approximately 19 tons each, the vehicles present a weighty challenge for mobilization. Fortunately, the railroad is ideally suited to transport heavy cargo. Along with efficient freight capability, the railroad is also equipped to transport a large number of personnel. The Stryker Brigade Combat Team consists of about 3,100 soldiers stationed at Fort Wainwright, along with another 700 soldiers stationed at Fort Richardson, near Anchorage.

Project Status

- 30 flat cars are scheduled for completion in spring 2007.
- Four SD70 MAC locomotives are scheduled for completion in September 2007.

Project Costs and Funding

- \$16 million budget, funded through a U.S. Department of Defense (DOD) appropriation that will likely be administered as a grant through the Federal Railroad Administration.



In spring 2005, the Alaska Railroad loads Stryker Brigade vehicles and equipment from Fort Wainwright, for shipment to the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana. The brigade team tested their combat skills at JRTC and became officially certified as a Stryker unit.



Northern Rail Extension

Project Description

The Alaska Railroad Corporation proposes to construct and operate a new rail line in the area between North Pole and Delta Junction. The project would involve approximately 80 miles of new rail line connecting the existing Eielson Branch rail line at the Chena River Overflow Structure and extending to a point near Delta Junction. The proposed rail line would provide freight and potentially passenger rail services serving commercial interests and communities in or near the project corridor.

The new rail line would be operated as part of the Alaska Railroad system. As a common carrier, the line would be available to the general public, commercial, and military shippers including agricultural and resource development businesses. With a top design speed of 79 miles per hour for passenger trains, the track could support public transit operations between Fairbanks, North Pole, Salcha, and Delta Junction.

In order to fulfill transport needs and avoid mountainous terrain along the northeast bank of the Tanana River, the project would require a Tanana River crossing. The new rail line may also cross the Salcha, Little Delta and Delta Rivers, as well as Delta Creek.

The current project scope is to complete sufficient engineering and analysis to support the development of an Environmental Impact Statement (EIS) as required by the National Environmental Policy Act (NEPA). This work includes identifying and analyzing feasible alignment alternatives, completing engineering design on alternatives selected for review in the EIS, and estimating anticipated construction costs.

Purpose and Need

The Northern Rail Extension Project would provide essential freight and passenger service to support transportation and mobility needs of the region. Specifically, the project may provide any or all of the following:

- Commercial freight service supporting communities and commerce in or near the rail corridor, including existing agricultural, mining, and petrochemical industries, thus reducing reliance and wear and tear on the Richardson Highway. Currently, both the agricultural community located near Delta Junction and mineral resource industries in the area receive materials that are initially shipped by rail. Materials must be off-loaded in or near Fairbanks, and then transported by truck via the Richardson Highway.

- Transportation alternative to the Richardson Highway for passenger transportation, with scheduled station stops between Fairbanks and Delta Junction by way of North Pole and other communities. Passenger rail service would be available for citizens, military personnel, contractors, and dependent families who wish to travel for work, shopping, medical, educational, or other reasons.
- Military support. Depending on military requirements, the rail line could provide access to military property west of the Tanana River and provide transportation alternatives to support military training exercises. Future training needs and uses for these training lands are currently being evaluated.
- Support regional tourism. Tourism is a major industry in Alaska and the rail line would provide further opportunities for visitors to enjoy the Alaska environment.

Benefits

- Common carrier rail service would provide for bulk transport of goods to and from existing agricultural developments, mineral resource developments, and other business enterprises. Freight and transit services in the area would enhance opportunities for economic expansion in a relatively isolated area of the state. The tourism support provided by the Alaska Railroad to other parts of the system could potentially be expanded to Delta Junction and provide additional opportunities to see Alaska by rail.
- Additional communities within Interior Alaska would be connected by rail to three ports, including the Port of Anchorage, recently designated as one of 15 strategic ports in the nation.
- Public transit would facilitate additional choices for families and individuals who desire safe, reliable, year-round transportation opportunities between the Delta Junction and Fairbanks areas. Rail transit would be an alternative to driving the Richardson Highway, which can present hazardous driving conditions during the long, dark, icy winter months.
- The rail extension could assist the military in accessing training facilities within the project corridor.



Status/Timeline

- Late 2004, ARRC initiated conceptual development.
- March 2005, HDR Engineering Inc. was retained to provide Program Management, preliminary engineering, and environmental support services.
- April 2005, ICF Consulting was selected as the Independent Third Party Contractor to prepare the EIS, under the direction of the Surface Transportation Board (STB), the lead federal agency.
- November 2005, STB publishes a "Notice of Intent" in the Federal Register.
- December 2005, Public and Agency Scoping meetings.
- Mid 2007, Draft EIS is expected to be complete.
- Early 2008, Final EIS and STB Decision is expected.
- Final design and construction based on funding

Cost and Funding

- Preliminary engineering and design and NEPA-mandated environmental assessments and documentation are included in a \$12.5 million budget from an initial Department of Defense (DOD) appropriation in 2006 being administered as a grant through the Federal Railroad Administration (FRA). DOD has appropriated an additional \$4 million for 2007.
- Construction costs, currently estimated to be between \$450 and \$800 million, will be more accurately determined through the engineering process in support of the EIS preparation. Funding sources are being sought. All or part of the project could be financed through the sale of revenue bonds that are secured by advance shipping contracts.

Project Participants

There are a number of players involved with the Northern Rail Extension and its environmental study phase.

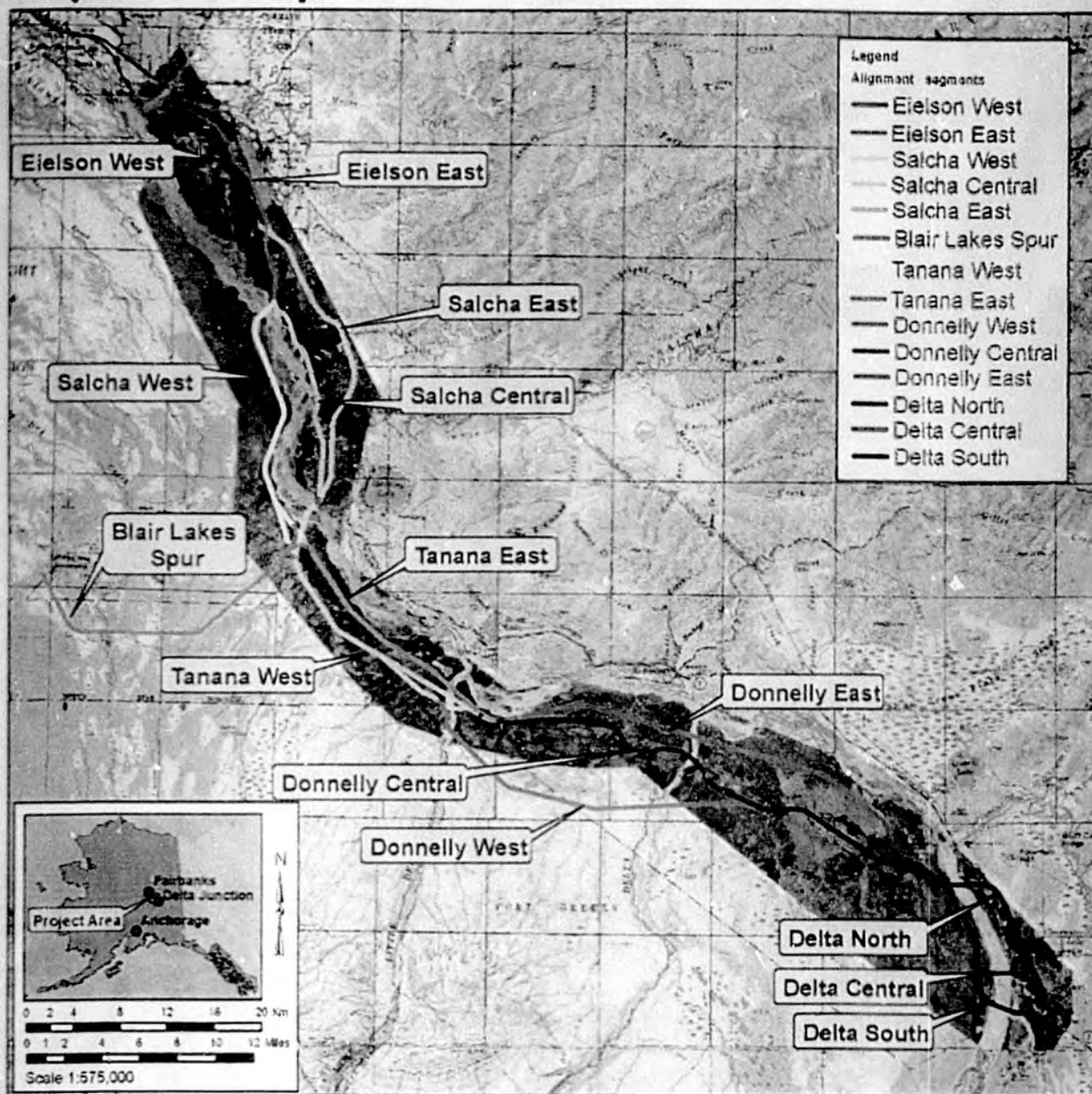
- The Alaska Railroad Corporation (ARRC) is a self sustaining corporation owned by the State of Alaska. ARRC is the project sponsor of the Northern Rail Extension Project
- The Surface Transportation Board (STB) is the lead federal agency on the project. Because the project involves new line construction requiring federal approval, an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) will be prepared. The EIS will evaluate, among other things, the proposed action and reasonable alternatives, including no action. The STB, through its Section of Environmental Analysis (SEA), will prepare the EIS with the assistance of an independent third party contractor.

- ICF Consulting, Inc. (ICF) was selected as the independent third party contractor to assist the STB in the preparation of the EIS. ICF has extensive experience in environmental consulting and has served as the third party consultant to SEA in the preparation of NEPA documents (EAs and EISs) in other rail construction matters. ICF Consulting, Inc., with offices in the Washington, D.C. area, has hired several Alaska-based firms to assist with EIS tasks. ICF Consulting, and its Alaska-based subcontractors, will act under the sole direct supervision and control of SEA. As part of the environmental review process, the public will be notified and asked to provide comments.
- HDR Alaska Inc. (HDR) has been contracted by ARRC to provide environmental and public relations services in support of the NEPA process. ARRC may provide technical and environmental information to SEA for possible use by the agency in preparing the EIS. In addition, ARRC plans to keep the Alaskan public apprised of progress of the project, HDR is assisting ARRC in preparing project newsletters, maintaining a project web site, and providing other public information services.
- TNH-Hanson has been retained by ARRC to develop preliminary engineering to support the EIS process.
- The Federal Railroad Administration (FRA) is a cooperating agency with the STB and the administering agency for the federal grant funding the EIS development. The FRA will provide technical oversight for the project.
- Cooperating Federal Agencies. In addition to the FRA the following federal agencies will be cooperating on the EIS: The Federal Transit Administration (FTA), The Bureau of Land Management (BLM), The Alaska Command (ALCOM), The U.S. Air Force (USAF) 354th Fighter Wing (Stationed at Eielson Air Force Base), The U. S. Army Corps of Engineers (USACE), and the U. S. Coast Guard (USCG). These agencies will provide review and comment on various aspects of the project throughout the development of the EIS.

To provide public comment

- E-mail to public_comment@akrr.com
- Mail to: Alaska Railroad Corporation - Capital Projects
P.O. Box 107500, Anchorage, AK 99510-7500
- or Fax to (907) 265-2365
- TTY/TDD 265-2620/voice 265-2494 or
Alaska Relay Service TTY 1-800-770-8973/
voice 1-800-770-8255

Project Area Map



Potential alternatives for proposed railroad extension from Eielson AFB to Delta Junction area.



Improved Siding Access

Project Scope

The Alaska Railroad (ARRC) is making its operations more safe and efficient by improving signalization and access to sidings (turnouts used to allow trains to pass) through this ongoing program, which began in 2000. The Railroad is improving access to sidings by replacing some manual switches with remote controlled switches, heating switch locations, lengthening existing sidings to accommodate longer trains, upgrading existing sidings for use by new locomotives, and building new sidings.

The total program will provide Centralized Traffic Control (CTC) and heaters at sidings from South Anchorage to Pittman. Some existing sidings are being extended; others are being newly built. Decisions to add, upgrade or

automate and signalize sidings depend on several factors:

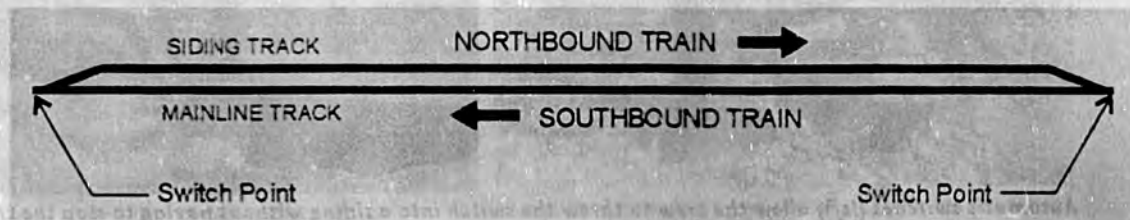
- **Obvious need.** Optimally, sidings are spaced at approximately half-hour (based on travel time) intervals, so that a train would not be delayed over an hour while waiting for an opposing train to pass. A usable siding is one that is long enough to hold a freight train up to 6,000 feet long and is constructed with sufficient material to withstand the weight and tractive forces produced by a heavy freight train pulled by SD70MAC locomotives. Freight trains that pull into a siding allow passenger trains to proceed without delay.
- **Statistical need.** ARRC uses a computerized rail traffic modeling program to identify

areas needing strategic siding upgrades. In 2000, model statistics, coupled with input from train dispatchers and transportation managers, resulted in a "5 Year Siding Improvement Plan."

The 5-year Siding Access Plan has continued to be updated as needs are identified and as funding is confirmed. On page 3, see siding and CTC projects accomplished between 2000 and 2006, and other projects proposed for future years.



Sidings, such as the Pittman Siding constructed in 2001 pictured above, allow trains traveling in opposite directions on the main track to pass.



Benefits

- Enhance efficiency for freight and passenger business by enabling movement of more and longer trains in meet-and-pass situations.
- Reduce the risk of injuries and incidents by providing a fail-safe system to determine status of switches.
- Lengthening existing sidings will accommodate long freight trains, allowing passenger trains to stay on the main line.
- Reduce crew sizes and maintenance required to keep siding switches operational in the winter.



Train signals are the "stop signs" of the railroad. They indicate when a train can continue on the main track, or when it must move into a siding. Automatic train signals can be controlled from the train or from the Railroad's Anchorage Dispatch Center.

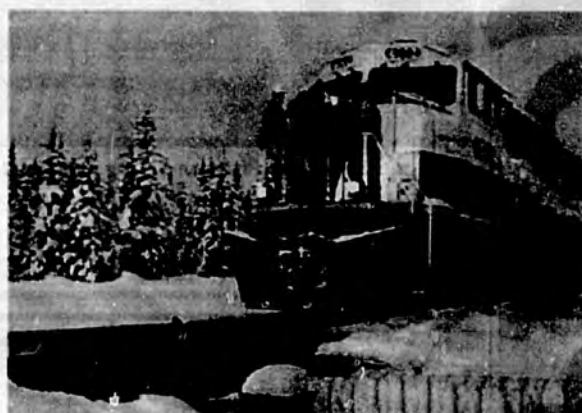
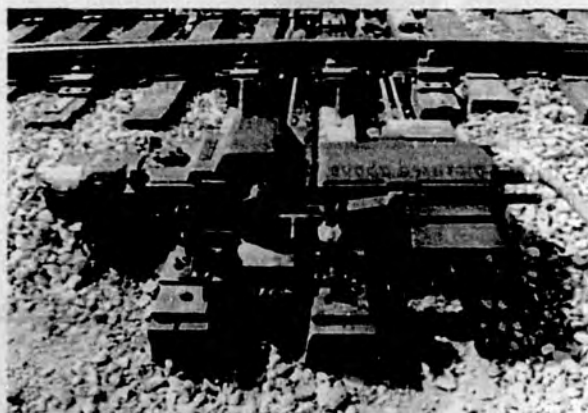
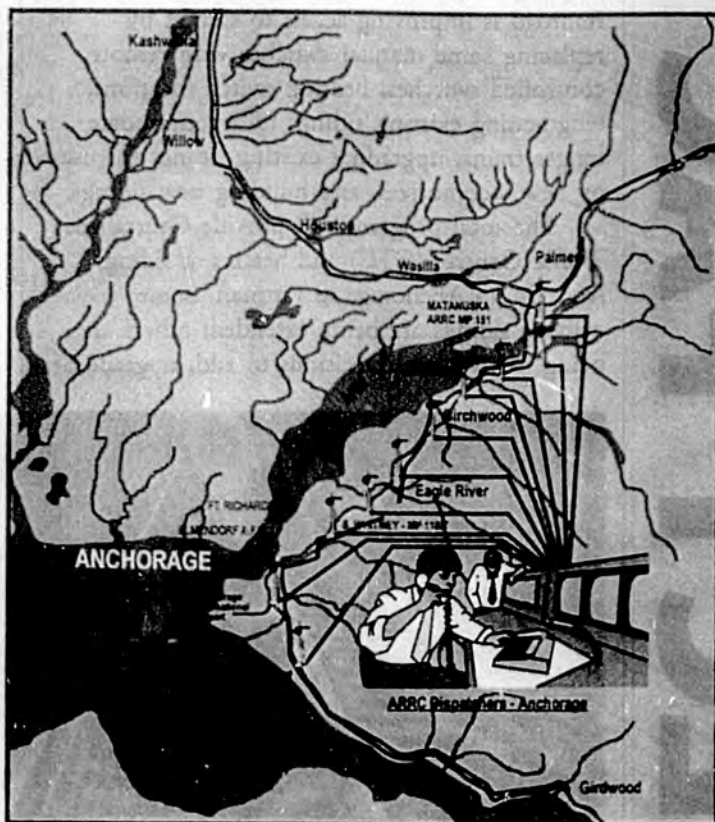
Cost and Funding

The Federal Railroad Administration (FRA) has provided the following grant funds:

- 2005 - \$1.11 million
- 2004 - \$1.048 million
- 2003 - \$4.495 million
- 2002 - \$8.25 million
- 2001 - \$9.317 million

Starting with 2006, funding will be provided 91% by the Federal Transit Administration (FTA) and 9% by the Alaska Railroad. FTA/ARRC funding to date:

- 2006 - \$2.5 million
- 2007 - \$3.066 million budgeted



Automatic switches (left) allow the crew to throw the switch into a siding without having to stop the train.



Siding Projects in 2000-2006

- **Hurricane Section:** Siding upgrade at MP 281. Extend siding from 2,400 feet to 6,000 feet, and install remote controlled switches and switch heaters. Completed November 2000.
- **Pittman:** New 6,000-foot siding at MP 166, about 10 miles north of Healy. Completed 2001.
- **North Ferry:** New 6,000-foot siding at MP 274, just north of Wasilla. Completed 2001.
- **Hunter:** Siding rehabilitation at MP 40. Replace old rail with new heavier rail on existing 4,800-ft. siding. Completed May 2002.
- **Indian:** Siding rehabilitation at MP 88.7. Replace old rail with new heavier rail on existing 4,800-ft. siding. Completed July 2002.
- **Rainbow:** Siding rehabilitation at MP 93.1. Replace old rail with new heavier rail on existing 1,500-ft. siding, and add north switch. Completed in 2003.
- **Eldutna:** Siding extension at MP 141. Lengthen approximately 160 feet to a total of 5,252 feet to accommodate block signals. Relocate north end turnout, and install heated power switches. Completed 2004.
- **Matanuska (Palmer Junction):** New 6,000-ft. siding, built to enhance train passing efficiency. Coincided with the curve realignment at MP-151 and the extension of the Palmer Junction track. Install heated power switches. Completed October 2003.
- **Houston:** Siding rehabilitation at MP 175.3. Replace old rail with new heavier rail on existing 2,422 feet of siding. Completed August 2002.
- **Susitna:** New 6,200-ft. siding located near MP 251, 30 miles south of the Susitna River crossing built to enhance train passing efficiency. Completed September 2002.
- **Summit:** Siding extension at MP 312.5. Lengthen 1000 feet to a total of 3,000 feet. Replace old rail with new heavier rail on existing 2,000 feet of siding. Completed July 2002.
- **Manley:** Siding rehabilitation at MP 420.4, 10 miles north of the Tanana River crossing. Replace old rail with new heavier rail on existing 3,900 feet of siding and extend to 6,200 feet. Completed 2003.
- **Goldstream (Ester):** New 6,200-ft. siding at MP 460. 2005.
- **Anchorage Yard:** New 6000-ft. siding at MP 116-117, near the Ship Creek north bluff excavation. Needed as part of yard expansion effort to meet current and future demand. 2005.
- **Birchwood:** Siding extension at MP 136.3. Lengthen siding by 2,100 feet for a total of 6,300 feet to accommodate longer trains. Scheduled in conjunction with curve realignments at MP-135. Install heated power switches. Completed 2004.
- **Gold Creek:** Install heated power switches at MP 263.2. Completed 2003.
- **Complete CTC Installation between Anchorage and Matanuska:** Install intermediate signals and convert existing "D" signals to intermediate signals. Completed 2004.

- **Extend CTC from MP 109.5 south to MP 105.2:** Install power switch at the south end of double track MP 105.2 and install power crossover switches near MP 107.2. 2005.
- **CTC Installation from Matanuska to Pittman:** Install intermediate signals and electric locks between Matanuska and Pittman. 2005.
- **Chulitna:** Upgrade siding with heavier rail at MP 273.8. Completed 2006.
- **Denali Park:** Upgrade siding with heavier rail at MP 347.7. Completed in 2006.

Other Proposed Siding and CTC Projects

- **Broad Pass:** Extend siding to 6,200 feet at MP 304-305.
- **Canwell:** Extend siding to 6,200 feet and install heated power switches at MP 319.5.
- **Canyon:** Siding upgrade at MP 268.4.
- **Cascade:** New 2,200-foot siding with heated power switches at MP 350.5.
- **Caswell:** Extend siding to 6,200 feet and install heated power switches at MP 202.3.
- **Clear Site:** Extend siding to 6,200 feet and install heated power switches at MP 392.9.
- **Colorado:** Extend siding to 6,200 feet near MP 298.
- **Colorado to Broad Pass:** 6.1-mile extension to connect two existing sidings, including heated power switches and CTC (see separate fact sheet).
- **Dunbar:** Extend siding to 6,200 feet and install heated power switches at MP 431.6.
- **Garner:** Upgrade siding with heavier rail at MP 355.7.
- **Houston:** Extend siding to 5,000 feet with heated power switches and CTC at MP 175.3.
- **North Nenana:** Extend siding to 6,200 feet at MP 415.4.
- **Saulich:** Extend siding to 6,200 feet with heated power switches at MP 450.8.
- **Wasilla:** Extend siding to 4,800 feet at MP 159.8.
- **Other Proposed Heated Power Switch installations:** Chase at MP 236.2, Healy at MP 358.7, Susitna at MP 250, Sunshine at MP 215.3 and Willow at MP 185.7.
- **Other Proposed CTC installations:** Ester at MP 460, Happy at MP 463, Summit at MP 312.5, and Willow at MP 185.7.



2007 Track Rehabilitation

Project Scope

The Alaska Railroad (ARRC) is continuing an aggressive track rehabilitation program in 2007 as part of an ongoing effort to upgrade the mainline, sidings and yards from Seward to Fairbanks. The program calls for replacement of rail, ties and ballast in areas of critical need railbelt-wide.

For engineering and maintenance purposes, the Railroad divides the mainline track into five districts, as follows:

- MP 0 (Seward) to MP 120 (just south of Eagle River)
- MP 120 to MP 203 (just north of Caswell)
- MP 203 to MP 306 (just north of Broad Pass)
- MP 306 to to MP 386 (between Healy and Nenana)
- MP 386 to Eielson AFB

Project Cost and Funding

The 2007 track rehabilitation budget is funded \$31.7 million by the Alaska Railroad through the sale of revenues bonds that are backed by the Federal Transit Administration (FTA):

- \$15.3 million to replace rail and eliminate joints (welding)
- \$5.5 million to replace wood ties



An Alaska Railroad crew installs new track that is improved with continuously welded rail and concrete ties.

- \$6.6 million to install concrete ties in high degree curve areas.
- \$4.3 million to place ballast and surface

Rail Program

Rail is replaced when it has worn away in curves, or when it has become severely battered in tangent sections. The 2007 Rail Program will replace worn rail joints with continuously welded rail (CWR). The conversion to CWR dramatically decreases maintenance costs, and improves ride quality. Focus will be on the corridors from Hurricane to Broad Pass, Denali Park, Windy, locations near Nenana and near Willow. Work to include rail grinding for longevity of rail, rebuilding mainline switches, as needed, and rail flaw detection.



2007 Rail Program Areas of Emphasis:

- CWR: MP 280 (Hurricane) to 311 (Broad Pass) and MP 181 to MP 187 (Willow)

Tie Program

The 2007 FRA Tie Program calls for installation of up to 64,000 wood cross ties on the main-line track. The Alaska Railroad tracks include nearly 2,000,000 ties. Since 1996, ARRC has replaced nearly 620,000 ties - or 31% of all ties.

Heavy tie renewals in the late 1990s resolved critical main track issues; however, the tie population is generally old, so renewals are needed to keep up with the ongoing loss of older ties.

2007 Tie Program Areas of Emphasis:

- Wood Ties: MP 436 (Dunbar) to MP 358 (Healy)
- Concrete Ties: Curves north of Nenana and curves south of Denali Park

Ballast Surfacing

The bed of a railroad track is comprised of several layers. The top layer is called ballast, which is made up of small, jagged rocks that fit snugly together, forming a stable bed that can withstand the tremendous weight of a train while still providing drainage. The 2007 Ballast and Surfacing Program calls for the surfacing of about 200 miles of track using 100,000 tons of ballast rock.

2007 Ballasting/Surfacing Program Areas of Emphasis:

- Surfacing throughout all Districts as needed

Shoulder Maintenance

ARRC plans to undertake a 10-year shoulder maintenance program, from Eagle River to Fairbanks, to enhance track safety by providing the necessary embankment support for the rail and the heavier and faster moving trains used today. As necessary, culverts providing drainage from one side of the embankment to the other side would be extended.



2007 Shoulder Maintenance Program Areas of Emphasis:

- Shoulder maintenance throughout all Districts as needed



Bridge Program

PROJECT FACTS

Project Scope

The Alaska Railroad's (ARRC) 500-plus miles of mainline track includes 162 bridges that cross barriers ranging from streams to gulches. Of these, 67 are constructed entirely of steel, 61 are constructed entirely from timber, 22 are constructed entirely of concrete, and 12 are of mixed construction (for example, the Matanuska River Bridge includes steel, concrete and timber spans).

ARRC's 2007 Bridge Program calls for major maintenance, overhaul and replacement needed to maintain Alaska Railroad integrity, safety and efficiency. Our long-term bridge program includes replacement of most, if not all, of our timber bridges.

Some of the Railroad's existing bridges have been identified as eligible for the National Register of Historical Places (denoted by an *), either individually or as contributing elements to a potential historic district. A historic bridge survey is underway to confirm eligibility determination. As necessary, mitigation will be conducted in accordance with agreements with the State Historic Preservation Officer (SHPO).

Purpose and Need

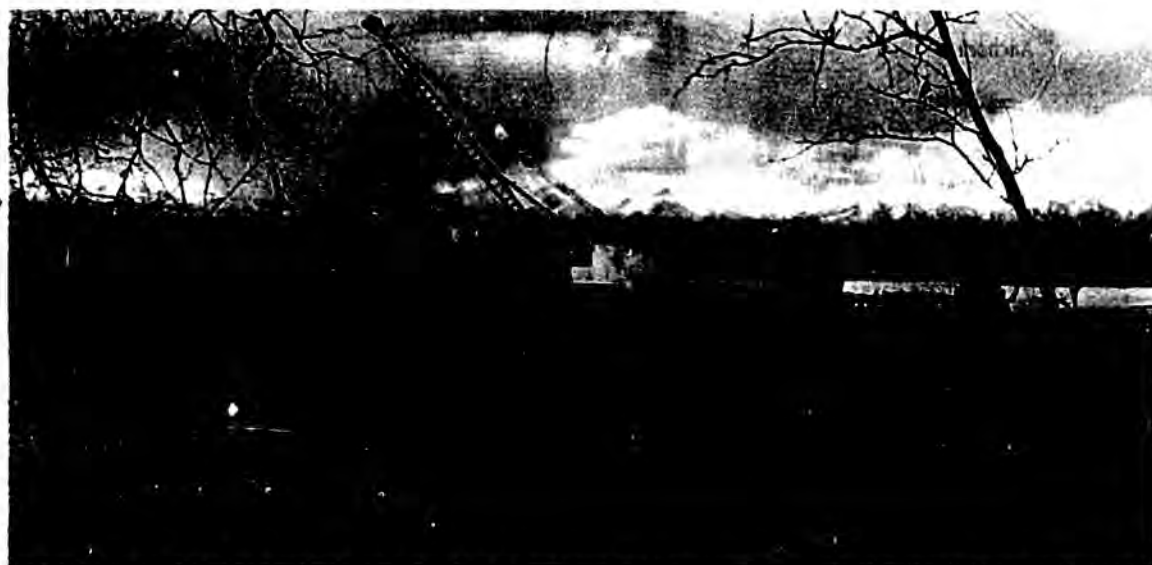
- Reinforcing or replacing some bridges and/or their components better accommodates the load demands of the Railroad's more modern, yet larger and heavier, fleet locomotives and trains.
- Replacing 50-year-old timber pile foundations addresses maintenance and safety concerns.
- Upgrading bridges will allow an increase in train speed and operational efficiency.

Project Cost and Funding

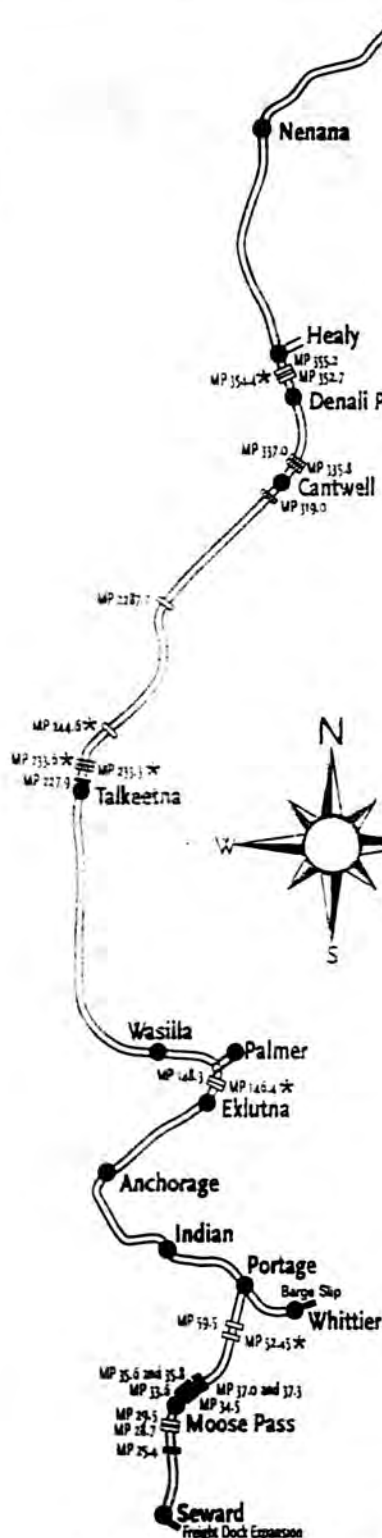
\$7.1 million budget in 2007, with \$5.3 million funded by the Federal Transit Administration, and \$1,800,000 by the Alaska Railroad.

Bridge Program Projects

- **Bridge Rehabilitation**
Replace timber foundations with a steel.
Locations: ARRC MP 148.3 and MP 352.7.
Rehabilitate piers at *Location: MP 354.*



At Knik River Bridge, MP 146.4, new piers and a new south span were constructed in 2005-2006. Demolition of existing piers will be completed in 2007.



• Replace with New Bridge

Replace existing timber trestle bridges with new bridges to improve safety. Converting existing bridges to either timber ballast deck or low clearance concrete deck bridges at *Locations:* MP 25.4, MP 33.6, MP 34.5, MP 35.6, MP 35.8, MP 37.0 and MP 37.3. Converting existing bridge to steel bridge at *Location:* MP 227.9. At MP 227.9, work in 2007 will include completion of the new piers, new span and demolition of old piers.

• Replace with Culvert

Replace existing timber trestle bridges with one or more culverts and fill material to improve safety and replace the maintenance-intensive timber structure with a lower-cost alternative. *Locations:* MP 233.3* and MP 233.6*. Culverts were installed in 2006 and the old bridges must be removed in 2007. *Locations:* MP 319.0, MP 315.8 and MP 337.0.

• Replace Component Parts

The purpose is to improve bridge and track safety through replacement or repair of component parts. ARRC plans replacement of caps, sash and sway braces, bulkheads, install steel pile bents and sheet pile bulkheads. *Locations:* *Whittier Barge Slip*, MP 29.5, MP 52.45, MP 59.5, MP 244.6, MP 267.7 and MP 355.2.

• Other Bridge Program Projects

Milepost: 146.4* (*Knik River*) – Complete demolition of piers in 2007.

NOTE: Execution of projects listed will depend on agency coordination/ approvals, funding and workforce availability.





Passenger Locomotive and Car Upgrades

PROJECT FACTS

Project Scope

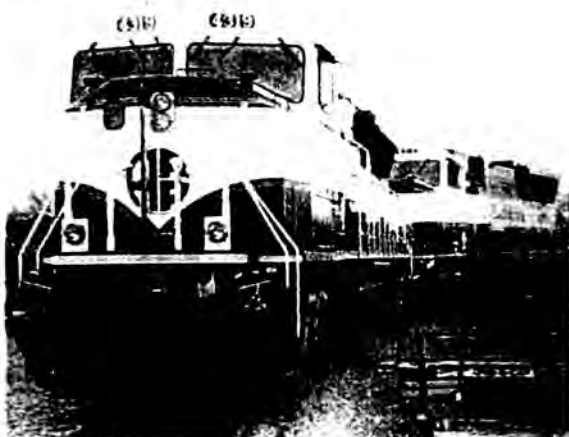
The Alaska Railroad (ARRC) has a fleet of 58 passenger related train vehicles, including 14 locomotives, 3 power/cab cars, 37 locomotive-hauled cars/coaches, and four self-propelled Rail Diesel Cars. This equipment varies in age and condition.

The Railroad upgrades older equipment to provide and expand passenger service operations in Alaska. Typical upgrade projects include the repainting and interior restoration of coaches, refurbishment of power generation cars, rehabilitation of railcar trucks, and rebuilding of passenger locomotives. ARRC acquires coaches and locomotives to replace older equipment.

2006 Project Costs/Status

- \$6.605 million was spent to purchase two bi-level dome coaches outfitted with full kitchens. Delivery in 2005 to provide a new first-class service option as part of the *Denali Star* train in summer 2005.
- \$7.15 million is budgeted in 2006-2007 to purchase two additional bi-level dome cars, which will also be equipped with full kitchens and dining areas. Delivery in 2007 ARRC plans to purchase two more in 2008.
- \$5.4 million is budgeted (2006) to purchase two low level dome passenger coaches that will match the Railroad's current 55x series. Delivery in 2006.
- \$1.55 million was spent to upgrade/rebuild the *Denali Car* to 1920s Victorian-era glory. New layout includes a bedroom suite, full kitchen, dining and conference areas. \$800,000 funded by Rasmuson Foundation and Ed Rasmuson.
- Except for the *Denali Car*, passenger car / coach refurbishment and purchase projects are funded primarily by the Federal Transit Administration, along with matching funds from the Alaska Railroad.

Locomotives



Eight new SDMAC locomotives were purchased by ARRC.

Passenger Coaches



Above: New bi-level dome coaches in 2005. Right and Below: Denali Car in 2006.





Collision Avoidance System

Project Scope

The Alaska Railroad (ARRC) is actively developing a multi-phased program to design, develop, and implement a communication-based train control system that utilizes data radio communications between train dispatchers and train crews, or dispatchers and roadway workers. The Collision Avoidance System (CAS) will ensure efficient and safe freight, passenger, and roadway worker operation.

The CAS project is comprised of a Computer Aided Dispatch (CAD) system, an on-board computer system, VHF packet data radio technology, and GPS locator technology. Wayside devices (including signals, switches, track integrity monitoring, and defect detection on trains) are interrogated by approaching locomotives for status. If needed, the train will be stopped prior to moving over the specific device.

Benefits

The Collision Avoidance System integrates CAD, on-board equipment, and wayside devices with a dedicated communication network and provides ARRC with the tools to:

- Electronically deliver authority (permission to be located on a specified stretch of track), speed restriction between the dispatcher office system and train.
- Stop locomotives/trains from exceeding authority/speed limits.
- Monitor switches for proper alignment.
- Detect broken rail (track integrity)

The fundamental difference between the CAS system and the current system is that the current system allows for human error that may cause catastrophic results. CAS will present human operators with improved information for decision-making. It will also detect infrastructure failure and potential violations quickly, and intervene when necessary. The proposed safety enhancements include:

- Generating safe mandatory directives
- Enforcing authority limits
- Enforcing speed restrictions
- Protecting roadway workers within their assigned limits

Status

The Collision Avoidance System is being implemented into ARRC operations in several phases, in which each step achieves incremental safety benefits. Completion is expected in 2007, and will include the installation of equipment on all of ARRC's 66 locomotives.

Phase I

The first phase, the communications segment, is installed and consists of mobile and base station packet data radios and GPS receivers on locomotives. Tracking occurs with GPS correction sent from the base stations to the locomotive. The system is operational and provides complete coverage of the railroad on all locomotives.

Phase II

- The Computer Aided Dispatcher (CAD) systems under contract with Pittsburgh-based Union Switch & Signal. The schedule is for installation during the first quarter 2006.

Phase III

- The Office Safety Server Segment is the source of control information and instructions required on-board to perform CAS safety functions. The system validates all authorization and restriction information.
- The Locomotive Segment increases train crew effectiveness, efficiency, and safety. Safety objectives are achieved through several on-board safety functions:



- On-board display of authorities, speed restrictions, and wayside detection alarms
 - On-board alerts
 - On-board enforcement of authority limits
 - On-board enforcement of speed limits
 - Protect roadway worker work limits
- Field acceptance testing is scheduled to begin in November 2007, with implementation complete by spring 2008.

Phase IV

- Wayside detection devices will be monitored in Phase IV. These hardware and software applications include track integrity, switch monitoring and detector instrumentation for high load, avalanche, and hot wheels.

Phase V

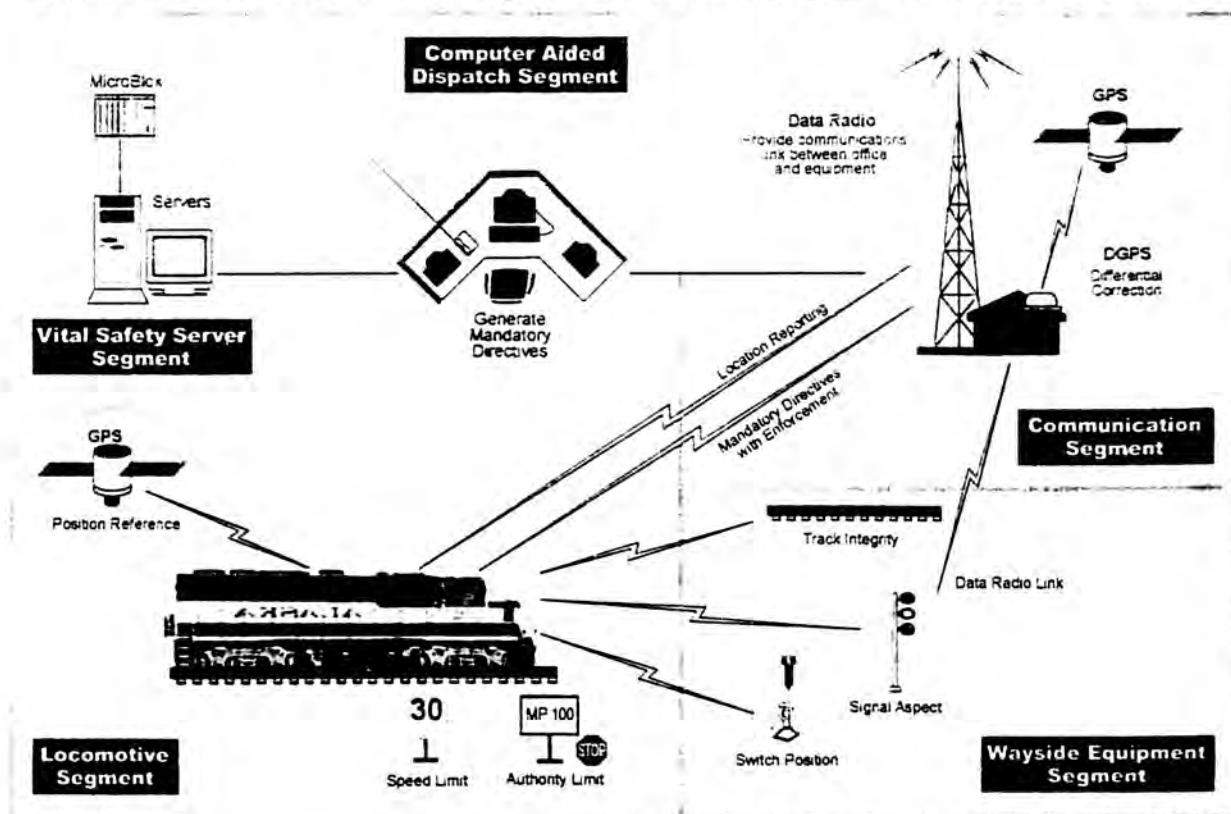
- Phase V will integrate on-track-vehicles (trucks and other vehicles outfitted to drive on the track) into CAS for monitoring, alerting and warning of authority limits and proximity to other maintenance vehicles.

Costs and Funding

The Federal Railroad Administration (FRA) funded earlier phases at \$11.9 million. Approximately \$13.5 million will be needed to complete Phase III. Phases IV and V are estimated to cost \$20 million.

\$4.48 million was budgeted for 2006 with funding from Federal Transit Administration (FTA) bond revenue. \$7.5 million is budgeted for 2007, funded 91% by the FTA and 9% by the Alaska Railroad.

Collision Avoidance System Overview for Locomotives





Train Whistle Noise Reduction Systems

Project Scope

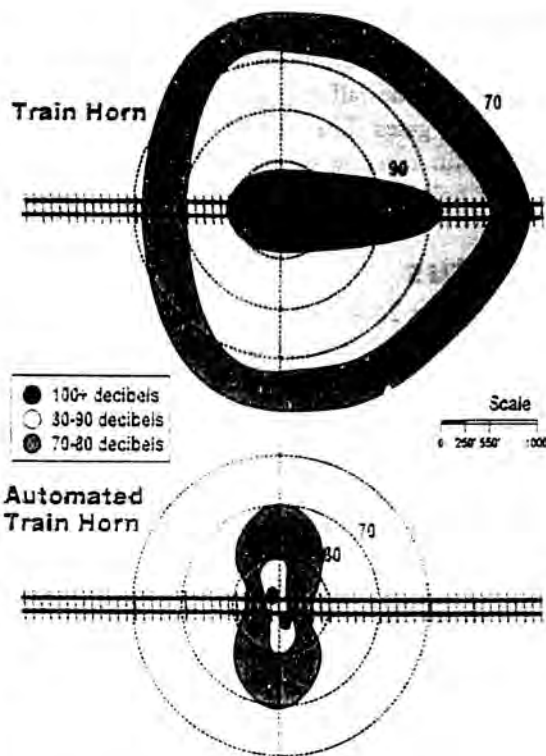
Federal regulations and Alaska Railroad rules require trains to sound their horns when approaching a public crossing and to continue sounding the horn until the crossing is reached. In June 2005, the Federal Railroad Administration (FRA) began enforcing a new rule requiring train engineers to sound the horn at least 15-20 seconds before the crossing and to continue sounding the horn until the crossing is reached. Given significant consequences for not complying (monetary fines to the railroad and suspension of train crews), train engineers have no choice but to blow the horn as required — day and night.

Anticipating potentially greater noise disruption to railbelt communities, ARRC began testing whistle noise reduction systems at two crossings in Anchorage in 2004. This technology, which is in use in other locations in the U.S., is designed to reduce noise from train whistling. The test determined that at least two whistle reduction systems can operate reliably in the Alaska environment.

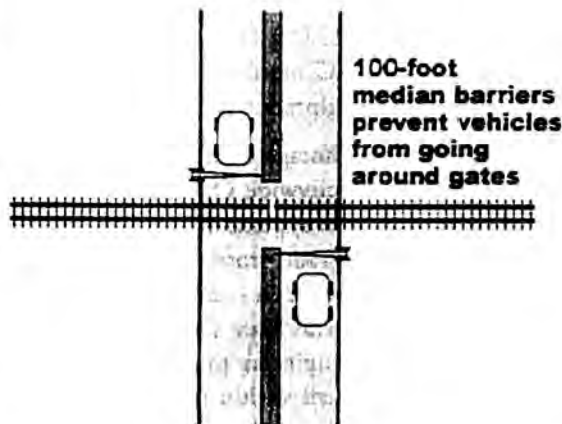
At one test site a stationary automated horn system was installed. When this system senses an approaching train, it sounds a whistle-like warning that is aimed perpendicular to the track, down the road, toward oncoming highway traffic. The system uses two stationary horns mounted at the crossing, instead of on the train. By directing the noise into the street, instead of the surrounding area, noise is more focused and less disruptive to the surrounding community.

At the other test site median barriers were erected down the middle of the street for about 100 feet on either side of the track. Crossing gates close against the median, thereby preventing vehicles from getting around the gates and onto the track. This system eliminates the need for trains to sound their horns for the crossing, making it a good choice for residential areas.

With either of these systems in place, train engineers do not need to blow the train whistle



Federal regulations and ARRC rules require horns to generate at least 96 decibels at 100 feet. A study conducted in Mundelein, Illinois, by the Northwestern University Center for Public Safety, showed the automated horn reduced noise by 85% compared to train-mounted horns.



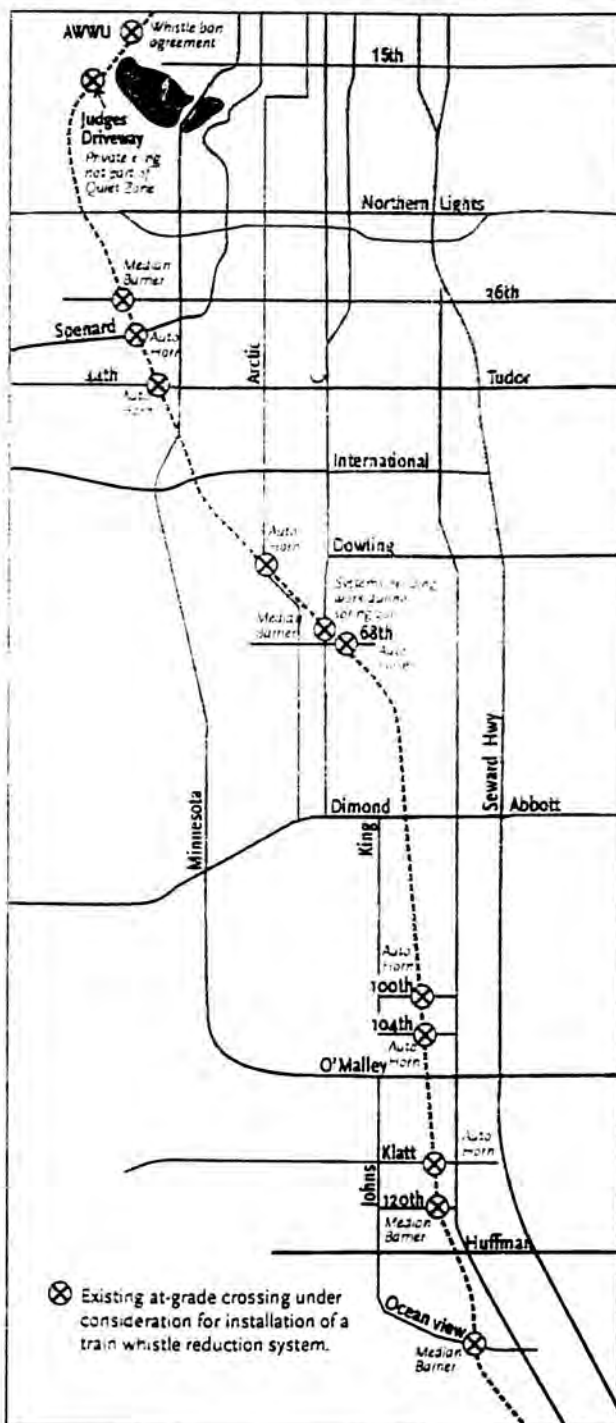
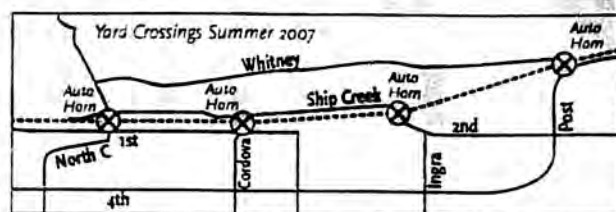
when approaching the crossing. However, there are circumstances when an engineer may need to blow the whistle when in the area. An example would be if the engineer sees a person or animal on the track, he or she would sound the horn as a warning to clear the tracks.

Benefits

Railroad train horns are proven to improve safety at road-rail at-grade crossings, even those with crossing gates. The whistle reduction technology can maintain crossing safety, while reducing the train horn noise in more populated areas.

Status

- Spring 2004, ARRC coordinated with state and municipal officials regarding whistle reduction system installation at test sites in Anchorage.
- Systems were installed for initial testing in 2004: 1) an automated horn system at the Klatt Road crossing, and 2) median barriers at the 36th Avenue crossing.
- ARRC notified residents living near test sites about the project, and invited them to take part in a before-and-after survey regarding any change in noise levels. About three dozen residents around each location participated. Survey results pointed to overall system success in reducing whistle noise, while ARRC monitoring confirmed equipment capability and reliability.
- ARRC conducted noise studies at the Klatt test site in July 2004 in order to compare noise levels between typical street noise, locomotive horn whistle and wayside horn whistle. Similar data was obtained for the 36th crossing site as part of the MP110-114 Capacity Improvement project. ARRC monitored the test sites to determine equipment capability and reliability.
- In 2005, Anchorage obtained federal dollars to help create a citywide Quiet Zone, by installing noise reduction systems at most of the 10 remaining at-grade crossings. The railroad continues to work in concert with Municipality of Anchorage and State Department of Transportation traffic engineers to determine the best systems to install within the constraints of available funding.



- In 2006, median barriers were installed at Oceanview and 120th Ave. Auto horns were installed at 104th and 100th Ave., Arctic Blvd., 44th Ave. and Spenard Road.
- Auto horns will be installed in 2007 at five additional crossings: 68th Ave., North C Street, Ingra, Cordova and Post Road.
- Communities statewide may determine that there are local crossings that warrant installation of whistle noise reduction systems. Nationwide, these projects are typically pursued at the request of the community, with funding coming from municipal, borough,

state and federal sources. Citizens interested in creating a Quiet Zone should first contact their local government transportation and community planning agencies with a request they fund, or seek funding for, train whistle noise reduction systems.

Project Costs

- The initial test budget was \$221,300, funded by Federal Railroad Administration (FRA). FRA granted an additional \$994,100 in 2005 to establish a Quiet Zone between the Anchorage Rail Yard and Oceanview Drive.

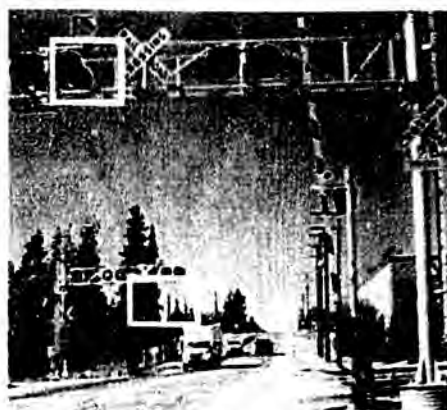
COSTS OF NOISE REDUCTION OPTIONS

For communities considering whistle noise reduction systems, the Railroad has researched cost ranges for the following options. These estimates are based on railroad experience with purchasing system equipment and materials, shipping charges, installation costs, and common construction-related contingencies.

Automated Horn - Equipment for this system includes two stationary horns mounted at the crossing, along with sensor equipment on the track and signals that notify the train engineer that system is working. Cost to install automated wayside horns ranges from \$50,000 to \$140,000. Higher end costs relate to upgraded signal and gate equipment, if necessary.

Median Barrier - Materials for this system include a non-mountable curb that create a barrier 60 to 100 feet long. For locations in the Anchorage area jersey barrier segments were used to reduce cost in installation, maintenance, and for ease of installation. Traffic engineers have determined that the roadway lanes and shoulder on either side of the median must be at least 30 feet in order to accommodate for shy distance from median, snow removal, and lane width for a vehicle. Configuration of surrounding roads also impact the feasibility of installing this system. Cost to install is \$45,000 to \$180,000 depending on roadway improvements, if necessary.

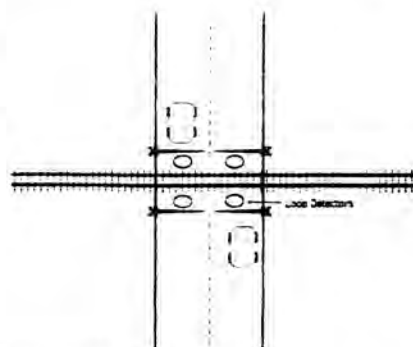
Four Quadrant Gate - Not yet tested in Alaska, this system installs two gates on either side of the track. The four gates come down, closing off access to the track on both sides of the road and on both sides of the track. This system also includes installation of loop detectors (sensors) which are buried beneath the pavement on each side of the crossing. These detectors sense vehicles that may be stalled or caught between the gates. If the system detects a trapped vehicle, the gates open so the vehicle can escape. Equipment and installation are expensive. This system is not feasible for many crossings due to high cost, impact to the roadway, and potential delays to traffic and railroad operations in the event of system failure. Cost to install is \$200,000 to \$360,000, depending on gate equipment already in place, and the extent of road construction needed.



Automated wayside horns at Klatt Road.



Median barriers at Oceanview crossing.



Four quadrant gate concept.



Crossbuck Illumination Test

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC) is testing the effectiveness of experimental illumination materials installed on railroad crossbucks, the familiar X-shaped warning signs that indicate a railroad crossing is present. ARRC will affix the luminescent material at select crossings that are not equipped with signals (flashing lights) and gates.

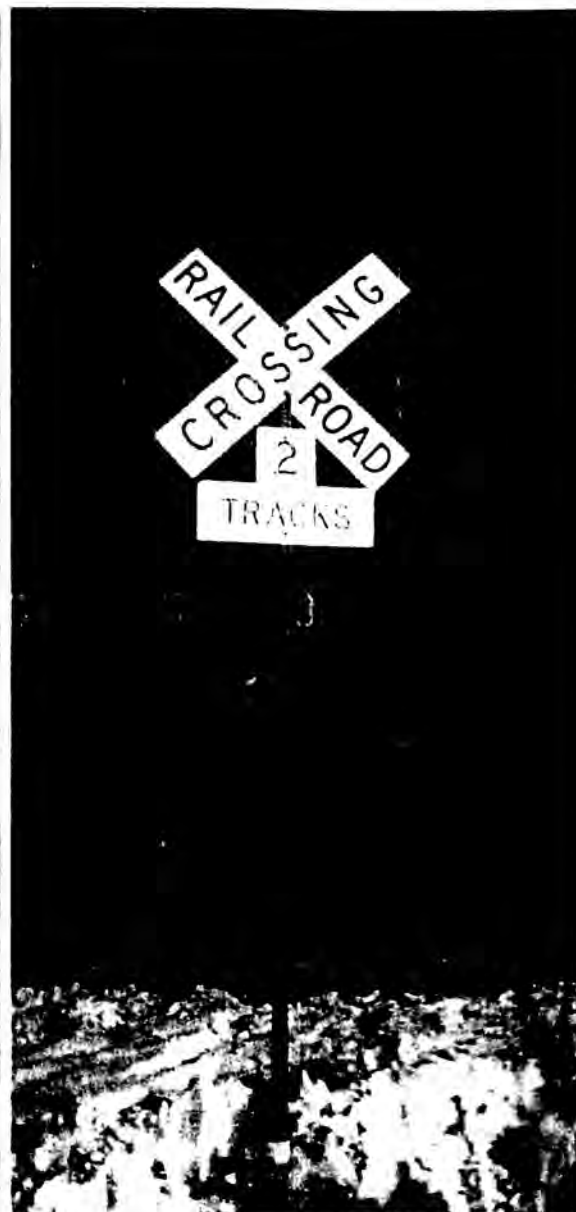
Benefits

According to national grade crossing accident statistics, "vehicle-run-into-train" accidents account for approximately one-third of nighttime crossing accidents. Poor visibility of the crossing and of the train within the crossing can contribute to these kinds of accidents.

The material being tested retains light absorbed during daylight hours, so that it effectively radiates light during hours of darkness. This source of light may enhance crossbuck visibility, thereby reducing incidents with vehicles. The Alaska Railroad provides an ideal platform to find out, given the state's cold climate and extended hours of darkness during winter months.

Project Status

- Based on initial test results in 2005, the material is being reformulated. Material will be ordered and retested in 2006 and 2007 for compliance with Federal Railroad Administration (FRA) and Federal Highway Administration (FHWA) standards.
- Test focus will be during fall and winter months, when darkness is most prevalent.
- Results will be reported to the Federal Railroad Administration. Application for acceptance of the material by the governing bodies – FRA and FHWA – will be based on test results.



Cost and Funding

Project budget is \$992,500. Funded by the FRA's Next Generation High Speed Rail Program.



Section Maintenance Facilities

PROJECT FACTS

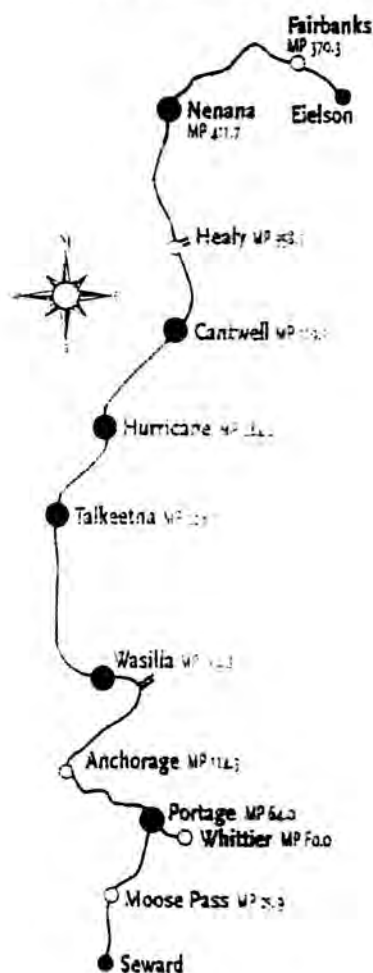
Project Scope

The Alaska Railroad Corporation (ARRC) proposes to build up to six section maintenance facilities (SMF) along the mainline track. The prototype will be constructed in Cantwell, with additional facilities planned for Hurricane, Portage, Talkeetna, Wasilla and Nenana.

Each of these locations is known as a "section," which, as the name suggests correlates to a section of track. Currently, ARRC sections are located at Portage, Whittier, Anchorage, Wasilla, Talkeetna, Hurricane, Cantwell, Healy, Nenana and Fairbanks. Sections typically have at least three people assigned, including a supervisor, track laborers and equipment operators. These employees are tasked with keeping their section of track in good operating order. To support this, sections are outfitted with a maintenance shelter, ranging from a heavy-duty tent to an aging building. More remote sections also provide housing, ranging from a nearby hotel to trailer to a temporary structure. There is no consistency among the section facilities.

The SMF project will bring uniformity to the section architecture and infrastructure. Five of these steel-framed heated maintenance facilities will be 45-by-62 feet in dimension, with 2,800 square feet of space. Each will house a small office, small restroom, small utility room, and a two-bay open shop area that will accommodate one piece of rail maintenance equipment (typically a ballast regulator, which doubles as a snow plow), and one to two trucks. The Talkeetna facility may be slightly larger to accommodate a larger piece of rail equipment (possibly a self-propelled passenger rail car) in the future.

Situated on a concrete foundation, the facility's exterior is consistent with the railroad's new building image. It includes lap siding (overlapping horizontal siding) and split face block design (brick veneer halfway up the sides) aluminum insulated windows and metal roof-



ing. A decorative timber truss, which mimics the Hurricane Gulch Bridge, will accent each side of the building, providing a distinctive, unifying design element.

Located entirely within the Alaska Railroad right-of-way, facility sites will include a small graded approach and parking area. A single track will run from the mainline track to the facility, and continue, embedded in the concrete, through the entire length of the building.

Project Benefits

- The Alaska Railroad Facilities and Engineering departments designed the facilities to be simple, easy to construct, expandable and readily adaptable to many uses. The purpose is to support continuing growth and development through modern, uniform infrastructure.
- During the winter employees spend significant time clearing trucks of snow and ice. Providing truck shelter will decrease the likelihood of injuries and improve response times to rail and track maintenance needs.
- The SMF provides a safe, secure place to protect Alaska Railroad investments in vehicles and tools. Railroad trucks, and tools stored in truck beds, are often stored outside, subjected to the weather, and in some cases, vulnerable to vandalism and theft.
- The SMF will replace aging, non-uniform facilities that are costly to maintain. The new facilities will lower the cost of operating and maintaining sanitation and heating components.

- The SMF represents a significant first step toward improving employee conditions in semi-remote areas. Future infrastructure upgrades call for construction of amenities buildings to replace existing old trailers. Amenities buildings will include showers, laundry room and a kitchen/breakroom.

Project Status

- Anchorage-based F&W Construction completed the first SMF in Cantwell in October 2006.
- Current plans call for construction of additional section maintenance facilities at Hurricane, Portage, Talkeetna, Wasilla, and Nenana.

Project Costs

- Each facility will cost between \$750,000 and \$1 million, depending on facility size and location. Funding is 100% Alaska Railroad.



The first Section Maintenance Facility was completed in Cantwell. Section crews completed the move in October 2006.

