Whittier Infrastructure and Master Planning

The Alaska Railroad (ARRC) is pursuing a master plan to guide development of railroad infrastructure in Whittier to improve passenger and freight train operations and community interaction.

**Project Scope / Objectives**

- 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 vehicle 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 Master Plan and the Whittier Comprehensive Plan to foster local economic 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)
- Phase One Environmental Site Assessment for Whittier Intermodal Development (Alaska Railroad).
- ARRC continues to meet with interested parties to address crossing issues.
**Completed Projects**

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.


- **DeLong Dock** – fender piling, water and electrical service improvements to accommodated 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 Pass-Pass** – Side loading structures complete in 2002; $2.26 million budget funded by ARRC.

- **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 yard water side, and video cameras to monitor barge operations and restricted areas. Card reader access for Yard entrance and exit control and additional lighting and cameras to cover all yard areas were accomplished in 2009-2010. Funded by ARRC.

- **Whittier Master Plan** – Initiated in 2004 with an intermodal planning study to improve passenger amenities, security review, and track layout engineering. Work resumed in 2006 to address plans for the Marginal Wharf and optimal freight handling. $598,000 budget funded 80% by FTA and 20% by ARRC.

- **Passenger Intermodal Improvements** – Phase One includes preliminary engineering, environmental permitting and demolition of the Marginal Wharf. The project was awarded to American Civil Constructors in fall 2007, with work beginning in late 2007, and completed in 2008. $3.1 million budget funded 91% by FTA and 9% by ARRC matching funds. Freight dock customers had used a winch connected to the Marginal Wharf. Following wharf demolition, the eliminated winch was replaced with a new barge slip dolphin. $400,000 budget for dolphin construction in 2008 was funded 100% by ARRC.

- **Freight Barge Slip Rehabilitation** – A multi-year program to repair or replace aging components, including control shack; mooring fenders, camels and dolphins; the pass-pass structure; sheet pile wall; towers, decking and several other areas. The Alaska Railroad internally funded $325,000 in 2006, $335,000 in 2007 and $350,000 in 2008.

- **Barge Slip Stern Replacement** – Barge Slip major modification to include stern (front) unloading improvements that facilitate more efficient rail and forklift pass-pass load/unload activity. The barge slip ramp was extended and track and ground work accomplished in 2009 at a cost of $870,000 funded by ARRC. The front unloading area was replaced in 2010. ARRC and Lynden each funded $2 million.

**Projects Underway**

Other projects prescribed by the plan and currently underway:

- **Security Fencing** – Install a security fence around the Whittier Yard and railroad property in Whittier to be completed in 2012. Part of the fence will be made from jersey barriers with fence tops that can be moved to facilitate snow removal. Include a second ID card-reader access-control chain-link rolling gate on the south side of the yard, near the Maintenance Facility (an existing card-reader gate is located at the north yard entrance). Funded by a $311,224 U.S. Homeland Security grant, and supplemented with $82,000 from the Alaska Railroad.
**Future Actions Recommended by the Whittier Master Plan**

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

**Security**
- 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 activity, and improve yard drainage and snow removal.
- Work with city to develop future options to reduce traffic delays at the major railroad/highway crossing adjacent to Whittier Creek.

**Passenger Intermodal Improvements**
- Dockside Passenger Improvements needed to address current limited dock space for day boats, multi-day small cruise boats, and cruise ships.
- Given Marginal Wharf 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 including two rails for simultaneous loading of two passenger trains.

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**Figure 1.** Status of Whittier Infrastructure Improvements and Master Plan elements