



# DOWNEASTER EXPANSION PROJECT OVERVIEW

## BACKGROUND

The Amtrak Downeaster makes five daily round trips between Boston and Portland, serving 10 communities in three states along its 116-mile corridor. The Boston to Portland service has been in operation since December 2001. Included in the original plan for the Downeaster service, but not possible until now, was the extension of service 30 miles beyond Portland to Freeport and Brunswick. Expansion of service to Brunswick is important because it will provide more mobility to Maine residents, increase tourism, support the redevelopment of the Brunswick Naval Air Station (BNAS) and provide a connection to the state owned Rockland Branch, which extends 58 miles from Brunswick to Rockland, the heart of mid-coast Maine.

Although a capital plan to upgrade the freight line between Portland and Brunswick to passenger standards had been in place for years, the lack of capital funding to complete the project remained a barrier until spring 2009 when the High Speed Intercity Passenger Rail (HSIPR) Grant Program was announced. Administered by the Federal Railroad Administration (FRA) as part of the American Recovery and Reinvestment Act (ARRA), the HSIPR grant program made \$8 billion available as a “down payment” on investment in our nation’s passenger rail system through a national competitive application process. The Northern New England Passenger Rail Authority (NNEPRA) submitted an application for the Downeaster Expansion Project, and was awarded \$35 million. Under the leadership of Governor John Baldacci, the State of Maine agreed to provide the remaining funds (approximately \$3 million) to complete the project.

The Downeaster Expansion Construction Project includes the rehabilitation of approximately 27 miles of track between Portland and Brunswick owned by Pan Am Railways, and approximately 1.2 miles of track in Brunswick owned by the MaineDOT. Although Pan Am Railways provides freight service on their line, and the Maine Eastern Railroad (MERR) provides freight and passenger excursion service between Brunswick and Rockland, no passenger service currently operates in between. That is about to change.

The project is being managed by NNEPRA and their engineering contractor, VHB. The majority of the work will be completed by Pan Am Railways’ labor forces and equipment, with certain elements to be constructed by MaineDOT. Upon completion of construction, Amtrak will extend two of the Downeaster’s daily round trips to Brunswick, and the MERR will offer connecting passenger service to Rockland.





# EXPANSION PROJECT



*The Project will rehabilitate existing track, including rail, ties, ballast, spikes, anchors and tie plates*



*Continuously welded rail will replace existing jointed rail to reduce maintenance costs and provide a superior ride quality for passengers.*



*In addition to rail and tie replacement, 15 turnouts will be replaced by the Project.*

## TRACK IMPROVEMENTS

**\$22.1 million**

The first work element of the Project is the replacement of decades-old jointed rail with new continuously welded rail (CWR). NNEPRA conducted public bid processes for track materials and the CWR contract was awarded to L.B. Foster of Allentown, PA, whose CWR mill is in Columbia City, Indiana. The first shipment of rail will be unloaded beginning in Brunswick on August 2, 2010 and Pan Am will begin installation on August 16, 2010. The new rail will be placed on new tie plates, provided by Unitrac based in Knoxville, Tennessee, and fastened using new spikes and new anchors provided by Harmer Steel Products based in Portland, Oregon.

Approximately one third of the ties (more than 33,000) between Portland and Brunswick will be replaced as part of the project and 41,900 tons of ballast will be spread throughout the corridor to secure the new track. As a result of public bid processes, ties will be provided by Perma Treat of Durham, Connecticut, and ballast will be provided by Pan Am from their quarry in Embden, Maine and by Pike Industries of Westbrook, Maine.

Additional track improvements include the replacement of ten turnouts (which connect main line track to passing sidings), and the Yarmouth Junction Diamond, setting the stage for the eventual expansion of service west to the Lewiston/Auburn area.

The improved track infrastructure will allow Downeaster passenger trains to safely operate at faster speeds and with a superior ride quality.

## PASSENGER PLATFORMS

**\$1.2 million**

While the train stations will be developed through public/private partnerships in the communities of Freeport and Brunswick, the construction of passenger platforms is included in this Project. The 400 foot long elevated platform in Brunswick will be located right in front of Maine Street Station and will be used by Downeaster passengers as well as passengers of the Maine Eastern Railroad. The Freeport platform will also be 400 feet long, but will include high and low level boarding areas due to its location on a curve. Both will have canopies, lights, heating elements to minimize snow and ice build-up and will be fully ADA compliant.

## RIGHT OF WAY IMPROVEMENTS

**\$2.2 million**

The project will address various area improvements along the rail line right of way. These elements include ditching, the rehabilitation of 3 stone arches, reconstruction of headwalls and clearing of brush blocking waterways. Fourteen culverts will be replaced or rehabilitated to ensure continued passenger train operations, and the deck of the Royal River bridge will be replaced with new timbers. A longstanding drainage deficiency in Brunswick, known as Deep Cut, will also be included in the project scope, and will be completed by a private contractor to be determined under contract to MaineDOT.

**GRADE CROSSINGS, SIGNALS & COMMUNICATIONS \$12.5 million**

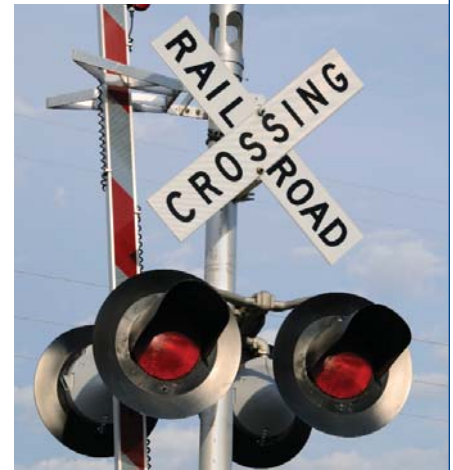
The rail line between Portland and Brunswick includes a total of 36 grade crossings, all of which will be upgraded during the Project. Most of the crossings are currently in a state of disrepair causing inconvenience to motorists and road maintenance crews. Impacted crossings will be completely rehabilitated with new bituminous concrete pavement and rubberized flangeway seals resulting in a smoother transition across the tracks. Vegetation management will occur around crossing locations to improve visibility.

In addition to the grade crossings themselves, most of the existing wayside signals will be upgraded including new predictors, signals and gates as well as in-track signaling. Along with the improvements made to the existing signal system, the Project will extend the signal system on the Brunswick Branch to encompass the entire operating limits of the Downeaster service. This extension will simplify and enhance the safety of train operation, allow faster operating speeds, and position the service for the future while protecting the initial investment.

**OPERATION of SERVICE**

The newly upgraded Portland to Brunswick corridor will support the operation of Amtrak passenger trains operating at speeds up to 70 mph in addition to freight trains.

Upon completion of the project, the Downeaster will begin serving Freeport and Brunswick with two daily round trips to Boston and one daily round trip to Portland. The schedule is still under development. This expansion is expected to generate approximately 36,500 new riders annually after the first full year of operation and provide connecting service to the Rockland via the Maine Eastern Railroad.



Existing signals will be upgraded to include larger lights and new gates, improving safety for all



36 Grade crossings will be upgraded to the standard pictured above, providing a smoother transition for trains and motorists alike.

TENTATIVE PROJECT SCHEDULE										
	2010		2011				2012			
	SUMMER	FALL	WINTER	SPRING	SUMMER	FALL	WINTER	SPRING	SUMMER	FALL
Rail Installation	█			█						
Tie Replacement						█				
Misc. Track Work				█				█		
Grade Crossings					█			█		
ROW Improvements	█			█				█		
Signals/Communication	█									
Brunswick Platform				█						
Freeport Platform				█						
Service Begins										█



The improvements will result in significantly improved track conditions which will safely and comfortably support the operation of Downeaster passenger trains.



## ABOUT NNEPRA

The Northern New England Passenger Rail Authority is a quasi-government agency created by the Maine State Legislature in 1995 for the purposes of restoring passenger rail service to Maine, and overseeing the operation of passenger rail service in Maine. NNEPRA serves as the business manager of the Amtrak Downeaster, providing operating and financial support, food service and marketing.

The NNEPRA Board of Directors is appointed by the Governor of the State of Maine. Current Board Members: Martin Eisenstein (Chairman), Dana Connors (Vice Chairman), Brenda Garrand (Treasurer), John Bubier and John D. Clifford. Maine DOT Commissioner David Cole and Maine Office of Tourism Director Pat Eltman serve ex-officio.

NNEPRA Staff: Patricia Quinn (Executive Director), Marina Douglass (Manager of Budget & Administration), Natalie Allen (Director of Marketing), Brian Beeler (Manager of Passenger Services), James Russell (Special Projects Manager), Terri Diffin (Data Analyst), Len Mulligan (Clerk of the Works).



## Thank You, to Our Downeaster Operating Partners

- AMTRAK
- Epicurean Feast/Downeaster Cafe
- Pan Am Railways
- Massachusetts Bay Transportation Authority



## Public Participation

The Downeaster is the result of a citizen's initiative lead by TrainRiders Northeast (TNE) and public support continues to be critical to sustain and grow the Downeaster service. To learn more about becoming informed or involved in passenger rail issues, please visit [www.TrainRidersNE.com](http://www.TrainRidersNE.com).

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