Downeaster Portland North Expansion Project
Portland to Brunswick
Cumberland County, Maine

FINDING OF NO SIGNFICANT IMPACT

Statement of Purpose and Need:

The project area is an approximately 30-mile long existing freight rail line between Portland and Brunswick. The existing freight train operation consists of six trains per day (three) locomotives and 50 cars per train) between Portland and the Royal Junction (located approximately one-third of the way between Portland and Brunswick), and two trains per week (one locomotive and six cars per train) between the Royal Junction and Brunswick. The freight train speed varies between 30 - 40 mph. Passenger rail is currently not available between Portland and Brunswick. Instead, I-295 is used for vehicular travel between these two locations.

The Amtrak Downeaster (Downeaster) currently operates ten daily trips (or five round trips) between Portland, Maine, and Boston, Massachusetts. The Northern New England Passenger Rail Authority (NNEPRA) seeks to extend four of these daily trips further north to Brunswick, Maine and add two additional trips between Portland and Brunswick. NNEPRA is proposing to rehabilitate approximately thirty miles of existing freight rail line between the Portland Transportation Center (PTC) in Portland, Maine, and the proposed Maine Street Station in Brunswick, Maine in order to offer this service.

Through this project, NNEPRA seeks to enhance mobility, reduce congestion and improve safety. Since 2001, the Downeaster has linked northern New England communities to ferries, airports, subways, intercity and regional bus trips, and Amtrak's northeast corridor by providing ten daily trips between Boston, Massachusetts and Portland, Maine. The Downeaster's 160 million passenger-miles and two million passengers since service initiation provide evidence of the regional demand for rail service in northern New England. Ridership has grown 87% since FY2005 and is expected to reach 468,000 passengers in FY2009.

The I-295 corridor has experienced substantial growth in traffic volume since the 1950s, and thus there is a growing need to reduce congestion and enhance safety in this area. Chronic congestion and delays occur due to inadequate roadway capacity. Furthermore, the increase in traffic volume has created an increase in traffic accidents, which creates hazards by temporarily reducing highway capacity and producing lengthy backups. The growth in traffic volume is projected to continue in the future; approximately 50,000 vehicles per day currently travel north of Portland on I-295, and traffic is expected to increase 20 percent by 2030. Expansion of the I-295 corridor is unlikely due to the potential for a large number of displacements and other substantial environmental impacts. However, expanding regional passenger rail service to the Brunswick area will enhance mobility and improve safety in the region and along the I-295 corridor.

Alternatives:

NNEPRA consulted with the city of Portland, the Towns of Freeport and Brunswick, Pan Am Railways, MaineDOT, and public stakeholders during the development of alternatives. They identified and considered three alternatives: the No-build alternative, the Preferred Alternative, and a build alternative. NNEPRA evaluated the alternatives based upon their ability to meet the project purpose and need, to satisfy engineering design criteria, and to avoid or minimize adverse environmental impacts.

The No-build alternative would consist of the operation of the current track, with the present level of service and maintenance and no appreciable change to the current track configuration or operating conditions. NNEPRA fully analyzed the No-build alternative, and its consequences were fully developed to allow equal comparison to the preferred alternative and to help decision-

makers and the public understand the ramifications of taking no action. However, NNEPRA concluded that the no-build alternative would not meet the project purpose and need because it would not enhance mobility or improve safety in the I-295 corridor. If NNEPRA proceeds under the No-build alternative, travel cost savings from reduced congestion would not be realized. Furthermore, chronic congestion and delays on I-295 north of Portland would continue and worsen as traffic volume increases through 2030. The potential for greater frequency of traffic incidents, possibly resulting in personal injury or loss of life, would increase as traffic volume increased.

NNEPRA also considered a build alternative that more closely followed I-295 between Portland and Yarmouth. This alignment would have required the development of a new rail corridor in the designated alignment beginning at the Portland Transportation Center (PTC), crossing Forest Avenue and then running parallel to I-295 through the Bayside area of Portland, construction of a new 1,700-foot rail bridge over Back Cove, and a connection to the St. Lawrence and Atlantic Railroad freight line, which would be rehabilitated between Portland and Yarmouth Junction. At Yarmouth Junction, this alternative would connect with the Brunswick Branch and continue on the same alignment as the preferred alternative. However, because the alternative build would require the construction of new rail and a new 1,700-foot rail bridge, the alternative had a substantially higher cost and the potential for greater adverse environmental impacts than the Preferred Alternative and was dismissed from detailed analysis.

The Preferred Alternative proposes to rehabilitate approximately thirty miles of an existing freight rail line between Portland and Brunswick. This rehabilitation would support the planned Downeaster passenger rail service extension from its existing terminus at the PTC to the proposed Maine Street Station in Brunswick. The Preferred Alternative would consist of track upgrades, special trackwork, the construction of platforms in Freeport and Brunswick, a siding at Brunswick, the rehabilitation of three stone arch culverts, the replacement or repair of 14 culverts, drainage improvements at the 'deep cut' north of Freeport, and signal upgrades.

Benefits of Preferred Alternative

The Preferred Alternative follows entirely within existing rail corridor rights-of-way, avoiding impacts from construction of a new corridor, while still meeting the mobility and safety needs of northern New England. The preferred alternative would support the planned Downeaster passenger rail service extension from its existing terminus at the PTC to the proposed Maine Street Station in Brunswick. Passenger rail service has the potential to play an important role in keeping Maine's economy competitive for the future by enhancing quality of life for Maine's employers, employees, residents and visitors. Investment in the passenger rail system helps fulfill state and federal transportation policies. Improvements to the track infrastructure for the proposed project would also benefit the freight rail service, which uses the same line.

Procedural History

In May 2008, NNEPRA submitted the Downeaster Portland North Expansion Project Railroad Rehabilitation and Improvement Financing Program Application (RRIFPA) / Categorical Exclusion to the FRA for approval. The categorical exclusion (CE) worksheet indicated that the Preferred Alternative qualified as a CE because the proposed project intended to provide "operating assistance to a railroad to continue existing service or increase service to meet demand, where the assistance will not result in a change to the environment." However, FRA determined that the project scope was not consistent with this category, and NNEPRA resubmitted the CE worksheet with supporting environmental documentation under "maintenance of existing railroad equipment" and "minor rail line additions."

After review of the resubmitted CE worksheet, FRA requested a more detailed environmental analysis regarding noise impacts and mitigation measures to address potential noise impacts. FRA concluded in December 2008 that NNEPRA should prepare an Environmental Assessment (EA).

Based upon the attached EA, which was completed in August 2008, FRA has concluded that the Preferred Alternative, including proposed mitigation measures, is not likely to incur significant environmental impacts. FRA concurs with the preferences of NNEPRA and finds that the Preferred Alternative is best able to achieve the project purpose and need without significant environmental impacts.

The FRA Office of Railroad Development has reviewed the attached EA. The potential for environmental impact is summarized for each resource category as follows:

Air Quality:
The proposed project would result in six additional passenger train trips per day along an approximately 30-mile corridor between Portland and Brunswick, which would lead to a negligible increase in emissions and could potentially improve the air quality in the region by diverting vehicles from the roads and highways between Portland and Brunswick. The project would have no significant impact on current or future air quality standards or lead to the establishment of a non-attainment area.

Water Quality:
The Preferred Alternative would not permanently impact water quality and would not cause a change in the Class B water quality classification. Construction of the project would temporarily impact water quality, with 17 waterways temporarily impacted by culvert and stone arch replacement and rehabilitation. These impacts would cease when construction was completed. NNEPRA will minimize the temporary impacts to waterways by the use of best management practices and by following the standards for culvert replacement under the Maine Natural Resources Protection Act (NRPA).

Water Bodies and Waterways:
The Preferred Alternative would not permanently impact waterways. Several culverts convey flow under the rail line from waterways not indicated on U.S. Geological Survey mapping. Culverts convey flow from an unnamed tributary to the East Branch Presumpscot River, an unnamed tributary to Davis Brook, and Mill Stream. The Davis Brook, Todd's Brook, and Cousins River Stone Arches convey flow from their respective waterways. During the repair and replacement of the fourteen culverts and three stone arches, seventeen waterways would be temporarily impacted. However, temporary impacts would cease immediately after the activity is completed. While some specific construction impacts cannot be estimated at this time because they depend on several factors that would be determined either during final design or by the contractor before or during construction, NNEPRA will minimize the impact to waterways by following best management practices and the standards for culvert replacement under the NRPA. Permits or approvals would be required from the United States Army Core of Engineers (USACE) and the Maine Department of Environmental Protection (MDEP).

Floodplains:
The Preferred Alternative would not permanently impact 100-year floodplains. Culvert replacement and stone arch repair would temporarily impact Davis Brook and two of its unnamed waterways, Todd's Brook, and Cousins. However, these temporarily impacted areas would be restored following construction.

Wetlands:
The Preferred Alternative would not permanently impact wetlands. Four wetlands would be temporarily impacted during the repair and replacement of the culverts and stone arches and the excavation at Deep Cut. The wetlands that would be temporarily impacted are adjacent to the Presumpscot River, an unnamed waterway to the East Branch of the Piscataqua River, Todd's Brook, the Cousins River, and Mill Stream. The Deep Cut excavation would temporarily impact the headwaters of the unnamed waterway to Bunganuc Stream. Underdrains would convey water into the wetland east of Deep Cut, but as this is a minor redirection of water that is already

present onsite. FRA does not expect any adverse impacts to occur. The temporary impacts would cease immediately after the activity is completed. Some minor and temporary construction impacts cannot be estimated at this time because they depend on several factors that would be determined either during final design or by the contractor before or during construction. However, NNEPRA will minimize the temporary impacts to wetlands by using best management practices and by following the standards for culvert replacement under the NRPA.

Coastal Zones:
The project would not impact coastal zones. Maine's coastal zone encompasses all political jurisdictions in Maine that have land along the coast or a tidal waterway, such as a river or bay. Because the municipalities in the project area are located in Maine's coastal zone, the Coastal Zone Management Act (CZMA) requires a federal consistency review. NNEPRA is working with the Maine State Planning Office (SPO), the federally-designated authority, to complete a consistency review for the project. The SPO has stated that CZMA review for this action is not required at this time. The SPO will perform its consistency review and issue its CZMA consistency determination at a later stage in the project following review and approval of the NRPA permit application by the MDEP.

Noise/Vibration:
The Preferred Alternative, involving the addition of six passenger trains per day between Portland and Brunswick, would not result in significant vibration impacts or severe noise impacts. The Preferred Alternative would result in moderate noise impacts to 83 sensitive receivers (residences) due to the train horn blowing at grade crossings; increased passenger rail without the horn would not cause moderate or severe impacts. Total exposure noise levels would generally be higher within rural portions of the project area due to low background noise levels and the absence of the shielding effects provided by rows of buildings near the tracks (typically not present in rural areas). The number of impacted residences would not exceed eight per grade crossing. To minimize the noise impacts and crossings associated with the proposed project, NNEPRA would implement the following mitigation plan:

- The corridor located between Congress Street in Portland and Falmouth Road in Falmouth is already an established Quiet Zone. The noise along this densely populated section of the corridor is already mitigated.
- Crossings between Fields Road in Falmouth and Hunter Road in Freeport are in rural areas. No additional mitigation is proposed for these areas.
- Crossings between West Street and East Street in Freeport are located in a mixed commercial/residential area and horns on trains passing some of these crossings have the potential to create a negative impact. At this time, officials from the Town of Freeport fully support the restoration of train service and are not requesting that noise mitigation measures be included in the initial expansion project. Should negative noise impacts arise as a result of the expanded Downeaster service, then NNEPRA and the Town of Freeport will work to mitigate those impacts, most likely through the installation of wayside horns.
- Crossings between Upper Mast Head Landing in Freeport and Union Street in Brunswick are located in either rural or commercial/industrial areas. No additional noise mitigation is proposed for these areas.
- Although the Downeaster does not cross Maine Street in Brunswick, it would travel up to that crossing. Maine Street is currently designated as part of a Quiet Zone. The upgraded signals and gates installed as part of this project would provide for the Town of Brunswick to apply to extend the Quiet Zone to Stanwood Street if they deemed it necessary.

Threatened or Endangered Species, Biology and Ecological Systems:
According to the U.S. Fish and Wildlife Service (USFWS), there are no known, listed or proposed, federal threatened or endangered species in the project area. According to the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Maine Natural Areas Program (MNAP), there are no known state listed or proposed threatened or endangered species in the project area. The project would not impact federal- or state-listed or proposed threatened or endangered species.

The project would also not impact ecological systems. The MDIFW has concurred that the project area does not contain sensitive ecological systems.

Transportation:
The Preferred Alternative would not have significant negative impacts on freight rail transportation. Current freight rail operations for the Freight Main Line, Brunswick Branch, or Rockland Branch would not be affected by six additional passenger train trips. The proposed siding at Brunswick would have a positive effect on existing and proposed freight rail traffic. NNEPRA will perform track rehabilitation according to best management practices to ensure minimal temporary impacts to existing freight rail operations during construction. The Preferred Alternative would have a positive impact on passenger rail transportation by offering new service between Portland and Brunswick.

The Preferred Alternative would also have a positive impact on vehicular transportation along the I-295 corridor by offering an alternate form of transportation to commuters, residents and tourists in Portland, Freeport and Brunswick. An alternate transportation mode would reduce congestion, thereby resulting in travel cost savings, as well as decreasing the potential for traffic incidents. The Preferred Alternative would not have a significant impact on local vehicular transportation. The Preferred Alternative would neither lower the Level of Service on roadways or at intersections near platforms nor have a substantial adverse effect on pedestrians or cyclists. Signal and circuit upgrades performed as part of the track rehabilitation would occur within the railroad right of way and would not substantially impact traffic on intersecting municipal roadways.

In terms of parking, the Preferred Alternative would have a negligible impact on parking availability in downtown Freeport and Brunswick. The Preferred Alternative is expected to generate minimal parking demand of about twelve cars per day at the Freeport platform. The demand is estimated at twenty spaces per day for the estimated twenty riders originating from Brunswick, which could be easily accommodated by the MaineDOT Park and Ride lot.

The rail siding would have a positive effect on existing and proposed freight rail traffic. However, if a small strip take is needed from Hannaford's Supermarket and the bank parking lot to relocate a chain link face, which was built within the existing railroad right of way, the proposed rail siding at Brunswick may have a minor effect on traffic circulation and parking around these businesses. It is envisioned that these impacts would be minor and not significant. There would be minor temporary impacts to transportation during construction from the operation of equipment and the potential temporary short-term closure of Union Street to install a portion of the siding across the street. NNEPRA will use proper implementation and maintenance of traffic control measures to minimize the temporary impacts. These minor temporary impacts would cease upon completion of construction.

Land Use, Zoning, and Property Acquisition:
The Preferred Alternative would not have a significant impact on land use, zoning consistency or property acquisition. The proposed Freeport platform would be located within a commercial zone, immediately adjacent to the existing rail lines. The proposed project would not present a conflict with existing uses in the area and would not require property takings since the platform is planned within the right-of-way. The proposed Brunswick platform would be located on a site purchased by the town. The site is zoned as a town center, and a railroad station would be consistent with the surrounding commercial land uses. The proposed Brunswick siding would likely be located entirely within the existing rail line right of way. NNEPRA may need to acquire a minor strip of land from the adjacent access drive from the Hannaford's Supermarket and from the parking area for the bank. As MaineDOT prepares the preliminary plan for the proposed rail siding, MaineDOT will ultimately determine whether there is a need for this minor strip.

Environmental Justice:

The Preferred Alternative would not result in disproportionate adverse impacts to minority or low-income residents or populations. The Preferred Alternative would benefit residents by providing additional public transportation services between communities, employment, shopping centers, and recreational amenities within the region.

Public Health and Safety:
The addition of six additional train trips on an existing, active rail line would not have an appreciable negative impact on public health and safety. The Preferred Alternative would improve public health and safety by upgrading out of date grade-crossing signal equipment. Furthermore, by diverting some commuter traffic from I-295 and local roads between Portland and Brunswick, the Preferred Alternative would likely reduce congestion and thus improve safety on the roads and highway.

Contaminated Sites and Hazardous Waste:
According to the EPA National Priority List and the MDEP Remediation Sites (Institutional Controls) Database, the project area does not contain known contaminated or hazardous waste sites. A Phase I Site Investigation was not prepared. The Preferred Alternative would not impact known contaminated sites or hazardous waste.

Cultural Resources:
The Maine Historic Preservation Commission (MHPC) stated that the Preferred Alternative would not impact prehistoric archaeological resources and would have no adverse effect upon historic properties. Previous study of historic architectural resources for the portion of the rail corridor north of Yarmouth Junction revealed three known resources eligible for the National Register of Historic Places (NRHP); two stone arch culverts (one in Yarmouth and one in Freeport) and one bridge (South Main Street crossing in Freeport). A cultural resources survey was performed for the 12-mile segment of Pan Am Railways between the Portland Wye in Portland and Yarmouth Junction, which had not previously been surveyed. The survey identified three bridges (one in Yarmouth, one in Cumberland, and one in Falmouth) within the project's Area of Potential Effects (APE) that are eligible for listing in the NRHP (VHB 2009). None of the culverts within this segment were determined to be eligible for listing in the NRHP. The survey also identified another bridge on the route, the Park Avenue Bridge in Portland, which had previously been studied and determined eligible for listing in the NRHP (VHB 2009).

The Preferred Alternative involves steel rail and wood tie replacements with new rails and ties in order to upgrade the line for passenger service. This work will not affect the integrity of any existing bridge structures, as the ties and rail will be attached to existing or replacement bridge timbers with the rails laid on top of the new ties. Based on this description of the proposed work, there will be no adverse effect to any of the inventoried bridges that are recommended eligible or are already determined eligible for the National Register.

Three stone arch culverts are being rehabilitated as part of the project, and one of these has been determined as eligible for the NRHP. Since the work to be conducted on the arches is limited to repair and rehabilitation, there will be no adverse effect.

MHPC concurred that the Preferred Alternative would not impact prehistoric archaeological resources and would have no adverse effect upon historic properties. See Appendix A to the Environmental Assessment for the correspondence with MHPC. FRA agrees with the MHPC's determination that the proposed project would not have an adverse effect on any of the identified resources.

Section 4(f):
Section 4(f) resources are located within the project area. Two stone arch culvert and five bridge structures along the corridor have been determined eligible for the NRHP.

The Preferred Alternative will not affect the integrity of any existing bridge structures, as the work necessary for upgrades to passenger service are limited to rail and tie replacement, which will be attached to existing or replacement bridge timbers, with the rails laid on top of the new ties. Based on this description of the proposed work, there will be no adverse effect to any of the inventoried bridges that are recommended eligible or are already determined eligible for the National Register.

The Preferred Alternative will not affect the integrity of the two stone arch culverts determined eligible for the NRHP, as the work is only to be performed on one of the stone arch culverts, and the proposed work is limited to repair and rehabilitation. Based on this description of the proposed work, there will be no adverse effect to the stone arches.

The Preferred Alternative would not have an adverse effect on Section 4(f) Resources.

Construction Impacts:
Construction of the Preferred Alternative would not have permanent impacts on resources within the project area (MDIFW 2009 and MNAP 2009). Due to the operation of equipment and the potential short-term closure of Union Street in Brunswick, the Preferred Alternative would create temporary construction impacts to traffic, air quality and noise. However, NNEPRA will use proper implementation and maintenance of control measures (e.g., traffic control, dust/ erosion and sedimentation controls, properly fitted emission control devices and mufflers, etc.) to minimize the temporary impacts. These minor and temporary impacts would cease upon completion of construction.

Construction of the Preferred Alternative would temporarily impact floodplains, wetlands, streams, and surrounding streambanks. The arch rehabilitation at Todd's Brook, Cousins River, and Davis Brook and two of its unnamed waterways would impact regulated 100-year floodplains, while four wetlands would be temporarily impacted during the repair and replacement of the culverts and stone arches and the excavation at Deep Cut. The wetlands that would be temporarily impacted are adjacent to the Presumpscot River, an unnamed waterway to the East Branch of the Piscataqua River, Todd's Brook, the Cousins River, and Mill Stream. The Deep Cut excavation would temporarily impact the headwaters of the unnamed waterway to Bunganuc Stream. Underdrains would convey water into the wetland east of Deep Cut, but as this is a minor redirection of water that is already present onsite, NNEPRA expects no adverse impact. The Preferred Alternative would also impact seventeen waterways and their surrounding streambanks by potentially increasing soil erosion within the disturbed portions of the project area. The temporary impacts would cease immediately after the activity is completed and would be minimized by using best management practices and by following the standards for culvert replacement under the NRPA. Construction activities would follow federal, state, and local statutes, regulations and ordinances and the proper permits would be obtained. Following construction, temporarily impacted floodplains, wetlands, streams, and surrounding streambanks would be restored to their natural condition.

Secondary and Cumulative Impacts:
The Preferred Alternative would result in secondary impacts by creating the potential for development of additional platforms, as well as further transit-oriented development near the proposed stops, similar to the Freeport Village Station and the Brunswick Maine Street Station currently under construction. This transit-oriented development would likely occur in already built-up areas. Local review boards would be responsible for investigating the impacts to water, sewer, and traffic from future transit oriented development.

The Preferred Alternative would have slight beneficial contributions to cumulative impacts. The proposed extension of passenger rail service is expected to provide an overall benefit to air quality. The rail service is expected to provide service to motorists who would otherwise travel between Portland and Brunswick by motor vehicle. This shift in travel mode is expected to reduce overall vehicle emissions. The addition of passenger rail service would also encourage further

quality. The rail service is expected to provide service to motorists who would otherwise travel between Portland and Brunswick by motor vehicle. This shift in travel mode is expected to reduce overall vehicle emissions. The addition of passenger rail service would also encourage further transit-oriented development, in addition to the developments that are already occurring adjacent to the proposed stops.

Therefore, the FRA finds that the project as presented and assessed in the EA according to FRA's "Procedures for Considering Environmental Impacts," including the mitigation measures outlined within, will not have a significant adverse impact on the quality of the human and natural environment.

Joseph C. Szabo
Administrator

7/1/09
Date