1.0 PURPOSE AND NEED

1.1 Background

The Federal Railroad Administration (FRA) has released guidance on implementing the President's "Vision for High Speed Rail" for applying for funding for high speed rail projects under the American Recovery and Reinvestment Act of 2009 (ARRA). In response, the Illinois Department of Transportation (IDOT) is preparing an application for funding under FRA's "Track 2" High Speed Intercity Passenger Rail Program for the Chicago – St. Louis corridor. The Track 2 program is aimed at developing new high speed rail corridors and intercity passenger services, or substantial upgrades to existing corridor services. It is intended to fund a set of inter-related projects that collectively constitute the entirety or a distinct phase (or geographic section) of a long-range service development plan for high speed rail.

The FRA requires a corridor-wide National Environmental Policy Act (NEPA) study when submitting a Track 2 application. The FRA's guidance encourages agencies to tier their environmental reviews. Using this approach, broader programs are covered under a Tier 1 NEPA document, such as a corridor-wide Environmental Assessment (EA). In a Tier 2 NEPA document, site-specific projects or actions are addressed in an Environmental Impact Statement (EIS), EA, or categorical exclusion (CE) document.

To support the Track 2 application for the Chicago – St. Louis corridor, the IDOT has prepared a Tier 1 corridor-wide NEPA document. The purpose of this Tier 1 document is to document potential environmental impacts at the corridor or program level. For the Chicago-St. Louis corridor, this Tier 1 corridor-wide EA will address improvements, such as the double tracking of the line that were not included in the January 2003 EIS for the Chicago-St. Louis High Speed Rail Project. Project specific issues, such as environmental impacts associated with specific improvements, will be addressed in a Tier 2 NEPA document.

1.2 Introduction

The proposed project would improve passenger and freight rail transportation by restoring and completing missing sections from a second, parallel, mainline track along the Chicago – St. Louis rail corridor.

This project is the second step of an incremental approach for improving existing railroad infrastructure to achieve a four hour travel time for the passenger rail mode and is the most cost-effective approach to improving current intercity rail service and facilitating development of HSR within the Chicago – St. Louis corridor. The purpose and need of the Chicago – St. Louis High Speed Rail (HSR) Project is to modally balance the transportation system between these two cities with an environmentally friendly, reliable, and convenient

travel option. The purpose and need of the proposed project also includes preserving and improving rail freight services in the corridor, including intermodal freight services.

1.3 Project History

For over a decade, the IDOT has pursued improvements to passenger rail service between Chicago and St. Louis. The Chicago – St. Louis corridor is part of the Midwest Regional Rail System plan to develop and implement a 21st Century regional passenger rail system. In January 2003, the IDOT completed an Environmental Impact Statement (EIS) for the Chicago – St. Louis corridor. The Preferred Alternative from the EIS included the provision of high-speed rail service, 110 miles per hour (mph), along the existing Chicago – St. Louis Amtrak route south of Dwight, Illinios. No action was proposed between Chicago and Dwight. The proposed service consisted of three round trips per day. A Record of Decision (ROD) was signed in January 2004.

Since the ROD, the IDOT has made significant progress on the Chicago and St. Louis Corrridor in cooperation with the Union Pacific Railroad (UP), which owns the right-of-way south of Joliet and operates rail freight services in the corridor. The IDOT has coordinated the planning efforts with the Canadian National Railway (CN), the owner and operator of the rail line between Joliet and downtown Chicago, which have involved subsidizing Amtrak operations and investing capital to upgrade UP and Amtrak facilities. Extensive rehabilitation of the Chicago-St. Louis corridor track and signal systems have been upgraded, and four quadrant gates installed at many grade crossings in the corridor. Total costs since the signing of the ROD have exceeded $110 million. Under earlier programs, work in East St. Louis had been completed using $40 million in loan and grants provided by the IDOT and loans from the FRA.

1.4 Project Area

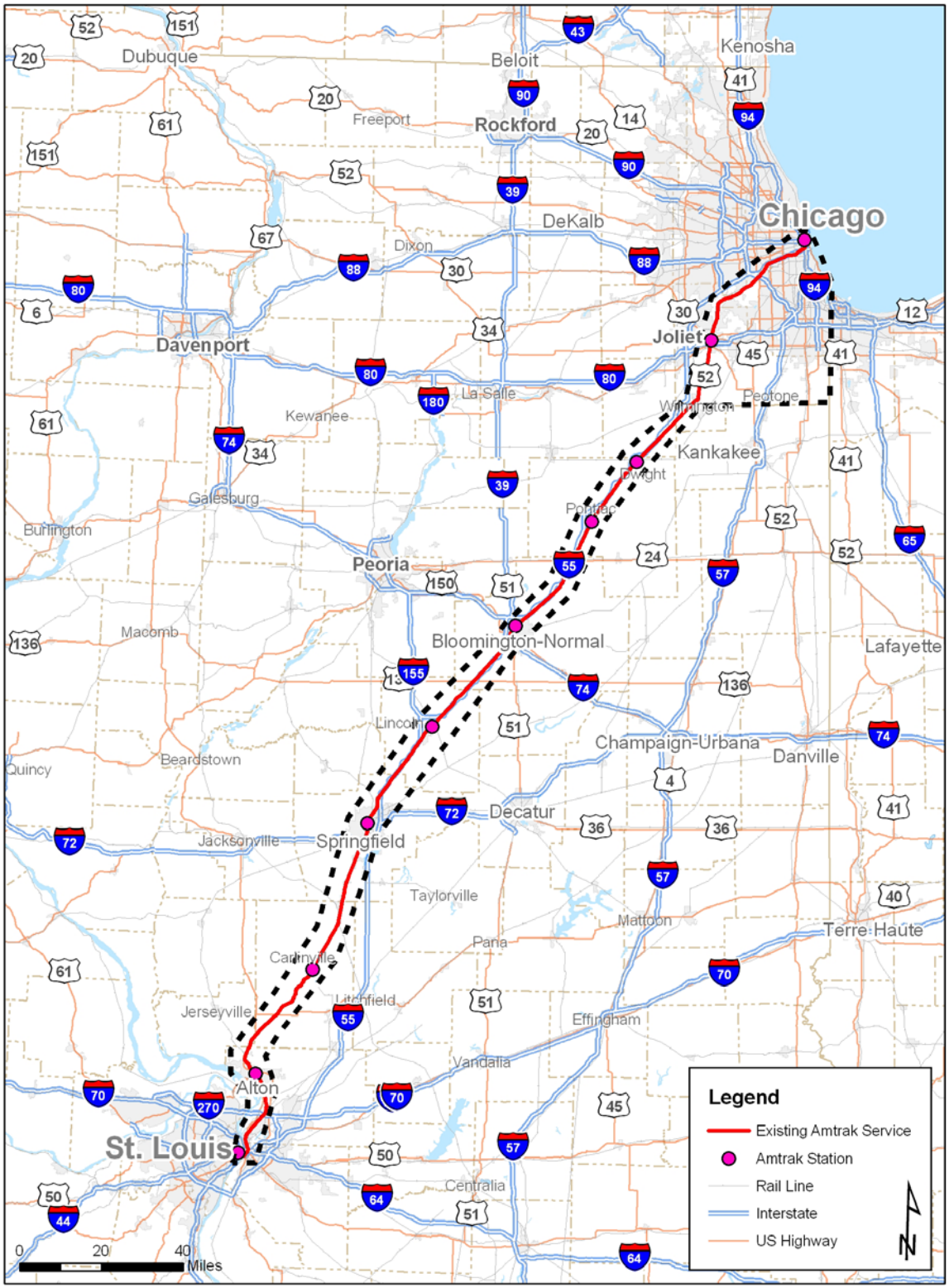
The overall project area lies along the 280-mile Chicago – St. Louis rail corridor, which extends in a northeast – southwest direction across the state of Illinois between Chicago, Illinois, and St. Louis, Missouri. The action proposed in this document is within and adjacent to the railroad right-of-way within this corridor. Figure 1-1 shows the project area.

1.5 Project Purpose and Need

1.5.1 Purpose of the Proposed Action

The overall purpose of this project is to establish a second mainline track between Joliet and St. Louis to enhance the passenger transportation network within the Chicago – St. Louis corridor, resulting in a more balanced use of the modal components. The CN portion of the corridor between Joliet and Chicago is already double-tracked. The existing transportation network consists of highway (automobile and bus), air, and rail (Amtrak) travel. Currently, 99 percent of the 35 million annual trips made in the Chicago – St. Louis corridor are accomplished through automobile and air travel. This project intends to establish a more balanced modal use of the transportation network by improving rail service.

Figure 1-1. Project Area



This project would improve existing passenger train-freight train meet (i.e., passing) operations by completing the double tracking of the UP portion of the corridor between Joliet, Illinois and St. Louis, Missouri, which would reduce delay, improve schedule reliability and safety, and increase average train speed to meet the goal of a four hour trip time between Chicago and St. Louis. The project would also improve passenger service without adversely affecting existing and future rail freight service, allowing the improvement of 110-mph HSR service within the corridor and enhancing the passenger transportation network.

1.5.2 Need for the Proposed Action

According to ridership estimates prepared in conjunction with the *Financial and Implementation Plan* (May 1994) and validated by the 1996 FRA study, *High-Speed Ground Transportation for America*, approximately 99 percent of person-trips in the corridor is by automobile, bus, and air, with the remaining one percent by rail (Amtrak). The need for the project stems from problems caused by this modal imbalance. These problems include congestion on highways, with inherent safety risks and environmental impacts, costly airfares and energy-inefficient short-haul air operations, travel time delays, and unreliability.

More than 90 percent of the over 35 million corridor trips have origins or destinations in Chicago or St. Louis. A more balanced transportation system in the corridor would provide travelers with greater mobility options. To achieve this, either a new transportation mode must be introduced, or improvements to an existing, less frequently used intercity passenger rail mode must be made. Reduced travel time, service reliability, and safety would attract travelers from automobile and air travel to a new or improved rail mode of transportation.

Reducing travel time and improving service reliability are paramount to increasing the viability of intercity passenger rail transportation. In order to be attractive, passenger rail must meet or better the travel time of auto travel on the parallel interstate freeways with 65 mph speed limits. A four hour overall travel time between Chicago and St. Louis is required to achieve that need. On-time performance, another key aspect of reliability, would be improved with the proposed project. Even with added passing capability, the existing single main track would not accommodate the additional frequency of proposed high speed passenger service and would not provide the operating flexibility required in view of the growing rail freight traffic. The project would improve travel times and on-time performance over existing Amtrak service. An increase in rail passenger ridership is projected to occur as a result of the project, as the dual mainline tracks are expected to result in an overall reduction in rail travel times meeting the four hour time between the corridor end points, plus improvements in the reliability and safety of rail service. The dual mainline tracks are also expected to avoid the operating conflicts for intercity passenger services resulting from the increased rail freight traffic anticipated to serve new intermodal freight facilities currently being constructed.

1.6 Applicable Regulations and Permits

- Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers

  Section 404 of the Federal Clean Water Act regulates the discharge of dredged or fill materials into waters of the U.S., including wetlands. The introduction of fill or other materials (other than pre-cast structures) below the ordinary high water line of surface waters such as rivers, streams, ponds, wetlands, or unavoidable filling of wetlands would require a Section 404 permit.

- Section 401 of the Clean Water Act Water Quality certification from the Illinois Environmental Protection Agency.

  States are granted authority to review activities in waterways and wetlands and to issue water quality certifications under Section 401. The Illinois Environmental Protection Agency (IEPA) issues a Section 401 Water Quality certification for all activities requiring a dredge and fill permit. Under the state's antidegradation policy, individual water quality certifications would be subject to public review. A Section 401 permit is mandatory for all projects requiring a Section 404 permit.

- Section 402 of the Clean Water Act National Pollutant Discharge Elimination System (NPDES) Construction Permit from the IEPA.

  Because the proposed project would disturb 0.4 hectares (1 acre), it would be subject to the requirement for an NPDES permit for stormwater discharges from the construction site(s). Permit coverage would be obtained under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR10) that would disturb about 0.4 hectares (1 acre) or under individual NPDES permits.

  A Stormwater Pollution Prevention Plan would be prepared and implemented, in accordance with requirements under the NPDES permit(s).

- Construction in Floodways of Rivers, Lakes, and Streams from the Illinois Department of Natural Resources (IDNR), Office of Water Resources

  The IDNR Office of Water Resources issues permits for work within regulatory floodways or public waters, and for the crossing of streams with more than 259 hectares (640 acres) of drainage area.

- Section 7 of the Endangered Species Act of 1973

  If endangered species are identified during the project, all activity in the immediate area would cease. Coordination with the U.S. Fish and Wildlife Service would be initiated as required by Section 7, and appropriate state or federal permits would be sought.

  The IDNR issues permits for incidental takes of state-listed threatened or endangered species.

- Air Permits

  To control local air pollution impacts, a permit may be required for portable bituminous and concrete plants used in project construction.

- IDOT Requirements

  Prior to construction, erosion control fencing would be placed at the limits of construction. Zones of fill, grading, compaction, or equipment movement would be restricted to areas outside the protective fencing. Impacts from silt and sedimentation would be minimized through adherence to erosion control measures outlined in IDOT's Standard Specification's for Road and Bridge Construction, January 1, 2007.

- Executive Order 11988, Floodplain Management (42 Federal Register [FR 26951)
- Executive Order 11990, Protection of Wetland (42 FR 26961)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629)
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (65 FR 50121)
- Federal Railroad Administration Procedures for Considering Environmental Impacts (64 FR 28545 and 49 CFR Part 260.35)
- National Environmental Policy Act of 1969 (42 USC § 4321 et seq., signed January 1, 1970)
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500–1508)
- Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC § 303)
- Section 6(f) of the Land and Water Conservation Act of 1965 (16 USC § 460)
- Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 USC § 401)
- Section 106 of the National Historic Preservation Act, as amended (16 USC § 470)
- Section 404 of the Federal Water Pollution Control Act (33 USC § 1344)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC § 61)
- Use of Locomotive Horns at Highway-Rail Grade Crossings, Final Rule (40 CFR 222 and 229)