



Purpose and Need Statement for Public and Agency Scoping

Chicago to Omaha Regional Passenger Rail System Planning Study

February 8, 2012



PURPOSE AND NEED STATEMENT FOR PUBLIC AND AGENCY SCOPING¹

The Iowa Department of Transportation (DOT), in conjunction with the Federal Railroad Administration (FRA), is evaluating alternatives for the reestablishment of intercity passenger rail service from Chicago, Illinois, through Iowa, to Omaha, Nebraska (Proposed Action). Iowa DOT's evaluation will be documented in the Chicago to Omaha Regional Passenger Rail System Planning Study (the Study) Tier 1 Service Level Environmental Impact Statement (EIS).

The Chicago to Omaha corridor (the Corridor) extends from Chicago Union Station, in downtown Chicago, Illinois on the east to a terminal in Omaha, Nebraska on the west. The Study Area consists of the five previously established passenger rail routes between Chicago and Omaha that pass through the states of Illinois and Iowa (Figure 1). Each route is approximately 500 miles long and 500 feet wide. In Illinois, the Study Area runs generally west from Chicago Union Station, which is the hub for the Midwest Regional Rail Initiative (MWRRI) to the Mississippi River and, depending on the route, is a distance of between 150 and 250 miles. In Iowa, the Study Area runs west from the Mississippi River across the entire state to the Missouri River, a distance of approximately 300 miles. In Nebraska, the Study Area terminates in Omaha, Nebraska which is located at the Missouri River, the eastern border of the state. The precise location for the terminal in Omaha will be identified as part of this Study. The five previously established passenger rail routes to be evaluated are numbered from north to south. For each route, the counties that are traversed in Illinois, Iowa, and Nebraska are listed east to west, as follows:

- Route 1, Illinois Central: Canadian National Railway via Rockford, Illinois, and Dubuque, Waterloo, and Fort Dodge, Iowa through Cook, DuPage, Kane, DeKalb, Boone, Winnebago, Stephenson, and Jo Daviess counties, Illinois; Dubuque, Delaware, Buchanan, Black Hawk, Butler, Franklin, Hardin, Hamilton, Webster, Calhoun, Sac, Crawford, Harrison, and Pottawattamie counties, Iowa; and Douglas County, Nebraska.
- Route 2, Chicago and North Western: Union Pacific Railroad via Clinton, Cedar Rapids, and Ames, Iowa through Cook, DuPage, Kane, DeKalb, Ogle, Lee, and Whiteside counties, Illinois; Clinton, Cedar, Linn, Benton, Tama, Marshall, Story, Boone, Greene, Carroll, Crawford, Harrison, and Pottawattamie counties, Iowa; and Douglas County, Nebraska.
- Route 3, Milwaukee Road: Canadian Pacific Railroad from Chicago to Sabula, Iowa, and Burlington Northern Santa Fe (BNSF) Railway from Bayard, Iowa, to Omaha, and abandoned except for several small stubs in between through Cook, DuPage, Kane, DeKalb, Ogle, and Carroll counties, Illinois; Jackson, Clinton, Jones, Linn, Benton, Tama, Marshall, Story, Boone, Dallas, Guthrie, Carroll, Crawford, Shelby, Harrison, and Pottawattamie counties, Iowa; and Douglas County, Nebraska.

¹ The full discussion of the Purpose and Need will be provided in Chapter 1 of the Tier 1 Service Level EIS for the Study.

- Route 4, Rock Island: CSX Transportation from Chicago to Utica, Illinois, and Iowa Interstate Railroad via Moline, Illinois, and Iowa City and Des Moines, Iowa through Cook, Will, Grundy, La Salle, Bureau, Henry, and Rock Island counties, Illinois; Scott, Muscatine, Cedar, Johnson, Iowa, Poweshiek, Jasper, Polk, Dallas, Madison, Guthrie, Adair, Cass, Pottawattamie counties, Iowa; and Douglas County, Nebraska.
- Route 5 , Burlington: BNSF Railway via Galesburg, Illinois, and Burlington and Ottumwa, Iowa through Cook, DuPage, Kane, Kendall, DeKalb, La Salle, Bureau, Henry, Knox, Warren, and Henderson counties, Illinois; Des Moines, Henry, Jefferson, Wapello, Monroe, Lucas, Clarke, Union, Adams, Montgomery, Mills, and Pottawattamie counties, Iowa; and Douglas County, Nebraska.

The Tier 1 EIS will provide Iowa DOT, FRA, and the public with a full understanding of the service-wide environmental impacts of the alternatives developed to meet the purpose of and need for the Proposed Action. Prior to the implementation of passenger rail service between Chicago and Omaha, Tier 2 Project Level NEPA documents will be developed based on the Study.

1.1 BACKGROUND

The MWRRI was established in 1991 as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) (Public Law [PL] 102-240) and its reauthorization in 1998 with the Transportation Equity Act for the 21st Century (TEA-21) (PL 105-178). ISTEA and TEA-21 included a broader national effort to support high-speed rail investment.

As a result of the MWRRI and the national high-speed rail initiative, numerous corridors were identified and refined, with Chicago as the hub. Between 1996 and 2004, a single transportation plan was developed that included all of these corridors; this plan is known as the Midwest Regional Rail System. Meanwhile, numerous studies were completed with regard to bus service integration with the MWRRI; financial, economic, market, and transportation analysis; infrastructure and capital costs; operating costs; and institutional and organizational issues. These efforts culminated in 2004, when the MWRRI issued the *Midwest Regional Rail Initiative Project Notebook* (MWRRI, June 2004) and the *Midwest Regional Rail System: A Transportation Network for the 21st Century, Executive Report* (MWRRI, September 2004).

Since 2004, efforts have progressed to develop the various corridors. In 2006, the *Midwest Regional Rail Initiative Project Notebook*, Chapter 11, Benefit Cost and Economic Analysis, was updated to reflect economic conditions at that time (MWRRI, November 2006). In addition, reports were issued from studies that included nine passenger rail corridors in the Midwest Regional Rail System.

In 2009 and 2010, Iowa DOT and Illinois DOT, in conjunction with FRA, evaluated alternatives for the corridor extending from Chicago Union Station to Iowa City, Iowa, with the completion of the Chicago to Iowa City Intercity Passenger Rail Service Tier 1 Service Level Environmental Assessment. On October 28, 2010, FRA awarded Iowa DOT and Illinois DOT a grant of \$230 million to proceed with the Chicago to Iowa City corridor Tier 2 Project Level studies.

On October 14, 2011, FRA agreed to a phased implementation approach for the Chicago to Iowa City corridor. Illinois DOT is proceeding with the Tier 2 Project Level studies for the portion of the corridor extending from Chicago to the Quad Cities (Moline and Rock Island, Illinois, and

Davenport and Bettendorf, Iowa), while Iowa DOT is focusing on completing the Tier 1 Service Level studies for the MWRRI corridor extending from Chicago to Omaha.

In 2010 and 2011, studies were completed for Planning Phase 7 of the MWRRI. These studies included MWRRI corridor alternatives analysis, capital cost updates, operating equipment configurations and performance standards, advanced train control, and public outreach (MWRRI, 2011). The Chicago to Omaha corridor was included in these studies.

1.2 PURPOSE

The Proposed Action and the Midwest Regional Rail System are intended “to meet current and future regional travel needs through significant improvements to the level and quality of passenger rail service,” as defined by the MWRRI in its Midwest Regional Rail System Executive Report (MWRRI, September 2004). The Chicago to Omaha Regional Passenger Rail System would provide competitive passenger rail transportation between Chicago and Omaha to help meet future travel demands in the Study Area. The Proposed Action would create a competitive rail transportation alternative to the available automobile, bus, and air service and would meet needs for more efficient travel by:

- Decreasing travel times
- Increasing frequency of service
- Improving reliability
- Providing an efficient transportation option
- Providing amenities to improve passenger ride quality and comfort
- Promoting environmental benefits, including reduced air pollutant emissions, improved land use options, and fewer adverse impacts on surrounding habitat and water resources

1.3 NEED

The need for the Proposed Action stems from the increasing travel demand resulting from population growth and changing demographics along the Corridor as well as the need for competitive and attractive modes of travel (MWRRI, June 2004).

1.3.1 Travel Demand

Between 2000 and 2009, the Chicago and Omaha metropolitan statistical areas have seen growth of approximately 5 and 11 percent, respectively (U.S. Census Bureau, March 2010), which has resulted in increased travel demand. The combined population in Illinois, Iowa, and Nebraska has increased by approximately 15 percent between 1970 and 2010 (U.S. Census Bureau, March 27, 1995, and August 17, 2011). Not only is population increasing in the area, but it is also becoming more urbanized, with expanded access to and demands for public transportation (Iowa DOT, December 27, 2010). For example, Iowa has historically had a mostly rural population; however, in 2003, that trend shifted, and 60 percent of the population is projected to live in urban areas by 2030 (Iowa DOT, December 27, 2010).

The population is also aging and is increasingly seeking alternative modes of transportation. Between 2000 and 2010, the population of individuals who are 65 years of age and over in Illinois, Iowa, and Nebraska has increased by 7.3, 3.8, and 6.2 percent, respectively (U.S. Census Bureau, 2000 and 2010). Within the Chicago and Omaha metropolitan statistical areas, the growth of the population of individuals who are 65 years of age and over, a population segment who tend to rely more on public transportation, is 8.2 and 25.9 percent higher, respectively, in 2010 compared to 2000 (Iowa DOT, 2012; Iowa DOT, December 27, 2010; U.S. Census Bureau, 2000 and 2010).

1.3.2 Competitive and Attractive Travel Modes

Introducing intercity passenger rail service in the Chicago to Omaha corridor would provide a competitive modal option for travel in the Corridor. The MWRRI estimates that over 97 percent of both business and personal travel between city pairs in the Study Area is by automobile, with bus, air, and rail travel making up the remainder (MWRRI, June 2004). Intercity passenger rail service would provide an option to highway and air travel in the face of a growing and aging population and increasing congestion on Midwest highways and at Midwest airports. For example, highway vehicle miles traveled in Iowa have increased 37 percent since 1990, and Chicago O'Hare International Airport is the second busiest airport in the nation (Iowa DOT, 2012; U.S. DOT, January 2012).

Travel modes available to the public along the Corridor include automobile, bus, air, and traditional-speed long-distance passenger rail. Current passenger rail service from Chicago to Omaha is part of Amtrak's long-distance service on the California Zephyr, which does not provide travel times that are competitive with other modes in the Study Area. Travel time from Chicago to Omaha on the current Amtrak long-distance service is approximately 8 hours and 55 minutes while travel time from Omaha to Chicago is approximately 9 hours and 36 minutes, compared to approximately 8 hours for travel by automobile (Amtrak, November 7, 2011). In addition, the arrival and departure times in Omaha are late at night or early in the morning, which is not consistent with convenient intercity travel. The only major metropolitan community in Iowa that currently has access to passenger rail is Council Bluffs via the once-a-day Amtrak California Zephyr (Iowa DOT, December 27, 2010).

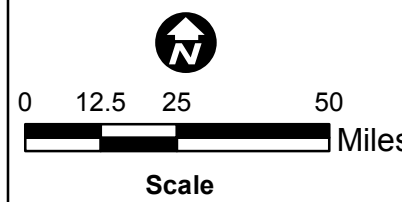
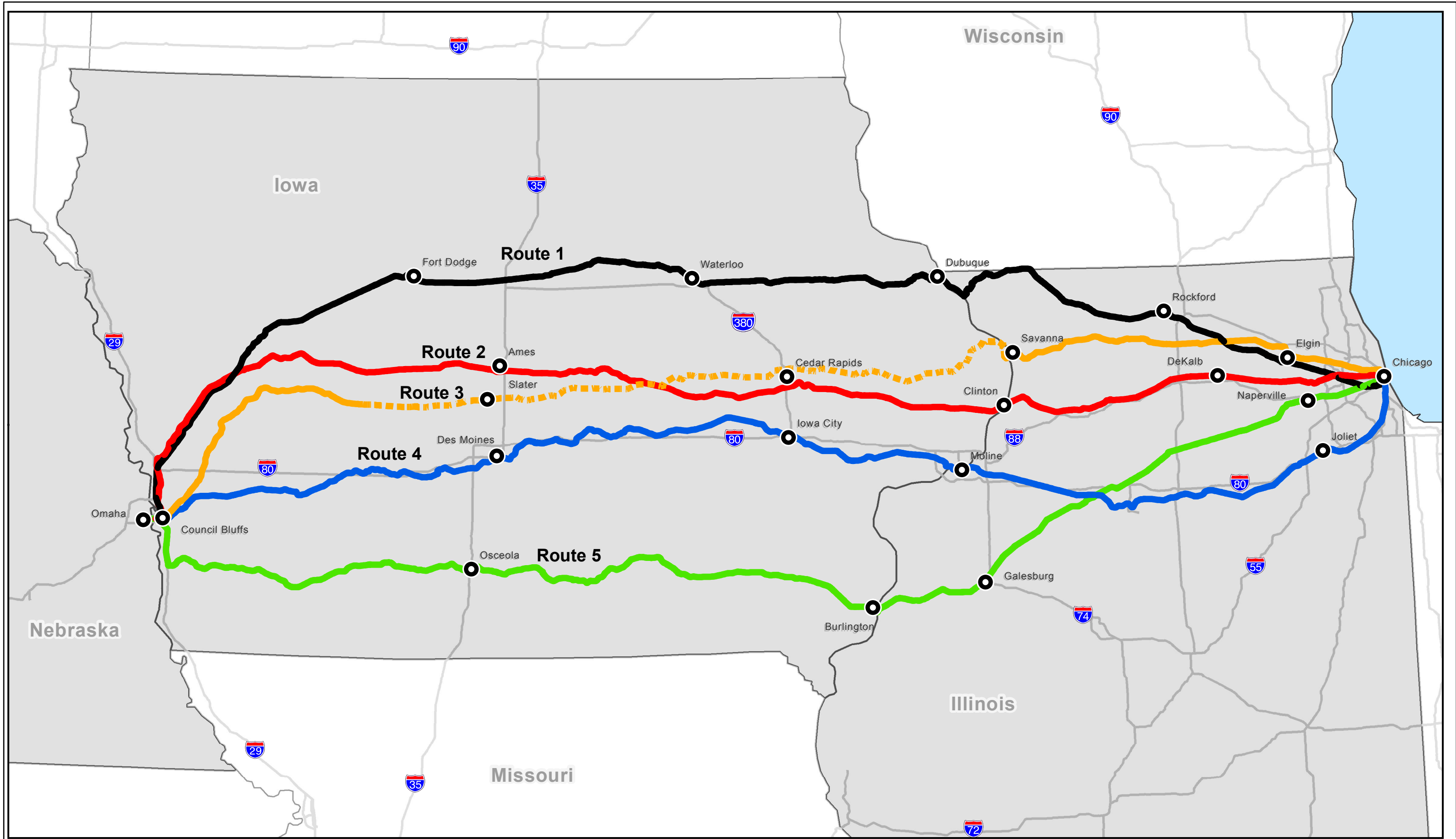
Different travel modes are selected by the public based on a combination of trip time, cost, and convenience. Bus and air service are available between several of the major cities in the Study Area. Interstate 80 (I-80) is the dominant transportation route in the Corridor. Between 2010 and 2030, vehicle miles traveled in Iowa on I-80 are expected to increase by more than 65 percent. If no capacity improvements are made, nearly 75 percent of I-80 in Iowa would be bordering on unstable traffic flow, at or beyond capacity (Iowa DOT, January 24, 2012). In Chicago, Des Moines, and Omaha, I-80 currently has peak-period congestion and capacity issues that impact travel times of both personal automobiles and bus service (FHWA, November 2010). In addition, by 2040, the majority of the I-80 corridor between Chicago and Omaha will be experiencing peak-period congestion issues if no capacity improvements are made (FHWA, November 2010). In addition, inclement winter weather in the Study Area often creates conditions that impact both highway and air travel, creating a need for an alternative mode that is less prone to winter service interruptions. For example, winter storms (storms lasting 4 or more hours with snowfall rates of 0.20 inch per hour or more) in Iowa reduce traffic volumes by an average of 29 percent (ranging from 16 to 47 percent) depending on total snowfall and wind speeds (Knapp, Kroeger, and Giese, February 2000).

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Legend			
	Route 1 (Canadian National Railway, former Illinois Central)		Route 4 (Iowa Interstate Railroad and CSX Transportation, former Rock Island)
	Route 2 (Union Pacific Railroad, former Chicago & North Western)		Route 3 (Canadian Pacific Railway and BNSF Railway, former Milwaukee Road)
	Route 3 Abandoned Portion		Route 5 (BNSF Railway, former Chicago, Burlington & Quincy)



Chicago to Omaha Routes

Chicago to Omaha
Regional Passenger Rail System Planning Study

DATE	January 2012
FIGURE	1