CHAPTER 3
RANGE OF ROUTE ALTERNATIVES

The Study evaluated potential route alternatives for the Corridor based on reviews of previous studies and also the ideas or concepts that were suggested by resource agencies or the public during the scoping process.

The range of route alternatives includes the No-Build Alternative and existing or former freight-only or freight-passenger routes that may have been previously identified by the MWRRI and other studies, as opposed to entirely new construction on new ROW (that is, a greenfield route). The No-Build Alternative is included to provide a basis of comparison to the other route alternatives (40 CFR 1502.14; 64 Federal Register (FR) 28545). Although greenfield routes may offer the ability to provide much higher speeds than use of existing railroad alignments, development of greenfield routes can be much more expensive and more disruptive to the environment and to communities than adding capacity or improvements to existing rail routes. Greenfield route alternatives are thus unreasonable due to the cost of new ROW and the challenge of timely acquisition of property. Additionally, the environmental impacts of grading entirely new ROW, rather than expanding as needed along existing ROW, would cause more impact on the natural environment (and likely also on the human environment) than on-alignment route alternatives. The MWRRI previously determined that population densities in the Corridor were not sufficiently high to develop the ridership that might leverage the potentially higher cost of greenfield route alternatives.

Potential route alternatives for the Corridor were identified by the MWRRI and the *Iowa DOT 10 Year Strategic Passenger-Rail Plan* (Iowa DOT, December 27, 2010). These previously established passenger rail routes in the Corridor are described in Section 3.2. In addition, combinations of these routes were considered, as discussed in Section 3.3. These combinations or "hybrid" routes are possible where two other routes cross; at the crossing point, a connection would be established between the routes.

3.1 NO-BUILD ALTERNATIVE

The No-Build Alternative would consist of operating the current trackage and operations with the present level of maintenance and no appreciable change to current track configuration or operating conditions.

3.2 PREVIOUSLY ESTABLISHED ROUTES

The previously established passenger rail routes in the Corridor, listed from north to south, are the Illinois Central, Chicago & North Western, Milwaukee Road, Rock Island, and Burlington (see Figure 1-1). In this Study, these five previously established passenger rail routes have been identified by a designator number, as shown in Table 3-1.

Table 3-1. Previously Established Passenger Rail Routes

Route Number	Original Operator	Current Operator and Route
1	Illinois Central	Canadian National Railway via Rockford, Illinois, and Dubuque, Waterloo, and Fort Dodge, Iowa
2	Chicago & North Western	Union Pacific Railroad via Clinton, Cedar Rapids, and Ames, Iowa
3	Milwaukee Road	Canadian Pacific Railroad from Chicago to Sabula, Iowa, and BNSF Railway from Bayard, Iowa, to Omaha, and abandoned except for several small stubs in between
4	Rock Island	CSX Transportation from Chicago to Utica, Illinois, and Iowa Interstate Railroad via Moline, Illinois, and Iowa City and Des Moines, Iowa
5	Burlington	BNSF Railway via Galesburg, Illinois, and Burlington and Ottumwa, Iowa

The previously established routes hosted intercity passenger service between Chicago and Omaha prior to the establishment of Amtrak on May 1, 1971. The Burlington route (Route Alternative 5) was the only route on which passenger service continued under Amtrak between Chicago and Omaha after April 30, 1971. The Rock Island route (Route Alternative 4) offered passenger service between Chicago and the Quad Cities as a continuation of prior service until 1978. Currently, the Burlington route (Route Alternative 5) hosts Illinois intercity passenger trains between Chicago and Galesburg, Illinois, and the Amtrak *California Zephyr* between Chicago and Emeryville, California, via Omaha.

Each of the five previously established passenger rail routes holds the potential of providing the required time-competitive, reliable service in the Corridor between Chicago and Omaha. Although a portion of the Milwaukee Road route (Route Alternative 3) between Sabula and Bayard, Iowa, has been abandoned, Route Alternative 3 was included in the Study because it bears enough similarity to the other route alternatives that surround it geographically that it could be time competitive if the missing portion were reconstructed. In addition, the populations that could possibly be served were identified as was the potential for ridership on each route.

All route alternatives are owned and operated by freight railroads, except for the abandoned portion of the Milwaukee Road route (Route Alternative 3) between Sabula and Bayard, Iowa, and portions of several route alternatives within the Chicago metropolitan area. These include: trackage at Chicago Union Station, which is owned by Amtrak; the former Milwaukee Road route between Chicago Union Station and Elgin, which is owned by the Regional Transportation Authority (Illinois) and operated by Metra (Canadian Pacific retains freight trackage rights); and the former Rock Island from La Salle Street Station to Joliet, also owned by the Regional Transportation Authority (Illinois). All of the routes host Metra commuter trains within the Chicago metropolitan area. At present, there are no other commuter operations within the Corridor. Most of the routes host trackage or haulage rights for other freight railroads on some or all portions of the route.

3.3 POTENTIAL COMBINATIONS OF ROUTES

As discussed in MWRRI studies (June 2004, September 2004, and 2011), combinations of routes are possible where the previously established passenger rail routes converge, and in some cases cross, as they approach Chicago or Omaha. There are several reasons to consider a combination of routes; chief among them are opportunities to increase ridership, decrease travel time, and decrease technical and economic challenges.

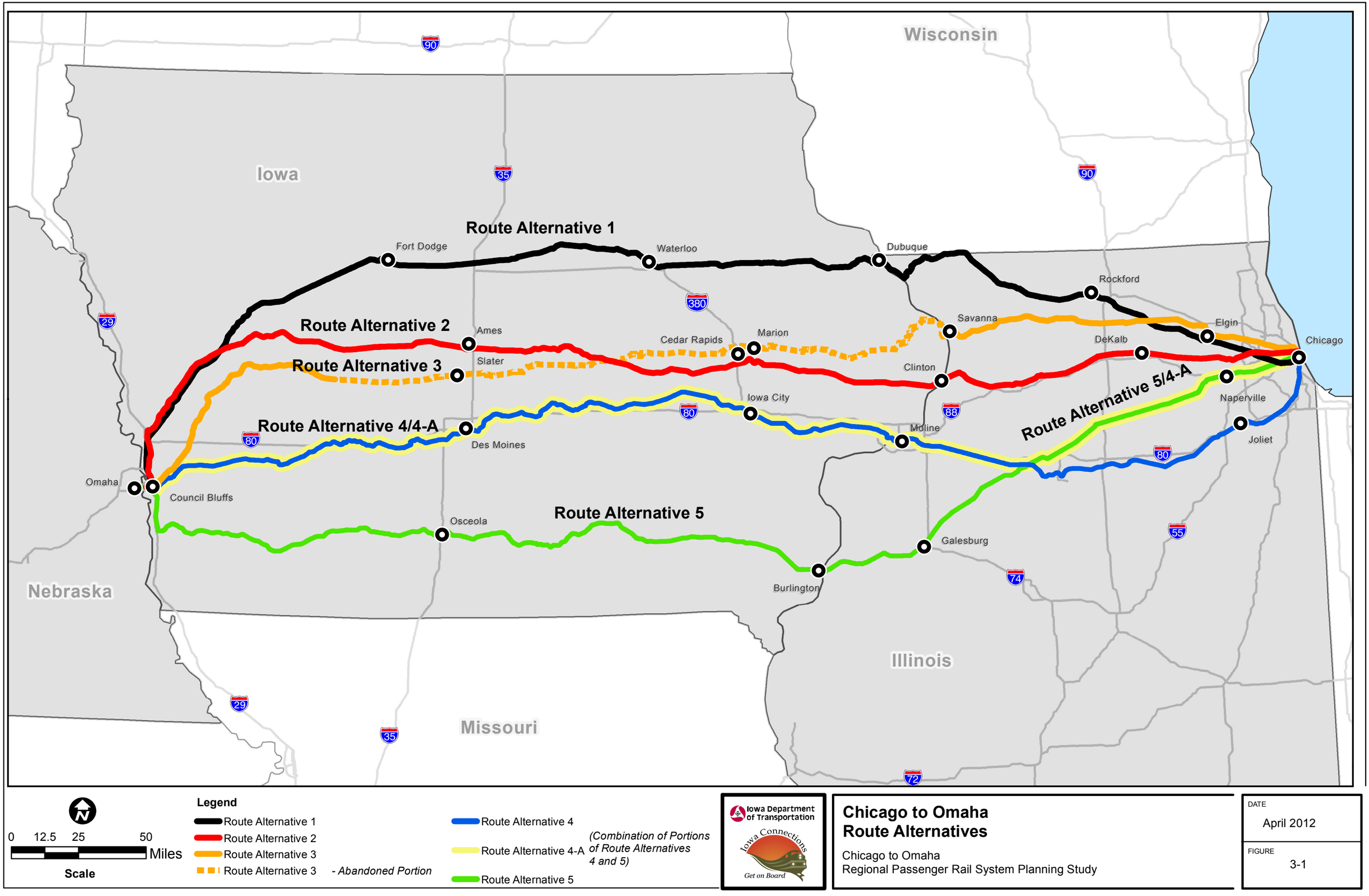
The MWRRI and the *Iowa DOT 10 Year Strategic Passenger-Rail Plan* considered a combination of the Rock Island and Burlington routes (Route Alternatives 4 and 5, respectively). In addition, this combination of routes was selected under the Chicago to Iowa City Intercity Passenger Rail Service Tier 1 Service Level Environmental Assessment (FRA, Illinois DOT, and Iowa DOT, September 2009), which evaluated the Chicago-Moline-Iowa City service by proposing to construct a connection where the two routes cross at Wyanet, Illinois. Other rail studies that include portions of this combination of Route Alternatives 4 and 5 from Chicago to Omaha are ongoing. For example, Tier 2 NEPA documents are in the preliminary stages for service from Chicago to Moline, Illinois, with funding in place and planned implementation in 2015. This service will use a combination of Route Alternatives 4 and 5.

This combination of Route Alternatives 4 and 5 is also being considered in this Study and is called Route Alternative 4-A. Route Alternative 4-A consists of Route Alternative 5 (the former Burlington, now BNSF) between Chicago Union Station and Wyanet, Illinois, where Route Alternative 5 and Route Alternative 4 cross, and Route Alternative 4 (the former Rock Island, now Iowa Interstate Railroad [IAIS]) between Wyanet and Omaha.

Conversely, other potential combinations evaluated in the MWRRI, such as a combination of the former Milwaukee Road (now Canadian Pacific Railroad [CP]) route (Route Alternative 3) and the former Illinois Central (now Canadian National Railway [CN]) route (Route Alternative 1) or a combination of Route Alternative 3 and the former Chicago & North Western (now Union Pacific Railroad [UP]) route (Route Alternative 2), would not serve to substantially reduce travel time, increase population served, or decrease technical challenges, and thus were not evaluated further. Consequently, only the combination of Route Alternatives 4 and 5 as Route Alternative 4-A was deemed worthy of additional evaluation in this alternatives analysis. Route Alternative 4-A is described in more detail in Chapter 5.

3.4 SUMMARY

The No-Build Alternative, described in Section 3.1, the five previously established passenger rail routes in the Corridor (Route Alternatives 1 through 5), described in Section 3.2, and the combination of Route 4 and Route 5 (Route Alternative 4-A), discussed in Section 3.3, compose the initial range of route alternatives proposed for consideration for the Study. These route alternatives are shown in Figure 3-1.


Wisconsin
Iowa
Route Alternative 1
Fort Dodge
Waterloo
Dubuque
Rockford
Route Alternative 2
Ames
Cedar Rapids
Marion
Savanna
Elgin
Chicago
Route Alternative 3
Slater
Clinton
DeKalb
Route Alternative 5/4-A
Iowa City
Naperville
Route Alternative 4/4-A
Des Moines
Moline
Joliet
Omaha
Council Bluffs
Osceola
Route Alternative 5
Galesburg
Burlington
Nebraska
Illinois
Missouri
0 12.5 25 50
Miles
Scale
Legend
Route Alternative 1
Route Alternative 2
Route Alternative 3
Route Alternative 3 - Abandoned Portion
Route Alternative 4
Route Alternative 4-A
Route Alternative 5
(Combination of Portions of Route Alternatives 4 and 5)
Iowa Department of Transportation
Iowa Connections
Get on Board
Chicago to Omaha
Route Alternatives
Chicago to Omaha
Regional Passenger Rail System Planning Study
DATE
April 2012
FIGURE
3-1