

Section 7

IMPLEMENTATION PLAN



7.0 Implementation Plan

The Tier 1 DEIS has presented several improvements along the Chicago to St. Louis corridor to meet the purpose and need of the program. The size and scope of this type of regional program rarely becomes implemented at once, requiring the anticipation of incremental steps with which to logically advance the program. Therefore, an implementation plan has been developed to help guide the identification and selection of staged improvements within the corridor. Ahead of any future projects, should federal funding be utilized, Tier 2 NEPA documentation must also be completed to assess the environmental affects and document measures to avoid or to minimize and mitigate impacts.

7.1 Continuation of Current Investment

A \$1.45 billion program is under way by the State of Illinois, including \$1.3 billion provided by the Federal Railroad Administration, to raise top speeds to 110 miles per hour, improve ride quality, increase reliability to 85 percent on time performance, improve stations and provide new rolling stock for improved passenger service between the East St. Louis area and Joliet, Illinois. Construction began in 2010 and is scheduled to be complete by 2015. This program will support three round trip high speed trains between St. Louis and Chicago. Construction includes new rail, ballast, concrete ties, and related improvements including 13 passing sidings and 24 miles of new double track at three locations (Table 7.1-1).

At the conclusion of these improvements, passenger train service on the Chicago-St. Louis corridor will consist of three 110 mph "Lincoln Service" round trips, a 79 mph "Lincoln Service" round trip and the 79 mph (non-State-supported) "Texas Eagle" round trip.

Table 7.1-1. Expected Timetable after Completion of Current Program

301	303	21	305	307	Stations	300	302	22	304	306
"LS" 110	"LS" 79	"TE" 79	"LS" 110	"LS" 110		"LS" 110	"LS" 110	"TE" 79	"LS" 79	"LS" 110
0700	0925	1345	1715	1900	Chicago	0920	1125	1352	2040	2215
1130	1500	1921	2200	2345	St. Louis	0435	0640	0755	1500	1730
4:30	5:35	n/a	4:45	4:45	One-way time	4:45	4:45	n/a	5:40	4:45

The Tier 1 DEIS is identifying the necessary improvements with which to continue the investment already completed throughout the corridor. One of the driving factors for

these improvements is the growth in ridership. Between 2007 and 2010, ridership increased 34 percent and over the past year, increased nearly 9 percent, even with construction occurring along the corridor. With any increase in any train frequency to accommodate additional ridership, limitations of the infrastructure may lead to undesirable on-time performance. Gradual improvement of the corridor to match increased frequency will help to continue the success of the corridor in a manner that best benefits passenger rail service without unintentionally also benefiting freight rail service in the corridor.

7.2 Development of Staged Improvements

Whether funding for the improvements described in the Tier 1 DEIS is available in a single package, or is stretched over a number of years and from a number of sources, the construction of the improvements requires a phased approach. This section describes the process with which to determine possible phases, and identifies rationale for these stages and resulting benefits. As an integrated freight, intercity passenger, and commuter corridor, the impacts of these improvements on those other services will be determined through additional modeling required before additional phases of the program are implemented.

7.2.1 Process

Amtrak's ridership model will be critical in determining the necessity of additional trips along the corridor. Increases in ridership outside of the capacity of the current corridor need to be anticipated well in advance to allow the appropriate level of planning, environmental documentation and construction to occur for enhancements to be completed. Existing corridor capacity estimates should be compared yearly with historical ridership data, future growth trends and future ridership projections. Ridership triggers should be put in place to identify key growth milestones that would start the additional study for the corridor.

Growth of other rail service (intercity passenger and freight) in the corridor will also be monitored. Yearly reviews of growth and projected increases should be used to identify targets levels that would require additional study for the corridor, in anticipation of infrastructure requirements necessary to accommodate both these increases and the sustainable capacity and reliability of the High Speed Passenger Service.

Because of the number of operating railroads throughout the corridor, any adjustment to the existing schedule and/or number of trips should be modeled to determine the available capacity along the corridor without impacting existing operations and without hindering the ability of the additional service to meet on-time reliability requirements. IDOT, Amtrak and the UP are in agreement that additional operation simulations will need to be conducted. These simulations would identify whether infrastructure requirements are necessary for implementation and therefore the need for additional environmental documentation beyond the Tier 1 DEIS level.

7.2.2 Staged Improvements – Additional Service

Because of the size of the corridor and the dynamics that affect the need for roundtrips, it is difficult to specifically plan for exact improvements that will be required. What has been prepared is a logical sequence of service implementation to meet projected needs based on historical data. The order, size and scope of any of these improvements may need to be modified in the future.

A possible first step in the service improvement program would be to convert Trains 303 and 304 to 110 mph locals. Since no additional trips are involved, minimal to no infrastructure improvements are expected. The advantage would be that all local trains would be on the same timetable and can be better coordinated throughout the corridor because of their consistency (Table 7.2-1).

Table 7.2-1. Expected Timetable after 303/304 Upgrade

301	303	21	305	307	Stations	300	302	22	304	306
"LS" 110	"LS" 110	"TE" 79	"LS" 110	"LS" 110		"LS" 110	"LS" 110	"TE" 79	"LS" 110	"LS" 110
0700	0925	1345	1715	1900	Chicago	0920	1125	1352	1945	2215
1130	1410	1921	2200	2345	St. Louis	0435	0640	0755	1500	1730
4:30	4:45	n/a	4:45	4:45	One-way time	4:45	4:45	n/a	4:45	4:45

Based on historical station boarding data, nearly 80percent of the riders along the corridor board between Springfield and Chicago, with Chicago and Normal having the top two numbers of riders and Springfield number four, behind only St. Louis. In order to best accommodate the high volumes along this section before the full contingent of eight round trips in the corridor is implemented, it is anticipated that a short-turn train could be added between Chicago and Springfield to provide additional service. An early morning express (departing 0530) could run from Springfield to Chicago, stopping at Normal and Dwight, and be scheduled to arrive in Chicago around 0800 for the start of the business day, or to facilitate connections to other commuter trains. The return could be at 1545, arriving in Springfield by 1814. The addition of this short-turn train also isolates the infrastructure improvements to the segment north of Springfield and fits the schedule in between current runs, minimizing the impact. As previously mentioned, simulations would be required to specifically identify any required infrastructure or impacts along the corridor.

The addition of a fifth round trip would begin the process of a transition to the full-build out of eight round trips. This service would serve to specifically close the gap between the existing service times, such as the four hour interval between southbound trains 303

and 21, and the seven hour interval between northbound trains 22 and 304. Additional round trips for the corridor would be added as needed and schedules for all trips modeled and adjusted as necessary.

7.2.3 Staged Improvements – Additional Infrastructure

As a result of the anticipated increased service frequency in the corridor, infrastructure improvements will be necessary. It is unlikely that a full double track corridor or a complete set of the improvements listed in the Tier 1 DEIS would be necessary to support the initial incremental improvements along the corridor. The sequence of improvements listed will need to be coordinated with the additional service being provided and the results of modeling detailing the specific infrastructure required. As with the incremental service levels, the order, size and scope of any of these improvements may need to be modified when implemented in the future.

The highest priority for construction should be Chicago to Joliet in order to bring adequate reliability not only for additional frequencies but also for current frequencies. On January 19, 2012 Amtrak filed a complaint with the Surface Transportation Board alleging CN freight interference has reduced on time performance between Joliet and Chicago. This filing noted Lincoln Service trains missed on time performance standards 50 percent to 60 percent of the time. This identifies the restrictions currently occurring along the corridor and the difficulty trying to add more service. The Joliet to Chicago segment is critical to the success of the full corridor. The simulations along this route will have to consider not only additions to High Speed Rail traffic, but also the expected increases to freight and Metra traffic as well. A key to the success of this section will be the continued coordination with the CREATE projects, the additional track capacity, the capacity over the Chicago river near 21st Street and the reduction of rail to rail crossing interference through the construction of railway flyovers.

Another priority should be construction of additional capacity across the Mississippi River at St. Louis. This structure currently has high volumes of freight traffic and may not be able to accommodate both future freight growth and High Speed Rail service with only two tracks. The UP has estimated on-time performance over the next 20 years of less than 40 percent due to projected traffic increases. As freight traffic continues to grow across the Mississippi River, on time High Speed Rail performance will deteriorate.

Additionally, the construction of the UP/NS flyover south of Springfield to preserve reliability is a critical infrastructure priority. The current interlocker at this location is controlled by the NS and the construction of the flyover would provide the independence to operate through Springfield unimpeded by the cross traffic. The Springfield location is critical because of the number of railroads that use the crossover location and the expected increase in freight traffic that would interfere with High Speed Rail trains.

An analysis of the remaining single track locations after the current improvements along the corridor along with the projected station ridership was reviewed to determine the following priorities:

- Construct double track in Springfield to allow for dual boardings or single boardings with freight movement operations concurrently operating at the stations.
- Construct double track locations in Dwight, Pontiac, Lincoln and Alton to allow for dual boardings or single boardings with freight movement operations concurrently operating at the stations.
- Construct remaining double track and siding sections as needed for meets/passing requirements.

7.2.4 Staged Improvements – Environmental Documentation

Before additional improvements along the corridor can be built, Tier 2 Project Level NEPA documents will be prepared for the specific projects being implemented using Federal Funds. Following the process outlined in this implementation plan, expected ridership demands will initiate the need for modeling simulations to determine the improvements necessary. Following the analysis, environmental document preparation must also be completed to assess the environmental affects and document measures to avoid or to minimize and mitigate impacts.

The following is a list of anticipated Tier 2 Project Level NEPA studies. The list is organized from north to south. Logical termini for the projects are based on the extent of major infrastructure improvements and station locations. Intermediate termini will be identified using train operation modeling where additional improvements are necessary to support service level increases (Exhibit 7.2-1). The sequence of construction will be based on the results of train traffic modeling. The scope of each Tier 2 document may change depending on future funding and implementation decisions and additional design.

- Chicago to Joliet – This Tier 2 Project Level NEPA document will include additional track, sidings, culvert and bridge improvements, signal improvements, commuter rail station improvements, High Speed Rail station improvements, rail flyovers, rail connections and a parallel structure across the Chicago River at 21st Street to improve capacity and reliability for identified incremental service additions.
- Joliet to Springfield - This Tier 2 Project Level NEPA document will include additional track, sidings, culvert and bridge improvements and roadway grade separations to improve capacity and reliability for identified incremental service additions.

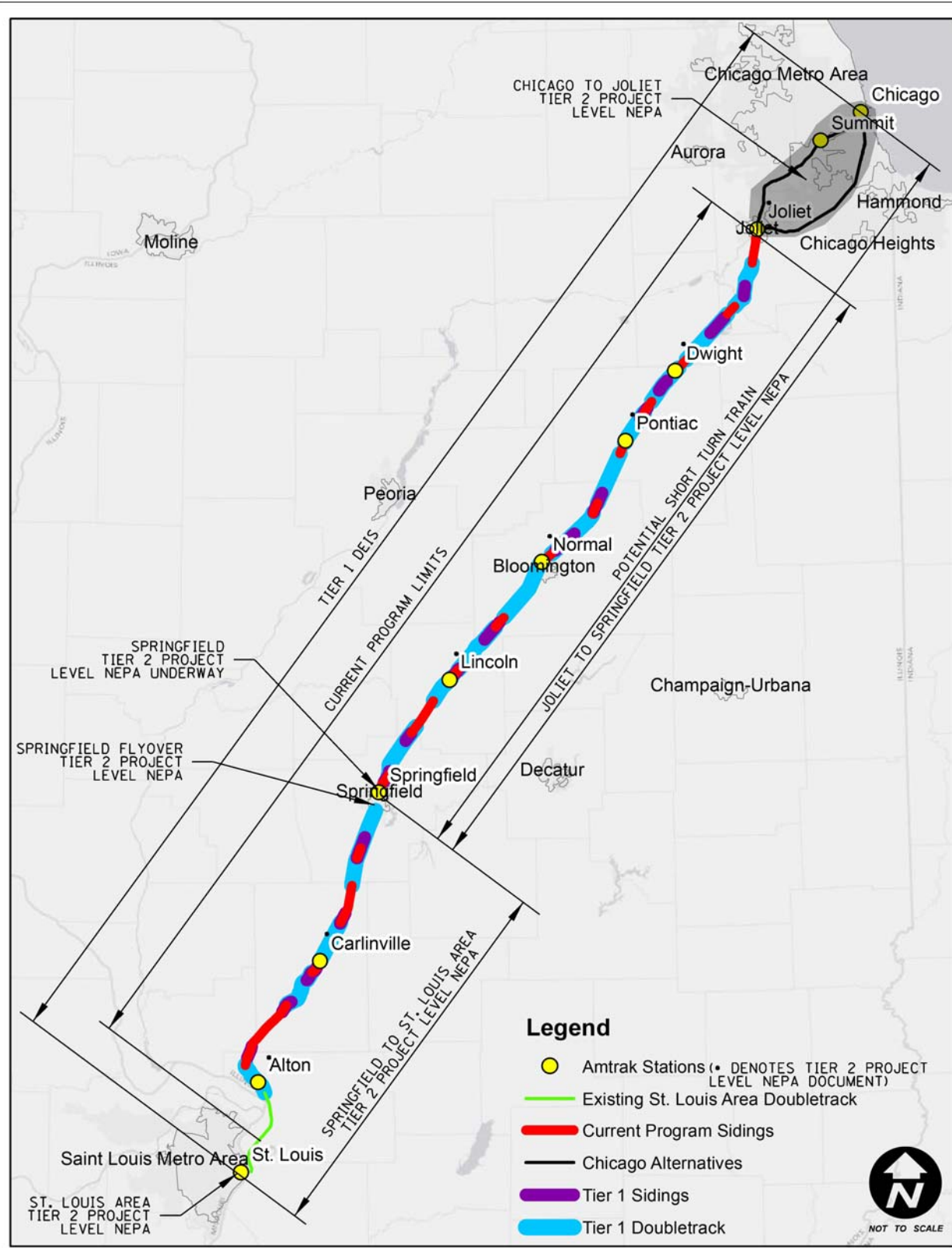


Exhibit 7.2-1. Staged Improvements

- Springfield - This Tier 2 Project Level NEPA document is part of the overall Chicago to St. Louis Tier 1 DEIS (included as Volume II).
- Springfield Flyover - This Tier 2 Project Level NEPA document will include new track alignment and a railway flyover structure to separate the UP and NS at-grade crossover to improve capacity and reliability along the corridor.
- Springfield Flyover to St. Louis Area - This Tier 2 Project Level NEPA document will include additional track, sidings, culvert and bridge improvements and roadway grade separations to improve capacity and reliability for identified incremental service additions.
- St. Louis Area - This Tier 2 Project Level NEPA document will include new doubletrack approaches to an increased capacity Mississippi River crossing to improve capacity and reliability for identified incremental service additions. The Tier 2 Level NEPA document will evaluate alternatives for an increased capacity Mississippi River crossing. A new double track connection to the Merchants bridge will also be include to provide redundant access in the system for the Mississippi River crossing and to provide construction staging and future maintenance routes.
- Station Improvements – Tier 2 Project Level NEPA documents will include High Speed Rail station improvements at Joliet, Dwight, Pontiac, Normal, Lincoln, Carlinville and Alton. These improvements include pedestrian grade separation structures to provide access to both platforms and to avoid pedestrians crossing tracks at-grade, additional parking requirements and additional station capacity requirements for identified incremental service additions.