

U.S. Department of Transportation  
Federal Railroad Administration

Record of Decision for the  
Springfield Rail Improvements Project  
Springfield, Illinois

December 2012

Prepared by:



U.S. Department of Transportation  
Federal Railroad Administration

For more information contact:

Andréa E. Martin  
Federal Railroad Administration  
1200 New Jersey Avenue SE, Mail Stop 20  
Washington, DC 20590



## 1.0 Introduction

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This Record of Decision (ROD) selects alternative 2A for the Springfield Rail Improvements Project, which would consolidate and improve rail lines in the City of Springfield, Illinois. The Springfield Rail Improvements Project is one part of the proposed Chicago to St. Louis High-Speed Rail Corridor Program to make further improvements to high-speed passenger rail service between Chicago, Illinois, and St. Louis, Missouri.

The Illinois Department of Transportation (IDOT) and the Federal Railroad Administration (FRA) used a tiered environmental process in this environmental evaluation. This tiered environmental review process is commonly used in the development of complex phased projects. The Springfield Rail Improvements Project is evaluated in Volume II of the Tier 1 Environmental Impact Statement (EIS) for the Chicago to St. Louis High-Speed Rail Program. This ROD is for the Springfield Rail Improvements Project and makes decisions about site-specific rail improvement alternatives in the City of Springfield, Illinois only, and does not pertain to a decision for the Chicago to St. Louis High-Speed Rail Program.

FRA has issued a separate ROD for the Chicago to St. Louis High-Speed Rail Corridor Program. The Springfield Rail Improvements Project is also referenced as the Springfield Project in this ROD.

IDOT prepared the Tier 2 environmental evaluation for the Springfield Project, in coordination with the FRA. Federal Cooperating Agencies for the Springfield Rail Improvements Project have included the Federal Highway Administration (FHWA), the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Environmental Protection Agency (USEPA). Federal agencies with specific review, consultation, and/or permitting roles, include but are not limited to, the Natural Resources Conservation Service (NRCS), the U.S. Coast Guard (USCG), and the U.S. Department of Commerce (USDOC).

In making this decision, FRA considered the information and analysis from the Tier 1 and Tier 2 evaluations within the 2012 Tier 1 Draft Environmental Impact Statement (Draft EIS) and the 2012 Tier 1 Final Environmental Impact Statement (Final EIS) for the Chicago to St. Louis High-Speed Rail Corridor Program (collectively the “EIS Documents”). FRA also considered public and agency comments received during the public comment periods for all of the above documents.

This ROD for the Springfield Rail Improvements Project has been prepared in accordance with the Council on Environmental Quality’s (CEQ) regulations implementing the National Environmental Policy Act (NEPA), (40 CFR Part 1500) and



FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999). Specifically, this ROD:

- States and reaffirms the Springfield Rail Improvements Project Purpose and Need.
- Identifies the alternatives considered but dismissed and the alternatives considered for the Springfield Rail Improvements Project, including the environmentally preferred alternative.
- Identifies the Selected Alternative for the Springfield Rail Improvement Project.
- Summarizes the environmental benefits and adverse effects.
- Summarizes the comments received on the Final EIS regarding the Springfield Rail Improvements Project.
- Presents the FRA Decision, determinations and findings on the Springfield Rail Improvements Project and identifies, and discusses the factors that were balanced by FRA in making its decision.

## 2.0 Project Background

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IDOT proposes the provision of two tracks between Chicago and St. Louis, including the section through Springfield, because of the needs for improved and expanded intercity passenger services. Multiple alignment options are available for the Chicago to St. Louis High-Speed Rail corridor through Springfield as presented in the EIS. The existing and projected rail traffic on the three north-south corridors through the City of Springfield causes vehicle traffic congestion, safety risks and other problems. These problems are primarily related to the multiple at-grade crossings in the three north-south corridors. The crossings block vehicle traffic, increase risk of crashes and require trains to blow horns. The EIS analyzed alternatives through Springfield to enhance rail line capacity and to accommodate and reduce the effects of additional high-speed passenger rail and freight rail traffic on the three north-south rail corridors in Springfield.

Proposed high-speed rail improvements in the Chicago to St. Louis corridor, including the section through Springfield, are consistent with the Illinois State Transportation Plan (ISTP) and the individual policies in the ISTP (IDOT, 2007).

## 3.0 NEPA Process

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IDOT, in coordination with the FRA, the Lead Agency for NEPA compliance for the Springfield Project, commenced the environmental review process in 2011. Considering anticipated permits and licenses needed for construction and operation of the Springfield Project, FRA requested and received the participation of the following Cooperating Agencies: FHWA, USACE, USFWS, and USEPA.

Table 2.1 below summarizes major NEPA milestones of the Springfield Project.

**Table 2.1. Summary of Major NEPA Milestones**

| Milestone   | Date                  |
|---|-----------------------|
| Notice of Intent & Public Scoping Meetings                | February – March 2011 |
| Notice of Availability Published/Circulation of Draft EIS | June 2012             |
| Public Hearing: Springfield                               | August 2012           |
| Notice of Availability and Publication of Final EIS       | November 2012         |

The environmental process for the Tier 2 Springfield Rail Improvements Project began formally in February 2011. Scoping Meetings for the Springfield Project were held in March 2011, and a Draft EIS was published on June 29, 2012.

Volume I of the Tier 1 EIS for the Chicago to St. Louis High-Speed Rail Program addresses broad corridor-wide issues and alternatives, and includes information on Program history and previous studies. Volume II containing the Tier 2 analysis for the Springfield Rail Improvements Project considers the recommended alternatives from the Tier 1 EIS in more detail. The Draft EIS presented the purpose and need for the Springfield Improvements Rail Project, the reasonable range of alternatives for passenger and freight rail, the existing environmental setting, potential effects from construction, and identified mitigation measures to reduce or eliminate potential adverse environmental effects. The Draft EIS informed decision makers, interested parties, and the public about the differences among various alternatives and options. The Draft EIS was circulated for 45 days for public review and comment. A public hearing was held in Springfield to provide additional opportunity for the public to comment on the Draft EIS.

Volume II of the Final EIS, published in November 2012, addressed changes to the Tier 2 Springfield Rail Improvements Project as a result of public and agency comments on the Draft EIS. The document identified the Preferred Alternative for the Springfield Rail Improvements Project and evaluated the potential environmental effects of the Preferred Alternative. Mitigation measures for the Preferred Alternative were also identified in Volume II of the Final EIS to reduce or eliminate adverse environmental effects.



## 3.1 Scoping and Public Involvement

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NEPA requires scoping and encourages early and frequent coordination with the public and resource agencies throughout the Springfield Project development process. Scoping for the Springfield Project included:

- Notice of Intent: February 2011
- Public Meetings on the Scope of the EIS: March 2011
- Draft Scoping Report: July 2011
- Public Meetings on Draft Scoping Report and Alternatives: October 2011

IDOT and the FRA hosted five Public Open House meetings along the study corridor March 1-9, 2011. Along with two Resource Agency and five Local Officials meetings, the Public Open House meetings commenced the scoping phase of the environmental study. In late October 2011, a public meeting was held in Springfield to present the preliminary alternatives for each section of the corridor, and for the Springfield Rail Improvements Project, and the criteria to be used to evaluate them.

## 4.0 Purpose and Need for the Springfield Rail Improvements Project

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### 4.1 Purpose

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#### 4.1.1 Chicago to St. Louis High-Speed Rail

The Springfield Rail Improvements Project is one component of the proposed Chicago to St. Louis High-Speed Rail Corridor Program. The Springfield Rail Improvements Project would enhance a portion of the passenger transportation network in the Chicago to St. Louis corridor by improving high-speed passenger rail service, resulting in a more balanced use of different corridor travel options by diverting trips made by automobile and air to rail.

#### 4.1.2 Springfield Rail Improvements Project

The purpose of the Springfield Rail Improvements Project is to enhance rail line capacity in Springfield to accommodate and reduce the effects of the increasing high-speed passenger and freight train traffic on the three north-south rail corridors that pass through Springfield: the Union Pacific (UP), Norfolk Southern (NS), and Canadian National (CN)/Illinois & Midland (I&M), see Exhibit 3-1. The purpose includes reducing rail line effects by improving safety, reducing congestion, and enhancing community livability and supporting commercial activity.

## 4.2 Need

### 4.2.1 Springfield Rail Improvements Project Need

The need for the Springfield Rail Improvements Project reflects the need for the Chicago to St. Louis High-Speed Rail Corridor Program and includes Project needs to address track capacity, safety, congestion, and community livability and commercial activity in Springfield.

#### 4.2.1.1 Track Capacity

The UP anticipates an increase in freight traffic on its line through Springfield. The number of daily freight trains is expected to increase from about five to about 27 by 2030. The existing single track does not have sufficient capacity to carry these freight trains and the high-speed trains and meet the minimum service requirements.

The other freight rail carriers through Springfield also anticipate increases in traffic on their rail lines. The current and projected number of trains on each of the rail lines through Springfield is shown in Table 3-1. Current rail traffic is based on field counts of the number and duration of trains in late 2009. The railroads furnished projected 2020 rail traffic.

**Exhibit 3-1.  
Existing Railroad Corridors**





**Table 3-1. Number of Trains through Springfield**

|                                | Current (2010) Rail Traffic | Projected (2030) Rail Traffic <sup>2</sup> (No-Build) | Projected (2030) Rail Traffic <sup>3</sup> (Build) |
|--------------------------------|-----------------------------|---|--|
| Union Pacific                  | 10 Passenger<br>5 Freight   | 10 Passenger<br>27 Freight                            | 18 Passenger<br>27 Freight                         |
| Norfolk Southern               | 16 Freight                  | 27 Freight  | 27 Freight   |
| Canadian National <sup>1</sup> | 4 Freight                   | 9 Freight   | 9 Freight  |
| TOTAL                          | 35 Trains                   | 73 Trains   | 81 Trains  |

<sup>1</sup> Includes I&M and KCS traffic on CN.

<sup>2</sup> Projected 2020 rail traffic was furnished by each railroad company. UP- 22F, NS-24F, CN-8F

<sup>3</sup> Projected 2030 rail traffic for NS and CN assumes a freight growth of 1.2 percent per year between 2020 and 2030. The UP projected rail traffic assumes a freight growth of 2 percent per year between 2020 and 2030.

As shown above, the total projected trains through Springfield would more than double over the next 20 years.

As part of the needs for enhanced safety of the Chicago to St. Louis corridor, as documented in the Tier 1 EIS, there are also specific needs inherent to the Springfield Project study area, identified as follows:

**4.2.1.2 Improve Safety**

There are 68 at-grade crossings in the Springfield study area. Each one of these represents a point of conflict between passenger and freight rail traffic and roadway traffic. Table 3-2 shows the number of at-grade crossings and grade separations in the Springfield study area by railroad.

**4.2.1.3 Alleviate Congestion**

All major east-west streets across Springfield have an at-grade railroad crossing. Many major streets such as North Grand Avenue, Carpenter, Adams, Washington, Laurel, and Ash streets cross all three railroads at-grade. A long train on any of these tracks can delay vehicle traffic through much of the City since it can simultaneously block almost all of the crossings on that track, and traffic queues can block vehicles on intersecting north-south streets. The I&M, NS and CN all have active rail yards in Springfield. Switching operations in these yards frequently block adjacent crossings with stopped trains or trains involved in back and forth movements.

**4.2.1.4 Improve Livability and Commercial Activity**

Noise

Train noise comes from the locomotive engines, air brakes, side-to-side car movement, slack-and-bunch car movement, wheels on rail joints, and locomotive horns blown by trains as they approach at-grade crossings. This noise is generated by both freight and



passenger (including high-speed) trains. Of these, train horns are the most disturbing. Because of the short distances between at-grade crossings in the rail corridors, trains must blow their horns almost constantly when moving through Springfield. The total duration of train horn noise in the study area is 207 minutes per day. Federal regulations provide public authorities the option to maintain and/or establish quiet zones provided supplemental safety measures are in place. There are currently no quiet zones in Springfield.

Each of the existing corridors passes through some residential areas, but the CN (19<sup>th</sup> Street) and UP (3<sup>rd</sup> Street) corridors have the most adjacent residential development. The UP corridor passes near many sensitive receptors in the Mid-Illinois Medical District.

### Community Division

The UP, NS, and CN/I&M railroads operate on separate north-south corridors through the City, at 3<sup>rd</sup> Street, 10<sup>th</sup> Street and 19<sup>th</sup> Street, respectively. These rail lines present physical and psychological barriers that split downtown and divide neighborhoods. These barriers have created a set of development patterns that work against a healthy downtown and neighborhoods by isolating portions of the community and restricting access. Attracting residential and commercial redevelopment adjacent to the tracks is also very difficult. Home buyers see neighborhoods that are frequently blocked from access to schools, shopping, and services by rail traffic as less desirable. The rail corridors, especially when the crossings are occupied by trains, inhibit neighborhood connectivity.

Community buildings exist along each of the three corridors. While some of these buildings provide services on a city-wide basis, many are neighborhood specific. Closed streets and blocked crossings from stopped trains inhibit access to these buildings and places or make access less safe by requiring the crossing of tracks or encouraging walking along the tracks.

Emergency Response and Community Services- The 3<sup>rd</sup> Street corridor runs directly through Springfield's Medical District passing between the campuses of the City's major hospitals. St. John's Hospital and Memorial Medical Center provide emergency services for a multi county area, and provide the only Class One Trauma Center in the region. Stopped trains can delay emergency vehicles traveling to the hospitals, and delay physicians moving from one hospital to the other for both routine and emergency purposes. In addition, the City of Springfield's planning goal is to enhance development opportunities in the Medical District, which would provide additional jobs and services to the surrounding communities. This development expansion is severely hindered because of the rail traffic on the UP rail line.

The 3<sup>rd</sup> Street corridor also passes through the midst of the downtown area. Development and redevelopment in Springfield's downtown is currently restricted by



the 3<sup>rd</sup> Street corridor. Because of its location and use, the 3<sup>rd</sup> Street rail corridor creates a barrier to redevelopment moving west, and creates an additional hurdle for residential redevelopment throughout the downtown.

### Goals and Objectives

Based on the purpose and need described in Sections 3.2 and 3.3 for the Springfield Rail Improvements Project, IDOT and FRA established the following goals and objectives:

- Provide a route through Springfield that achieves the purpose of the Chicago to St. Louis High-Speed Rail Corridor Program as documented in the Tier 1 EIS.
- Provide additional track capacity to accommodate future passenger train traffic.
- Improve safety and reduce congestion by reducing the number of at-grade street crossings in the study area with a focus on those streets with the highest traffic volumes.
- Improve livability and commercial activity by reducing train horn noise throughout the City and reducing the barrier effect of the rail lines with their growing rail traffic on neighborhoods, downtown and the Medical District.
- Minimize negative rail operational impacts, impacts to existing development, lifecycle and capital costs, and impacts to social and economic resources.

## 5.0 Tier 1 Alternatives in Springfield Considered and Dismissed in the Draft EIS

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The northern limit of the Springfield Project is the south right-of-way line of Sangamon Avenue. The southern Springfield Project limit is the north right-of-way line of Stanford Avenue. The Springfield Project includes an evaluation of vehicle congestion, public safety, and other problems along all three of the north-south rail lines through the City.

### 5.1 Alternatives Eliminated at Tier 1

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Through the Tier 1 alternative screening process, IDOT identified five build alternatives and one no build alternative in Springfield, alternatives 1 through 5. The Tier 1 EIS screening analysis (Volume I, Section 3) discusses the specific details of the alternatives and description of the alignments.

- Alternative 5 would shift UP freight trains to Tenth Street and leave Amtrak passenger trains on Third Street. This alternative would also shift CN, I&M and KCS freight trains from the Nineteenth Street corridor to the Tenth Street corridor. Additional tracks would be provided along Tenth and Third Streets. Alternative 5 was eliminated because it introduced the need for trains to shift from one track to another in the UP line north and south of the City and increased the length of the CN track. The shift is necessary because under this alternative passenger traffic



would be on the UP's 3<sup>rd</sup> Street tracks, and UP freight traffic would be on 10<sup>th</sup> Street. UP freight trains on the UP west track north and south of the City would need to cross over the UP east track to use the new UP freight corridor on 10<sup>th</sup> Street. These trains could block and delay any UP freight or passenger trains on the UP east track. This alternative also had the highest capital costs and the largest area of new right-of-way required. This alternative was among the highest in terms of length of rail corridor through minority and low-income residential neighborhoods, which resulted in the highest impact to environmental justice (EJ) populations, and did not provide any notable advantages relative to the other alternatives. EJ populations are considered "populations of concern" due to Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) and implementing DOT Order (5610.2(a) (May 2, 2012) directing Federal agencies to identify and address disproportionate high and adverse human health or environmental effects on these groups .

- Alternative 4 would shift UP freight trains to Tenth Street and leave Amtrak passenger trains on Third Street. Additional tracks would be provided along Tenth and Third Streets. Alternative 4 also was eliminated because it introduces the need for trains to shift from one track to another in the UP line north and south of the City in the same manner as described above, as well as having high capital costs, and negative community impacts. This alternative did not provide any notable advantages relative to the other alternatives.
- Alternative 3 would shift UP freight trains and Amtrak passenger trains from Third Street to Tenth Street as well as CN, I&M and KCS freight trains from the Nineteenth Street corridor to the Tenth Street corridor. The Third Street corridor from near Ridgely Avenue to South of Iles Avenue would be abandoned as would the Nineteenth Street corridor from north of Clear Lake Avenue to near Stanford Avenue. Additional tracks would be provided along Tenth Street. Alternative 3 was eliminated because of a lack of support from the CN, the high capital costs, and the large area of right-of-way that would need to be acquired. This alternative had the lowest probability, based on census data, for EJ and neighborhood impacts, but constructing Alternatives 1 or 2 (see detailed description below) with the grade separations on the CN corridor would minimize the potential for higher EJ impacts associated with these alternatives at a lower cost than constructing Alternative 3.

Alternatives 1 and 2, and the No-Build were the retained alternatives and were addressed at site-specific detail in the Tier 2 environmental evaluation, since they achieve the Springfield Project's purpose and need while minimizing capital and present value costs and impacts to social resources. Section 5.2 summarizes the retained alternatives

## 5.2 Alternatives Carried Forward at Tier 1

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The following summary outlines the build alternatives that were retained for Tier 2 analysis for the Springfield Rail Improvements Project from the Tier 1 EIS.

The Tier 2 analysis through Springfield analyzes alternatives for enhancing the capacity of one of the three corridors (Union Pacific (UP)) and accommodating and reducing the overall effects of the increasing high-speed passenger and freight train traffic along the three north-south rail corridors.

### 5.2.1 No Build Alternative

The No-Build Alternative consists of maintaining the existing rail and street facilities after completion of the improvements approved by the FRA in the 2004 Record of Decision (ROD Improvements) and the 2011 FONSI (see the Tier 1 Final EIS Volume I, Section 3.2). No additional grade separations would be constructed. Quad gate (gates in all four quadrants of the crossing to minimize opportunities for drivers to drive around the gates when down) installation along 3rd Street as part of the ROD Improvements would allow for a quiet zone for the 3rd Street corridor (UP). The No-Build Alternative would have a substantial increase in freight rail traffic compared to the existing.

### 5.2.2 Alternative 1

Alternative 1 (Alternative C in Volume I of the Final EIS) leaves UP freight and passenger traffic at its existing location in the 3<sup>rd</sup> Street rail corridor. A second track would be added to increase train traffic capacity. New grade separations would be constructed at city streets. Alternative 1 is evaluated with three different grade-separation configurations and grade crossing closures. These are referred to as Alternatives 1A, 1B and 1C:

- 1A – Double track UP on 3<sup>rd</sup> Street – grade separation at passenger station.
- 1B – Double track UP on 3<sup>rd</sup> Street – some grade separations on UP corridor only.
- 1C – Double track UP on 3<sup>rd</sup> Street – some grade separations on all.

Alternatives 1A, 1B, and 1C include closure of 3<sup>rd</sup> Street parallel to the UP tracks from Ash Street to Union Street. This consists of abandoning 3<sup>rd</sup> Street in areas where it is immediately adjacent to the track and the existing UP right-of-way width is less than 66 feet. This would require that the street right-of-way and any property with access only from 3<sup>rd</sup> Street be purchased.

The passenger station along 3<sup>rd</sup> Street for Alternatives 1A, 1B, and 1C would be at the site of the existing Amtrak Station and would extend to the block immediately to the north. The alternatives include a grade separation at Jefferson Street to provide the required 500 feet station platform length. Station parking (minimum 100 spaces) would be located immediately east of the station in the block between Jefferson and Washington streets.



### 5.2.3 Alternative 2

Alternative 2 (Alternative D in Volume I of the Final EIS) would shift UP freight and passenger traffic to the 10<sup>th</sup> Street rail corridor parallel to the existing Norfolk Southern (NS) corridor. Two new tracks would be constructed for the UP, and new grade separations would be constructed at city streets. Alternative 2 has two different grade separation configurations. These are referred to as Alternatives 2A and 2B.

- 2A – Relocate UP to 10<sup>th</sup> – some grade separations on 10<sup>th</sup> Street and 19<sup>th</sup> Street (Exhibit 4-1).
- 2B – Relocate UP to 10<sup>th</sup> – grade separation or closure of all crossings on 10<sup>th</sup> Street south of North Grand Avenue, some grade separations on 19<sup>th</sup> Street.

Alternative 2B was developed at the request of the UP to evaluate the cost, impacts, and benefits of eliminating all at-grade crossings where the NS and UP would operate in adjacent, parallel corridors (North Grand Avenue to Stanford Avenue).

The passenger station along 10<sup>th</sup> Street for Alternatives 2A and 2B would be on the east side of the rail corridor on the block between Adams and Washington streets. An overhead pedestrian crossing would provide access to the platforms. These alternatives include closing the Adams Street crossing to provide the required 500 feet station platform length. Station parking (minimum 100 spaces) would be located east of the station between Adams and Jefferson streets.

## 5.3 Tier 2 Screening of Alternatives

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The Springfield Project Tier 2 screening criteria were applied to the No-Build Alternative and to Alternatives 1A, 1B, 1C, 2A, and 2B. All of the alternatives, including the No-Build Alternative, include a substantial increase in passenger and freight rail traffic, and this is reflected in the screening comparison.

Table 4-1 lists the Springfield Rail Improvements Project screening objectives and the corresponding criteria, as well as the units or methodology used to quantify or characterize these criteria. Quantitative criteria were measured in appropriate units such as number, time, or dollars, while qualitative criteria are encapsulated in a brief narrative description. Each of the alternatives that passed the Tier 1 screening (Volume I, Section 3.3.5) was evaluated in Volume II through the Tier 2 screening. Some of the Tier 2 screening criteria are the same as those used in the Tier 1 screening.

As appropriate for a Tier 2 analysis, a more detailed analysis was conducted for the Springfield Rail Improvements Project alternatives at Tier 2 because of a greater level of available engineering detail and environmental information.

Some of the screening criteria from Tier 1 were not included in Tier 2, because for those criteria additional information is not necessary or relevant at the Tier 2 level.

Additionally, screening criteria were added to address the specific Springfield Project

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needs. Differences in impacts and costs from Tier 1 to Tier 2 are a result of the more detailed analysis undertaken for Tier 2.

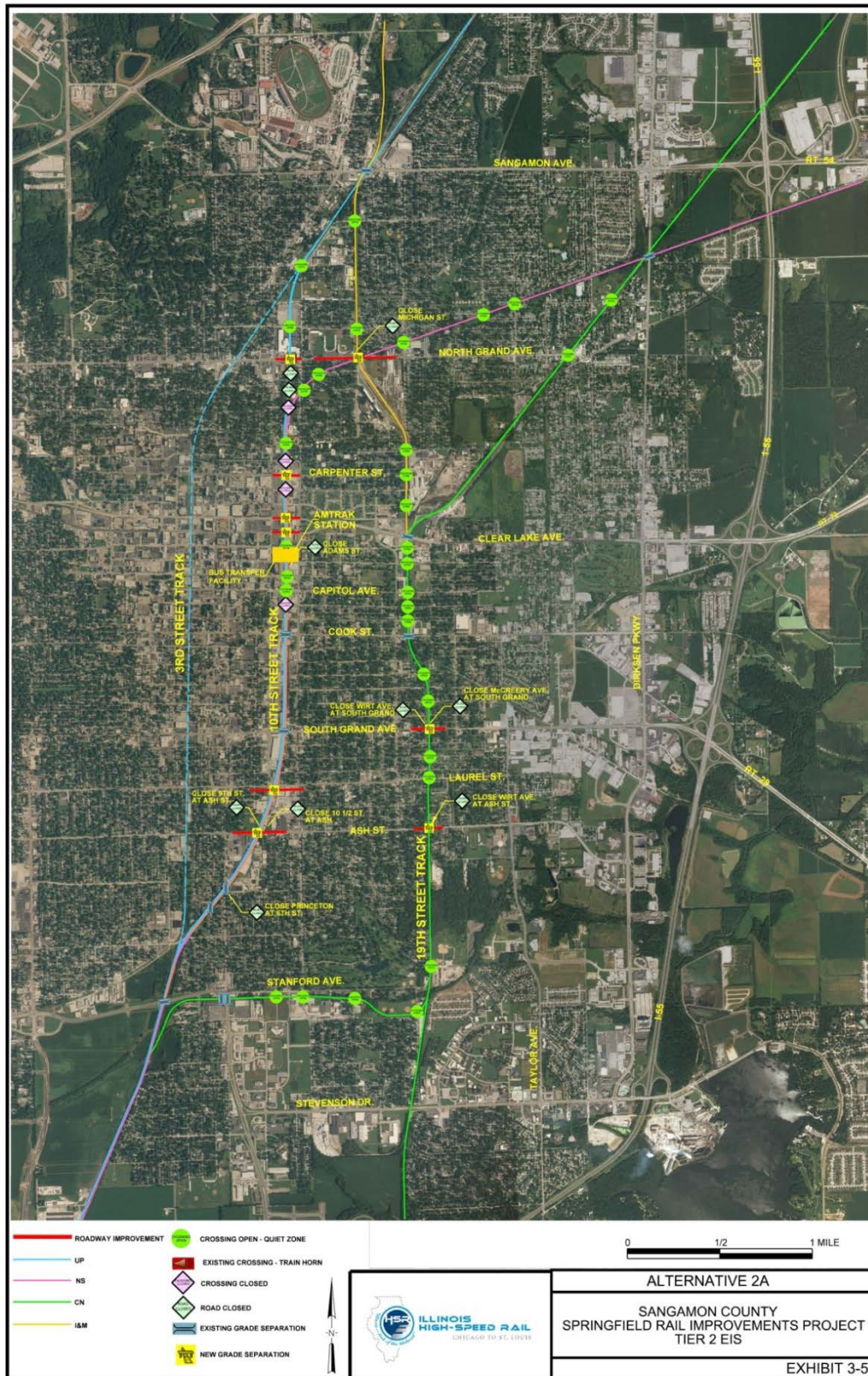
**Table 4-1. Tier 2 Objectives and Screening Criteria**

| Objective                                | Criteria and Measures  |
|--|--|
| Safety                                   | <b>Train/Vehicle Accidents at Grade Crossings (# of predicted accidents)</b>   |
| Congestion                               | <b>Vehicle Traffic delay (# of minutes of vehicle delay)</b>   |
| Livability and commercial activity       | <ul style="list-style-type: none"> <li>• <b>Predicted sound levels (Amount of time horns are blown per day (# of minutes))</b></li> <li>• <b>Reduce rail traffic through the Medical District and downtown (qualitative discussion)</b></li> </ul>         |
| Lifecycle and Capital Costs              | <ul style="list-style-type: none"> <li>• <b>Present value cost (dollars)</b></li> <li>• Capital cost (dollars)</li> </ul>  |
| Operational issues                       | Number of at-grade crossings   |
| Impacts to existing development          | Right-of-way Impacts (acres of right-of-way required)  |
| Impacts to social and economic resources | <ul style="list-style-type: none"> <li>• Residential and commercial displacements (# of displacements)</li> <li>• Parcels with changes in access (# of parcels)</li> <li>• Neighborhood severances and public services (qualitative discussion)</li> </ul> |

Note: Criteria not included in the Tier 1 Screening are in **bold**.



Exhibit 4-1. Alternative 2A



## 5.4 Alternatives Carried Forward for Detailed Tier 2 Study

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Alternatives 2A and 2B were the reasonable alternatives brought forward and analyzed in Volume II of the EIS since they achieve the Springfield Project's purpose and need while minimizing capital and lifecycle costs and impacts to social resources. These build alternatives best meet the Springfield Project's purpose and need by minimizing at-grade street crossings and the predicted car/train crashes. They also are effective in reducing vehicle delays. Normal train horn blowing would be eliminated by these build alternatives and they have the lowest annual and lifecycle costs. Both of these build alternatives eliminate rail traffic from downtown, the Medical District and the neighborhoods along 3<sup>rd</sup> Street. In addition, these build alternatives reduce the barrier effect of the 10<sup>th</sup> Street and 19<sup>th</sup> Street corridors by building new grade separations in both rail corridors.

## 5.5 Environmentally Preferable Alternative

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CEQ regulations implementing NEPA require that a ROD specify the alternative or alternatives considered to be environmentally preferable. "Environmentally preferable" is defined as "the alternative that will promote the national environmental policy as expressed in the NEPA, Section 101." Ordinarily this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources.

IDOT, in coordination with the FRA, USEPA and USFWS, identified the environmentally preferable alternative for the Springfield Rail Improvement Project as Alternative 2A.

In determining an environmentally preferable alternative, IDOT considered all action alternatives as well as the No Action Alternative. IDOT weighed and balanced the physical environmental effects associated with the action alternatives as well as those associated with the No Action Alternative. IDOT determined that the adverse environmental effects associated with the Selected Alternative were less substantial than the consequences associated with the No Action Alternative in terms of air quality, energy, and traffic, and thus identified Alternative 2A as environmentally preferable.

## 5.6 Selected Alternative

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FRA has selected Alternative 2A as the Selected Alternative for the Springfield Rail Improvements Project after consideration of public and agency comments on the Draft and Final EISs. Alternative 2A consists of relocating the existing UP freight and passenger rail corridor to a new location parallel to the NS tracks on 10<sup>th</sup> Street. The improvement consists of constructing two UP tracks at 20-foot centers in a 75-foot right-



of-way. The NS right-of-way would be 65 feet wide with one main track and the provision for a future track at 15 feet from the main track. The existing underpasses at Cook Street, South Grand Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street would remain and be modified as necessary to accommodate the new track.

New grade separations would be constructed at nine locations. The existing rail crossings would be closed at 10<sup>th</sup> Street and five other locations. Streets would be closed at 11 locations. Improvements would be made to the remaining at-grade crossings to allow implementation of quiet zones on the CN, UP, and NS rail corridors in the Springfield Project area.

A proposed new rail passenger station would be located adjacent to the 10<sup>th</sup> Street rail corridor north of Adams Street. The cost and impacts for the station are included with the overall Springfield Project. The existing NS rail yard would be purchased. Costs are included in overall Springfield Project costs.

Rail traffic would be eliminated from the existing UP corridor from north of Ridgely Avenue to south of Iles Avenue. Portions of Ridgely Avenue, Factory Street, Iles Avenue, and Burton Drive would be realigned to accommodate the track improvements.

Alternative 2A is the Selected Alternative for the Springfield Rail Improvements Project for the following reasons:

- Alternative 2A would have lower capital cost than Alternative 2B.
- Alternative 2B would have lower delays, crash rates, and lifecycles costs, but this results primarily from constructing new grade separations at Monroe and Washington streets and closing Capitol Avenue and Enos Street. The grade separations both have a benefit/cost ratio much less than 1.0. The grade separations and street closures create undesirable access and adverse travel issues as discussed in Section 5.2.3.1 and 5.2.3.2 of this ROD.
- Alternative 2B would require more right-of-way acquisition, and would result in more commercial displacements and more parcels with a change in access.
- Alternative 2B would change the access to the Great Western Railroad Depot due to the construction of an underpass grade separation along Monroe Street. This presents no change from its historic setting and vibration studies have assessed no structural impact to the property from the alternatives and no noise impacts.
- There are no other anticipated substantial differences between the impacts generated from Alternatives 2A and 2B for environmental justice concerns, Section 4(f) properties, noise, or vibrations impacts.

Additional Considerations:

While Alternative 2A is the Selected Alternatives for the reasons described in this section 5.6, it involves significant and costly improvements in moving service off of the existing Amtrak route. As described in section 2.2 of FRA's ROD for the Tier 1: Chicago to St.

Louis High-Speed Rail Corridor Program, IDOT has developed an implementation plan which calls for the Chicago to St. Louis High-Speed Rail Corridor Program to be implemented in incremental steps due to the Program size and scope. Therefore, resources will need to be prioritized and costs and benefits weighed in deciding which improvements will be advanced first. Accordingly, in advancing the overall Program, FRA's selection of Alternative 2A would not preclude limited interim investments on the existing Amtrak route (particularly safety-related improvements) that might be appropriate prior to the implementation of the major improvements contemplated through the Springfield Project Selected Alternative. Environmental analyses for such investments might need to be made, as appropriate. This is consistent with the FRA's approach to other sections of the Corridor Program where the selected alternative moves away from the existing Amtrak route but the switch to the new route may not be achievable in the short term.

## 6.0 Summary of Potential Effects and Measures to Avoid and Minimize Harm

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IDOT conducted a comprehensive review and analysis of the potential impacts of the Selected Alternative in Volume II of the Final EIS, building upon the impact analysis of the Draft EIS. This analysis included an assessment of the impacts to both the natural and human environment. Consistent with 40 CFR 1505.2(c), all practicable means to avoid or minimize environmental harm from the Springfield Project were identified and mitigation measures were described, which are formal commitments associated with the Springfield Project approval. In designing, constructing, and operating the proposed railroad improvement, IDOT is required to adhere to all mitigation measures.

IDOT will prepare a comprehensive mitigation and monitoring plan for the Springfield Project in close coordination with FRA and the Cooperating Agencies. IDOT will submit the completed plan for FRA review and approval prior to implementation. In developing the comprehensive mitigation monitoring plan, IDOT will coordinate with relevant agencies on mitigation issues within their specific area of expertise.

The environmental impacts for Alternative 2A were assessed in compliance with the FRA's Procedures for Considering Environmental Impacts, NEPA, CEQ's regulations, resource agency input, and public comments. Field surveys were conducted for resources that have a potential for impacts. Surveys were conducted for ambient conditions for noise and vibration modeling, historic structures and archaeological sites, endangered and threatened species, and wetlands. Newsletters, a Springfield Rail Improvements Project website, telephone call-in numbers and numerous community presentations were provided for interested neighborhood groups throughout the Springfield Project area to solicit comments and feedback from the public.

Table 5-1 summarizes the environmental impacts of Alternative 2A.

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**Table 5-1. Environmental Impact Summary of Alternative 2A**

| Impact Category                                   | Alternative 2A |
|---|----------------|
| Right-of-Way Acquisition (Acres)                  | 42.0           |
| Displacements                                     |                |
| Residential                                       | 117            |
| Commercial  | 53             |
| Access Changes                                    | 28             |
| Farmland Conversion (Acres)                       | 0              |
| Cultural Resources                                |                |
| National Register Listed (or Eligible) Sites      | 0              |
| Known Archaeological Sites                        | 0              |
| Natural Resources                                 |                |
| Threatened/Endangered Species (Number of Species) | 0              |
| Natural Areas (Number)                            | 0              |
| Native Vegetation (Acres)                         | 0              |
| Affected Lakes and Streams                        | 0              |
| 100-yr. Floodplains Crossings                     | 0              |
| Wetlands (Acres)                                  | 0              |
| Parks (Number)                                    | 0              |
| Special Waste Sites (Number within one block)     |                |
| CERCLIS <sup>(1)</sup>                            | 2              |
| LUST <sup>(2)</sup>                               | 20             |

<sup>(1)</sup>Comprehensive Environmental Response, Compensation and Liability Information System.

<sup>(2)</sup>Leaking Underground Storage Tank.

<sup>(3)</sup> Current access to the Great Western Railroad Depot will be relocated to the west along the same block. Therefore, there will be no permanent impact to this structure.

Alternative 2A is shown in Appendix A, Exhibit A-1.

## 6.1 Land Use Impacts

The relocation of UPRR from the 3rd Street corridor to the 10th Street corridor with Alternative 2A would allow for the expansion of businesses and the Medical District along 3rd Street. Other City improvement opportunities also would be possible along the abandoned 3rd Street corridor, such as a city-wide pedestrian/bike path or parkway for additional green space. This enhancement to the community could provide the

opportunity for businesses to cater to needs of additional visitors to the downtown area and the President Lincoln historical sites. For example, restaurants and other outdoor food vendors could become established for bicyclists touring the downtown attractions or passing through the City. In addition, a multimodal facility, consisting of a train station and transit hub for buses and taxi service, has been planned by the City of Springfield for the 10th Street corridor. This facility is intended to provide services and jobs to Springfield's east side. This complex is proposed to be constructed on about four city blocks and may contain restaurants, shops, office space, a daycare facility, meeting rooms, and parking. This facility conforms to the City's Downtown Redevelopment Plan and Springfield's 2030 Comprehensive Plan.

## 6.2 Socio-economics and Environmental Justice Community Impacts

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### 6.2.1 Relocation

Table 5-1 depicts the number of residential and commercial displacements for the Selected Alternative. The displacement numbers can be referenced in Exhibit A-1 and Appendix A.

Approximately 117 residences and 53 commercial businesses may be relocated as a result of the construction of Alternative 2A. These relocations are a result of approximately 42 acres of right-of-way that is required for the additional railroad tracks necessary for the Springfield Project. Springfield has sufficient comparable housing and commercial space available to accommodate those relocations. Right-of-way purchases would be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (42 USC 4601 et seq.), as amended, and the U.S. Department of Transportation implementing regulations. IDOT would implement the provisions of the State of Illinois Relocation Assistance Plan in accordance with the Uniform Act.

### 6.2.2 Environmental Justice and Title VI

Each of the build alternatives would affect some Environmental Justice populations, as defined by CEQ based on the most recent census data. Railroad traffic currently exists within each of the current rail corridors within the City of Springfield. However, the build alternatives do not disproportionately impact EJ populations, as both the 3<sup>rd</sup> Street (UP) and the 10<sup>th</sup> Street (NS) rail lines pass through more non-minority than minority communities.

Under the Selected Alternative, 23 minority residences and five minority-owned businesses would likely need to be relocated; however, these displacements are not borne disproportionately by minorities. Minority displacements constitute approximately 20 percent of the total residential displacements, and minority-owned

businesses likely to be displaced constitute approximately 10 percent of the total business displacements.

Positive impacts to Springfield, the communities of concern and neighborhoods would result from the elimination of 32 at-grade crossings, improvements to remaining at grade crossings, and the elimination of train horn blowing. Benefits from these actions center on increased safety, reduced delays and general noise reduction city-wide. New grade separations would increase safety not only for vehicular traffic but also pedestrians traveling across these railroad crossing locations. Safety would also increase for vehicular and pedestrian traffic from proposed improvements to at-grade crossings remaining along the 10th and 19th Street Corridors. The proposed at-grade crossing treatments would support elimination of blaring noise from train horns traveling through Springfield's communities. Therefore, because the benefits to communities of concern in the Springfield Rail Improvements Project area were determined to outweigh the adverse effects to these communities, no disproportionately high and adverse human health and environmental effects are anticipated to result from implementation of the Springfield Project.

### **6.2.3 Public Services/Facilities**

Public services and facilities that would be displaced by Alternative 2A are the Illinois EPA, the Salvation Army, and Planned Parenthood. The Illinois EPA headquarters is at 1021 North Grand Avenue East. The proposed Springfield Rail Improvements Project would bisect the headquarters building, and displace the north entrance, office space, and parking north and south of the building, all of which is leased by the Illinois EPA. Adequate replacement space is available nearby. Office space could be replaced through the addition of floors, or construction of additional buildings or add-ons to the north of the existing headquarters. Acquiring property to the north may also be possible for replacing lost parking space.

Alternative 2A would have a net positive effect on access and response times for emergency vehicles serving the Springfield communities once construction is complete. Response time for emergency vehicles would improve as a result of improved roadway system linkage with elimination of the UP on the 3<sup>rd</sup> Street corridor, construction of eight grade separations, crossing closures along the 10<sup>th</sup> and 19<sup>th</sup> street corridors, and consolidation of UP and NS railroad traffic into one corridor. Police, fire, and emergency response times may be temporarily affected during construction. Coordination with public response agencies serving the Springfield Rail Improvements Project area would continue during construction to avoid and minimize disruptions to emergency response.

#### **6.2.3.1 Road Closures**

Road closures along the Selected Alternative are primarily in industrial areas where the business would be displaced and moved to a new location or access would not result in adverse travel. Adverse travel is the additional length of roadway a motorist must travel

as a result of a closed road. Adverse travel would be limited to no more than one block, except for the area between Reservoir Street and Enterprise Street. This adverse travel would only be borne by local residential visits. Adverse travel resulting from road closures would not be a factor for residents going shopping or for emergency services or access to public facilities since the primary east-west arterial is North Grand Avenue one block north of Reservoir Street.

#### **6.2.4 Community Impacts**

Alternative 2A would consolidate rail traffic to fewer corridors, which would eliminate neighborhood barriers, promote community cohesion and reduce the length of rail lines that go through residential areas by 3.7 miles.

Positive impacts to the Springfield communities and neighborhoods would result from the elimination of 32 at-grade crossings, improvements to remaining at-grade crossings, and the elimination of train horn blowing. Benefits from these actions center on increased safety and general noise reduction city-wide. New grade separations would increase safety not only for vehicular traffic but also pedestrians traveling across these railroad crossing locations. Safety would also increase for vehicular and pedestrian traffic from proposed improvements to at-grade crossings remaining along the 10<sup>th</sup> and 19<sup>th</sup> Street corridors, due to fencing along the railroad right-of-way and four quadrant gates at crossings to prohibit vehicles from entering during train crossings. The proposed at-grade crossing treatments would support establishment of a train horn quiet zone.

Views of trains and new rail lines would be considered a minor adverse visual impact. IDOT would determine potential ways to help reduce minor impacts, such as planting vegetation screens or providing aesthetically pleasing features as part of the design.

#### **6.2.5 Economic Benefits and Impacts**

The expenditure of funds for transportation infrastructure has both direct and indirect economic impacts to the City of Springfield. The economic impacts of Alternative 2A would be dispersed through the City of Springfield and Sangamon County.

The direct impacts include jobs created both in production of materials and equipment used in the Springfield Project and in actual on-site construction activities. Construction of the Springfield Rail Improvements Project would involve demolition of existing structures, widening and preparing the road bed, placement of new track, installation of signal and safety devices, and construction of grade separations. Firms that produce the signal and safety devices, steel rails, and rolling stock for Alternative 2A would create additional jobs.

Wages individuals receive would then recycle throughout the economy as new workers buy/rent houses, furniture, groceries, and other merchandise. These expenditures, in turn, create new jobs. While much of this benefit would be within the City of



Springfield, the total geographic distribution impact would depend upon the location of firms supplying the labor and materials needed on the Springfield Project.

The predicted increase in train traffic by 2020 from about 35 trains per day to 72 trains per day through the City of Springfield would create some new railroad jobs. The precise location of economic impacts would depend on which companies receive contracts to conduct the construction activity.

Alternative 2A would require the purchase of about 42 acres of additional right-of-way. The increased benefits of increased passenger rail traffic through the City and the redevelopment potential of the abandoned 3<sup>rd</sup> Street railroad corridor is expected to counter the loss of property tax revenue as a result of the conversion of property to transportation use.

## 6.3 Cultural Resources

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Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) of reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP.

The Area of Potential Effect (APE) is defined as two blocks on either side of the existing 10<sup>th</sup> Street tracks, or about 1,500 feet. This distance encompasses any grade separations that might be constructed, including those on 19<sup>th</sup> Street.

Three sites within the Area of Potential Effect (APE) are currently listed on the National Register individually. One of these—the Abraham Lincoln Home—is also a National Historic Landmark. The other two sites include the Lincoln Colored Home and the Mine Rescue Station. FRA has determined the Selected Alternative would have *No Effect* on these properties due to their distance from the proposed action since they are all over 400 feet from the railroad tracks, except for the Mine Rescue Station.

The Mine Rescue Station at 609 East Princeton Avenue is listed on the National Register of Historic Places and is about 75 feet from the existing railroad right-of-way, but this presents no change from its historic setting. The Selected Alternative would not present any vibration impacts to the structural integrity of the Mine Rescue Station; therefore, the effects assessment on this property is *No Effect*.

The Illinois State Historic Preservation Office concurred with the *No Effect* determination in a letter received on November 1, 2012 and is attached in Appendix A. A final determination will be made upon the completion of archeological investigations.



### 6.3.1 Archaeological Resources

Alternative 2A would avoid the Lincoln Home National Historic District; therefore, the Springfield Project would not impact any known archaeological sites. New right-of-way would be subjected to a Phase I archaeological survey to identify potentially significant archaeological resources. Potentially significant archaeological resources could be found associated with the former coal-mining communities of Starne and Iles Junction, the rail yard and shops of the Great Western Depot/Wabash Railroad, as well as pre-Civil War domestic neighborhoods of downtown Springfield including the Springfield Furniture Factory. The evaluation of potential impacts to unknown archaeological resources within the Springfield Rail Improvements Project area would require continued coordination with the Illinois Historic Preservation Agency (IHPA) under the requirements of Section 106 of the Historic Preservation Act of 1966. Further Section 106 coordination will continue with the IHPA as a commitment of this ROD.

## 6.4 Air Quality

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### 6.4.1 Conformity

All areas of Sangamon County affected by the Springfield Project are classified as attainment areas for the six criteria air pollutants which include carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), ozone (O<sub>3</sub>), and sulfur dioxide (SO<sub>2</sub>). Accordingly, a conformity determination of the Springfield Project's capacity to cause or exacerbate exceedances of the National Ambient Air Quality Standards (NAAQS) is not required.

### 6.4.2 Construction Impacts

Potential impacts to local air quality during construction of the Selected Alternative are possible. Potential impacts include fugitive dust emissions, direct emissions from construction equipment and truck exhausts, increased emissions and dust from construction vehicles on the streets, and emissions from re-routed vehicular traffic. Fugitive dust emissions vary with the nature of the operations and the dust control methods employed. Fugitive dust generated during construction generally consists of large-sized particulates that settle on nearby buildings and vehicles. People near a construction site would be exposed to higher than average amounts of inhalable particulates. However, the impacts associated with construction activities are normally negligible, local, and temporary.

IDOT's Standard Specifications for Road and Bridge Construction include provisions on dust control. Under these provisions, dust, and airborne dirt generated by construction activities would be handled through dust-control procedures or a specific dust-control plan, when warranted. The contractor and IDOT would meet to review the nature and extent of dust-generating activities and would cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby

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publicly traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, the Springfield Project would not cause any notable, short-term particulate matter air quality impact.

## 6.5 Noise/Vibration

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In accordance with Federal Transit Administration (FTA) and FRA guidelines, a noise and vibration impact assessment was conducted for the Selected Alternative.

### 6.5.1 Noise Impact Assessment

For Alternative 2A, future noise levels do not include horn noise because IDOT and the City of Springfield would establish a quiet zone. The grade separations and grade crossing improvements included in Alternative 2A allow quiet zones to be established. No noise impacts would occur at institutional receivers with Alternative 2A.

With Alternative 2A there would be nine severe noise impacts and nine moderate noise impacts at residential locations along the Springfield Project. These noise impacts are limited to one area as shown in Exhibit A-1I (see Appendix A). The noise impacts are located in the southern portion of the study area near the intersection of the NS tracks and the existing UP tracks.

The noise impacts would result from the projected additional UP and NS trains in the 10<sup>th</sup> Street corridor in an area where streets crossing the tracks are grade separated, so existing trains do not sound their horns. Thus, the increase in the number of trains in the 10<sup>th</sup> Street corridor would be the primary factor in the change in noise levels.

Overall, noise impacts would be reduced throughout the rail corridor of the recommended alternatives because of the proposed quiet zone. The Selected Alternative would eliminate train horns from being sounded throughout Springfield on all three rail corridors. This would have a positive effect on residents who live and work along the 10<sup>th</sup> Street corridor. City-wide residents also would benefit from the proposed action—even with an increase in the overall number of trains.

### 6.5.2 Vibrations Impact Assessment

The results of the vibration impact assessment for the Selected Alternative indicates that there would be 129 impacts at residential (Category 2) locations and two impacts at institutional (Category 3) locations. The vibration impacts would be on the 10th Street corridor, the new UP tracks between Phillips Street and Ridgely Avenue, and on the new double-track portion of the UP north of Ridgely Avenue. The vibration impacts along the 10th Street corridor would result from the new tracks and the increase in train traffic along the corridor. The impacts between Phillips Street and Ridgely Avenue

would result from the introduction of the new UP tracks in this location. The vibration impacts on the existing UP corridor north of Ridgely Avenue would result from the changes in the tracks and the presence of a number of crossovers. Vibration impacts also would occur at the Caritas Hall Association and the Great Western Railroad Depot. The Great Western Railroad Depot currently experiences vibration impacts with existing rail traffic, and the proposed Springfield Project would reduce vibration levels from the No-Build condition. All vibration impacts are limited to human annoyance, and the projected vibration levels are below the criteria for potential damage to any building structures.

No vibration impacts would occur on the section of the NS track north of Phillips Street, or on the CN or I&M tracks because there would be no change in the vibration levels in those locations with Alternative 2A. Future operations would be on the existing tracks with no change in speed. Therefore, there would not be any change in the ground-borne vibration levels at sensitive receptors adjacent to these portions of Alternative 2A.

### **6.5.3 Train Noise and Vibration Mitigation Measures**

The Selected Alternative 2A would reduce existing noise and vibration levels along 3rd Street and avoid vibration impacts at sensitive receptors including the historic Dana Thomas House, and Memorial Medical Center, Springfield Clinic, and the proposed Medical District expansion between Memorial Medical Center and St. John's Hospital.

Quiet zones are proposed to be established throughout the Springfield Rail Improvements Project area and IDOT will work with the City of Springfield to assure that appropriate quiet zones are established. Train horns sounded near at-grade crossings are the major noise source in the Springfield Project area. Quiet zones would eliminate this major noise source from freight and passenger train activities throughout the Springfield Project area. For the 18 moderate and severe noise impacts still remaining in the Selected Alternative, payments for noise easements will be required since other noise mitigation forms are too costly and impracticable unless IDOT proposes and FRA concurs with alternative arrangements to mitigate impacts.

There are several approaches to reduce ground-borne vibration from train operations outlined in Section 5.8.4.2 of Volume II. IDOT in coordination with UP, shall conduct a detail vibration assessment to identify specific mitigation measures reducing vibration from train operations during further development of the Springfield Rail Improvements Project. A vibration mitigation plan for the Springfield Project, including specific measures, agreed to by IDOT and UP is required prior to any FRA commitment to implement the Springfield Project.

### **6.5.4 Construction Noise Mitigation Measures**

Temporary noise during construction has the potential of being intrusive to residents near the construction sites. Construction activities would be carried out in compliance

with all applicable local noise regulations. In addition, specific residential property line noise limits would be developed during final design and included in the construction specifications for the Springfield Project, and noise monitoring would be performed during construction to verify compliance with the limits. This approach allows the contractor flexibility to meet the noise limits in the most efficient and cost-effective manner. Noise control measures that would be applied as needed to meet the noise limits include the following:

- Avoiding nighttime construction in residential neighborhoods.
- Using specially quieted equipment with enclosed engines and/or high-performance mufflers.
- Locating stationary construction equipment as far as possible from noise-sensitive sites.
- Constructing noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise-sensitive receivers.
- Re-routing construction-related truck traffic along roadways that would cause the least disturbance to residents.

## 6.6 Floodplains

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Based on the floodplain mapping maintained by the Federal Emergency Management Agency, no work would be performed below the 100-year flood elevation, and as a result the Springfield Project would not encroach upon any base floodplain. Therefore, there would be no impacts to floodplains, and no floodplain map revisions would be required. Alternative 2A would not result in any significant adverse impact on natural and beneficial floodplain values; any significant change in flood risks or damage; or significant potential for interruption or termination of emergency service or emergency evacuation routes.

## 6.7 Wetlands

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Based on the wetlands reconnaissance survey and the National Wetland Inventory mapping, Alternative 2A did not affect any wetlands regulated under the Clean Water Act of 1972.

## 6.8 Special Waste

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The USEPA listing of potential, suspected, and known hazardous waste or hazardous substances sites in the Springfield Project area (i.e., the Comprehensive Environmental Response Compensation and Liability Information System of CERCLIS list) was reviewed on February 10, 2012, to ascertain whether the proposed Springfield Rail Improvements Project would involve any listed sites. Based on this review, the proposed improvements associated with the Springfield Project would require right-of-way from

one listed CERCLIS site, the Springfield Iron Company at the northeast corner of the intersection of Ridgely Avenue and Factory Street (see Exhibit A-1B in Appendix A). Another CERCLIS site, Nutronics, Inc., located at 1703 Peoria Road, would be within one block of the proposed improvements.

Rail construction may encounter petroleum-contaminated soils at several locations within the Springfield Project area. Construction activities may require coordination with the responsible parties of the CERCLIS and LUST sites and other reported sites concerning the disposal of excavated materials (see Appendix A, Exhibits A-1A to A-1J for LUST site locations). These sites are not anticipated to present significant impairments to rail improvements associated with the construction of Alternative 2A. A Preliminary Environmental Site Assessment (PESA) for special waste is recommended prior to construction to determine risks and liabilities prior to land acquisition and construction activities.

## 6.9 Section 4(f)/6(f) and Parklands

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The proposed action is adjacent to three Section 4(f) properties. These properties include 11th and Black Park, Iles Park, and Lanphier Park (see Exhibits A-1 and A-2 in Appendix A). There are also three historic properties adjacent to the proposed rail right-of-way.

These properties also include the Lincoln Home, Lincoln Colored Home, Springfield Furniture Factory, Great Western Railroad Depot, and the Mine Rescue Station. No right-of-way will be purchased from any of these properties and there is no noise, vibration or aesthetic impacts resulting in a constructive use; therefore, these properties do no result in any Section 4(f) uses.

## 6.10 Irreversible and Irretrievable Commitments of Resources

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Irreversible resource commitments represent a loss of future options. It applies primarily to the use of nonrenewable resources, such as cultural resources or fossil fuels, and to factors that are renewable only over long time spans. An irretrievable commitment of resources represents opportunities that are foregone for the period of the proposed action. It relates to the use of renewable resources, such as timber or human effort, as well as other utilization opportunities that are foregone in favor of the proposed action.

Implementation of the proposed action would result in the irreversible and irretrievable commitment of natural and man-made resources to the construction and operation of the proposed action. The primary commitment of resources would come from the construction phase, but there would be some commitment of resources for operation of the rail line. In general, the commitment of resources would be common for all of the build alternatives.

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Alternative 2A would result in the irreversible and irretrievable commitment of construction materials, such as steel, concrete, ballast rock, and wood. Though largely irretrievable, these resources are not in short supply and many of the materials could be recycled for other projects when they no longer meet the design needs of the passenger or freight rail service. In addition, energy resources (fuel) and financial resources would be committed to the Springfield Project for construction, operation, and maintenance. Some land for additional right-of-way would also be irretrievably and irreversibly committed for conversion to the railroad.

Human effort would be irretrievably committed during the planning, construction, and operation phases of the Springfield Project. The commitment of time and available labor in the construction of the proposed action would also represent an irretrievable commitment of resources.

## 6.11 Mitigation

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Table 5-2 summarizes adopted mitigation actions as they apply to each resource.

**Table 5-2. Mitigation Actions**

| <b>Resource Impacted</b>                                    | <b>Mitigation</b>  |
|---|--|
| Land Use  | IDOT would implement the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (42 USC 4601 et seq.), as amended, and the U.S. Department of Transportation implementing regulations. IDOT would implement the provisions of the State of Illinois Relocation Assistance Plan in accordance with the Uniform Act.   |
| Socio-economics and Environmental Justice Community Impacts | Any adverse impacts of the proposed Springfield Project would not be disproportionately borne by minority or low-income populations yielding no need for mitigation action. Benefits from the Springfield Project center on increased safety, reduced delays and general noise reduction city-wide. Police, fire, and emergency response times may be temporarily affected during construction. IDOT coordination with public response agencies serving the Springfield Project area would continue during construction to avoid and minimize disruptions to emergency response. Safety would also increase for vehicular and pedestrian traffic from proposed improvements to at-grade crossings. |





| Resource Impacted                                  | Mitigation  |
|--|---|
| Cultural Resources                                 | The Section 106 process would continue with an evaluation of potential impacts to unknown archaeological resources within the Springfield Project area and continued coordination with the Illinois Historic Preservation Agency (IHPA) under the requirements of Section 106 of the Historic Preservation Act of 1966. Further Section 106 coordination will continue with the IHPA as a commitment of this ROD.   |
| Air Quality/Construction Noise Mitigation Measures | IDOT's Standard Specification on dust control would be implemented during construction to limit dust emissions during construction. Noise control measures that would be applied by IDOT and UP as needed to meet the noise limits include the following: Avoiding nighttime construction in residential neighborhoods; using specially quieted equipment with enclosed engines and/or high-performance mufflers; locating stationary construction equipment as far as possible from noise-sensitive sites; constructing noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise-sensitive receivers; re-routing construction-related truck traffic along roadways that would cause the least disturbance to residents.                  |
| Noise and Vibration                                | Quiet zones would be created throughout the City on all rail corridors traversing the City. IDOT will work with the City to assure that these quiet zones are established. Noise easements are recommended to be purchased for moderate and severe receptors unless IDOT proposes and FRA concurs with alternative arrangements to mitigate impacts. IDOT in coordination with UP, shall conduct a detail vibration assessment and to identify specific mitigation measures to reduce vibration from train operations during further development of the Springfield Rail Improvements Project. A vibration mitigation plan for the Springfield Project, including specific measures, agreed to by IDOT and UP is required prior to any FRA commitment to implement the Springfield Project. |
| Water Quality/Resources                            | Best Management Practices would be utilized by IDOT and UP to protect water quality. Almost all runoff from construction would be diverted directly into the City's combined sewer system during and after construction and treated by the Springfield Metro Sanitary District.   |
| Visual and Aesthetic Quality                       | Views of trains and new rail lines would be considered a minor adverse visual impact. IDOT would determine potential ways to help reduce minor impacts, such as planting vegetation screens or providing aesthetically pleasing features as part of the design.   |





| Resource Impacted               | Mitigation  |
|---------------------------------|---|
| Special Waste                   | Construction activities associated with construction of Alternative 2A may require additional coordination with responsible parties for CERCLIS and LUST, and other reported sites concerning the disposal of excavated materials. A Preliminary Environmental Site Assessment (PESA) for special waste is recommended prior to construction to |
| Section 4(f)/6(f) and Parklands | No right-of-way will be purchased from any of the Section 4(f)/6(f) and Parklands properties and there is no noise, vibration or aesthetic impacts resulting in a constructive use; therefore, these properties do no result in any Section 4(f) uses.  |

## 7.0 Summary of Comments on the Springfield Rail Improvements Project

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During the 30 day waiting period following the publication of the Final EIS, FRA received letters from the Illinois State Historic Preservation Office, Illinois and US EPA outlining future coordination and permitting requirements. The letters are attached in Appendix A:

- The Illinois State Historic Preservation Office concurrence with the FRA's *No Effect* determination was received on November 1, 2012.
- IL EPA letter was received on November 16, 2012; the agency has no objections to the Project, however, a stormwater permit will be required if one or more acres is disturbed during future construction activities, and hazardous materials if encountered, will need to be properly disposed of or recycled.
- US EPA letter was received on December 10, 2012; the agency appreciates acknowledgement of their comments on the Draft EIS and commends the Final EIS for improvements to the following sections; Purpose and Need; Alternatives; Environmental Impacts; Threatened and Endangered Species; Migratory Birds; Environmental Justice; Noise Receptors; Water Crossings; and Cumulative Impacts. The US EPA also commends the Preferred Alternative selection for the Springfield Project, and the agency looks forward to future coordination with the FRA and IDOT.

## 8.0 Corrections to the Final Springfield Rail Improvements Project

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There are no changes to the Final EIS.

## 9.0 Decision

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### 9.1 Basis for Decision

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IDOT proposes to implement high-speed passenger rail service between Chicago and St. Louis. The purpose of the Chicago to St. Louis High-Speed Rail Corridor Program is to offer a safe, reliable alternative to automobile and air travel between Chicago and St. Louis using proven rail technology. Currently, the overwhelming majority of travelers travel by automobile on Interstate 55, contributing to substantial safety and congestion concerns on that roadway and in adjacent communities. Projected travel demand on I-55 is expected to continue to increase commensurate with projected population growth in Illinois. Implementation of that program will help address these needs.

The Selected Alternative identified in this ROD is composed of passenger and freight rail relocation and grade separations in the City of Springfield, and is a component of the Chicago to St. Louis high-speed passenger rail program. Section 4.3 of this ROD articulates in detail the considerations and factors balanced by FRA in arriving at this decision.

FRA, in accordance with NEPA, CEQ's NEPA implementing regulations (40 CFR Part 1500), and FRA's Procedures for Considering Environmental Impacts, finds that the requirements of NEPA have been satisfied for the Tier 2 analysis of the Springfield Rail Improvements Project.

The environmental record for the Tier 2 Springfield Rail Improvements Project includes the Draft EIS (June 2012), the Final EIS (December 2012), and this ROD, which includes comments from the circulation of the Final EIS. These documents represent the detailed analysis and findings required by NEPA on:

- The environmental impacts of the proposed Springfield Project
- Alternatives to the proposed Springfield Project
- Irreversible and irretrievable impacts on the environment which may be involved in the proposed Springfield Project should it be implemented.

On the basis of the evaluation of social, economic, and environmental impacts contained in the Draft EIS and Final EIS, as well as the written and oral comments offered by the public and by other agencies, FRA determines that:

- Adequate opportunity was afforded for the presentation of views by all parties with a significant economic, social, or environmental interest, and fair consideration was given to the preservation and enhancement of the environment and to the interest of the communities in which the proposed Springfield Rail Improvements Project is located; and

- All reasonable steps were taken to minimize adverse environmental effects of the proposed Springfield Project, and where adverse environmental effects remain, they have been fully reported in the Draft EIS and Final EIS.

The extensive opportunities provided for public and other stakeholder involvement in planning and decision-making are described in the Final EIS. The reasonable steps to minimize adverse environmental effects are described in the Final EIS and are detailed as Springfield Project commitments in this ROD.

## 9.2 Section 4(f)

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Section 4(f) of the Department of Transportation Act of 1966 declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation land, wildlife and waterfowl refuges, and historic sites.” Section 4(f) states that the Secretary of Transportation “may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible avoidance alternative to the use of the land from the Section 4(f) property; and
- the program or project includes all possible planning to minimize harm to the Section 4(f) property resulting from the use.”

In the Final EIS, IDOT evaluated Section 4(f) in compliance with all requirements of Section 4(f) as well as FRA’s Procedures for Considering Environmental Impacts.

The Selected Springfield Project Alternative avoids any use of Section 4(f) properties. Based upon this evaluation, FRA concludes that the Springfield Project is consistent with the requirements of Section 4(f).

## 9.3 Wetlands Finding

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Presidential Executive Order 11990, “Protection of wetlands,” directs federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.

Construction of the Springfield Rail Improvements Project would not traverse, modify, or destroy any wetlands. Based upon these findings, FRA determines that the Springfield Project complies with requirements of Executive Order 11990.

## 9.4 Floodplains and Floodways Finding

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DOT Order 5620.2 implements Executive Order 11988, Floodplain Management and Protection. These orders state that FRA may not approve an alternative involving a significant encroachment unless FRA can make a finding that the proposed encroachment is the only practicable alternative. The major purposes of Executive Order 11988 are to avoid Federal support for floodplain development; to prevent uneconomic, hazardous, or incompatible use of floodplains; to restore and preserve the natural and beneficial floodplain values; and to be consistent with the standards and criteria of the National Floodplain Insurance Program.

FRA concludes that the Springfield Project will not result in any substantial adverse impact on natural and beneficial values of the floodplains, will not result in a substantial change in flood risks or damage, and will not have a substantial potential for interruption or termination of emergency service and evacuation routes. Based upon these findings, FRA determines that the Springfield Project complies with requirements of Executive Order 11988.

## 9.5 Environmental Justice Finding

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Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that each Federal Agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The Final Department of Transportation (DOT) Order to Address Environmental Justice in Minority Populations (DOT Order 5610.2(a) (May 2, 2012)) imposes similar obligations on DOT operating administrations to promote the principles of Executive Order 12898 and incorporate such principles in all programs, policies, and activities including the NEPA process.

The majority of the Springfield Project would be within or adjacent to an existing transportation corridor therefore the benefits to communities of concern in the Springfield Project area were determined to outweigh the adverse effects to these communities, no disproportionately high and adverse human health and environmental effects are anticipated to result from implementation of the Springfield Project.

Positive impacts to Springfield, the communities of concern and neighborhoods would result from the elimination of 32 at-grade crossings, improvements to remaining at grade crossings, and the elimination of train horn blowing. Benefits from these actions center on increased safety, reduced delays and general noise reduction city-wide. New grade separations would increase safety not only for vehicular traffic but also pedestrians traveling across these railroad crossing locations. Safety would also increase for vehicular and pedestrian traffic from proposed improvements to at-grade crossings

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remaining along the 10th and 19th Street Corridors. The proposed at-grade crossing treatments would support elimination of blaring noise from train horns traveling through Springfield's communities. Based upon these findings, FRA determines that the Springfield Project complies with requirements of Executive Order 12898.



## 10.0 Conclusion

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FRA has reached a decision based on the evaluation of the Springfield Rail Improvements Project contained in Volume II of the Chicago to St. Louis High-Speed Rail Corridor Program Draft EIS and Final EIS. FRA approves the Springfield Rail Improvements Project and identified Alternative 2A as the Selected Alternative in this ROD. FRA has selected this alternative because the alternative: 1) best satisfies the Purpose and Need for the proposed action; 2) minimizes impacts to the natural and human environment by utilizing an existing transportation corridor where practicable and incorporating other mitigation measures. Accordingly, this alternative has been selected based on processes in compliance with NEPA and other applicable requirements, and may be advanced.



Joseph C. Szabo  
Administrator  
Federal Railroad Administration

Date: 12/18/12

Attachments