Final
Environmental Impact Statement

Chicago - St. Louis
High-Speed Rail Project

PREPARED BY

THE U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL RAILROAD ADMINISTRATION
AND
ILLINOIS DEPARTMENT OF TRANSPORTATION

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FEDERAL HIGHWAY ADMINISTRATION

Chicago - St. Louis High-Speed Rail Project
from Chicago to St. Louis
in Cook, Will, Kankakee, Grundy, Livingston, McLean, Logan, Sangamon, Macoupin,
Jersey, Madison, and St. Clair Counties, Illinois, and St. Louis County, Missouri

Final Environmental Impact Statement

Submitted Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303
by the
U.S. Department of Transportation
Federal Highway Administration
Federal Railroad Administration
and
Illinois Department of Transportation

Cooperating Agency:
U.S. Coast Guard, Eighth District

JAN 1 6 2003
Date of Approval

for FHWA Division Administrator

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Date of Approval

for FRA Administrator

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for IDOT

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This Final Environmental Impact Statement (EIS) summarizes information presented in the Draft EIS, responds to agency and public comments received on the Draft EIS and at the Public Hearings held in July/August 2000, and describes the Preferred Alternative and other alternatives considered for providing High-Speed Rail (HSR) service in the 450-kilometer (280-mile) Chicago-St. Louis corridor. The proposed action would help provide a more balanced use of the passenger transportation network in the corridor, resulting in benefits to the human environment. Important socioeconomic and environmental issues include impacts associated with grade crossing treatments and fencing and impacts to wetlands and native prairie remnants.

The Preferred Alternative selected includes provision of high-speed rail service along the current Chicago - St. Louis Amtrak route. In the Draft EIS, three alternative alignments were evaluated between Chicago and Dwight. However, as a result of funding constraints and other uncertainties, an alignment was not selected through this area, and the current Amtrak route will be used. No action is proposed north of Dwight. Through this area, maximum operating speeds will not exceed the existing maximum speed of 79 mph (127 kph), no physical improvements will be made, and no additional trains will be operated. The proposed service consists of three round trips per day with a maximum operating speed of 79 mph (127 kph) north of Dwight and 110 mph (177 kph) south of Dwight.

Comments on this Final Environmental Impact Statement should be received by MAR 1 0 2003 and should be sent to Mr. John Schwalbach at the above address.

Summary

SUMMARY

S.1 PROPOSED ACTION

The proposed action will provide High-Speed Rail (HSR) passenger service between Chicago and St. Louis. South of Dwight, maximum operating speed will be 110 mph (177 kph). North of Dwight, the existing maximum operating speed of 79 mph (127 kph) will be maintained. In the Draft Environmental Impact Statement (EIS), three alternative alignments were evaluated between Chicago and Dwight. (See Figure S-1.) However, as a result of funding constraints and other uncertainties, an alignment was not selected through this area, and the current Amtrak route will be used. No physical improvements and no changes in operating characteristics (i.e., number and speed of trains) will be made north of Dwight.

Initially, HSR service will consist of three round trips per day, with estimated one-way end-to-end travel times between four hours and four hours and 30 minutes. HSR trains will stop at all of the stations currently served by the existing Chicago - St. Louis Amtrak route (i.e., Chicago Union Station, Summit, Joliet, Dwight, Pontiac, Bloomington/Normal, Lincoln, Springfield, Carlinville, Alton, and St. Louis). Prior to expanding service beyond three round trips per day, it will be necessary to select an alternative alignment between Chicago and Dwight. As part of this selection and service enhancement, supplemental environmental documentation will be prepared, and an operational review will be conducted.

Existing track will be utilized for the proposed action throughout the project area. However, provision of HSR service will require construction of 20 kilometers (12 miles) of double track; 35 kilometers (22 miles) of freight siding; and one grade-separated highway-railroad grade crossing; and installation of enhanced warning devices at 174 grade crossings.

The Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA) are joint lead agencies for preparation of the documentation required by the National Environmental Policy Act (NEPA) of 1969 and related statutes. The responsibility for direct oversight of the environmental studies and preparation of appropriate documentation was undertaken by FHWA's Illinois Division, acting on behalf of FHWA and FRA. The FHWA has determined that the utilization of federal funds for this project will constitute a "major Federal action" according to NEPA. As such, this document has been prepared pursuant to 23 CFR Part 771 (Environmental Impact and Related Procedures).

S.2 ALTERNATIVES EVALUATED IN THE DRAFT EIS

The alternatives selected for evaluation in the Draft EIS were: 1) the No-Build Alternative consisting of the continuation of existing Amtrak service in the project area, and 2) the High-Speed Rail Alternative.

S.2.1 No-Build Alternative

The No-Build Alternative is a continuation of existing Amtrak service. Passenger service would operate on the current Chicago - St. Louis Amtrak route between Union Station in Chicago and the Amtrak Station

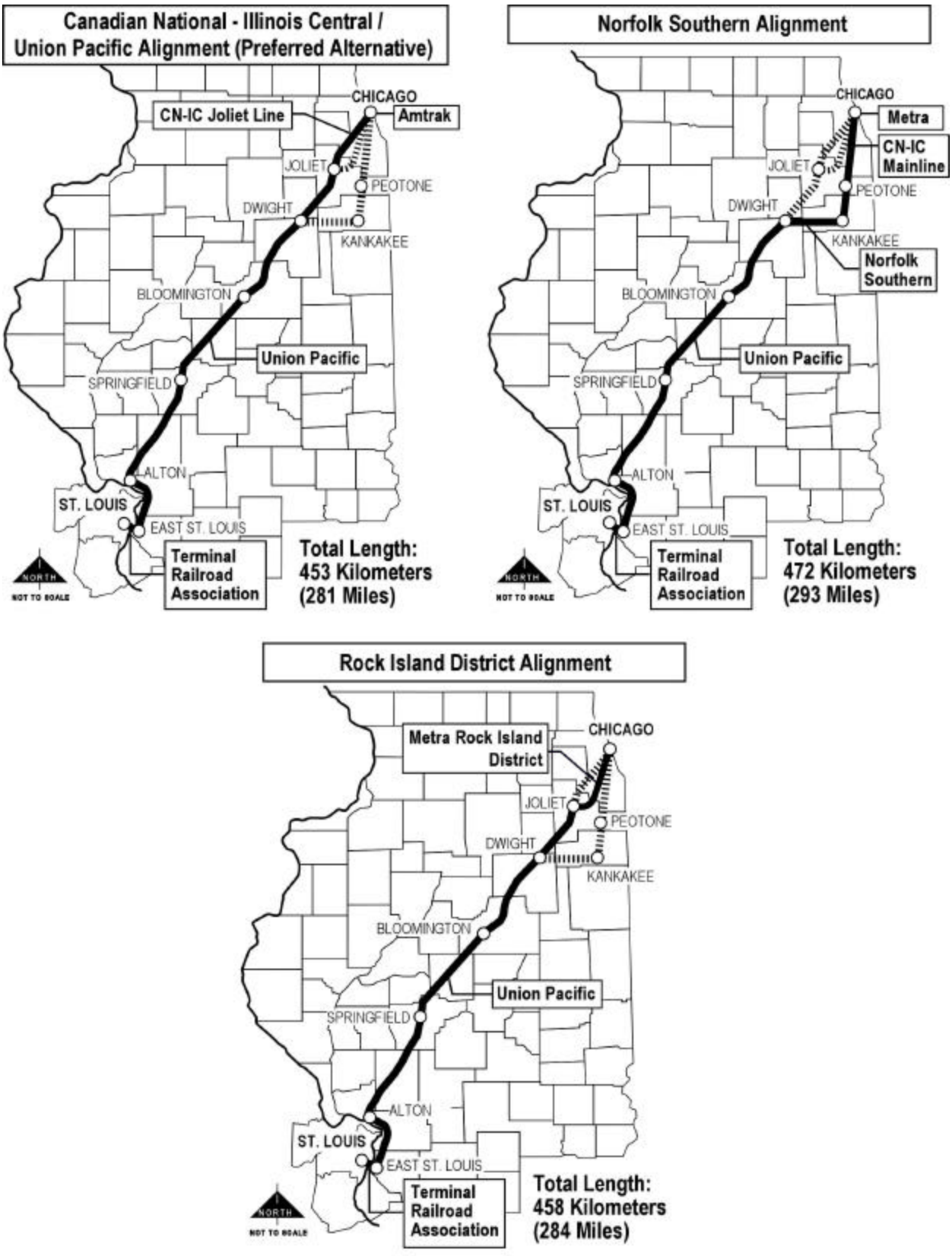

FIGURE S-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ALIGNMENTS EVALUATED IN THE DRAFT EIS

in St. Louis. Service between Chicago and St. Louis would consist of three daily round trips with scheduled one-way trip times of between five hours and 25 minutes and five hours and 40 minutes. No changes in station stops, equipment, or grade crossing treatments would occur with this alternative. Additionally, only regular maintenance and rehabilitation would occur in the project area. No new construction or additional right-of-way would be required.

This alternative will not meet the purpose and need of the project since it will not enhance the passenger transportation network in the Chicago - St. Louis corridor.

S.2.2 High-Speed Rail Alternative

High-Speed Rail passenger service was evaluated in the Draft EIS as an alternative to current Amtrak service that would address the existing rail passenger service problems in the corridor and that would serve as a more viable alternative to intercity automobile, air, and bus travel between Chicago and St. Louis. This alternative would help provide a more balanced use of the passenger transportation network in the corridor, resulting in benefits to the human environment. These benefits to the human environment include reductions in volatile organic compound and carbon monoxide emissions and energy consumption associated with intercity travel in the Chicago - St. Louis HSR corridor.

The HSR Alternative evaluated in the Draft EIS consisted of provision of passenger service between Chicago and St. Louis, operating at top speeds of 110 mph (180 kph) through most of the project area, except for a 29-kilometer (18-mile) segment between Lincoln and Springfield where 125 mph (200 kph) would be achieved. Service would consist of eight round trips per day, with one-way end-to-end travel times of approximately 3.5 hours.

Between Chicago and Dwight, three alternative alignments were evaluated. One of the alignments — the Canadian National-Illinois Central/Union Pacific — is the current Amtrak route. Another would utilize Canadian National-Illinois Central mainline and Norfolk Southern (formerly Conrail) track via Kankakee to provide a better route of entry into Chicago and would provide access to the proposed South Suburban Airport site in Peotone. This alignment is referred to as the Norfolk Southern alignment. The third alignment, referred to as the Rock Island District alignment, would utilize Metra Rock Island District track between Chicago and Joliet and Union Pacific track between Joliet and Dwight. South of Dwight, one alternative alignment was evaluated. The alignment matches the existing Amtrak route between Dwight and St. Louis. Figure S-1 shows the three Chicago - St. Louis alignments evaluated.

As part of the High-Speed Rail Alternative, double track and freight siding, grade crossing treatment, station, and equipment options were also evaluated.

S.3 SELECTION OF THE PREFERRED ALTERNATIVE

As demonstrated in the Draft EIS, implementation of high-speed rail service will meet the purpose and need defined for this project. This fact, coupled with the consideration of public and resource agency comment on the Draft EIS, led to the determination that the overall benefits of providing HSR service outweigh the potential environmental impacts and that HSR service should be provided in the Chicago - St. Louis corridor to the extent practicable. However, an alignment could not be selected between Chicago and Dwight. There were several reasons the selection of an alignment through this area had to be postponed. First, funding is not currently committed for improvements through this area. Second, there are several other on-going projects

between Chicago and Dwight that could influence the selection of an alternative alignment. Some of these projects include:

- the South Suburban Airport in Peotone;
- the reinstitution of the Grand Crossing, which would provide the Norfolk Southern alignment access to Union Station; and
- the switching of Southwest Metra service to Rock Island District track near 79th Street.

Final decisions on how these projects will proceed have not been made. Therefore, since funding is not committed, it was decided that selection of an alternative alignment between Chicago and Dwight would not be prudent at this time.

Therefore, the Preferred Alternative selected for this project, as described in Section S.1, consists of a continuation of existing service between Chicago and Dwight and provision of high-speed rail service between Dwight and St. Louis. This combined alternative is entitled the Modified No-Build Alternative. Even though the improvements associated with provision of HSR service have been reduced from those presented in the Draft EIS, the Preferred Alternative will address the three needs identified for this project.

S.4 SUMMARY OF IMPACTS

The following is a summary of the impacts associated with the Preferred Alternative. A more detailed description of the alternative impacts evaluated and proposed mitigation is provided in Section 5. Figures S-2A through S-2C depict the environmental constraints identified in the HSR project area. A summary of the impacts identified for the Preferred Alternative is presented in Table S-1.

S.4.1 Social/Economic

The Preferred Alternative will require the acquisition of 0.2 hectares (0.4 acres) of commercial property at Pontoon Road (MP 272.70), where a grade separation is proposed. This improvement will also result in the displacement of one commercial outbuilding. Just compensation will be provided for the property acquisition that will be required. The Bureau of Land Acquisition of the Illinois Department of Transportation (IDOT) will determine the fair market value.

S.4.2 Water Resources

Short-term impacts to water quality and aquatic biota could occur with the Preferred Alternative. Twenty-eight streams and small tributaries could be affected. To minimize potential impact, erosion, sedimentation and bank stabilization measures will be employed, consistent with IDOT's Bureau of Design and Environment Manual, and Procedure Memorandum 25-01.

S.4.3 Wetlands

The Preferred Alternative will require the loss of 0.36 hectares (0.89 acres) of wetland. Wetland impacts will be mitigated through a wetland mitigation plan approved by the Illinois Department of Natural Resources.

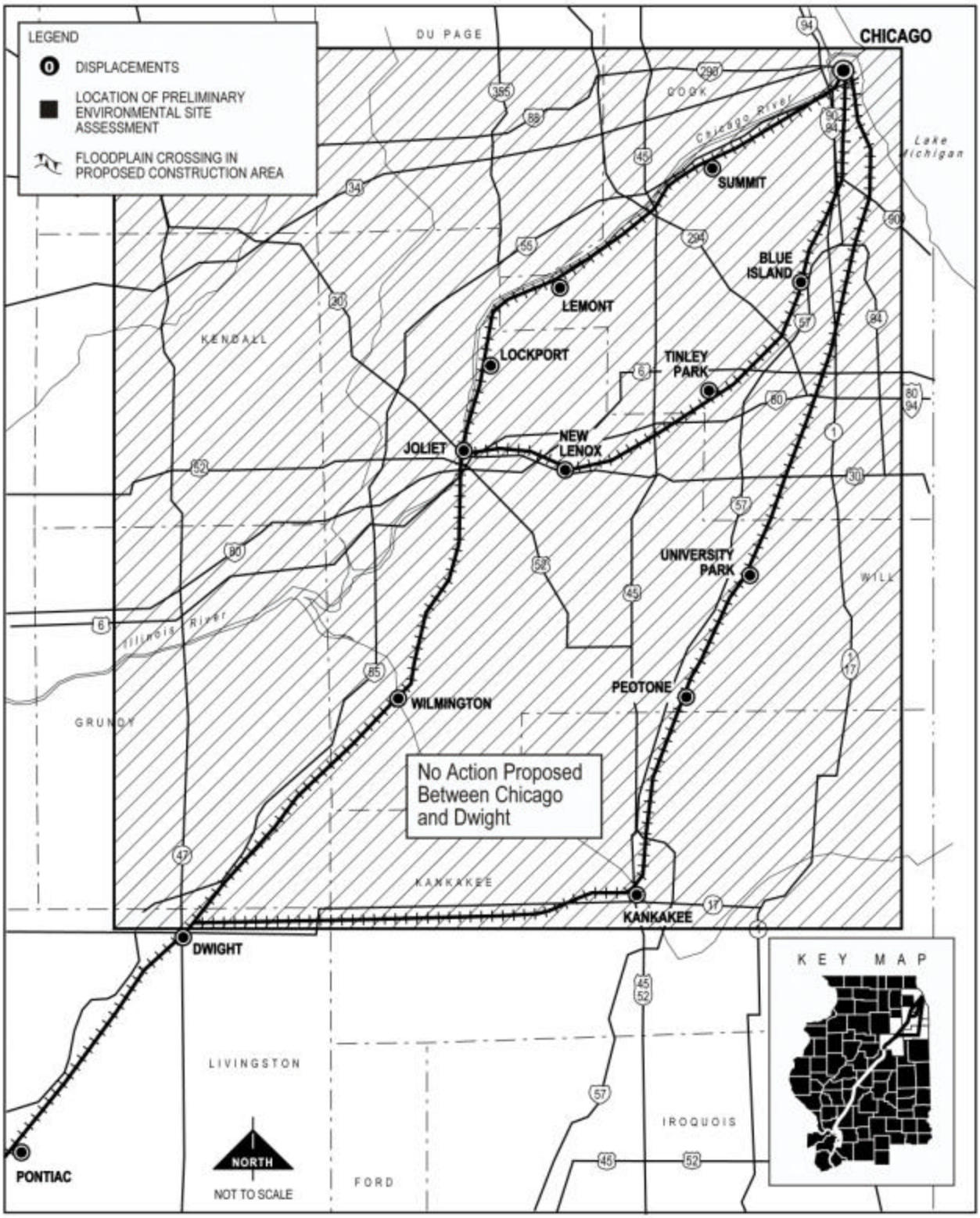

FIGURE S-2A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Chicago to Pontiac)

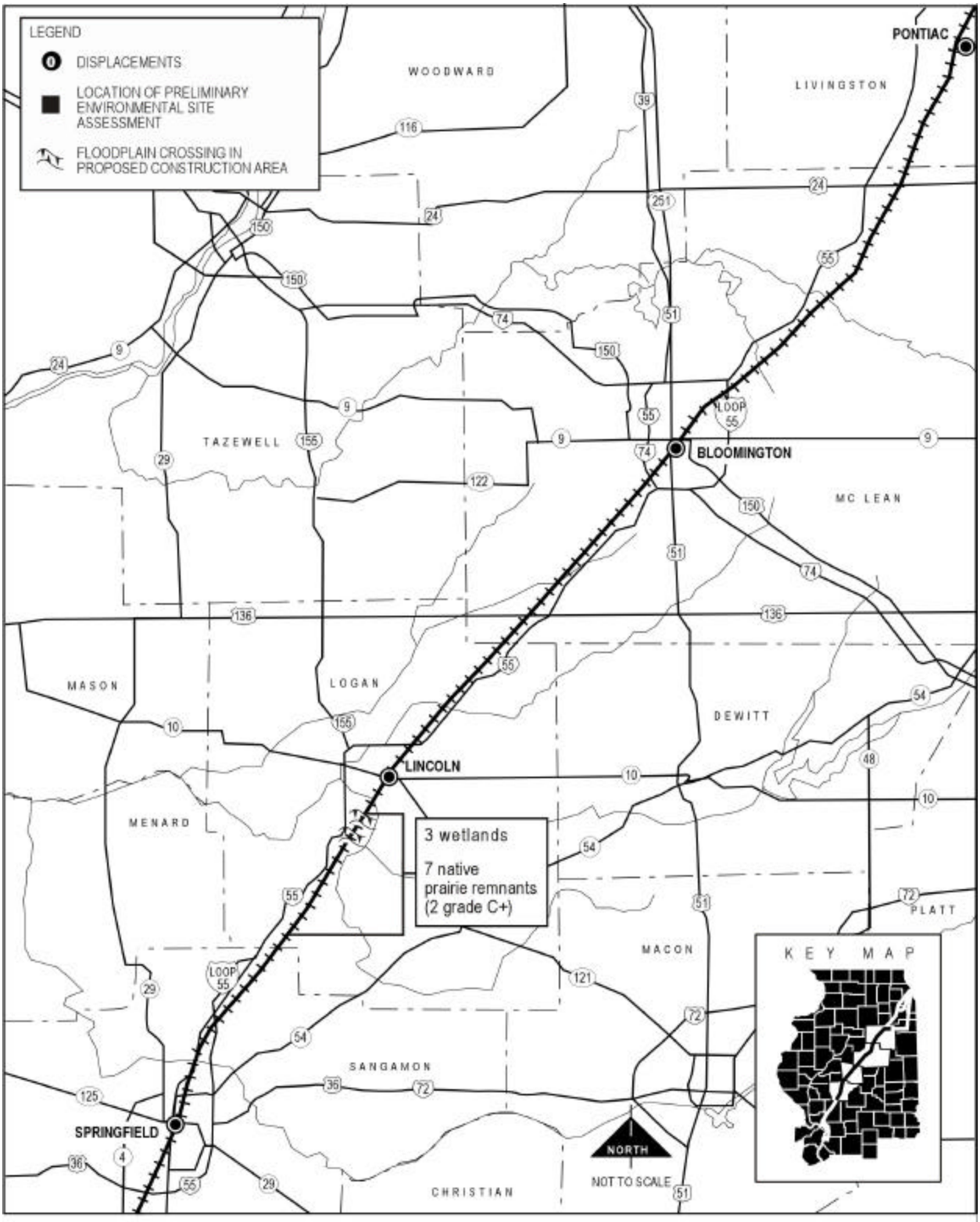

FIGURE S-2B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Pontiac to Springfield)

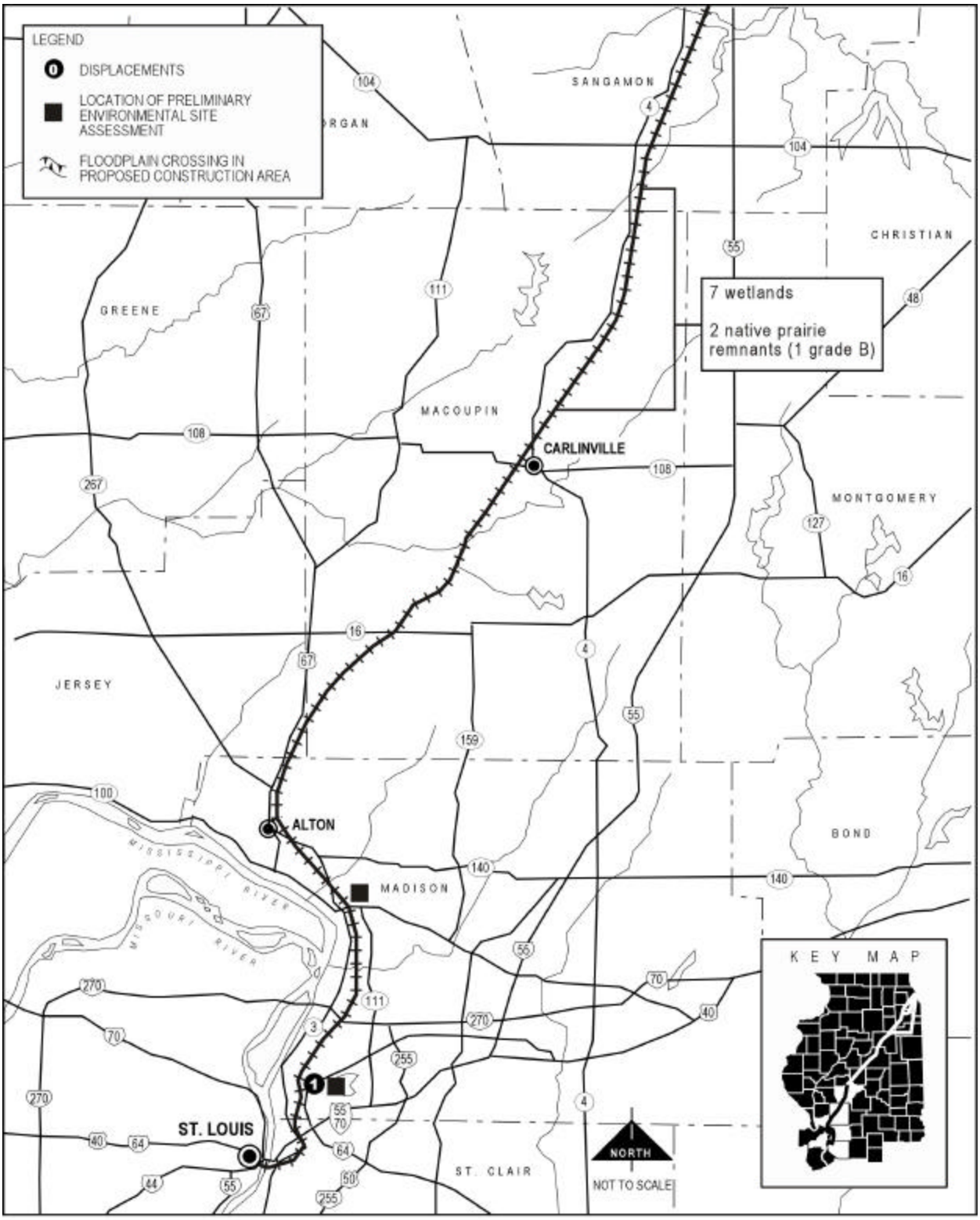

FIGURE S-2C
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Springfield to St. Louis)

Table S-1
SUMMARY OF IMPACTS

	Preferred Alternative	Comparable Alternative from the Draft EIS
Right-of-Way Acquisition – Hectares (Acres)		
Direct Conversion	<1 (<1)	49 (121)
Agricultural	0	31 (76)
Prime Farmland	0	32 (79)
Displacements (Number)		
Residential	0	11
Commercial	0	1
Institutional	0	1
Other Structures	1	1
Noise Impacts (Number of Receptors)	0	0
Stream and Tributary Crossings (Number)	28	56
Wetland Impacts – Hectares (Acres)		
Impacts	<1 (1)	6 (15)
Mitigation Required	<1 (2)	25 (62)
Natural Resource Impacts – Hectares (Acres)		
All Upland Vegetation	34 (85)	95 (234)
Native Vegetation (All)	<1 (<1)	2 (4)
Native Vegetation (Grade C+ or higher)	<1 (<1)	1 (2)
Floodplains (Projects with floodplain crossings)	1	6
Cultural Resources (Number)		
Above-ground Resources	0	0
Archaeological Resources	0	0
Forest Preserves and Parks (Number)	0	0
Undetermined Waste Sites (Number)	2	5
Highway-Railroad Grade Crossings (Number)		
Existing	322	322
Proposed for Closure – Pedestrian	14	17
Proposed for Closure – Vehicular	10	68

Note: For comparison purposes, the impacts associated with the High-Speed Rail Alternative (CN-IC/UP alternative alignment) as evaluated in the Draft EIS are also listed in this table. This alternative, like the Preferred Alternative (Modified No-Build), consisted of provision of high-speed rail service on the existing Chicago - St. Louis Amtrak route.

S.4.4 Natural Resources

The Preferred Alternative will require the loss of 34 hectares (85 acres) of upland vegetation. Seventy-four percent of this will be agricultural land, pasture, developed land or forbland. Restoring and enhancing environmental quality is proposed for all impact areas. All disturbed areas not occupied by project facilities will be immediately revegetated and mulched to stabilize disturbed soils, minimize erosion, and enhance the productivity and aesthetics.

The Preferred Alternative will require the loss of 0.25 hectares (0.61 acres) of native vegetation. Unavoidable impacts to native communities will be mitigated through a prairie mitigation plan.

The Preferred Alternative will require the removal of wetland and prairie habitats within and adjacent to the existing right-of-way. Some of these are high quality areas providing potential habitat for protected species. However, no threatened or endangered species were found during field surveys of the project area of the Preferred Alternative. Therefore, no impacts to threatened or endangered species are anticipated. Coordination has been conducted with the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources regarding the potential for the project to affect Federal or state threatened or endangered species. This coordination and consultation will continue as appropriate in order to assure that appropriate mitigation measures are incorporated into the project so that impacts to protected plant and animal species are minimized or avoided.

S.4.5 Floodplains

One construction project associated with the Preferred Alternative would occur in areas where 100-year floodplains have been identified. However, no work should be performed below the 100-year flood elevation, and as a result, this improvement will not encroach upon the base floodplain. Therefore, there will be no impacts to floodplains.

S.4.6 Cultural Resources

No impacts to archaeological resources were identified for the Preferred Alternative. No historic above-ground resources will be displaced. Additionally, no perceivable visual impacts to historic property were identified in areas where enhanced warning devices will be provided at existing grade crossings within existing right-of-way. Finally, fencing will not be provided if it is determined that visual impacts to historic resources would result. Therefore, this project has no potential to have an effect on historic resources.

S.4.7 Special Waste

No CERCLIS sites will be involved or impacted by this project. Preliminary Environmental Site Assessments (PESAs) for special waste were conducted by IDOT, Bureau of Railroads. The assessments concluded that the Preferred Alternative could involve other special waste sites. Further investigations should be conducted to determine risks and liabilities of the involvement prior to land acquisition.

S.4.8 Grade Crossing Treatments

Twenty-four grade crossings along the Preferred Alternative, or less than eight percent of the crossings, are proposed for closure. Fourteen of these crossings serve pedestrian traffic only. In all instances where crossing closures are proposed, adequate reserve capacity exists on the adjacent crossings to handle the diverted traffic.

S.5 AREAS OF CONTROVERSY

One of the more prominent issues associated with the implementation of HSR service is related to the proposed grade crossing treatments. All of the grade crossings in the project area were evaluated as part of the EIS process. Closure of nonessential grade crossings will enhance the safety of railroad passengers and highway users, while resulting in some disruption of local vehicular operation and inconvenience to frequent users. As part of the Preferred Alternative, less than eight percent of the crossings are proposed for closure. Many of these crossings (14 of the 24 proposed for closure) serve pedestrian use only. Less than one percent of the average daily traffic (ADT) crossing the proposed HSR route uses the vehicular crossings proposed for closure. None of the crossings proposed for closure have an ADT over 1,200 vehicles. Additionally, no crossings will be closed before an agreement is reached with the local agency having jurisdiction over the crossing or, in the case of private crossings, the crossing owner.

Other areas of controversy include the increase of speeds through small towns where historic buildings or districts are within close proximity to the track and the fencing of the right-of-way that will be considered for most urbanized areas where there are grade crossings. IDOT will work with local communities on the detailed design of fencing, as well as crossing treatments, as implementation of the Preferred Alternative occurs.

S.6 UNRESOLVED ISSUES WITH OTHER AGENCIES

Preliminary Environmental Site Assessments were conducted in the project area to determine the likelihood of construction occurring in areas where there is known hazardous or non-hazardous waste. Additional testing may be warranted for the special waste locations investigated. At least six months prior to land acquisition the PESAs should be validated. If right-of-way acquisition does not include the ownership or operation of any aboveground or underground storage tanks or discarded waste and if construction grading and excavation does not involve any of the documented or suspected sites, then no additional preliminary testing for the project will be necessary. If the stipulations can not be met after the scope of involvement has been determined and after validation, then additional investigation could be required. In either case, the project will not be implemented until all risks and liabilities of involvement are known and are acceptable to IDOT.

S.7 PERMITS REQUIRED

There will be permit requirements for construction of the Preferred Alternative associated with the crossing and filling of water resources and wetlands. Section 404 permits will be needed from the U.S. Army Corps of Engineers for wetlands where filling occurs. In addition, a Section 401 water quality certification will have to be obtained from the Illinois Environmental Protection Agency.

Permits from the Illinois Department of Natural Resources, Office of Water Resources, will be required for construction activity in and around streams and floodplains.

It is anticipated that this project will result in the disturbance of two or more hectares (five or more acres) of total land area. Therefore, it will be subject to the requirement of a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from the construction sites. Permit coverage for the project will be obtained either under the Illinois Environmental Protection Agency General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR10) or under an individual NPDES permit.

If endangered species are identified during project implementation, all activity in the immediate area would cease. Coordination with the U.S. Fish and Wildlife Service would be initiated as required by Section 7 of the Endangered Species Act of 1973, and appropriate state or federal permits would be sought.

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

S.8 TECHNICAL DOCUMENTS

A series of technical documents were produced to support the development of this document. They are on file with IDOT and can be reviewed upon request. They cover the following areas:

- Grade Crossing Treatments;
- Wetlands;
- Native Vegetation;
- Threatened and Endangered Species;
- Phase I Archaeological Research;
- Above-Ground Cultural Resources;
- Air Quality; and
- Noise and Vibration.

Additionally, documentation regarding the Special Waste Screening and the Preliminary Environmental Site Assessments is on file with the Geologic and Waste Assessment Unit.

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ENVIRONMENTAL CONSEQUENCES

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SECTION 1

Purpose and Need

Section 1
PURPOSE AND NEED

This Final Environmental Impact Statement (EIS) was prepared as a condensed Final EIS, where information that has not changed from the Draft EIS is summarized and changes in the project since the Draft EIS was circulated are addressed more fully. However, since this section is a critical element in the project and this document, it is being repeated here highlighting the few minor changes that have been made.

1.1 PURPOSE OF THE PROPOSED ACTION

1.1.1 Purpose

The primary purpose of this proposal is to enhance the passenger transportation network in the Chicago - St. Louis corridor, resulting in a more balanced use of its components. The existing network consists of highway (automobile and bus), air and rail (Amtrak) travel. Currently, 99 percent of the 35 million trips made annually in the Chicago - St. Louis corridor are accomplished through automobile and air travel. This proposal is intended to result in a more balanced use of the network by diverting trips made by automobile and air. A more balanced use of the network will also provide benefits to the human environment over the existing network use. As identified below, congressional initiative has focused this proposal on the study and advancement of High-Speed Rail (HSR).

1.1.2 Intermodal Surface Transportation Efficiency Act - Section 1036

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established as policy that the United States should develop a National Intermodal Transportation System which is economically efficient and environmentally sound, provides the foundation for the Nation to compete in the global economy, and moves people and goods in an energy efficient manner. Provisions for high-speed ground transportation are set forth in Section 1036 of this legislation and state that it is the policy of the United States to promote the construction and commercialization of high-speed ground transportation systems.

As part of ISTEA, Congress authorized funds for a national high-speed ground transportation technology demonstration program. Congress provided funding to the Illinois Department of Transportation (IDOT) to advance the proposed Chicago - St. Louis HSR project as part of an overall Federal effort to research and develop high-speed ground transportation technologies in order to foster the implementation of high-speed steel wheel on rail transportation systems as alternatives to existing transportation systems.

1.1.3 Project Description

This proposal involves the development, implementation and operation of HSR service in the approximately 450-kilometer (280-mile) Chicago - St. Louis corridor. The project area and the alternative alignments considered for HSR service are shown on Figure 1.1-1.

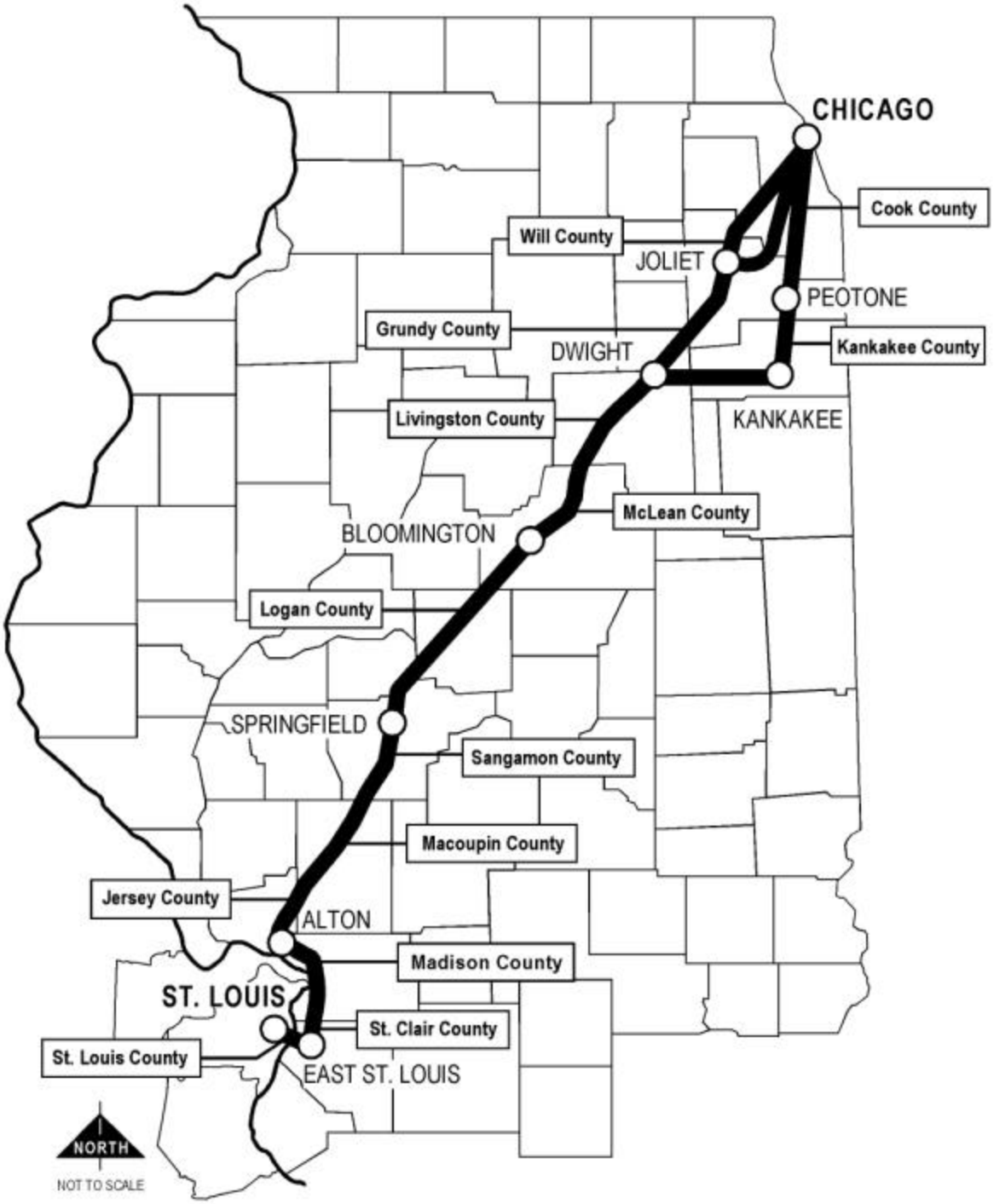

FIGURE 1.1-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
PROJECT AREA

Currently, the metropolitan population in the Chicago - St. Louis corridor is 10.8 million. Ninety-seven percent of this population resides in the metropolitan areas of Chicago and St. Louis. Ridership forecasts developed for high-speed rail service indicate that approximately 50 percent of future trips will originate and terminate in Chicago and St. Louis, and that projected ridership is predominantly made up of travelers residing within the corridor.

1.2 PROJECT HISTORY

Prior to the enactment of ISTEA, high-speed rail in the Chicago - St. Louis corridor was first studied in 1979. A system consisting of a 150 mile per hour (240 kilometer per hour), electrified, double tracked system was evaluated. It was estimated that implementation of this system would cost approximately $2.2 billion (in 1994 dollars). At the end of the study, it was concluded that the potential cost of new alignment high-speed rail service was unaffordable, and that efforts should be concentrated on improving existing passenger train service instead of implementing high-speed rail using new alignments.

Over the past several years, IDOT has been vigorously pursuing the improvement of passenger train service between Chicago and St. Louis. These efforts have involved subsidizing Amtrak operations and investing capital to upgrade Amtrak facilities. Extensive rehabilitation of the track between Joliet and East St. Louis was completed using $40 million in loans and grants provided by IDOT and additional loans from the Federal Railroad Administration (FRA). In all, approximately $10 million has been provided in federal loans and grants for the track upgrade between Joliet and East St. Louis and construction of a new route between Granite City and East St. Louis. Additionally, approximately $4 million in Section 1010 funds from the FRA has been used to test vehicle arresting barriers in the high-speed rail corridor.

In 1992 the Secretary of Transportation designated the Chicago - St. Louis line part of the "Chicago Hub Network" high-speed rail corridor. That same year IDOT developed a conceptual plan analyzing HSR service between Chicago and St. Louis. In 1992, IDOT, in cooperation with Amtrak, initiated a feasibility study of high-speed rail passenger service in order to develop a realistic and achievable blueprint for implementation of HSR service in the Chicago - St. Louis corridor. During the feasibility study, different alignments were evaluated using both diesel- and electric-powered trains at different ranges of speed. At the completion of the study in May 1994, it was concluded that 110 to 125 mile per hour (180 to 200 kilometer per hour) HSR diesel-powered service operating primarily on existing rail lines would be viable from both a ridership and financial perspective. The findings were documented in the Chicago - St. Louis High Speed Rail Financial and Implementation Plan (May 1994) and validated in the commercial feasibility study released by the FRA, High-Speed Ground Transportation for America (August 1996).

As part of the Financial and Implementation Plan, estimates of ridership, revenue and cost were developed. It was estimated that implementation of HSR service would cost approximately $400 million. Approximately one-fifth of the costs would be required to improve safety conditions at existing highway-railroad ~~at~~-grade crossings. With service consisting of eight daily round trips between Chicago and St. Louis at speeds of up to 125 miles per hour (200 kilometers per hour), annual operation costs were estimated at $32 million. Annual ridership projections were approximately 1.3 million for the year 2010, which would produce approximately $62 to $64 million in annual revenue. Cost and revenue estimates developed for the Financial and Implementation Plan are in 1993 dollars.

While the Financial and Implementation Plan study was being conducted, the issue of a third regional airport in the Chicago area materialized. As a result of the site assessments conducted, Peotone was

selected as the preferred site for a south suburban airport. An important element in the viability of a south suburban airport will be its accessibility to the Chicago metropolitan area. To serve this proposed airport, HSR service alternative alignments were analyzed that could connect Peotone to Chicago and to the Union Pacific line, south of Joliet. One of these alternative alignments is still under consideration and ~~is~~ was evaluated in ~~this~~ the Draft ~~Environmental Impact Statement (D~~EIS. ~~). HSR serving the airport would stop north of Peotone and west of the airport, where shuttle service would be provided between this HSR station and the airport terminal.~~ Regardless of whether or not the third airport is constructed, this alternative alignment is considered viable from a ridership perspective. Intercity ridership estimates for this alignment, assuming no airport is constructed, are similar to those on the other alignments. Additionally, this alignment would impact fewer ~~at~~ grade crossings than the other alignments with only three grade crossings in the first 60 kilometers (37 miles) from Chicago as opposed to ~~the~~ over 30 on the current Amtrak route ~~to~~ through Joliet.

1.3 NEED FOR THE PROPOSED ACTION

According to the ridership estimates prepared in conjunction with the Financial and Implementation Plan, the 1991 mode split for annual person trips in the corridor is 95.5 percent for automobile, 3.1 percent for air, 1.1 percent for rail (Amtrak), and 0.3 percent for bus. The person trip estimates updated for 1998 indicate a similar split. Over 90 percent of the over 35 million corridor trips have origins or destinations in either Chicago or St. Louis. The need for the proposed action stems from the problems caused by this imbalance in the transportation system. The problems range from congestion on highways with inherent safety risks and environmental impacts, to costly airfares, travel time delays, and unreliability. For there to be a more balanced transportation system in the corridor, ~~trips must be diverted from the predominant modes of automobile and air. To achieve this,~~ either a new transportation mode must be introduced or improvements to an existing, less frequently used transportation mode must be made. The conditions that will attract travelers from automobile and air travel to a new or improved mode of transportation are reduced travel time, service reliability, and safety. In addition to diverting travelers, the new or improved mode, as part of the entire transportation network, must result in improvements to the human environment relative to air pollution and energy consumption. These improvements to the human environment will be realized through the use of modern, state-of-the-art equipment and efficiency.

This proposal focuses on improving rail transportation by introducing HSR service to replace the existing passenger rail service.

1.3.1 Reduced Travel Time and Improved Service Reliability

Reducing travel time and improving service reliability are of paramount importance to increasing the viability of an improved mode of transportation.

The HSR service would reduce travel time between Chicago and St. Louis, resulting in travel times that are shorter than can be achieved by automobile or bus. Additionally, downtown-to-downtown travel times by rail would be more comparable to air service.

Reliability, relative to HSR, is a product of frequency of service, on-time performance, and accessibility. The HSR proposal advanced would have significant improvements in ~~terms of frequency of service and~~ on-time performance over the existing Amtrak service and would also be more or as accessible as existing

and future proposed air service. The HSR service would also not be subject to highway congestion near the Chicago and St. Louis downtown areas or airports.

1.3.2 Safety

To divert travelers from automobile and air modes, potential HSR passengers must also believe use of the service is safe, as well as faster and more reliable. Safety pertains to passengers getting to and using the parking facilities at the HSR stations, walking through the stations to board the service, and traveling on the HSR service. Safety enhancements included as part of the HSR proposal advanced would result in improvements to overall rail passenger safety when compared to existing rail service and the other modes of travel.

1.3.3 Human Environment

Provision of a transportation network with a more balanced use of the different modes would result in benefits to the human environment. The HSR proposal would include modern, state-of-the-art rail equipment that would result in an overall reduction in passenger transportation-related emissions in the corridor when air quality is considered. ~~Emissions from existing rail service, with the exception of nitrogen oxides, are less than either auto or air travel when compared on a passenger-kilometer (passenger-mile) basis. As a result, diversions of travel from these modes~~ Diversions from air and automobile travel to HSR service would result in reduced volatile organic compound, ~~and~~ carbon monoxide, and nitrogen oxide emission levels in the corridor.

Additionally, implementation of the HSR proposal advanced would result in an overall reduction in energy consumed by the alternative modes of travel in the corridor. Existing rail passenger service in the corridor is currently more efficient than air and automobile travel, in terms of energy consumption per passenger-kilometer (passenger-mile), and the proposed HSR service would improve upon this efficiency.

SECTION 2

Affected Environment

Section 2
AFFECTED ENVIRONMENT

This section describes the existing environmental conditions in the Chicago - St. Louis High-Speed Rail (HSR) project area. The project area is defined as the area of potential impact. The term corridor is also used in a broader sense to describe the affected environment relative to travel, ridership, general land use and demographics, air quality, and energy.

This document has been prepared as a condensed Final Environmental Impact Statement (EIS). As such, it summarizes information from the Draft EIS that has not changed. The subsections in this document are identical to those used in the Draft EIS. The Draft EIS can be referenced for additional information on any of the topics discussed in this section.

Due to the length of the corridor, the affected environment relative to wetlands, natural resources, and special waste focused on the proposed construction areas of the HSR Alternative. In the Draft EIS, the following assumptions were used to define the project area for these issues:

- **Double Track and Freight Siding**: 30 meters (100 feet) out from the centerline of the track for the length of the improvement.
- **Service Roads**: 15 meters (50 feet) beyond the edge of the right-of-way for the length of the service road.
- **Stations and Grade Separations**: the footprint of the improvement.

The Preferred Alternative consists of fewer construction areas than evaluated for the High-Speed Rail Alternative in the Draft EIS. (See Section 3 for a description of the Preferred Alternative.) For example, no improvements are proposed north of Dwight and no service roads or station improvements are proposed throughout the corridor. As a result, information contained in this section regarding wetlands, natural resources, and special waste focuses on the proposed construction areas of the Preferred Alternative only. Additionally, much of the information regarding other environmental issues for the area north of Dwight has either been removed or summarized since no action is proposed through this area.

2.1 EXISTING LAND USE

2.1.1 Development Patterns

Historically, St. Louis and Chicago have served as major continental transportation centers, both tracing their origins to water and rail transportation routes. St. Louis originally developed from its role as a port on the Mississippi River which provided access to domestic and foreign markets. Chicago prospered from its strategic location on Lake Michigan and access to eastern markets through the Erie Canal and the Great Lakes. During the 19th Century, the addition of railroads linking these cities forged an economic lifeline between Chicago and St. Louis. Construction of the rail network spawned the growth of numerous communities which served as regional centers for the collection and distribution of goods for a rich agricultural hinterland. The influence of the railroad remained strong until interstate highways joined the

transportation system in the 1950s and 1960s. In contrast to the railroads, which created new communities along their length, interstate highways were constructed around, and bypassed, the existing rural communities. Because the interstates had limited points of access, county roads that connected with, or crossed over them, linking existing communities, became particularly important to the rural areas. As the economy of the region and the nature of agribusiness have changed, both highways and railroads have remained important elements of community life.

Since the railroad is located in a general northeast-southwest direction between Chicago and St. Louis, city and village streets, typically designed on a north-south/east-west grid system, cross the tracks at sharp angles. This configuration was not a serious traffic problem when rail crossings were traversed by pedestrians or horses. However, the combination of automobile and truck traffic, at significantly increased volumes, and the diagonal orientation of intersections, has compromised safety and operational efficiency at rail crossings within rural communities. The use of larger agricultural vehicles, which are periodically driven to town to deliver grain to the local grain elevator, has also contributed to traffic congestion and hazards at highway-railroad grade crossings. Depending upon the size of the community, the number of highway-railroad grade crossings typically ranges from three to 15, with three to five crossings typically in the smaller communities and 10 to 15 in the regional centers.

Old U.S. Route 66, a historic federal road, runs parallel to the rail corridor between Cook County and Springfield and serves a unique and important role in providing direct highway access along the railroad to each corridor community. Roads crossing the railroad tracks are generally at-grade and are important to the maintenance of continuity of the roadway system, providing access across the tracks to Old U.S. Route 66, farmland, rural residences or the interstate. Private rail crossings have been constructed for privately-owned parcels which are crossed, or separated from roadway access, by the tracks. In some instances, private crossings provide the sole access to a parcel.

The downtown areas of the small rural communities along the corridor developed in a compact pattern along the railroad. The location of buildings and uses, determined by railroad accessibility, resulted in a clustering around the train stations and sidings. Land uses which relied heavily upon rail service concentrated in this area and include uses such as: grain elevator, post office, passenger train station, commercial establishments and industrial plants and mills. Other facilities important to community life, such as the town hall, a civic park, school, fire station, post office, hotel and dining establishments, were also often constructed in proximity to the railroad passenger station. These facilities continue to play a key role in the economic and social livelihood of the downtown core while serving residents throughout the community.

Six rural communities along the corridor have developed into regional centers over the past century. These are: Joliet, Bloomington/Normal, Lincoln, Springfield, Carlinville, and Alton. Population, land uses, building density, and the local transportation system distinguish the regional centers from the rural communities. The regional centers also typically have a wide range of agricultural, commercial and industrial services and suppliers; and provide medical facilities and opportunities for higher education not available in the smaller rural communities.

Existing land use in the corridor is described by county in Section 2.1.3.

2.1.2 Agriculture

The State of Illinois is an agricultural state. Eighty percent of the state's total area is farmland used for the production of crops, timber or livestock. With the exception of the urbanized metropolitan areas of Chicago and St. Louis, agriculture is the primary land use along the high-speed rail corridor. Of the 12 corridor counties in Illinois, farmland accounts for over 90 percent of the total county land area in Livingston, McLean, and Logan counties, and over 80 percent of the total land area in two others (Grundy and Sangamon).

2.1.3 Existing Land Use Description by County

2.1.3.1 Cook County

The Canadian National-Illinois Central (CN-IC) Joliet Line (with Amtrak tracks) extends from Union Station in Chicago's downtown for approximately 44 kilometers (27 miles) in Cook County, passing through Chicago and older Chicago suburbs, including Cicero, Forest View, Summit, Bedford Park, Willow Springs, and Lemont. Metra commuter rail stations are located in Summit, Willow Springs, and Lemont; Chicago - St. Louis Amtrak service also stops at the station in Summit.

Heavy industrial land use is predominant along the tracks in Cook County between Chicago and Lemont. In Lemont, the railroad passes through the central business district. Lemont's business core was originally stimulated by rail service and access to the Illinois and Michigan Canal. The central business district in Lemont continues to provide a mixture of retail commercial, institutional and recreational land uses in proximity to the railroad.

2.1.3.2 Will County

In Joliet, the CN-IC Joliet Line switches to the Union Pacific (UP) tracks. The CN-IC/UP tracks extend for approximately 53 kilometers (33 miles) in Will County, passing through Romeoville, Lockport, Joliet, Elwood, Wilmington, Braidwood, and Godley.

The CN-IC/UP tracks pass through the center of communities whose business core was originally stimulated by rail service and access to the Illinois and Michigan Canal. The central business districts in Lockport, Joliet and Elwood continue to provide a mixture of retail commercial, institutional and recreational land uses in proximity to the railroad. South of Joliet, outside of the incorporated areas of Wilmington, Braidwood, and Godley, most of the land use adjacent to the tracks is agricultural.

South of Elwood, the railroad passes through the Joliet Arsenal. The Arsenal is being converted into a 6,500-hectare (16,000-acre) prairie parkland, titled the Midewin National Tallgrass Prairie. It will serve as both a nature preserve and a recreational open space with biking and hiking trails. The Joliet Arsenal redevelopment plan also includes: construction of a 370-hectare (910-acre) National Veteran's Cemetery on the west side adjacent to the railroad; two industrial parks; and a 170-hectare (425-acre) county landfill.

An additional special area in this county is the Unicom Braidwood Nuclear Power Plant, located immediately southeast of Braidwood. Roadways serving this facility that cross the railroad are designated emergency evacuation routes.

2.1.3.3 Grundy County

The Union Pacific extends for approximately 19 kilometers (12 miles) in the southeast corner of Grundy County. Most of the land adjacent to the track is used for agriculture in this county. However, it also passes along the edge of Braceville and through the center of Gardner. Residential development occurs along the Union Pacific in Braceville. In Gardner, numerous institutional and commercial uses, as well as a grain elevator, are found along the railroad.

2.1.3.4 Livingston County

The Union Pacific extends for approximately 48 kilometers (30 miles) in Livingston County, passing through the communities of Dwight, Odell, Cayuga, Pontiac, and Ocoya. Both the Village of Dwight and the City of Pontiac serve as regional centers for the Grundy-Livingston County agricultural area. Outside of the urbanized areas, the railroad passes through agricultural areas.

The Village of Dwight, located at the north end of the county, has experienced growth to the west and north. The Dwight Correctional Center is located approximately three kilometers (two miles) west of the village near the Interstate 55 interchange on Illinois Route 17. In addition to agribusiness, major employers in Dwight include the RR Donnelley & Sons Company, a printing company located within the developing area north of Dwight, and Coils, Inc., a manufacturer of electrical devices.

The City of Pontiac, located towards the center of the county, is an important regional trading center with a blend of agriculture, manufacturing and service industries. Heartland Community College and St. James Hospital are among the facilities which distinguish Pontiac from the smaller rural communities. Major employers include Caterpillar, Inc., the Pontiac Correctional Center, RR Donnelley & Sons, Inc., Interlake, Inc., and Johnson Press.

Throughout the Chicago - St. Louis HSR corridor, there are some communities with less than 25 households which have the identity of a name but are not incorporated. An example in Livingtston County is unincorporated Cayuga with a small residential area and a closed grain elevator. Old U.S. Route 66 and Main Street serve as the primary roadways through Cayuga.

Ocoya functions as an agricultural service stop, with a grain elevator and rail siding.

2.1.3.5 McLean County

In McLean County, the HSR corridor extends for approximately 69 kilometers (43 miles) through the center of the Town of Normal and the City of Bloomington, contiguous communities which together function as an urbanized regional center. The corridor also passes through unincorporated agricultural areas and rural communities, including Chenoa, Lexington, Towanda, Funks Grove, and McLean.

Chenoa, Lexington, and Towanda are located north of the Bloomington/Normal area. Single-family residential and commercial land uses, including those related to agriculture, are generally located within the HSR corridor in these communities.

Land uses in the Bloomington/Normal area reflect the area's economic strength in education, insurance, agribusiness and industry. The Illinois State University campus is on the west side of the tracks in central

Normal and includes university facilities and student housing within walking distance to the Normal Amtrak station.

Funks Grove and McLean are located south of Bloomington/Normal in McLean County. Land use in the Funks Grove area within the HSR corridor consists mainly of forested areas. However, there is some commercial land use near the railroad tracks in Funks Grove. The Funks Grove Pure Maple Sirup Company, located in Funks Grove Township has been in operation since 1891. Access to Old U.S. Route 66 is provided by a private grade crossing from this enterprise. This private crossing is used to transport sap. During the spring season, this crossing is actively used. The HSR corridor passes through the center of McLean. Land use is mixed near the railroad in this community.

2.1.3.6 Logan County

The HSR corridor extends for approximately 44 kilometers (27 miles) in Logan County and passes through several rural communities, including Atlanta, Lawndale, Lincoln, Broadwell, and Elkhart. In the unincorporated agricultural areas, there are isolated agricultural and industrial facilities adjacent to the railroad. These facilities are generally located near a rail crossing providing access to Old U.S. Route 66 and Interstate 55. Land uses in Logan County are characteristic of those in predominantly agricultural areas.

The Lincoln and Logan Correctional Facilities are located approximately three kilometers (two miles) south of Lincoln. The Township Route (TR) 128 highway-railroad grade crossing is the only crossing used to access these facilities from the west. Edward R. Madigan State Park is north of the correctional facilities and generates seasonal traffic on Business Route Interstate 55 and the TR 128 rail crossing.

2.1.3.7 Sangamon County

The HSR corridor extends for approximately 55 kilometers (34 miles) in Sangamon County, passing through Springfield and the rural communities of Williamsville, Sherman, Chatham, Auburn, and Thayer. Outside of Springfield, land uses in Sangamon County are characteristic of those in predominantly agricultural areas. Land uses in Springfield, the state capital, are generally mixed around the railroad, with a high concentration of government buildings and businesses in the downtown district. The Springfield train station is also located in the downtown district. The concentration of Lincoln sites, government institutions, and research and conference facilities generate high levels of tourist activity throughout Springfield.

2.1.3.8 Macoupin County

The HSR corridor extends for approximately 66 kilometers (41 miles) in Macoupin County, passing through mostly agricultural areas, as well as rural communities, including Virden, Girard, Nilwood, Carlinville, Plainview, and Shipman.

As the county seat, Carlinville serves as a regional center for Macoupin County. The Carlinville Area Hospital, Blackburn College, and the Loveless Park Sports Complex are facilities which distinguish Carlinville as a regional center for medical, educational and recreational services.

The Malham Orchard, approximately 4.0 kilometers (2.5 miles) south of Carlinville, is accessed by a private rail crossing. The private crossing is used by the public visiting the orchard store and by trucks transporting produce to markets.

2.1.3.9 Jersey County

The HSR corridor extends for less than five kilometers (three miles) in unincorporated areas in the southeast corner of Jersey County. Land use is predominantly agricultural, but there is some single-family residential land use.

2.1.3.10 Madison County

The HSR corridor extends for approximately 44 kilometers (27 miles) in Madison County, passing through urbanized, incorporated communities with heavy industrial uses. The Lewis and Clark Community College in Godfrey, the Alton Square Shopping Center in Alton, and the Explorer Pipeline Company in Hartford, each located adjacent to the railroad, represent the diversity of land uses within Madison County. Small agricultural fields remain active in the unincorporated areas.

Traveling south from Alton, the adjacent land use becomes increasingly industrial, comprised of petroleum tank farms, refineries and rail yards located in East Alton, Wood River, and Hartford. Small parcels of farmland, located between tank farms, occur in East Alton and Hartford. Larger farmland parcels are present farther south in the unincorporated area between Hartford and Granite City.

In the southerly portion of Madison County, the corridor parallels Illinois Route 3 into St. Clair County. The area adjacent to the railroad is vacant land.

2.1.3.11 St. Clair County

The proposed HSR corridor extends for approximately six kilometers (four miles) in St. Clair County, passing through the City of East St. Louis. As at the southern end of Madison County, the corridor parallels Illinois Route 3 into East St. Louis. The area adjacent to the railroad is vacant land surrounding transportation infrastructure.

2.1.3.12 City of St. Louis

The proposed HSR corridor extends for approximately three kilometers (two miles) in the City of St. Louis. The railroad is located just south of the St. Louis downtown area.

2.2 SOCIOECONOMIC AND COMMUNITY CHARACTERISTICS

2.2.1 Community Services and Facilities

Schools, medical centers, fire and police stations, and agricultural facilities serve the daily needs of residents along the high-speed rail corridor. Access to and from educational, medical and agricultural facilities plays a critical role in providing these services, and in serving the health, safety and general welfare of those who use them. The district boundaries for schools and emergency services extend beyond the limits of municipalities to cover vast agricultural areas. Within the communities, public service districts typically overlap the railroad.

School bus, emergency vehicle and agricultural traffic routes were considered during this project. As part of the data collection process, meetings were conducted with county engineers and representatives from county

and regional planning commissions to gather crossing-specific information. Land use and socioeconomic information helped the team to identify the vehicle use characteristics at each grade crossing and document which crossings and routes have a significant role in the movement of students, emergency vehicles, and agricultural products and supplies. Following these meetings, city planners, school superintendents and county farm bureau managers were contacted to provide additional information regarding facility operations and transportation needs within their jurisdictions.

2.2.2 Demographics

2.2.2.1 Population and Population Distribution

Population concentrations are found within the Chicago and St. Louis metropolitan areas, including Cook, Will, Madison and St. Clair counties, and St. Louis City, Missouri. Both St. Clair County and St. Louis City experienced population decreases between 1990-2000, 2.6 percent and 12.2 percent, respectively. The 40.6 percent population increase in Will County evidences a movement outward from Chicago and the inner ring of suburbs to developing fringe areas. Will County, once a predominantly agricultural area, is becoming increasingly urbanized, with a 2000 population density of 231 persons per square kilometer (600 persons per square mile).

Corridor counties with regional centers in the rural areas – McLean and Sangamon counties – have relatively higher populations than rural counties with small communities. However, countywide population densities within counties with regional centers are still low. Over the 10-year period between 1990 and 2000, population increases of 16.5 and 5.9 percent occurred in McLean and Sangamon counties, respectively.

All rural counties in the Chicago - St. Louis corridor experienced population increases between 1990 and 2000, ranging from 1.0 percent in Livingston County to 16.1 percent in Grundy County.

2.2.2.2 Racial Composition

The racial composition of the corridor is predominantly white. However, minority populations are concentrated within the Chicago Metropolitan (Cook and Will counties) and St. Louis Metropolitan areas (Madison County, St. Clair County and St. Louis City). McLean and Sangamon counties, with their diversified regional centers, also have relatively higher minority populations than the predominantly rural counties with small communities.

2.2.3 Economies

2.2.3.1 Employment

Employment in the counties along the high-speed rail corridor equaled over 50 percent of total Illinois non-farm employment (excluding government workers) in 1995. But 83.4 percent of the employment in the corridor was located in Cook County. Between 1990 and 1995 employment in the corridor outside Cook County grew **9.4** percent compared to 5.6 percent for the State as a whole. Growth was strongest in Will County (26.4 percent). Outside of Cook County, Logan County, and St. Louis City, all sectors of the economy within the HSR corridor showed growth between 1990 and 1995.

In the northern section of the corridor, Cook County has the most diversified employment base, but it must compete with surrounding counties that have lower taxes and newer infrastructure and facilities. Will County is an older industrial area that is expanding its manufacturing employment while continuing to diversify and increase the share of employment in services and other sectors. Grundy is one of the counties expected to be drawn into the orbit of economic activity radiating out from Chicago, but it is still beyond the focus of activity and experienced only a 1.7 percent increase in employment between 1990 and 1995.

In the central portion of the corridor, Livingston County has the highest percentage of its employment in manufacturing: 38.2 percent compared to a statewide average of about 20.7 percent. In contrast to Livingston, McClean County has only 14.3 percent of its employment in the manufacturing sector. The economic base for this county is its finance and insurance sector. The headquarters for State Farm Insurance are located in Bloomington.

In Sangamon County, manufacturing employment accounts for only 6.1 percent of total employment. Like McLean County, Sangamon shows strength in the insurance category; two insurance companies have headquarters in Springfield. Springfield is also the state capital and state government provides the base employment for the county. Sandwiched between the two insurance/government/educational service counties is Logan County, which has a small but diverse workforce that complements its basic agricultural economy.

The southern segment of the corridor contains four counties. Macoupin and Jersey counties are heavily rural and agricultural while Madison and St. Clair counties are more urban and industrial. Only 115 persons, less than four percent of the non-farm workforce, were employed in manufacturing in Jersey County in 1995. Macoupin County had about 13.1 percent of its workers in manufacturing. It also had a high percentage, 5.7 percent (compared to 0.3 percent statewide) in mining and quarrying. Approximately 27.9 percent of non-farm employment in Madison County is in manufacturing, while the economic base of St. Clair County is in the services sector which accounts for 37.3 percent of the county's employment.

2.2.3.2 Income

Generally, the northern counties in the HSR corridor have the highest median household and per capita incomes. Cook County has the highest per capita income at $15,520, but Will County has a higher median household income. This difference results from the larger average size of households in Will County. In every corridor county except Cook, per capita income is exceeded by the statewide median. (Income data analyzed for this project is from the 1990 Census; income data from the 2000 Census is not yet available.)

2.2.4 Environmental Justice

Detailed information regarding minority and low-income populations in the HSR corridor was compiled from Bureau of Census 1990 data. Table 2.2-7 in the Draft EIS provides the percentage of the population in each community along the HSR corridor comprised of minority and low-income persons. Minority populations in communities within the corridor ranged from 0 to just below 100 percent. Low-income percentages range from 0 to 62 percent. (Minority population data from the 2000 Census was reviewed and does not conflict with information presented in this section. As mentioned above, income data from the 2000 Census is not yet available.)

2.3 TRANSPORTATION FACILITIES AND SERVICES

The Chicago - St. Louis corridor is currently served by four modes of transportation: highway, air, rail, and bus. The total existing (1998) annual person trips estimated within the corridor on these four modes is 35.2 million. Table 2.3-1 presents a summary of corridor travel by mode. Additionally, commuter and freight train operations occur on portions of the alternative alignments evaluated. Commuter rail traffic is not included in the 35.2 million person trip estimate.

Table 2.3-1
CHICAGO - ST. LOUIS HIGH-SPEED RAIL CORRIDOR
ANNUAL PERSON TRIPS

Mode	Annual Person Trips	Percent
Rail	270,969	0.8
Air	1,108,975	3.2
Bus	98,108	0.3
Auto	33,675,165	95.8
Total	**35,153,217**	**100.0**

2.3.1 Existing Intercity Mass Transportation Service

Intercity mass transportation service between major towns and cities located in the HSR corridor is available via train, bus, and aircraft. Air travel is the most predominant of these three modes. Of the total 1998 person trips between Chicago and St. Louis, air travel accounts for 3.2 percent of the trips, while rail and bus service accounted for 1.1 percent combined.

2.3.1.1 Passenger Rail Service

Existing Amtrak service between Chicago and St. Louis consists of three trips in each direction per day with scheduled end-to-end operating times ranging from five hours and 25 minutes to five hours and 40 minutes. Service along this route is provided at 11 stations: Chicago Union Station, Summit, Joliet, Dwight, Pontiac, Bloomington/Normal, Lincoln, Springfield, Carlinville, Alton, and St. Louis Amtrak Terminal. Annual ridership on this route is estimated at 271,000 (IDOT, 1999).

Amtrak fares (2002) for a round trip between Chicago and St. Louis average approximately $82.00; the fare between Chicago and Springfield averages $62.50.

2.3.1.2 Passenger Air Service

Air travel within the HSR corridor is available from airports in Chicago (O'Hare, Midway, Meigs), Bloomington, Springfield, and St. Louis (Lambert Field). On an average weekday, there are approximately 150 one-way plane trips with origins and destinations within the corridor. Approximately 53 percent of these trips are between Chicago and St. Louis. Seventy-nine percent of the air person trips in the corridor are between Chicago and St. Louis, which accounts for 42 percent of all intercity travel between the two cities. Scheduled flight time between Chicago and St. Louis is typically around 75 minutes. The 1998 annual person trips in the HSR corridor using air travel was estimated at 1.1 million.

Airline fares fluctuate quite often. Round trip airfare between Chicago and St. Louis can range from $60.00 to $325.00. Round trip airfare between Chicago and Springfield can reach $425.00. Most commonly round trip airfares are approximately $150.00 between Chicago and St. Louis and approximately $200.00 between Chicago and Springfield.

2.3.1.3 Passenger Bus Service

Greyhound Lines, Inc. and other smaller carriers operate bus service between Chicago and St. Louis. A total of **25** daily routes operate in the corridor, consisting of eight daily trips from Chicago to St. Louis and 12 daily trips from St. Louis to Chicago (Greyhound Lines, Inc., 1999). The other **five** routes stop in either Chicago or St. Louis with stops in Joliet, Bloomington, or Springfield. The other communities in the corridor with bus service are Dwight and Pontiac, as well as Illinois State University in Bloomington/Normal. Scheduled travel times for the southbound end-to-end service range from five hours and five minutes to eight hours and 25 minutes. Northbound service scheduled travel times range from five hours and 50 minutes to over 11 hours. The annual (1998) person trips using bus service for corridor trips was estimated at 98,000.

Bus fares (1999) are typically around $63.00 for round trips between Chicago and Springfield and around $51.00 for round trips between Chicago and St. Louis.

2.3.2 Existing Intercity Automobile Travel

Of the estimated 35.2 million existing (1998) annual person trips in the HSR corridor, private automobile trips account for 95.8 percent, or 33.7 million. However, travel between Chicago and Joliet and between St. Louis and Alton accounts for 75 percent of these automobile trips. In comparison, travel between Chicago and St. Louis accounts for only three percent of all automobile trips in the corridor and 52 percent of trips between the two destinations. Interstate 55 accommodates most of the intercity automobile travel in the corridor.

2.3.3 Additional Rail Operations

Freight traffic currently operates on the existing track evaluated for high-speed rail service. Additionally, commuter rail service — the Metra Heritage Corridor — operates on the CN-IC Joliet Line between Chicago Union Station and Joliet. This service consists of three weekday peak direction trains in both the morning and evening. Round trip fares (1999) on Metra service range from $3.50 to $9.30.

2.4 AIR QUALITY

Transportation sources produce the following pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), hydrocarbons (also known as volatile organic compounds or VOCs), and particulate matter (PM). Nitrogen oxides and VOCs are precursors to ozone. Particulate matter is emitted primarily by stationary fuel-burning sources — power plants and industrial sources — but also to a smaller extent by transportation sources.

2.4.1 Regulatory Setting

Under the authority of the Clean Air Act and the 1990 Clean Air Act Amendments (CAAA) [42 U.S. Code (USC) 7401 *et seq.*], a set of primary and secondary Ambient Air Quality standards for six criteria pollutants was established. These standards are intended to protect the public health and welfare. When levels of pollutants do not exceed the annual average standards and do not exceed the short-term (1-, 3-, 8-, and 24-hour) standards more than once per year, an area is considered in attainment of the National Ambient Air Quality Standards (NAAQS).

The 1990 CAAA require Federal agencies to ensure that their actions conform to the appropriate State Implementation Plan (SIP). The SIP is a plan that provides for implementation, maintenance, and enforcement of the NAAQS, and includes emission limitations and control measures to attain and maintain the NAAQS. Conformity to a SIP, as defined in the CAAA, means conformity to a SIP's purpose of reducing the severity and number of violations of the NAAQS to achieve attainment of such standards. The Federal agency responsible for the action is required to determine if its action conforms to the applicable SIP. The U.S. Environmental Protection Agency (USEPA) has developed two sets of conformity regulations:

- Transportation projects developed or approved under the Federal Aid Highway Program or Federal Transit Act are governed by the "transportation conformity" regulation [40 Code of Federal Regulation (CFR) Part 93, Subpart A]; and

- Other projects, which include the Federal action planned for the Chicago-St. Louis High-Speed Rail project, are governed by the "general conformity" regulations. The regulations for *Determining Conformity of General Federal Actions to State or Federal Implementation Plans* were published in the *Federal Register* on November 30, 1993. The general conformity rule (40 CFR Part 93, Subpart B) became effective January 31, 1994. In Illinois, general conformity criteria and procedures are set forth in 35 Illinois Administrative Code 255. In Missouri, these criteria and procedures are set forth in 10 CSR 10-6.300. The total emissions for this project (discussed in Section 5) have been prepared in accordance with the Illinois and Missouri general conformity regulations.

The conformity regulations apply to Federal actions occurring in air basins designated as nonattainment for criteria pollutants or in attainment areas subject to maintenance plans (maintenance areas). Federal actions occurring in air basins that are in attainment with criteria pollutants are not subject to the conformity rule.

Metropolitan Planning Organizations (MPOs) in the Chicago and St. Louis nonattainment areas are required to analyze the emission impacts of highway and transit projects within their respective areas. To ensure that all surface transportation improvements are accounted for in the regional emissions analysis, the MPOs have included the HSR project and its impacts on the transportation system even though this project is not considered a highway/transit project as defined under Section 7201(b) of TEA-21. The Chicago Area Transportation Study has included the HSR project in the regional analysis for the 2020 Regional

Transportation Plan Update. The East-West Gateway Coordinating Council has included the HSR project in their regional analysis for the current Transportation Improvement Program.

For nonattainment and maintenance areas, the Illinois Environmental Protection Agency's (IEPA) and the State of Missouri's general conformity rules establish maximum annual emissions rates for pollutants, including for both ozone precursors — VOC and NO_x — on the presumption that reductions in these pollutants will contribute to reductions in ozone formation. According to these states' general conformity regulations, a conformity determination is required for each pollutant where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed the threshold rates for these areas. For the nonattainment and maintenance areas in the Chicago - St. Louis HSR corridor, the following rates apply:

	(Tons Per Year)	
Area	**VOC**	**NO_x**
Chicago Nonattainment Area	25	N/A
Jersey County Maintenance Area	100	100
St. Louis Nonattainment Area (in Illinois)	100	100
St. Louis Nonattainment Area (in Missouri)	100	100

The Clean Air Act Sections 182 (b) and (f) provide waivers for NO_x reduction requirements in those nonattainment areas where the USEPA determines that NO_x reductions would not provide net ozone air quality benefits. Such is the case in the Lake Michigan area including northeastern Illinois and adjoining nonattainment areas in Indiana, Wisconsin and Michigan. The IEPA petitioned the USEPA to issue a NO_x waiver for the Chicago nonattainment area; subsequently, the USEPA published a proposed approval on March 6, 1995. Final issuance of the NO_x waiver under Section 182 (f), which affects General Conformity, was published in the January 22, 1996 *Federal Register*. Thus, due to the issuance of the NO_x waiver, no threshold rate for NO_x is applicable for the Chicago nonattainment area, and the conformity analysis for this project focuses exclusively on VOC emissions in this area.

Outside of the ozone nonattainment and maintenance areas, a conformity determination under 40 CFR Part 93 ("Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act") is not required.

2.4.2 Affected Environment

2.4.2.1 Ambient Air Quality in the High-Speed Rail Corridor

Nonattainment Areas:

The HSR project is located in portions of two designated ozone nonattainment areas. The Chicago nonattainment area is classified as severe and includes the Illinois counties of Cook, DuPage, Kane, Lake, McHenry, and Will; Oswego Township in Kendall County; and Aux Sable and Goose Lake Townships in Grundy County. The St. Louis nonattainment area is classified as moderate and includes the Madison, Monroe, and St. Clair counties in Illinois and St. Charles, St. Louis, Jefferson, and Franklin counties in Missouri. Additionally, Jersey County, which had originally been designated marginal, was re-designated

attainment in early 1995 and is subject to a maintenance plan. Figure 2.4-1 identifies the ozone nonattainment areas in the HSR corridor.

Lyons Township and Southeast Chicago in Cook County are classified as moderate nonattainment areas for PM_{10}.

Pollutant Standards Index:

The Pollutant Standards Index (PSI) is used to report regional (sector) ambient air quality to the public. The PSI converts ambient air pollution concentration to an index number corresponding to a description of air quality as good, moderate, unhealthful, very unhealthful, and hazardous. The PSI is based on the short term NAAQS for criteria air pollutants. PSIs are computed for 10 sectors in Illinois. The HSR corridor is located in four of these sectors. Data for 1998 for these four sectors is listed in Table 2.4-1.

Table 2.4-1
POLLUTANT STANDARDS INDEX SUMMARIES BY SECTOR

	Percent of Days		
Sector	**Good**	**Moderate**	**Unhealthful**
Chicago - Chicago	86	14	0
Chicago - South and West	84	16	0
Joliet/Will County	94	6	0
Metro-East (St. Louis)	64	34	2

Source: IEPA, October 1999.

2.4.2.2 Inventory of Existing Intercity Passenger Travel

Emissions inventories are quantities of pollutants emitted over a given time period, which provide information about contributions from various sources. They are estimated by multiplying emissions factors (e.g., from a single locomotive trip from Chicago to St. Louis) by a source activity (number of trips). The inventories provided in this section were developed to represent existing (2000) annual intercity passenger travel between Chicago and St. Louis. The sources taken into account include passenger railroad locomotives, commercial aircraft, buses, and private automobiles. Locomotive and aircraft emissions were determined based on the procedures and data in USEPA's Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources, hereinafter referred to as the EPA manual. The methodology for determining bus and private automobile emissions generally follow the guidelines of the EPA manual as well.

Table 2.4-2 presents the existing (2000) annual emissions for VOC, CO, and NO_x by source estimated for intercity passenger travel in Chicago - St. Louis HSR corridor. The results of the emissions analysis indicate that automobile travel accounts for over 90 percent of the CO and NO_x emissions from intercity

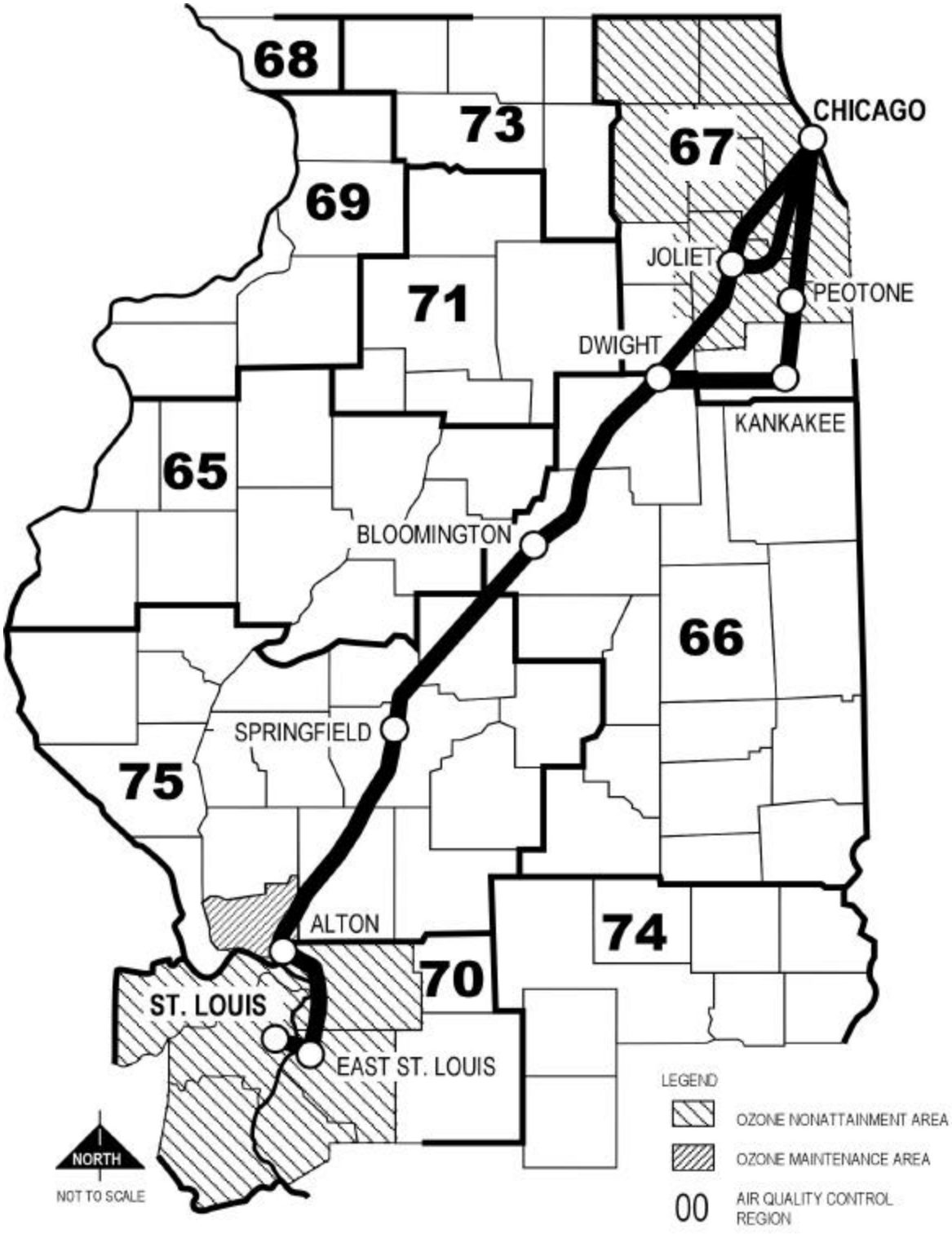

FIGURE 2.4-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
OZONE NONATTAINMENT AREAS

Table 2.4-2
ESTIMATED EXISTING (2000) EMISSIONS RESULTING FROM INTERCITY PASSENGER TRAVEL IN THE HIGH-SPEED RAIL CORRIDOR
(tons per year)

Pollutant	Mode of Travel	Annual Emissions	Percent
Volatile Organic Compounds (VOC)	Rail	8	0.3
	Air	473	19.7
	Bus	1	0.1
	Auto	1,919	79.9
	Total	**2,401**	**100.0**
Carbon Monoxide (CO)	Rail	22	0.1
	Air	783	4.0
	Bus	3	0.0
	Auto	18,668	95.9
	Total	**19,476**	**100.0**
Nitrogen Oxides (NO_x)	Rail	246	4.1
	Air	348	5.8
	Bus	7	0.1
	Auto	5,443	90.0
	Total	**6,044**	**100.0**

transportation sources in the HSR corridor. For VOCs, automobile emissions account for approximately 80 percent of the intercity transportation source emissions in the corridor. For all three pollutants evaluated, rail passenger service accounts for less than five percent of the intercity passenger travel total.

2.4.2.3 Existing Ambient Concentrations at Selected Sites

Existing Ambient Carbon Monoxide Concentrations:

The microscale dispersion analysis for this project evaluated local CO levels at receptor sites located along the roadways that are expected to experience the greatest change in traffic volumes and in the vicinity of the passenger railroad stations where the greatest increase in vehicular delay is expected.

South of Dwight, microscale CO analyses were performed for the closest receptor (worst-case location) at three highway-railroad grade crossings in the Chicago - St. Louis HSR corridor: Carpenter Street (MP 184.68) in Springfield; Walnut Street (MP 194.40) in Chatham; and 20th Street (MP 275.00) in Granite City. Microscale analyses were also performed at the Bloomington and Springfield passenger railroad stations. The analysis at these stations focused on the impacts of vehicular delay at the closed crossings. Figures 2.4-2A and 2.4-2B identify the locations where the microscale analyses were conducted.

Maximum existing one-hour CO concentrations were estimated to range from 4.4 to 7.3 ppm. These equate to estimated eight-hour concentrations that range from 2.5 to 4.6 ppm. The estimated concentrations are below the NAAQS one-hour and eight-hour standards of 35.0 and 9.0 ppm.

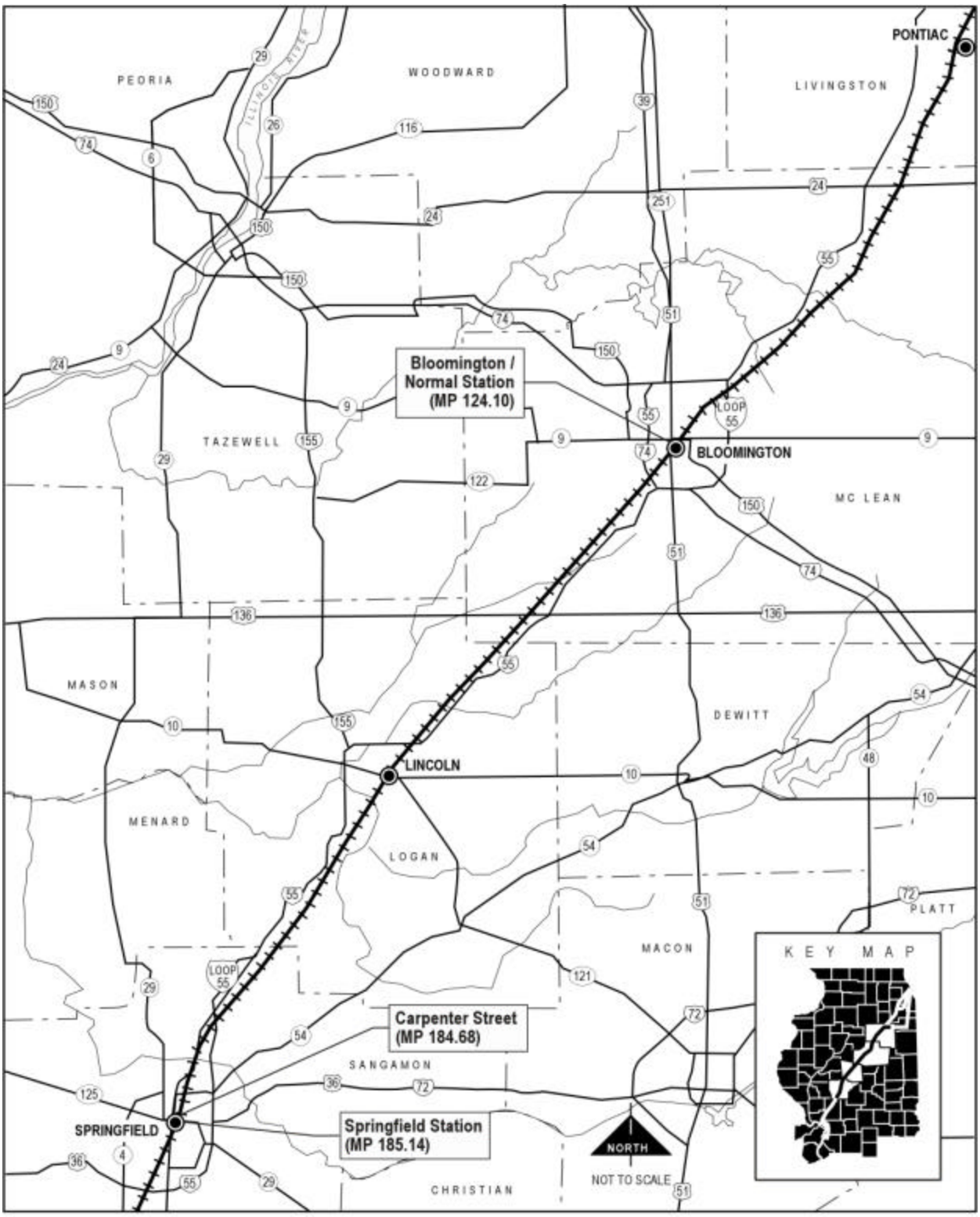

FIGURE 2.4-2A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
MICROSCALE CARBON MONOXIDE ANALYSIS LOCATIONS
(Pontiac to Springfield)

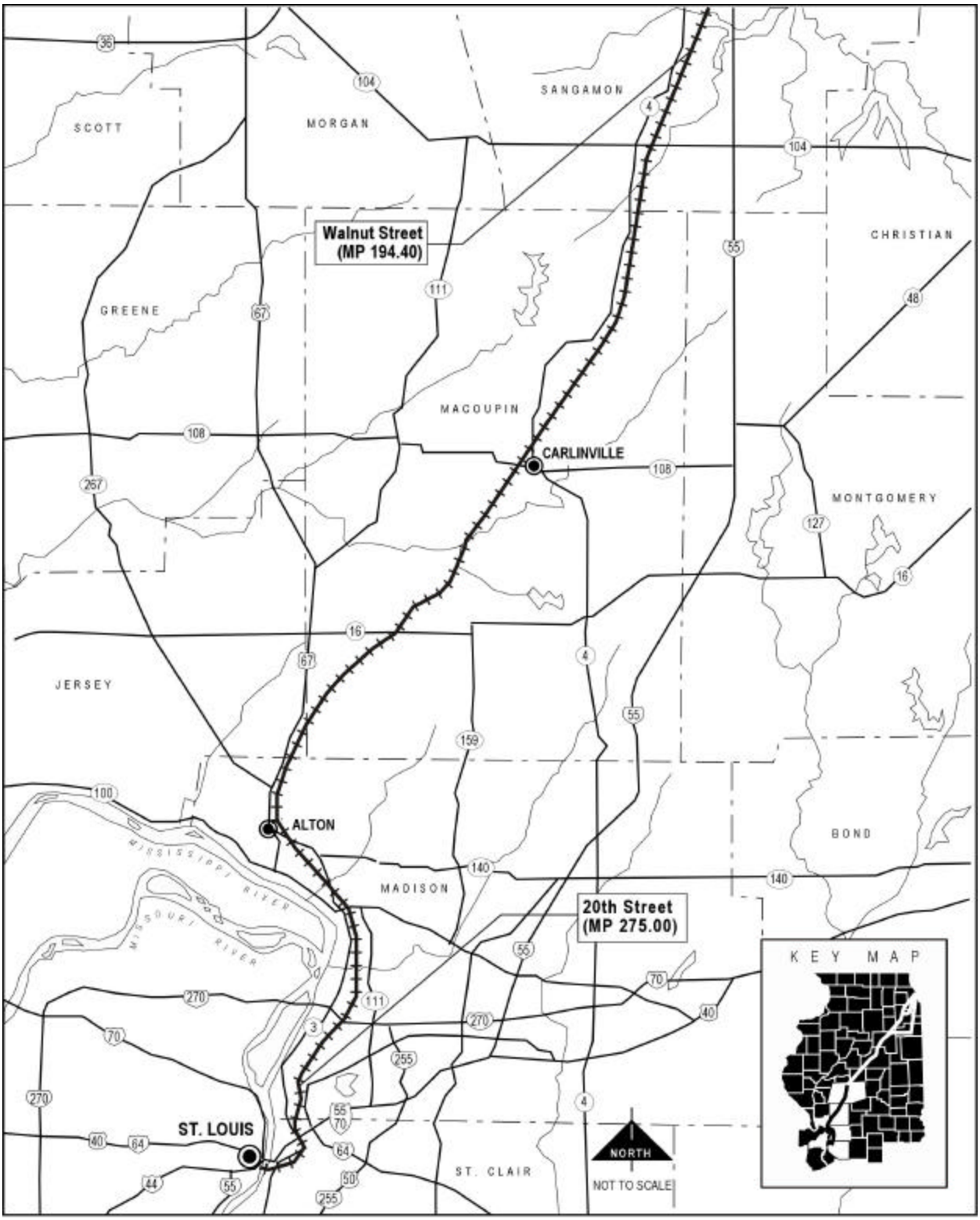

FIGURE 2.4-2B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
MICROSCALE CARBON MONOXIDE ANALYSIS LOCATIONS
(Springfield to St. Louis)

Existing Air Quality Effect of Locomotive Passbys:

Results from locomotive passby assessments on other railroad projects in the U.S., particularly the Northeast Corridor (NEC) Improvement Project, generally indicated that locomotive passbys only minimally increase background concentration levels and do not exceed NAAQS standards. For example, peak CO concentrations at sites evaluated for the NEC Improvement Project did not exceed 0.03 ppm. This was converted to a one-hour concentration below 0.01 ppm, which is nominal compared to the 35.0 ppm one-hour NAAQS standard (USDOT, 1994). The assessment for the NEC evaluated trains pulled by an F40 locomotive, the same type of locomotive used by Amtrak in the Chicago - St. Louis corridor. Based on this information, the air quality effects of locomotive passbys were not assessed as part of this project.

2.5 NOISE AND VIBRATION

2.5.1 Regulatory Setting

The Federal Railroad Administration (FRA) and the Federal Transit Administration (FTA) have developed guidance manuals, High Speed Ground Transportation Noise and Vibration Impact Assessment and Transit Noise and Vibration Impact Assessment, that include criteria for noise and vibration impact evaluation. For noise, the criteria set limits for noise increases related to the project based on the existing ambient noise level in terms of L_{eq} (equivalent sound level) or L_{dn} (day-night sound level). These criteria reflect an equivalent increase in noise annoyance depending on the existing noise, allowing less of an increase at locations where existing noise levels are higher. The FRA and FTA vibration criteria include impact thresholds based on land use and event frequency, in terms of the root mean square (rms) ground vibration velocity level (VdB, in dB relative to 1 micro-inch per second). For this project, the general assessment procedures described in the FRA and FTA manuals were used to develop noise and vibration estimates.

There are no relevant state regulations concerning noise and vibration directly applicable to high-speed rail.

2.5.2 Affected Environment

Existing noise and vibration levels in the Chicago - St. Louis HSR corridor were evaluated for railroad train operations only. Secondary sources, such as motor vehicle traffic on nearby roadways, aircraft overflights in some areas, and general community activities, were not included in these estimates.

The predominant noise- and vibration-sensitive land use in the HSR project area is residential. Additional sensitive receptors include schools, churches, and other institutional buildings. All sensitive receptors located within 75 meters (250 feet) of the track centerline were analyzed in the HSR corridor.

2.5.2.1 Measures of Noise and Vibration

Noise Descriptors:

The most commonly used measure of noise is the A-weighted sound level, expressed in decibels (dBA). The A-weighted sound level is a single-number measure of sound intensity with weighted frequency characteristics that correspond to human subjective response to noise. Because environmental noise fluctuates from moment to moment, it is common practice to condense all information into a single number, called the "equivalent" or "energy-average" sound level (L_{eq}). Because many surveys show that the L_{eq}

properly predicts annoyance, this descriptor is commonly used for noise impact assessment. L_{eq} can be thought of as the steady sound level that represents the same sound energy as the varying sound levels over a specific time period. Commonly used equivalent noise descriptors are the $L_{eq}(h)$ measured over a one-hour period, and the $L_{eq}(24)$, measured over a 24-hour period. For this project, the $L_{eq}(h)$ was used when evaluating noise at non-residential sensitive receptors.

A widely accepted measure of cumulative noise exposure in residential areas is the Day-Night Sound Level, abbreviated as L_{dn}. The L_{dn} is the A-weighted equivalent sound level for a 24-hour period with an additional 10-decibel weighting imposed on noise that occurs during the nighttime hours (between 10:00 PM and 7:00 AM). The L_{dn} was used in this project to evaluate noise levels at residential receptors.

Vibration Descriptors:

Vibration is an oscillatory motion of an object about some equilibrium position which can be described in terms of displacement, velocity, or acceleration. The response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. Because vibration velocity amplitude within the low frequency range is of most concern for environmental vibration (approximately 5 to 100 Hz), vibration velocity is used in this analysis to describe ground-borne vibration from train operations.

The descriptor used in this analysis for the assessment of ground-borne vibration is the rms vibration velocity level, VdB, expressed in decibels relative to one micro-inch per second. The rms amplitude is defined as the average of the squared amplitude of the signal and is typically evaluated over a one-second period of time.

Vibration impact criteria are based on the effects of a single train passby. Vibration levels as a result of passenger train passbys are typically higher than those associated with freight trains because passenger trains can operate at higher speeds in the project area. For this analysis, the vibration levels associated with passenger trains were evaluated.

2.5.2.2 Existing Noise and Vibration Estimates

Noise Estimates:

At 75 meters (250 feet) from the centerline of the track, existing noise level estimates are below 60 dBA. At 8 meters (25 feet), existing noise level estimates are up to 74 dBA. The highest estimated noise level is in Chatham, where residential receptors are as close as 8 meters (25 feet) from the centerline of the track.

Vibration Estimates:

Between 8 meters (25 feet) and 75 meters (250 feet), vibration levels range from 61 to 81 VdB for trains operating at 79 mph. The highest existing vibration levels are also estimated in Chatham (81VdB). This is the only location where the ground-borne vibration impact level for residential receptors of 80 VdB is exceeded.

2.6 WATER RESOURCES

2.6.1 Surface Water

Numerous rivers, streams, lakes, ponds, canals, and wetlands occur in the HSR corridor. Discussion of surface water in this section focuses on characteristics of rivers and streams that could be affected by the proposed project.

Most of the streams, especially the major streams, have had much of their riparian or streamside vegetation cover altered from forested vegetation with banks stabilized to agriculture/grass and urbanized land. (See Sections 2.8 and 2.9 for descriptions of wetland and upland vegetation communities.)

2.6.1.1 Drainage Basins

The project area intersects five major drainage basins, comprised of several sub-basins (Table 2.6-1) (IEPA, 1995a, 1995b, and 2000). Figure 2.6-1 shows the relationship between these basins and the project area. All of the drainage basins within the project area ultimately flow into the Mississippi River, many via the Illinois River. Table 2.6-2 (in Appendix A) summarizes available information on various physical features of the perennial streams within the project area. Numerous minor tributaries and drainageways lie within the project area, but were not characterized by available references. They were, however, evaluated during the analysis of impacts. More detailed information in each drainage basin is provided in the Draft EIS prepared for this project.

Table 2.6-1
MAJOR RIVER BASINS IN THE PROJECT AREA

Major River Basin	Drainage Area sq. km. (sq. mi.)	Sub-Basins	Percent of Project Area
Des Plaines/Lake Michigan	3,200 (1,231)	Great Lakes/Calumet Des Plaines	21
Kankakee	13,400 (5,165)	Kankakee/Iroquois	17
Illinois	64,300 (24,810)	Upper Illinois/Mazon Vermilion Middle Illinois Mackinaw Lower Illinois/Macoupin	29
Sangamon	14,000 (5,419)	Upper Sangamon Lower Sangamon Salt Creek of Sangamon	22
Mississippi South Central	2,900 (1,131)	Mississippi South Central	11

Source: IEPA (1995a, 1995b, and 2000)

Channelization of streams and their tributaries has been common practice in Illinois in response to agricultural needs. This is the case for streams in the Sangamon, Des Plaines, and Kankakee basins and the Vermilion and Mackinaw sub-basins of the Illinois Basin (IDNR, 1994b). The surrounding land immediately adjacent to the water body, as well as within the watershed, substantially influences the physical, chemical, and ultimately the biological aspects of streams and rivers.

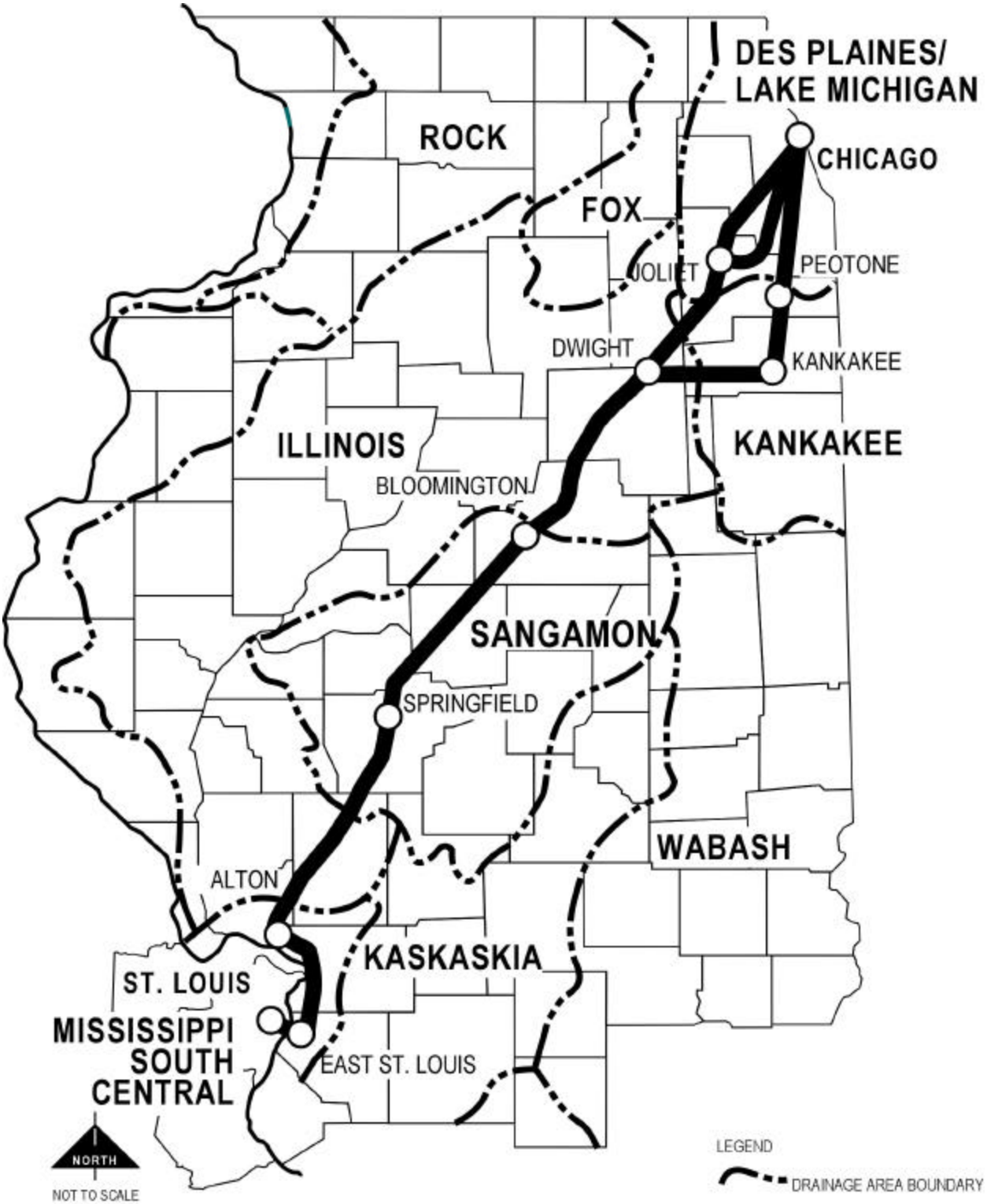

FIGURE 2.6-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
MAJOR DRAINAGE BASINS

Des Plaines/Lake Michigan Basin:

The Des Plaines River flow is generally south through Lake and Cook counties. Water from this basin drains southwest through the Des Plaines River to where it joins flows from the Kankakee River to form the Illinois River. In Illinois, the Des Plaines Basin has been extensively developed for urban and industrial use. This basin represents approximately 21 percent of the project area length.

Kankakee Basin:

The Kankakee Basin in east-central Illinois drains northwest via the Kankakee River to the Illinois River. This basin represents 17 percent of the project area length.

Illinois Basin:

The Illinois River Basin represents the largest portion of the project area (29 percent). The basin drains to the southwest, ultimately to the Mississippi River.

Sangamon Basin:

The Sangamon River Basin represents 22 percent of the project area length. This basin forms the largest watershed of any of the tributaries to the Illinois River. Two streams are tributary to the Sangamon Basin in areas where potential impacts from the proposed project may occur. These are Elkhart Slough and Anderson Branch.

Mississippi South Central Basin:

The final major basin, the Mississippi South Central Basin, drains to the Mississippi River for lands surrounding St. Louis. The basin represents 11 percent of the project area.

2.6.1.2 Aquatic Biota

Ponds, lakes, streams, and rivers within the project area support numerous life forms. Most animals and organisms require definite types of aquatic habitat to survive, grow and reproduce. The character of the substrate may be the primary physical factor influencing the distribution and abundance of benthic invertebrates (Ivens et al., 1981). Sedimentation adversely affects the aquatic life of a stream through loss of habitat, direct mortality, injury, and growth suppression. The degree of damage correlates positively with the amount of sediment deposited into the river (Brigham et al., 1981). General water quality aspects of the various streams and rivers along the project area are described in Section 2.6.1.3.

Des Plaines/Lake Michigan Basin:

Extensive modification has occurred to many channels within this basin, particularly those that form the canal system. Ninety-four species of fishes, 34 species of mussels, and 17 species of crustaceans have been reported from this basin (Page et al., 1992). However, these figures cover a large area beyond the project area, including Lake Michigan. Aquatic resources contained within the project area are less diverse than those of the basin as a whole.

Waterways crossed by the project are dominated by fish species tolerant to pollution, including turbid waters. Such waters are non-conducive to the establishment of most native organisms. Fish species likely to be found include goldfish, carp, and green sunfish. Bottom substrates such as gravel, brush piles, and aquatic weed beds, which can provide habitat for fish and invertebrates, are limited due to channelization and sediment deposition.

Like fish species, invertebrates that may exist in the project area include organisms that have the ability to survive a wide range of environmental conditions and are generally capable of thriving in water of extremely poor quality.

Kankakee Basin:

Based on current scientific literature reviews and previous field experience of investigators, numerous quality streams and creeks of known high quality exist throughout the basin. These streams play a crucial role in providing food sources, temporary and permanent shelter and spawning areas for aquatic wildlife. In particular, the Kankakee River is an excellent resource in terms of species diversity and as a fishery. Seventy-two fish species are present, including several unusual species such as the ironcolor shiner, weed shiner, blacknose shiner, lake chubsucker, starhead topminnow, northern longear sunfish, and least darter (Smith, 1971).

The Kankakee River hosts a variety of midges, caddisflies, mussels, and water beetles. The diversity of benthic invertebrates increases in areas of complex substrates such as areas having various amounts of sand, silt, gravel, cobble, and bedrock. Less diverse substrates typically support from 25 to 28 taxa while more diverse substrates support from 70 to 80 taxa. Twenty-seven species of midge flies, 62 species of caddisflies, and 64 species of water beetle were collected in 1978 in the river upstream of the project area crossings. Ten more species of caddisflies were previously recorded for the river and 52 more species of water beetles are considered likely to occur in the river, giving totals of 72 caddisflies and 116 water beetles (Brigham et al., 1981). Thirty-seven species of mussels have been reported in the river. A dramatic decline in the mussel fauna of the Kankakee River has occurred over the past 100 years. This decline is similar to that documented for other Illinois rivers, including the Illinois, Kaskaskia, Rock, and Vermilion rivers (Brigham et al., 1981).

Illinois Basin:

From 67 to 100 fish species have been identified within streams in the Illinois Basin, which includes considerable area beyond the project area. Mazon Creek system contains 67 fish species. Habitats include extensive beds of aquatic vegetation and gravelly riffles and pools. Habitats in the Mackinaw River are similar to those of Mazon Creek. The diversity of habitats along the Mackinaw is reflected in high fish species diversity (i.e., 100 species of fish) (Smith, 1971). Unusual species include rosyface shiner, silver redhorse, and the freckled madtom. The Vermilion River contains 80 fish species. Habitats within the river include gravely and sandy riffels and pools as well as aquatic vegetation and rocky riffles. Unusual fish species include blacknose dace, redbelly dace, and hornyhead chub (Smith, 1971).

Many of the waters in the Illinois Basin are characterized by populations of pollution worms of the family Tubificidae. However, some of the original diversity of benthic organisms, such as immature insects, clams, snails, leeches, moss animals and the like, exists in some parts of the basin and its lakes (Mills et al., 1966).

Sangamon Basin:

Ninety-four fish species are present within the Sangamon River system (Smith, 1971). The headwaters of the Sangamon River, Kickapoo Creek, and some small tributaries near the mouth of the Sangamon support particularly rich assemblages of fishes (Smith, 1971). Some of the unusual species include the rosy face shiner, silver redhorse, and freckled madtom. Habitats for aquatic biota in this river system include shallow and deep water pools, submerged aquatic vegetation, and riffels. Salt Creek is less altered than the Sangamon River although both branches of Salt Creek have lost some of the species they once supported.

Mississippi South Central Basin:

The Wood River and the Cahokia Canal are small tributaries to the Mississippi River. The fish species number approximately 64 (Smith, 1971). Problems affecting the diversity of fish species include extensive industrial pollution, siltation, and desiccation of small streams during drought periods. The streams lack variety in aquatic habitats and would not have high species diversity even if they were not polluted and otherwise altered (Smith, 1971).

2.6.1.3 Water Quality

Water quality standards set by the Illinois Pollution Control Board (IPCB) are based on the degree to which a water feature provides the "designated use." Table 2.6-3 (in Appendix A) summarizes water quality features of perennial streams within the project area. This information was primarily extracted from Illinois Environmental Protection Agency's The Illinois Water Quality Report 1998 Update (IEPA, 1998) and from the 1997 water resources data for the State (USGS, 1997). The IEPA report provides an evaluation of the water quality of the State's aquatic resources. In this report water quality conditions are described in terms of the degree to which the various waters attain their designated uses. Good condition indicates that the water body meets all designated uses or offers “Full Support." Fair condition indicates that the designated uses are met most of the time (i.e., "Partial Support with Minor or Moderate Impairment"). Poor condition indicates that water quality is severely impaired and that the water feature offers "No Support" for the designated uses to any degree. Waters considered "Threatened" are those where water quality is currently adequate to maintain the designated use, but if a declining trend continues, only partial support may be attained in the future.

Overall stream quality in Illinois has improved over the past two decades. The water quality trend analysis reported (IEPA, 2000) most streams to be either stable or slightly improving. Some streams have improved due to a decline of point source impacts. Other streams continue to show indicators of receiving non-point source pollution, in particular, increased siltation, phosphorus, and nitrate/nitrite concentrations typically associated with agricultural runoff. Streams and rivers within the five basins have fair to good water quality, although portions near the Chicago metropolitan area have poor quality (IEPA, 1995b).

Sediment load is greatest in streams located in west and southwest portions of Illinois. The Mississippi South Central Basin is considered within an area of higher sediment loads, while the extreme northeastern portion of the Sangamon Basin is part of the region that has the lowest sediment load carried by streams.

Stream biologists from the IEPA and the Illinois Department of Natural Resources (IDNR) have developed the Biological Stream Characterization (BSC), a stream-quality index (IEPA, 2000). The BSC utilizes a five-tiered classification system based on fish and aquatic macroinvertebrate diversity and the associated index of biological integrity. This index assesses the biological condition of streams. The BSC system contains

categories ranging from "A" to "E". Category "A" (Unique Aquatic Resources) streams are in excellent condition. Category "E" streams are considered to be in very poor condition and support few species, those of which are the most environmentally tolerant species (IEPA, 2000).

Des Plaines/Lake Michigan Basin:

Most of the Des Plaines/Lake Michigan Basin watershed occurs in the greater Chicago Metropolitan region and has been extensively urbanized and industrialized. Water quality in this basin has been degraded due to urban stormwater runoff, municipal and industrial discharges, and extensive channelization of many of its small tributaries. The Des Plaines Basin exhibits the highest levels of heavy metals and organics in sediments. Contaminants found include arsenic, cadmium, chromium, lead, mercury, zinc, chlordane, DDT, heptachlor epoxide, and PCBs.

Approximately 11.5 percent of the 1163 stream kilometers (721 stream miles) evaluated and/or monitored in this basin were rated as full support; 26.8 percent showed partial support with minor impairment. The majority of the stream kilometers (51.9 percent) were rated as partial support with moderate impairment, and the remaining 9.8 percent were considered as not supporting overall uses (IEPA, 2000).

Kankakee Basin:

Water quality within the Kankakee Basin has had some degradation due to increased nutrients and siltation associated with agricultural practices. However, this degradation has not impaired the designated uses of the water resources within this basin. A total of 829 stream kilometers (512 stream miles) in the Kankakee Basin were evaluated and/or monitored for their water quality conditions. For the Kankakee Basin, 96.1 percent of these stream kilometers were rated as full support and 3.9 percent were rated as threatened (IEPA, 2000).

Illinois Basin:

Within the Illinois Basin a total of 4,656 stream kilometers (2,887 stream miles) were evaluated and/or monitored for water quality conditions. A little over half of the stream kilometers assessed (56 percent) were rated as full support. Threatened use accounted for less than one percent, partial support with minor impairment occurred on 40.1 percent, and three percent of the stream kilometers are rated as partial support with moderate impairment (IEPA, 2000). Generalized impacts to streams in the Illinois Basin include urban stormwater runoff, municipal discharges, and non-point source pollution from cropland runoff.

Sangamon Basin:

A total of 1,771 stream kilometers (1,098 stream miles) were evaluated and/or monitored for water quality conditions within this basin. Approximately 23 percent of the stream kilometers were rated as full support, with another 2 percent of full support stream kilometers listed as threatened. The majority of the stream kilometers (65 percent) were rated as partial support with minor impairment. Another 10 percent of the stream kilometers were rated as partial support with moderate impairment, and less than 1 percent were rated as not supporting overall uses.

Mississippi South Central Basin:

The Mississippi South Central Basin covers the watershed between the lower Illinois Basin and the mouth of the Kaskaskia River. Most of the stream kilometers assessed within this basin for water quality conditions were rated as either partial support with minor or moderate impairment (IEPA, 2000). General degradation of water quality within this basin is due to urban stormwater runoff, municipal and industrial wastewater near the urban areas, and agricultural runoff in rural areas (IEPA, 2000). Streams identified within the project area had not been evaluated for their supporting uses.

2.6.1.4 Special Status Streams

The Wild and Scenic Rivers Act of 1968 (as amended) defines a "Wild River" as those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. A "Scenic River" is a river or section of a river that is free of impoundments, with watersheds or shorelines still largely undeveloped but accessible in places by road. None of the rivers crossed in the project area are officially identified as either "Wild" or "Scenic" by either the federal government or the State of Illinois.

The Nationwide Rivers Inventory (NRI) is a register of rivers that may be eligible for inclusion in the National Wild and Scenic River System. These rivers were included on the NRI based on the degree to which they are free flowing, the degree to which the rivers and their corridors are undeveloped, and the outstanding natural and cultural characteristics of the rivers and their immediate environments. Four rivers within the project corridor are listed on the NRI (U.S. Department of Interior, 2000). These include:

River	Segment	Recognized Value
Kankakee	35-kilometer (22-mile) segment upstream of the Indiana State Line	Recreational
Mackinaw	129-kilometer (80-mile) segment between Illinois River and Colfax	Recreational
Mazon	76-kilometer (47-mile) segment from source to its mouth	Scenic and Recreational
Sangamon	242-kilometer (150-mile) segment between South fork and Saybrook	Scenic and Recreational

Navigable Waters of the United States are waters administratively defined waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation. Navigable Waters within the project area include the South Branch Chicago River, South Fork of South Branch Chicago River, Calumet Sag Channel, Little Calumet River, Kankakee River, Mackinaw River, Sugar Creek, Salt Creek, Sangamon River, and the Mississippi River. Of the bridges crossing these waters in the HSR project area, two are drawbridges. These are both on the CN-IC Joliet Line at the South Branch Chicago River and the South Fork of South Branch Chicago River.

Illinois Natural Area Inventory (INAI) streams which are crossed in the project area include the Kankakee River, Mackinaw River, and Salt Creek. The Kankakee River is crossed by the Union Pacific Railroad in Will County. The Mackinaw River is crossed by the Union Pacific Railroad in McLean County. Salt Creek is crossed by the Union Pacific Railroad in Logan County.

2.6.2 Groundwater

Groundwater occurs in water-bearing units called aquifers. In Illinois, aquifers are classified as sand-and-gravel aquifers, shallow bedrock aquifers, and deep bedrock aquifers. Within the project area, the principal shallow sand-and-gravel aquifers in Illinois are found in the counties of Cook, Will, McLean, Logan, and Madison. The principal shallow bedrock aquifers are located in the counties of Cook and Will, while the deep bedrock aquifers lie in the northeastern part of the state, north of Livingston County.

Overall groundwater quality in the project area is good. Groundwater quality is dependent in large part on the physical and chemical composition of overlying the geologic materials. The risk for groundwater contamination through the corridor is low to moderate except where the corridor crosses alluvial deposits where it becomes high (Berg & Kempton, 1984).

At this time, there are no sole source aquifers in Illinois. No regulated groundwater recharge areas are within the project area. United Water Illinois has a source water protection area that is included in the construction zone of the project. The zone for the United Water Illinois well field is southwest of Lincoln Lakes outside the city of Lincoln, in Logan County. There are several hundred private well-heads that lie within 60 meters (200 feet) of the project area. However, this distance is the minimum setback for public water supplies and is too restrictive for private wells. All of the private wells are outside of the railroad drainage ditch that should act as adequate confinement for any diesel fuel spills.

2.6.3 Water Use

For areas along the project area, the primary uses for water include public water supplies, agriculture, industry, and recreation. Non-potable water for agricultural, industrial and recreational uses is derived primarily from surface water, with groundwater supplying typically less than 15 percent of water uses (Fitzgerald et al. 1983, Zuehls 1987, Zuehls et al. 1984). Except for the Greater Chicago Region, which obtains water from Lake Michigan, potable water is primarily drawn from groundwater sources. Groundwater is used for domestic supply, industry, and agriculture (IEPA, 1995a and 2000). Most wells tapped in sandstone or limestone formations are generally for farm use (IEPA, 1976e).

2.7 GEOLOGY

2.7.1 Bedrock and Structural Geology

Underlying surface bedrock is generally older in the north, and is mainly Silurian in Cook and Will counties, with an area of Ordovician origin in western Will County. For most of the remaining length of the project, the bedrock is Pennsylvanian, except for a Mississippian area near the Mississippi River in Madison and St. Clair counties (INHS, 1987). The precambrian basement rock is at various depths ranging from about 1,100 meters (3,500 feet) at the northern and southern extremes of the project area to 1,500 meters (5,000 feet) or more near the center of the State. Bedrock is not exposed in any large areas along the HSR corridor.

An area of karst topography exists in the vicinity of the town of Alton, near the Mississippi River. Karst areas are characterized by a fractured bedrock surface (in this case, Mississippian limestone) and numerous springs and sinkholes. Consequently, the risk of groundwater contamination in such areas is “very high” (ISGS, 1999). Karst topography lies outside the affected environment of this project.

2.7.2 Surface Geology and Topography

The entire project area is located on glacial till deposits associated with Wisconsinian, Woodfordian, Holocene, Altonian or Illinoian glaciers (Schuberth, 1986). Over most of the project area, a layer of loess exists at the surface, ranging from less than one meter (three feet) to greater than 30 meters (100 feet) in thickness (Willman, 1975). Portions of the northern stretch of the project (from Livingston County north) have a substrate of loess interspersed with lake deposits, sand dunes and glacial outwash. An area of alluvial deposition occurs in sections of the project near the Mississippi River (Willman, 1975). Soil erosion is a recognized problem in much of Illinois since 1) loess soils are severely erosion-prone, 2) much of the state is in agricultural tillage, and 3) rainfall is relatively high.

The project passes through, from north to south, the Chicago Lake Plain, the Wheaton Morainal Country, the Kankakee Plain, the Bloomington Ridged Plain, and the Springfield Plain of the Central Lowland physiographic province (INHS, 1987). With the exception of Cook and Will counties, the project lies within the Till Section of this province, a topographically flat accumulation of glacial soils which historically supported tall prairie grass.

2.7.3 Mineral Resources

Mineral resources that exist in the proposed project area include coal, petroleum (crude oil and natural gas), stone (limestone, dolomite, sand and gravel), peat, and clay.

Coal production in Illinois is currently limited to areas where it is near the surface or can be deep-mined economically. However, the Eastern Interior Coal Field extends well beyond the current production region and includes most of the project area from southwest Will County to northwest Madison County. A high potential for surface-minable coal is present in the project area within Madison and extreme southwest Jersey counties. Large quantities of deep-minable coal are present in the project area in Livingston, Logan, Sangamon, Macoupin and Madison counties.

Petroleum production as crude oil and natural gas is heaviest in the southeast portion of the State, although the proposed project passes through some of the less productive counties. Crude oil is produced from Sangamon, Macoupin, Madison and St. Clair counties, and a relatively small amount of natural gas is produced from Madison and St. Clair counties.

Limestone and dolomite are widely quarried in the northern quarter of the State, along the western edge, and near the southern tip. The stone is mostly used in the crushed and broken form for construction aggregate and road-base. Portland cement and flagstone are other main uses. Sand and gravel, mostly used in construction aggregate, are mined heavily from large deposits in Cook, Will, and Livingston counties.

Peat has been produced in all counties the project passes through from Sangamon northward, except Logan County, with quantities not exceeding 1 million tons per year per county in 1984.

Clay production in Illinois fell from over 2 million tons per year in the 1950s to less than 300 thousand tons in 1985. Livingston County is one of the main clay-producing counties in the State, mostly for bricks, portland cement, and concrete. Historically, Grundy County has produced refractory clay, but production has almost completely fallen off in recent years.

2.7.4 Seismic Risk

The ability of seismologists to predict earthquakes has increased greatly over the past few decades, but it is still possible for an earthquake to occur with little advance warning. The corridor is within an area characterized as having no seismic risk in Cook and northern Will counties, minor risk southward into northern Madison County, and moderate risk in the remainder (Uniform Building Code, 1991). However, depending on the strength of an earthquake, most likely centered in the New Madrid Zone, and the subsurface profile at a given site, locations in the corridor could be susceptible to earthquake damage. A major concern in the corridor would be amplification of earthquake ground motions by alluvial soils in the Alton to St. Louis portion of the project area. The concern here would be for lateral spread damage of embankments and levees since the liquefaction potential of loose sandy materials in the upper part of the valley fill is typical of the American bottoms area of the Mississippi River (Bauer, ISGS personal communication).

2.8 WETLANDS

2.8.1 Wetland Delineations

Wetlands are areas where the vegetation is adapted for life in saturated or shallowly flooded soil conditions. Waters of the U.S. include wetlands and all waters that 1) are currently used, 2) were used in the past, or 3) may be used for interstate or foreign commerce. Waters of the U.S. also include all interstate wetlands including intrastate lakes, streams, mudflats, sandflats, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds (Goode and Pierce, 1990).

Because of the values of wetlands, the historic losses, and the increase in development pressures, wetlands are protected under the Federal Clean Water Act (CWA). The U.S. Army Corps of Engineers (COE), through Section 404 of the CWA, regulates the discharge of dredged/fill materials into waters of the U.S., including wetlands.

During field surveys, wetland investigations were conducted in accordance with methodology approved by the COE for identifying and delineating jurisdictional wetlands (Environmental Laboratory, 1987). In addition, all plant species observed in each wetland were listed on wetland floristic quality assessment forms. The Floristic Quality Assessment (FQA) was used to determine the relative vegetative quality utilizing methodology presented in Swink and Wilhelm (1994).

All wetlands observed within 30 meters (100 feet) of the current right-of-way were delineated during the fall 1997 survey. Surveyed wetlands with a floristic quality index (FQI) equal to or greater than 20 were revisited in the spring and summer of 1998 to re-evaluate the wetland and to identify additional plant species to provide a comprehensive, three season, plant list. During the fall survey, 112 wetlands were delineated. Ten wetlands were revisited during the spring and summer surveys. A more detailed discussion of methodology and the results of the wetland surveys is presented in the Wetland Report prepared for this project.

2.8.2 Wetland Classification

Wetland communities are distinguished primarily by vegetation type and by the duration of hydrology. Based on the Cowardin Classification (Cowardin et al., 1979), there are three primary categories of waters of the U.S. in the project area: palustrine emergent (PEM), palustrine forested (PFO), and palustrine scrub-shrub (PSS). All wetlands delineated for this project were classified using this system.

2.8.3 Wetlands Within the Project Area

During the field surveys, all areas within the high-speed rail project area proposed for construction activity were evaluated for the potential presence of wetlands. Table 2.8-1 summarizes existing wetlands in the project area of the Preferred Alternative. A total of ten wetlands were identified within the project area of the Preferred Alternative. None were determined to be high quality based on the criteria of having an FQI near or greater than 20.00. Figures 2.8-1A and 2.8-1B illustrate the general location of these 10 wetlands.

2.9 NATURAL RESOURCES

2.9.1 Upland Vegetation

Within the various natural divisions traversed by the project area, there are seven general upland vegetation communities. These are forest, shrubland, hedgerow, grassland, forbland, agricultural land, and developed land. Vegetation communities were identified using aerial photography, literature from the Illinois Department of Natural Resources and Illinois Natural Heritage Program, and field surveys. Field investigations focused on areas where new impact will occur. Table 2.9-1 summarizes the magnitude of the general communities within and adjacent to the project area.

Table 2.9-1
UPLAND VEGETATION COMMUNITIES IN THE PROJECT AREA

Vegetation Communities	Estimated Percent
Forest	3
Shrubland	6
Hedgerow	6
Grassland	15
Forbland	25
Agricultural Land	22
Developed Land	23

2.9.2 Native Vegetation

Field surveys of native vegetation were conducted in all areas of the project area where construction is proposed. The protocol established by White (1978) was used to assess the prairie sites grades A through E. A more detailed discussion of methodology and the results of the native vegetation surveys including species inventory lists is presented in the Native Vegetation Report prepared for this project.

Each prairie with a grade of C+ or higher was evaluated utilizing the Floristic Quality Assessment methodology presented in Swink & Wilhelm (1994). The FQI provides a qualitative way to assess the general floristic quality of an area/site (Swink & Wilhelm, 1994). If an area or site has an FQI of greater than 35, then it is likely that the area possesses sufficient conservatism and richness to be of profound importance from a regional perspective (Swink & Wilhelm, 1994).

Table 2.8-1
EXISTING WETLANDS

Milepost	Wetland	COE District	Plant Community	Dominant Vegetation	Soil Type	Size hect.	(acres)	NWI Classification[1]	FQI	Percent Adventive	Functional Values
158.50-168.40	A	Rock Island	Marsh	Duckweed, reed canary grass, three-seeded mercury, false nettle	Sawmill silt loam	0.02	(0.04)	PEM	3.46	40.0	
	B	Rock Island	Scrub-shrub	Giant ragweed, sandbar willow, water hemlock	Sable silty clay loam	0.06	(0.14)	PSS	6.12	14.3	
	C	Rock Island	Scrub-shrub	Sedge, black willow, slender wedge grass	Sable silty clay loam	0.01	(0.03)	PEM/PSS	8.95	0.0	
204.55-210.60	A	St. Louis	Marsh	Cattail, sedge	Virden silty clay	0.83	(2.06)	PEM	8.52	11.8	
	B	St. Louis	Marsh/ forested		Virden silty clay	6.93	(17.12)	PEM*	**		Larger than 5 acres
212.55-218.65	A	St. Louis	Forested	Eastern cottonwood, black willow, prairie cord grass	Virden silty clay	0.23	(0.57)	PFO*	9.18	26.9	
	B	St. Louis	Marsh	Cattail, cocklebur, prairie cord grass, long-scaled nut sedge, giant foxtail, sow thistle	Virden silty clay	0.39	(0.97)	PEM*	4.04	25.0	
	C	St. Louis	Scrub-shrub	Cocklebur, black willow	Virden silty clay	0.10	(0.24)	PSS*	**		
	D	St. Louis	Scrub-shrub	Black willow, prairie cord grass	Virden silty clay	0.49	(1.22)	PSS*	4.08	14.3	
	E	St. Louis			Dumps; mines	0.77	(1.89)	PEM*	**		
					Total Size:	9.83	(24.28)				

1 - Wetland classifications are based on Cowardin et. al. 1979.

* - Wetland location also noted on NWI maps.

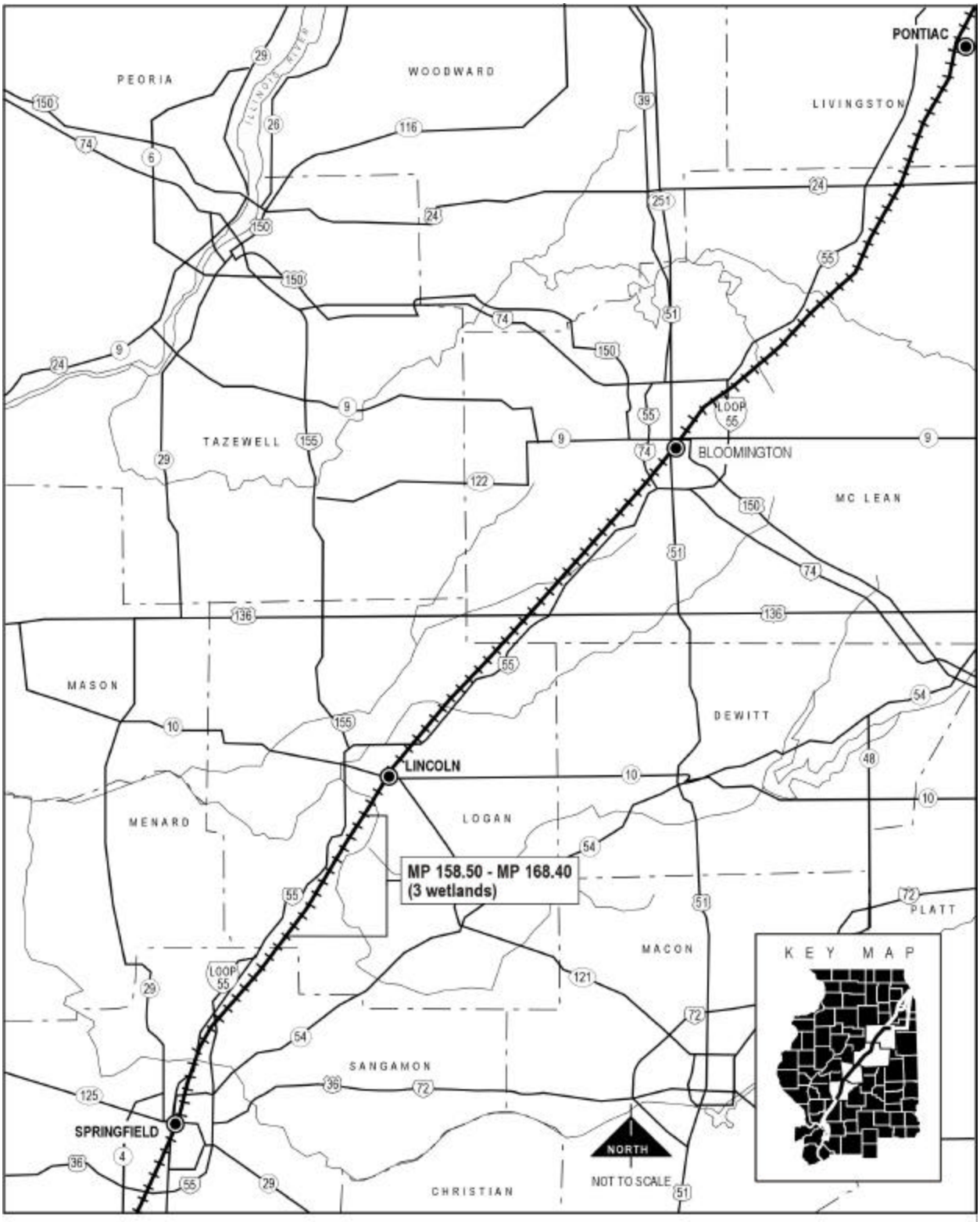

FIGURE 2.8-1A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
WETLAND LOCATIONS
(Pontiac to Springfield)

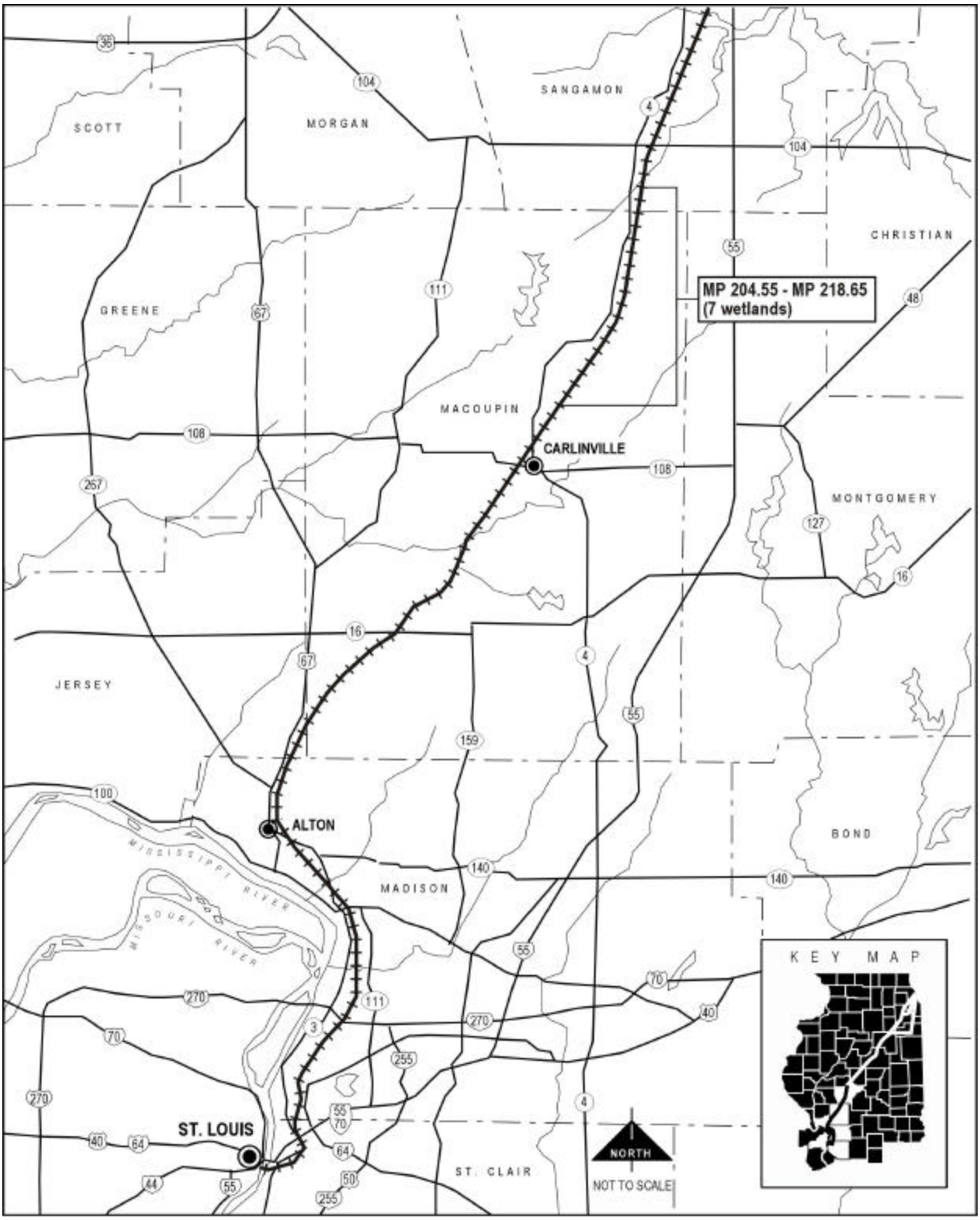

FIGURE 2.8-1B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
WETLAND LOCATIONS
(Springfield to St. Louis)

A total of nine prairie remnants were identified within the project area of the Preferred Alternative. One is a grade B prairie, two are prairies grade C+ or higher, and six are either grade C or C-. Most of the native prairie remnants are linear, growing along the railroad right-of-way. The grade B prairie has an FQI of 37.33, indicating an exceptionally high natural value. The grade C+ prairies have FQIs of 14.20 and 15.29. (See Table 2.9-2.) The locations of native prairies with grades C+ or higher are illustrated in Figures 2.9-1A and 2.9-1B.

Table 2.9-2
EXISTING NATIVE VEGETATION IN PREFERRED ALTERNATIVE PROJECT AREA

COUNTY	Milepost	Grade	Size Hectares (Acres)	FQI
Logan	161.00	C-	0.06 (0.16)	-
Logan	161.20	C-	0.06 (0.16)	-
Logan	163.00	C-	0.70 (1.75)	-
Logan	164.80	C+	0.36 (0.90)	15.29
Logan	164.90	C	0.06 (0.15)	-
Logan	164.95	C	0.06 (0.15)	-
Logan	165.00	C+	0.21 (0.51)	14.20
Macoupin	217.20	C-	0.51 (1.28)	-
Macoupin	218.65	B	0.46 (1.14)	37.33
TOTAL			**2.51 (6.20)**	

2.9.3 Terrestrial Animals

Railroad rights-of-way and their associated vegetative cover provide habitat for many wildlife species. The linear characteristic of a rail line offers not only localized habitat value but also important continuity of open space, linking diverse habitat features. This linkage can be important, especially where the right-of-way passes through predominantly agricultural or urban areas that otherwise offer limited habitat value and diversity. Railroad rights-of-way offer denning sites for small mammals, nesting and roosting structure for song birds and raptors, and can provide seclusion and ground cover for various species of reptiles and amphibians. Due to the early establishment of railroads, relatively undisturbed portions of the right-of-way hold some of the only remaining vestiges of Illinois prairie, along with the invertebrate and vertebrate species characteristic of this once-common plant community.

The evaluation of wildlife is based on a survey of habitat availability, wildlife species distribution, habitat preferences, as well as direct and indirect field observations. A field reconnaissance was conducted within the project area, focusing on areas of potential project impact and characterizing typical habitats. Habitat availability was then compared with published records for species distribution as well as field observations.

Due to the extensive length of the project, many animals documented in the Draft EIS occur only in a portion of the project area. The eastern mole is found in well drained soils in more central Illinois. The meadow vole, least weasel and western smooth snake occur in grasslands of the northern half of the state. The plains pocket gopher is found in sandy soils bordering the southeast edge of the Illinois and Kankakee

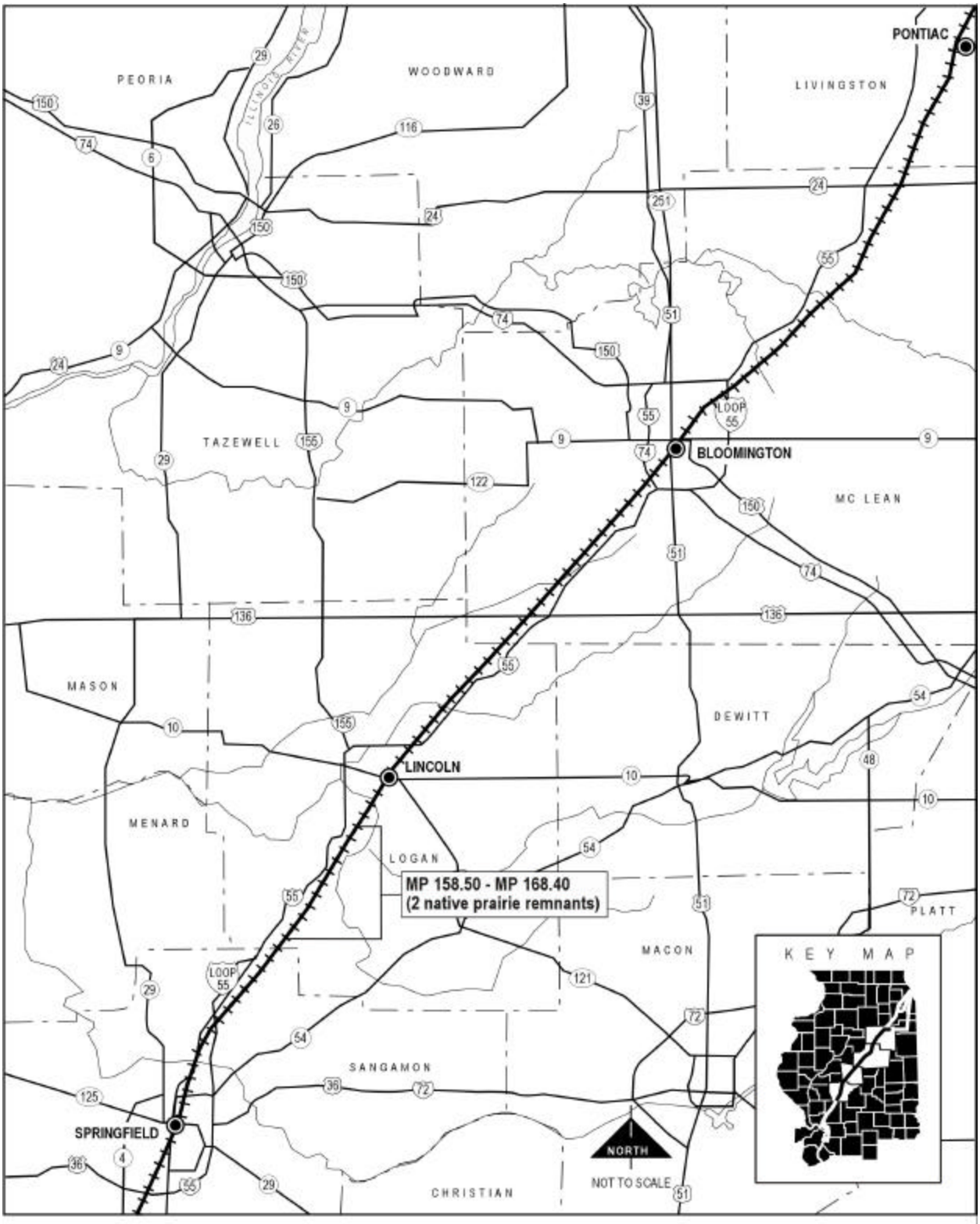

FIGURE 2.9-1A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
NATIVE PRAIRIE LOCATIONS (Grade C+ or Higher)
(Pontiac to Springfield)

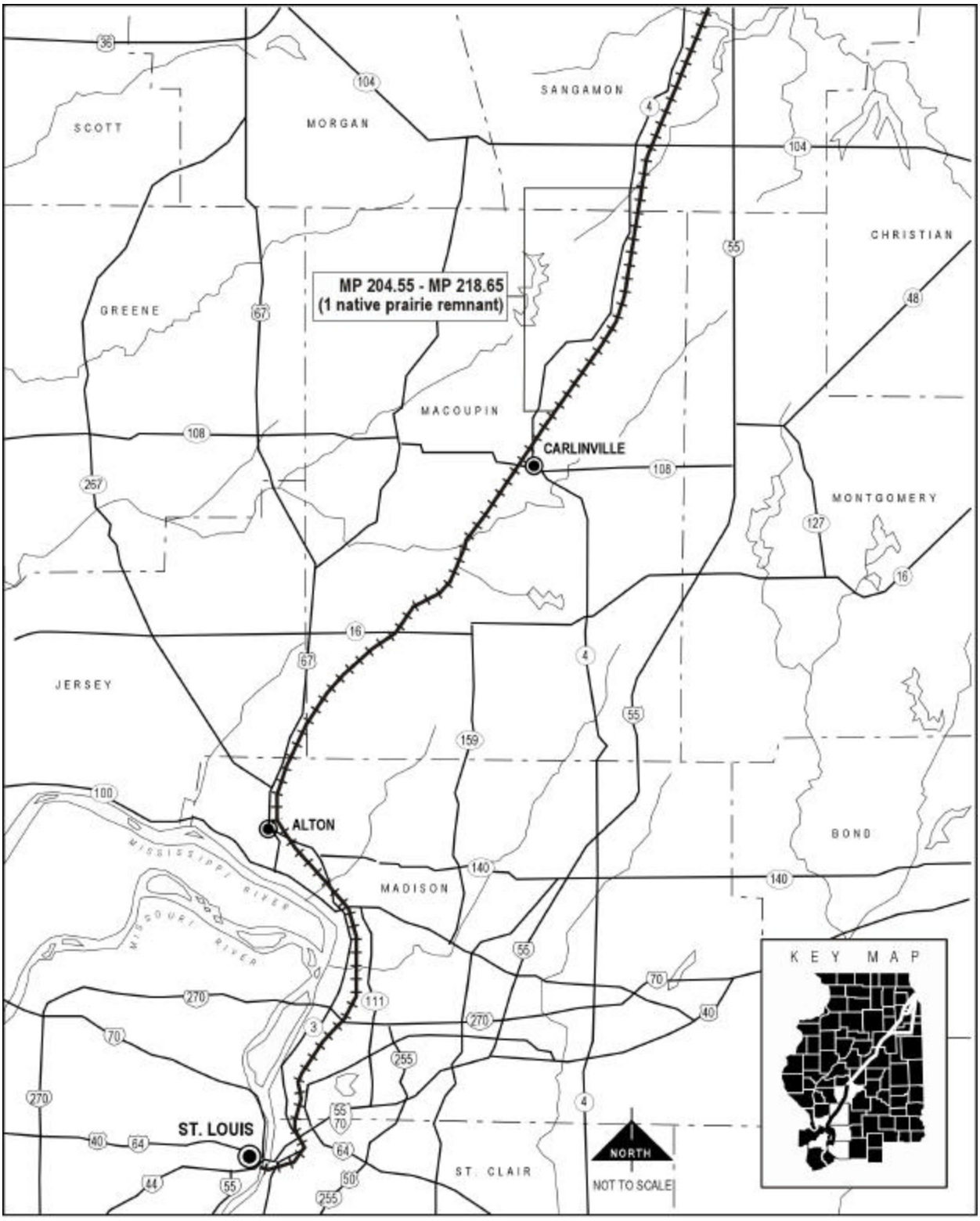

FIGURE 2.9-1B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
NATIVE PRAIRIE LOCATIONS (Grade C+ or Higher)
(Springfield to St. Louis)

rivers. The eastern box turtle, rough green snake and prairie king snake are generally limited in range to the southern half of the state. Wildlife species potentially found in the project area and their principal habitats are listed in Appendix A-1 of the Draft EIS.

2.9.4 Threatened and Endangered Species

The Federal Endangered Species Act (ESA) of 1973, as amended, was passed in an attempt to control the loss of at-risk birds, mammals, reptiles, mussels, fish, amphibians, invertebrates, and plants. Section 7 of the ESA requires that projects being authorized, funded, or carried out by federal agencies demonstrate that the action will not jeopardize the continued existence of any listed species or modify their critical habitat. If federally listed species are known to exist on a proposed site, the lead federal agency must initiate Section 7 consultation with the U.S. Fish and Wildlife Service to assure that the species and/or critical habitat will not be adversely affected by the project.

The Illinois Endangered Species Protection Act (IESPA) of 1972 (as amended) is similar to the ESA but is implemented at the state level. The state act protects State-listed animals and plants from unauthorized actions and requires agencies of the State and local governments to enter into a consultation process through the Illinois Department of Natural Resources to evaluate whether actions authorized, funded or implemented by these entities are likely to jeopardize the continued existence of state-protected species or are likely to result in the destruction or adverse modification of designated essential habitat of the such species.

Field studies for threatened and endangered plants and animals were conducted in the fall of 1997 and the spring and summer of 1998. Through early coordination with the Illinois Department of Natural Resources, a list was developed that included federal and state threatened and endangered species potentially occurring in the project area. This list was based on a review of the Natural Heritage Data Base (IDNR, 1996a), as well as recommendations of the individual Natural Heritage Biologists most familiar with each section of the project area. Cover-type mapping was prepared for all areas within the project area through aerial photo interpretation. This information was then field verified during the fall of 1997. Plant surveys were timed to coincide with the optimal identification period for each species, typically the time of flowering.

In addition to overall plant and animal surveys within the project area, three special studies were undertaken for threatened or endangered animals known to have a high probability of occurring within the project area. During the spring and summer of 1998, field studies were undertaken for the Eryngium stem borer (*Papaipema eryngii*), the Illinois chorus frog (*Pseudacris streckeri illinoensis*), and the Hine's emerald dragonfly (*Somatochlora hineana*).

Tables 2.9-3 and 2.9-4 (in Appendix A) list the protected plant and animal species identified by the IDNR as potentially occurring within the project area and characterize the habitat requirements of each species. A full discussion of threatened and endangered species is provided in the Threatened and Endangered Species Report prepared for this project.

2.9.5 Natural Areas

Much of the vegetation within the project area is not high quality. However, there are nine Illinois Natural Area Inventory sites and three nature preserves within 1.6 kilometers (one mile) of the project area south of Dwight (Table 2.9-5). The INAI sites are ecologically sensitive and require consultation under the Illinois Endangered Species Protection Act. Nature preserves are protected under the Illinois Natural Preserves

System Act of 1963. The act stipulates that nature preserves be maintained as much as possible in the natural condition and be used in a manner consistent with their continued preservation.

Table 2.9-5
NATURAL AREAS WITHIN 1.6 KILOMETERS (ONE MILE) OF THE PROJECT AREA

	Type of Site[1]			
Natural Area	**INAI**	**INP**	**NNL**	**NHL**
Alton Geological Area	x			
Carlinville Railroad Prairie	x			
Carpenter Park	x	x		
Denby Prairie	x	x		
Elkhart Hill	x			
Funks Grove National Natural Landmark Nature Preserve State Park	x	x	x	x
Mackinaw River	x			
Ocoya Geological Area	x			
Salt Creek	x			

Source: IDNR 1996a.
1 - INAI = Illinois Natural Areas Inventory, INP = Illinois Nature Preserve, NNL = National Natural Landmark, NHL = National Heritage Landmark

2.10 FLOODPLAINS

The Federal Emergency Management Agency (FEMA) has mapped areas that would be affected by flooding for most major waterways along the project area. National Flood Insurance Program Maps from FEMA were used to identify and calculate the length of the 100-year in the project area. The floodplain crossings identified between Dwight and St. Louis are shown on Figure 2.10-1A through 2.10-1C.

2.11 HISTORIC AND ARCHAEOLOGICAL RESOURCES

2.11.1 Historic Sites and Resources

The above-ground resources review for this project consisted of an evaluation of the areas surrounding those construction projects that will require additional right-of-way and the areas surrounding each highway-railroad grade crossings in the project area. Outside of these areas, no surveys were conducted because there is no potential for impact to above-ground resources. The results of above-ground resources review conducted for this project, **including the identification of 30 properties listed on the National Register of Historic Places**, are documented in a report entitled Literature Search and Preliminary Historic Resources Survey, High Speed Rail: Chicago to St. Louis. See Section 5.11 of this document for the discussion of potential impact.

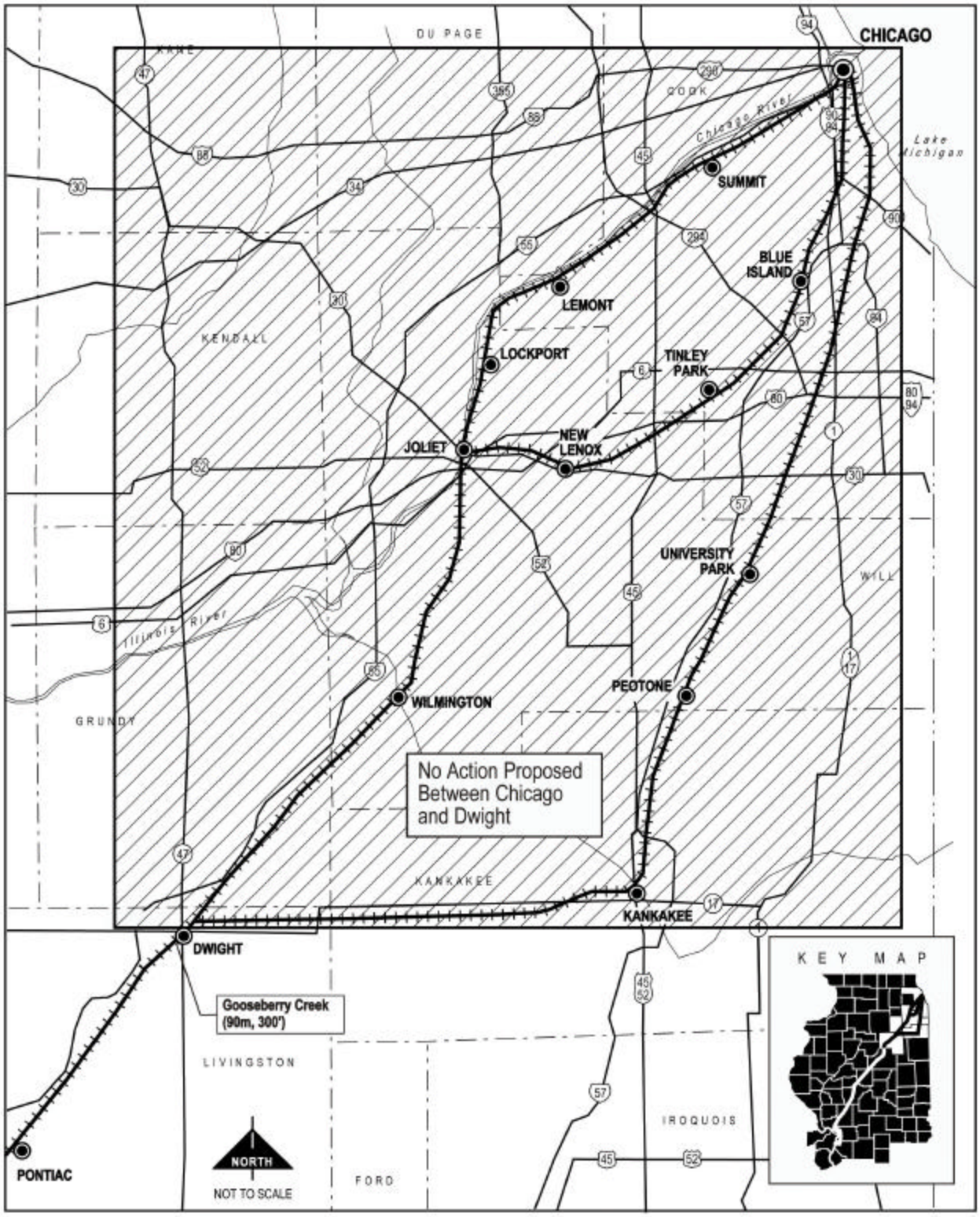

FIGURE 2.10-1A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
100-YEAR FLOODPLAIN CROSSINGS
(Dwight to Pontiac)

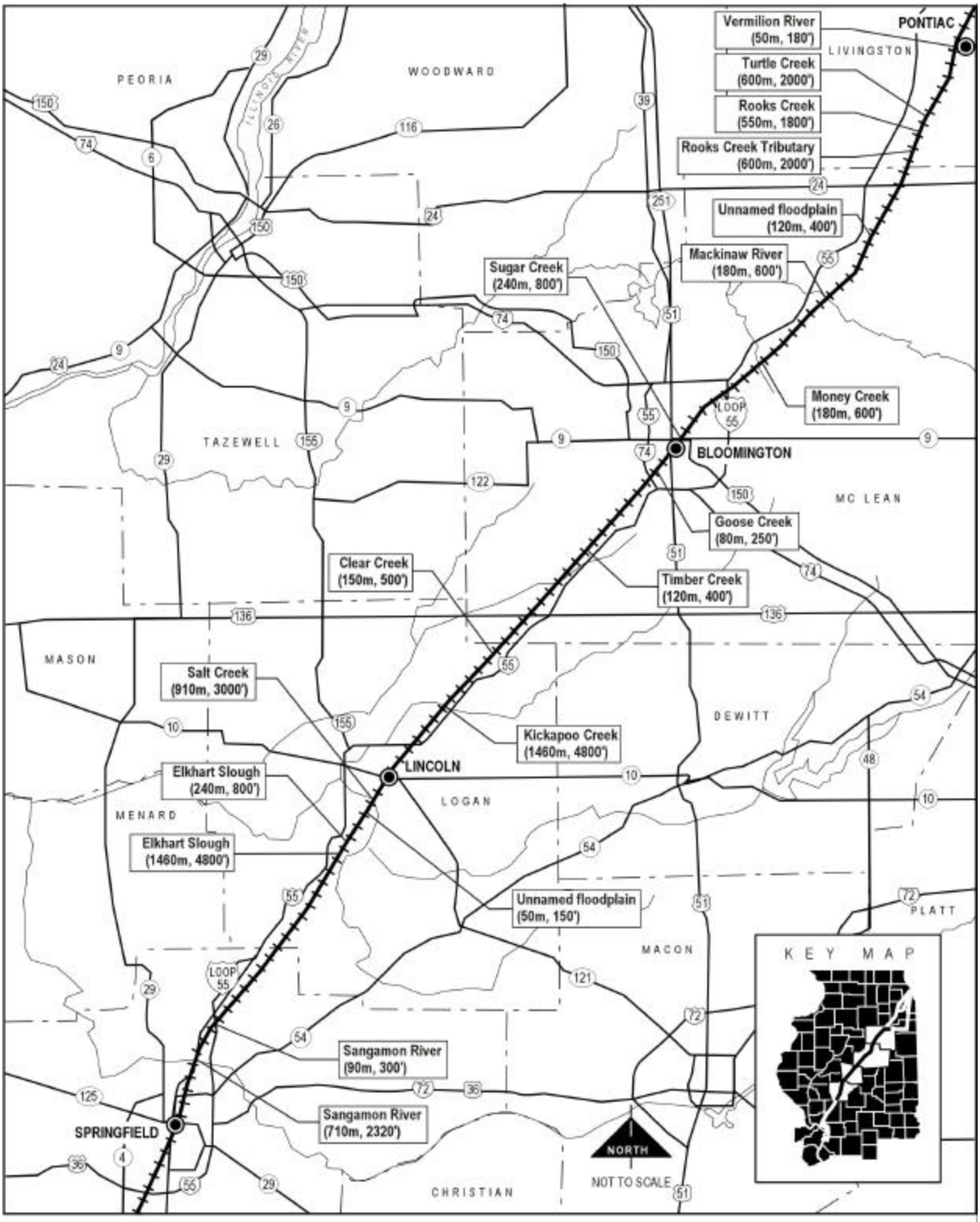

FIGURE 2.10-1B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
100-YEAR FLOODPLAIN CROSSINGS
(Pontiac to Springfield)

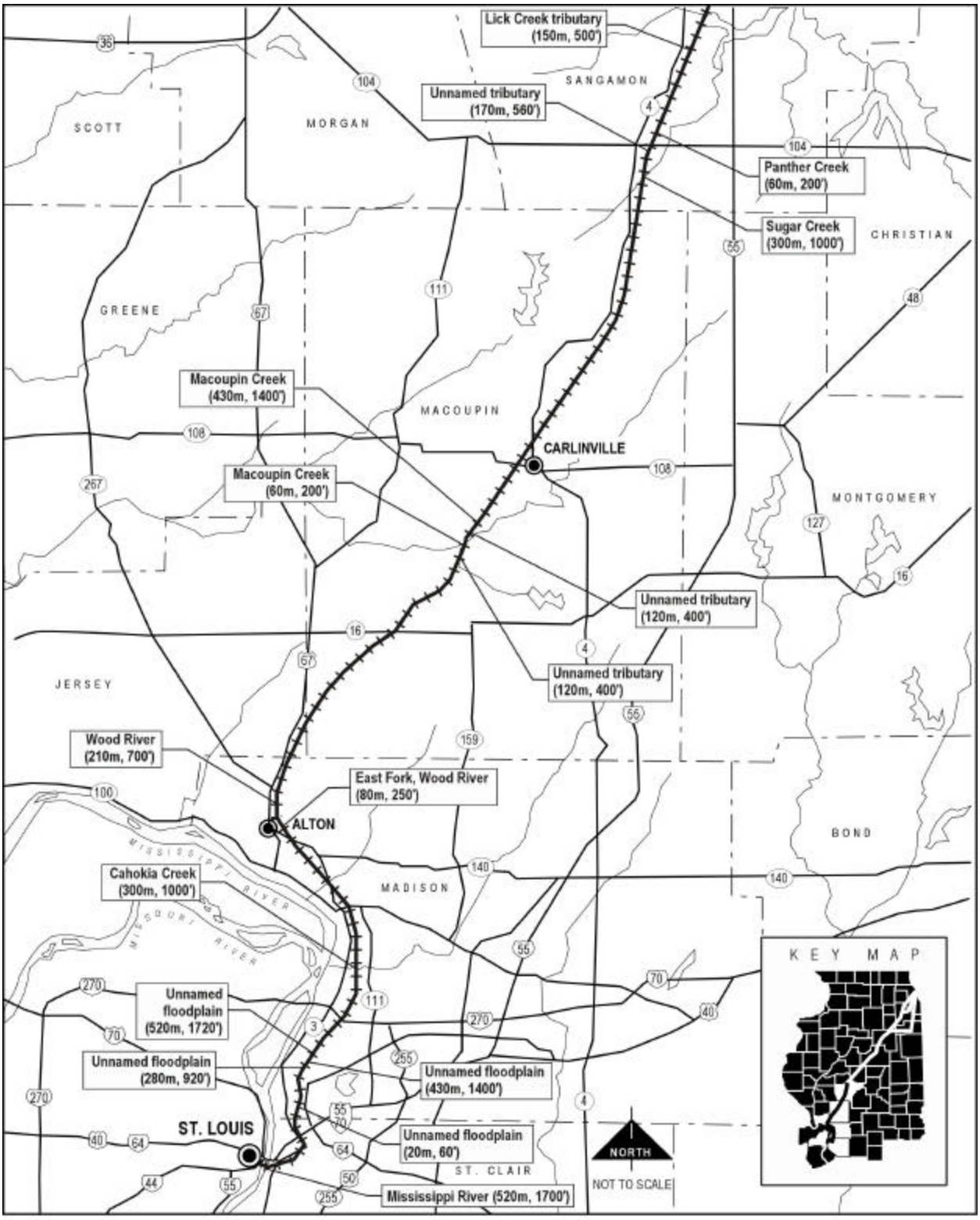

FIGURE 2.10-1C
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
100-YEAR FLOODPLAIN CROSSINGS
(Springfield to St. Louis)

2.11.2 Archaeological Resources

As of September 1998, the HSR project area in its entirety was subject to a Phase I archaeological survey. Based on this survey, Phase II archaeological testing was recommended at two sites — TR 234 (MP 231.00) and Maryville Road (MP 270.70).

During the course of the surveys conducted for this project, no archaeological sites associated with known American Indian tribal units were encountered. Additionally, there were no mounds or cemeteries identified within the project area.

2.12 FOREST PRESERVES AND PARKS

An inventory of forest preserves and parks within 1.6 kilometers (1.0 mile) of the railroads in the HSR project area was conducted. Approximately 160 forest preserves and parks are located within 1.6 kilometers (1.0 mile) of the current Amtrak route between Chicago and St. Louis. Of these, approximately 30 are directly adjacent to the route. A complete listing of these facilities is provided in Appendix A-2 of the Draft EIS.

Many of the properties discussed in this section, as well as in Sections 2.9.5, Natural Areas, and 2.11, Historic and Archaeological Resources, can be classified as Section 4(f) resources. Additionally, some of the properties can be classified as Section 6(f) resources. However, acquisition of Section 4(f) or Section 6(f) property will not occur as part of this project. See Sections 5.9.5, 5.11, and 5.12 for the discussion on impacts to these resources.

2.13 ENERGY CONSUMPTION

Current energy consumption by the four basic transportation modes — air, rail, bus, and automobile — used for intercity travel in the HSR corridor was calculated for this project. Since each of the four modes uses a different type of fuel, comparison of the energy consumed by each required conversion to a common base unit. The British Thermal Unit (BTU) was the measure used to compare the total annual energy consumed by each mode.

Energy consumption estimates for rail were derived by simulating existing operations. The rail energy consumption rate as calculated for Chicago - St. Louis Amtrak service is 1,630 BTUs per person-kilometer (2,620 per person-mile).

Energy consumption rates were used to calculate annual consumption for the other three modes. The rates were obtained from the Final EIS prepared for the NEC Improvement Project (USDOT, 1994). The consumption rates used are shown below.

- Passenger Automobile: 2,200 BTUs per person-kilometer (3,600 per person-mile)
- Intercity Bus: 600 BTUs per person-kilometer (1,000 per person-mile)
- Aircraft: 4,300 BTUs per person-km (6,900 per person-mile)

These consumption rates indicate that rail travel is more energy efficient than automobile or air, but not as efficient as bus.

Table 2.13-1 lists the annual person-kilometers (person-miles) of travel and energy consumption by mode. The rail system consumes approximately 1.4 percent of all energy used for intercity passenger service in the HSR corridor while serving 2.1 percent of all person-kilometers (person-miles) of travel.

Table 2.13-1
EXISTING (1998) ANNUAL PERSON-KILOMETERS (PERSON-MILES) OF TRAVEL AND ENERGY CONSUMPTION

Mode	Person-Kilometers (Person-Miles) (millions)	Percent	Energy Consumption (billions of BTUs)	Percent
Rail	81 (50)	2.1	132	1.4
Air	482 (299)	12.6	2062	21.9
Bus	32 (20)	0.8	20	0.2
Auto	3234 (2005)	84.5	7217	76.5
Total	**3829 (2374)**	**100.0**	**9432**	**100.0**

2.14 SPECIAL WASTE

2.14.1 Hazardous Waste

The USEPA listing (February 2, 2000) of potential, suspected and known hazardous waste or hazardous substances sites in the project area (i.e., the Comprehensive Environmental Response Compensation and Liability Information System or CERCLIS list) has been reviewed to ascertain whether the proposed project will involve any listed sites. As a result of this review, it has been determined that improvements associated with this project will not require right-of-way or an easement from a listed CERCLIS site.

2.14.2 Undetermined Waste Status

Preliminary Environmental Site Assessments (PESA) for man-made hazards in the HSR project area were conducted in accordance with A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation (IDOT) Highway Projects except that no subsurface investigation was authorized since it is unlikely that the testing would be valid at the time of land acquisition or construction. A total of ten PESAs were conducted and documented in the Draft EIS; the sites were numbered from one to 10. Sites one through eight are now outside of the project area. Sites 9 and 10 are shown on Figure 2.14-1.

The assessments concluded that this project could involve special waste sites. Further investigations should be conducted to determine risks and liabilities of the involvement prior to land acquisition. A summary of the findings for each site is provided below.

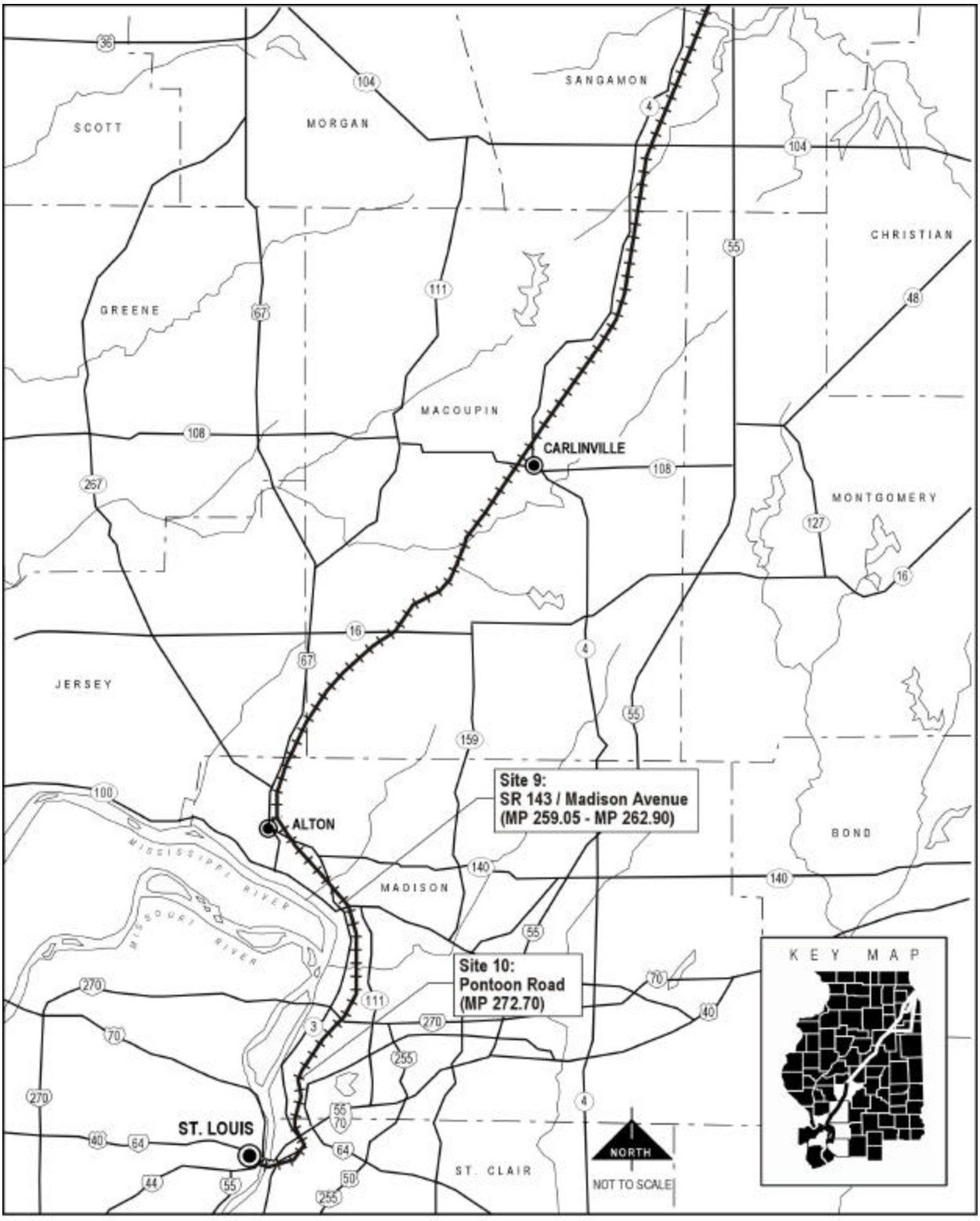

FIGURE 2.14-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
LOCATIONS OF PRELIMINARY ENVIRONMENTAL SITE ASSESSMENTS
(Springfield to St. Louis)

Site 9:

Site 9 is located in Madison County between St. Louis Avenue (MP 259.05) and Illinois Route 143/Madison Avenue (MP 262.90). Two gas stations were formerly located in the vicinity of the Illinois Route 143 crossing. When the property was vacated, the underground storage tanks (USTs) were removed; this site is not on the most recent UST list. Several CERCLIS and leaking underground storage tank (LUST) sites are also listed in this area. However, the improvements planned for this area will occur within the existing railroad right-of-way.

Site 10:

This site is located at the Pontoon Road crossing in Granite City. The site of a former business where four aboveground oil tanks were located is on the northwest corner of the Pontoon Road crossing. On the southeast corner of this crossing, there is a gas station that appears on the most recent LUST list. The northeast corner of this crossing is not listed on the most recent LUST and UST lists. However, historical records and interviews with adjacent property owners indicate that this parcel may contain an UST.

SECTION 3

Alternatives

Section 3
ALTERNATIVES

The premise underlying the Illinois Department of Transportation's (IDOT) high-speed rail (HSR) concept as evaluated in this Environmental Impact Statement (EIS) is that passengers are sensitive to overall travel time, not maximum operating speed. In Illinois, the alternative selected for implementation will consist of project elements that are cost effective while producing major travel time reductions. These include:

- Use of existing rail infrastructure where possible (eliminating the need for all new track and right-of-way).

- Use of diesel-powered trains limiting top operating speeds to 110 mph (177 kph).

- Improvements and additions to enhance track capacity and train operations that are cost effective, such as provision of new train control and communication systems; provision of limited areas of double track to allow for HSR trains traveling in opposite directions to pass each other with minimal delay; provision of additional siding track, as well as upgrading and extending existing siding track; and treatment of selected highway-railroad grade crossings.

- Modification in dispatching procedures to reduce conflict with freight traffic by giving priority to HSR trains.

In the Draft EIS, two alternatives were evaluated for the Chicago - St. Louis High-Speed Rail Project: the No-Build Alternative and the Build (High-Speed Rail) Alternative. The No-Build Alternative included the continuation of existing Amtrak service, which consists of three round trips per day between Chicago and St. Louis. The High-Speed Rail Alternative included provision of 110 to 125 mph (177 to 200 kph) intercity passenger service. As part of the High-Speed Rail Alternative, eight daily round trips were proposed, and three alignment options were considered between Chicago and Dwight.

The Draft EIS was circulated in June 2000, and a series of Public Hearings were held throughout the state in late July and early August 2000. Based on comments received from the public and resource agencies, as well as consideration of other factors, a Preferred Alternative was selected. The Preferred Alternative includes provision of high-speed rail service in the Chicago - St. Louis corridor. However, several modifications were made to the High-Speed Rail Alternative as presented in the Draft EIS. The major changes are summarized below.

- No alternative alignment has been selected between Chicago and Dwight. Trains will operate at existing maximum speeds (79 mph/127 kph) on the current Amtrak route between Chicago and Dwight until an alternative alignment is selected for this area at some future time. The Preferred Alternative includes no physical improvements through this area.

- Ultimately, a "full-build" High-Speed Rail Alternative would consist of eight round trips per day. However, the Preferred Alternative consists of three round trips per day (matching existing service).

- In the Draft EIS, the HSR Alternative included provision of 125 mph (200 kph) service between Lincoln and Springfield. As part of the Preferred Alternative, the proposed maximum operating speed through this area is reduced to 110 mph (177 kph), eliminating the need to close grade crossings or to provide positive protection (e.g., vehicle arresting barriers or grade separations) at the retained grade crossings. Vehicle arresting barriers were tested in the Chicago - St. Louis corridor at three locations but were determined by IDOT to require further refinement prior to implementation on a long-term basis. If appropriate, higher operating speeds will be reassessed in the future

- Grade crossing treatment recommendations were modified to minimize impacts or because of public opposition. The Department will however continue to pursue crossing closures where local authorities agree to them.

In this section, the alternatives evaluated in the Draft EIS are summarized (Section 3.1), and the Preferred Alternative is described (Section 3.2). Section 3.2 focuses on the changes in the project that have occurred since the Draft EIS was circulated (i.e., the selection and refinement of the Preferred Alternative).

3.1 ALTERNATIVES SELECTED FOR EVALUATION IN THE DRAFT EIS

3.1.1 No-Build Alternative

The No-Build Alternative consisted of the existing plus committed improvements to the existing intercity passenger rail system and the complementary intercity highway and aviation services and facilities in the Chicago - St. Louis corridor. A summary of the existing plus committed intercity passenger transportation system is provided below.

- **Rail**. Amtrak operates the intercity passenger rail service in the corridor. Existing service consists of three daily round trips between Chicago and St. Louis. Scheduled one-way travel time through the corridor ranges from five hours and 25 minutes to five hours and 40 minutes. *The track along the Amtrak route, along with the rail communication and signal system, from an area approximately 15 kilometers (nine miles) north of Dwight to Springfield is being upgraded*. The only other improvements planned consist of regular maintenance and rehabilitation of the track.

- **Automobile**. The majority of intercity automobile travel in the Chicago - St. Louis corridor is accommodated on Interstate 55, which primarily runs parallel to the Chicago - St. Louis Amtrak route. A typical automobile trip between Chicago and St. Louis takes approximately 5.5 hours. *The only major capacity improvement currently committed to on Interstate 55 is the widening of the facility (from two lanes to three lanes in each direction) between Naperville Road and Interstate 80. Additionally, other interchange improvements along Interstate 55 are also planned throughout the corridor. (These improvements were not identified in the Draft EIS.)*

- **Air**. Daily flights are operated in the corridor among O'Hare, Midway, and Meigs Field in Chicago; Lambert Field in St. Louis, and the airports in Bloomington and Springfield. Scheduled one-way flight time between Chicago and St. Louis is typically around 1.25 hours. While capacity

improvements are being considered at airports in the corridor, the effect these improvements will have on service is not known.

- **Bus**. Greyhound Lines, Inc. and other smaller carriers operate bus service in the Chicago-St. Louis corridor. Scheduled one-way travel times ranges from five hours and five minutes to over 11 hours.

Detailed discussions of the existing and future intercity transportation characteristics are provided in Section 2.3, Transportation Facilities and Services, and Section 4, Transportation Impacts, in the Draft EIS. This information is summarized in the same sections of this Final EIS.

The No-Build Alternative will not meet the purpose and need of this project. The purpose of this proposal, as described in Section 1, is to enhance the passenger transportation network in the Chicago - St. Louis corridor, resulting in a more balanced use of its components. To achieve this, there must be a new or improved transportation mode with shorter travel times and enhanced reliability and safety. As described above, the No-Build Alternative will be a continuation of existing Amtrak service and will not provide any operational or service improvements. Without reductions in travel time or improvements to reliability and safety, the viability of rail passenger service as an alternative to air and automobile travel will not increase, and subsequently, travelers will not divert from those two modes. Therefore, this alternative is not considered an adequate solution to meet the existing and anticipated transportation needs of the corridor.

3.1.2 Build Alternative (High-Speed Rail)

High-speed rail passenger service is an alternative to current Amtrak service that will address the existing rail passenger service problems identified in the corridor and will serve as a more viable alternative to automobile, air, and bus intercity travel between Chicago and St. Louis. The HSR Alternative evaluated in the Draft EIS included the use of new diesel-powered trains, possibly equipped with tilt suspension technology, with maximum operating speeds of 110 mph (177 kph) through most of the project area. For a 29-kilometer (18-mile) segment between Lincoln and Springfield, a maximum operating speed of 125 mph (200 kph) was considered. The proposed service consisted of eight round trips per day, with estimated one-way end-to-end travel time of approximately 3.5 hours.

The existing plus committed improvements planned for the complementary highway and aviation facilities and services were also included as part of the HSR Alternative in the Draft EIS. Although no long-range planning data is available for air or bus travel, it was assumed that increases and expansion in service will be proportional to the projected increase in ridership for these modes.

In the Draft EIS, it was concluded that implementation of the 110 to 125 mph (177 to 200 kph) HSR Alternative would meet the defined purpose of this project—to enhance the passenger transportation network in the Chicago - St. Louis corridor, resulting in a more balanced use of its components. If fully implemented, HSR service is projected to attract approximately 1.3 million riders by the year 2010. Approximately two-thirds of this ridership would consist of travelers diverting from other modes of transportation. As a result, the rail passenger mode share in the corridor would increase from 0.8 percent to nearly 3.0 percent. (See Section 4, Transportation Impacts in the Draft EIS.)

Increases in rail passenger ridership would be a result of reduced rail travel times and improvements in the reliability and safety of rail service. Along with these enhancements, improvements in air quality and a reduction in energy consumption would also be expected.

3.1.2.1 Alignment Options

Three different alignments were evaluated in the Draft EIS for passenger rail service under the HSR Alternative. Figure 3.1-1 provides an overview of the alternative alignments analyzed for HSR. To assist in identifying locations throughout the corridor along the alternative alignments, the existing railroad mileposts (MP) were used. The mileposts are in ascending order from north to south and east to west in the corridor and are shown on Figure 3.1-1.

The difference between the three alternative alignments lies between Chicago and Dwight at the northern end of the corridor. One of the alignments—the Canadian National-Illinois Central/Union Pacific—is the current Amtrak route. (This alignment was referred to as the Illinois Central/Union Pacific in the Draft EIS but has been renamed in the Final EIS to the Canadian National-Illinois Central/Union Pacific, or CN-IC/UP, to reflect the change in ownership.) Another alignment utilizes Canadian National-Illinois Central mainline and Norfolk Southern (formerly Conrail) track via Kankakee to provide an alternative route of entry into Chicago and would provide access to the proposed South Suburban Airport (SSA) site in Peotone. This alignment is referred to as the Norfolk Southern alignment. The third alignment, referred to as the Rock Island District alignment, utilizes Metra Rock Island District track between Chicago and Joliet and Union Pacific track between Joliet and Dwight. The alternative alignments between Chicago and Dwight are shown on Figure 3.1-2.

South of Dwight, one alignment was evaluated for the HSR Alternative that matches the existing Amtrak route. Use of this alignment includes crossing the Mississippi River via MacArthur Bridge which is located immediately south of the Interstate 55/64/70 river crossing. Prior to the issuance of the Draft EIS, Amtrak service in the Chicago – St. Louis corridor operated on a different alignment, over the Merchants Bridge, into and out of the City of St. Louis. Figure 3.1-3 shows the former and current Amtrak routes in the St. Louis area. The old alignment is still used by Amtrak if there are delays on the new alignment.

Although south of Dwight only one alternative alignment was evaluated, frequently throughout the Draft EIS, the Chicago to Dwight alternative alignment names were used to represent an entire alignment between Chicago and St. Louis. When Chicago - St. Louis corridor alignments are referred to, the following names are used: Canadian National-Illinois Central/Union Pacific (CN-IC/UP, formerly IC/UP), Norfolk Southern (NS), and Rock Island District (RID). These alignments are shown on Figure 3.1-4.

3.1.2.2 Project Elements

The following information summarizes the more detailed elements of the HSR Alternative as defined in the Draft EIS.

Track Connections. Along the Norfolk Southern alignment, new track connections were proposed at 31st Street between Metra Electric and CN-IC mainline tracks, to gain access into downtown Chicago; in Kankakee, to connect the CN-IC mainline and the Norfolk Southern; and in Dwight, to connect the Norfolk Southern and the Union Pacific. On the other two alignments—the CN-IC/UP and the RID—no new track connections would be required.

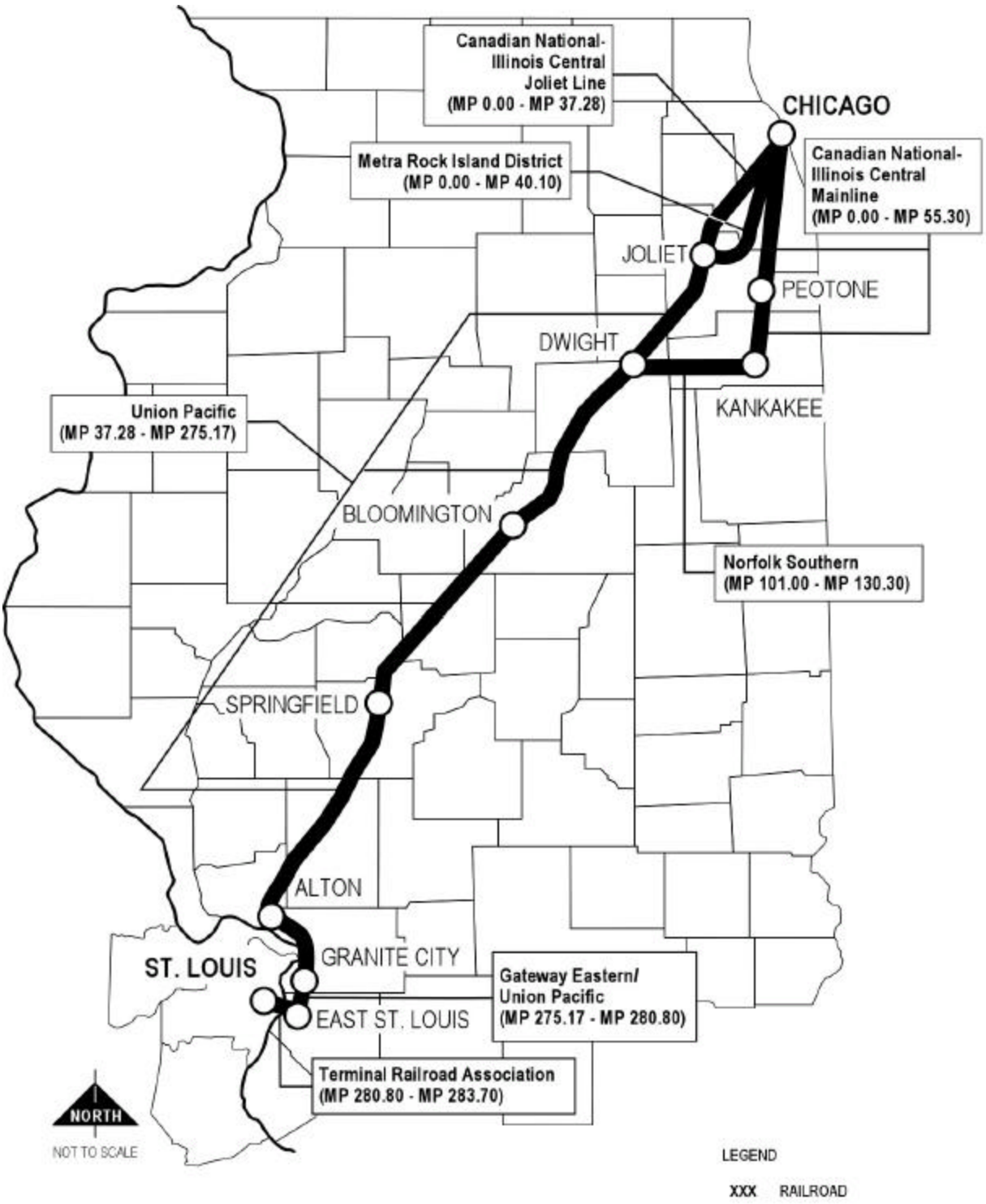

FIGURE 3.1-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ALTERNATIVE ALIGNMENTS

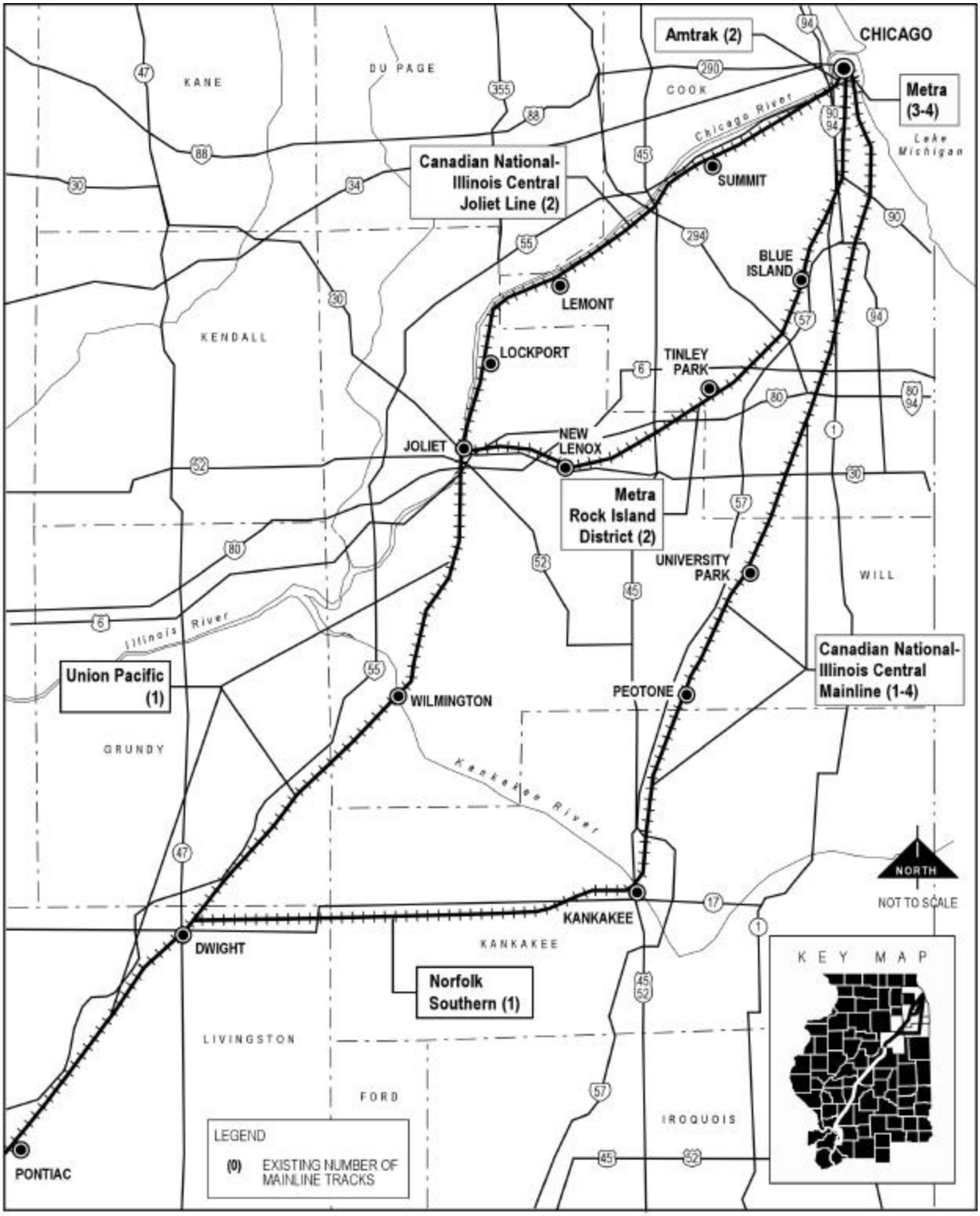

FIGURE 3.1-2
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
CHICAGO TO DWIGHT ALTERNATIVE ALIGNMENTS

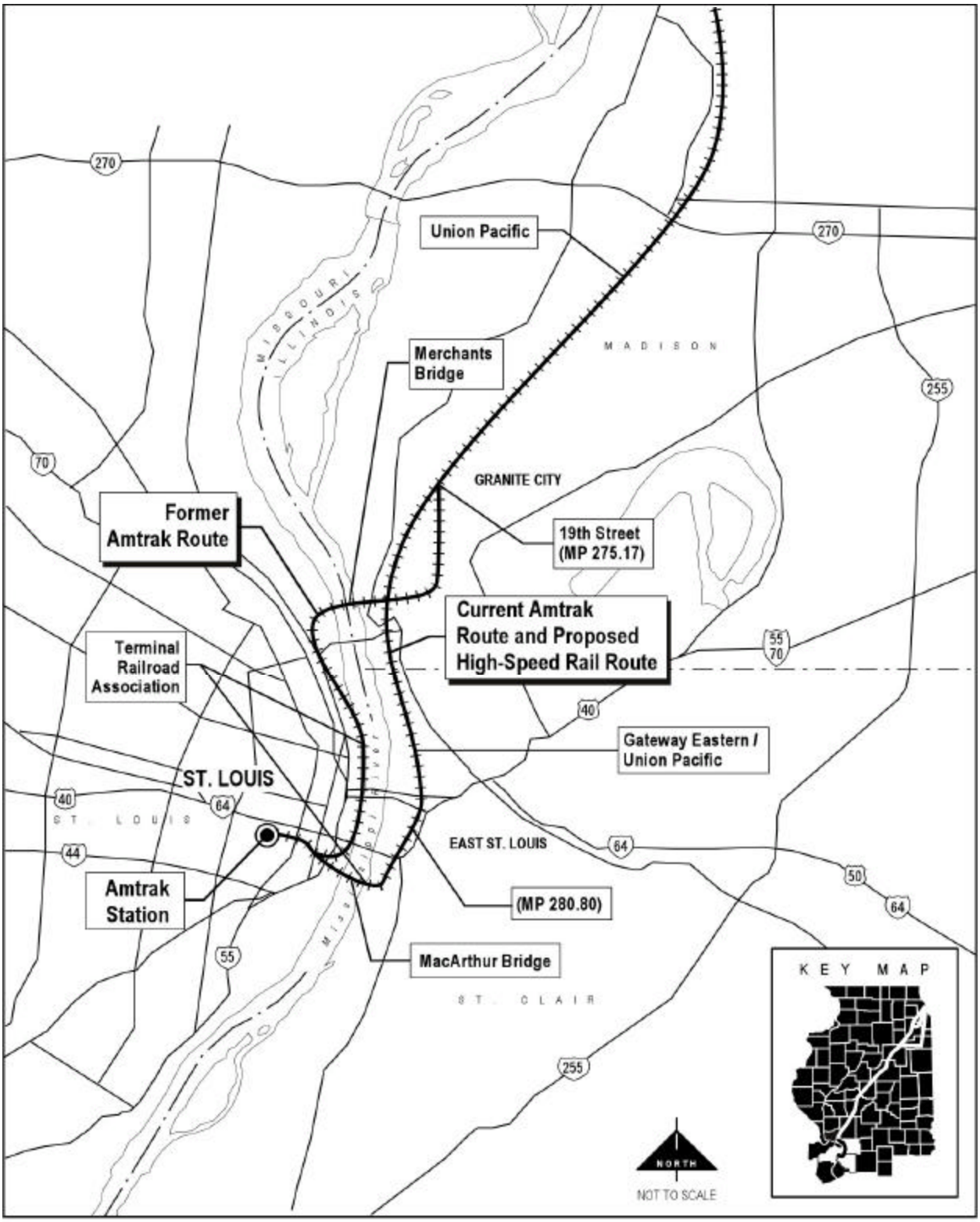

FIGURE 3.1-3
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
PROPOSED HIGH-SPEED RAIL ALIGNMENT IN ST. LOUIS AREA

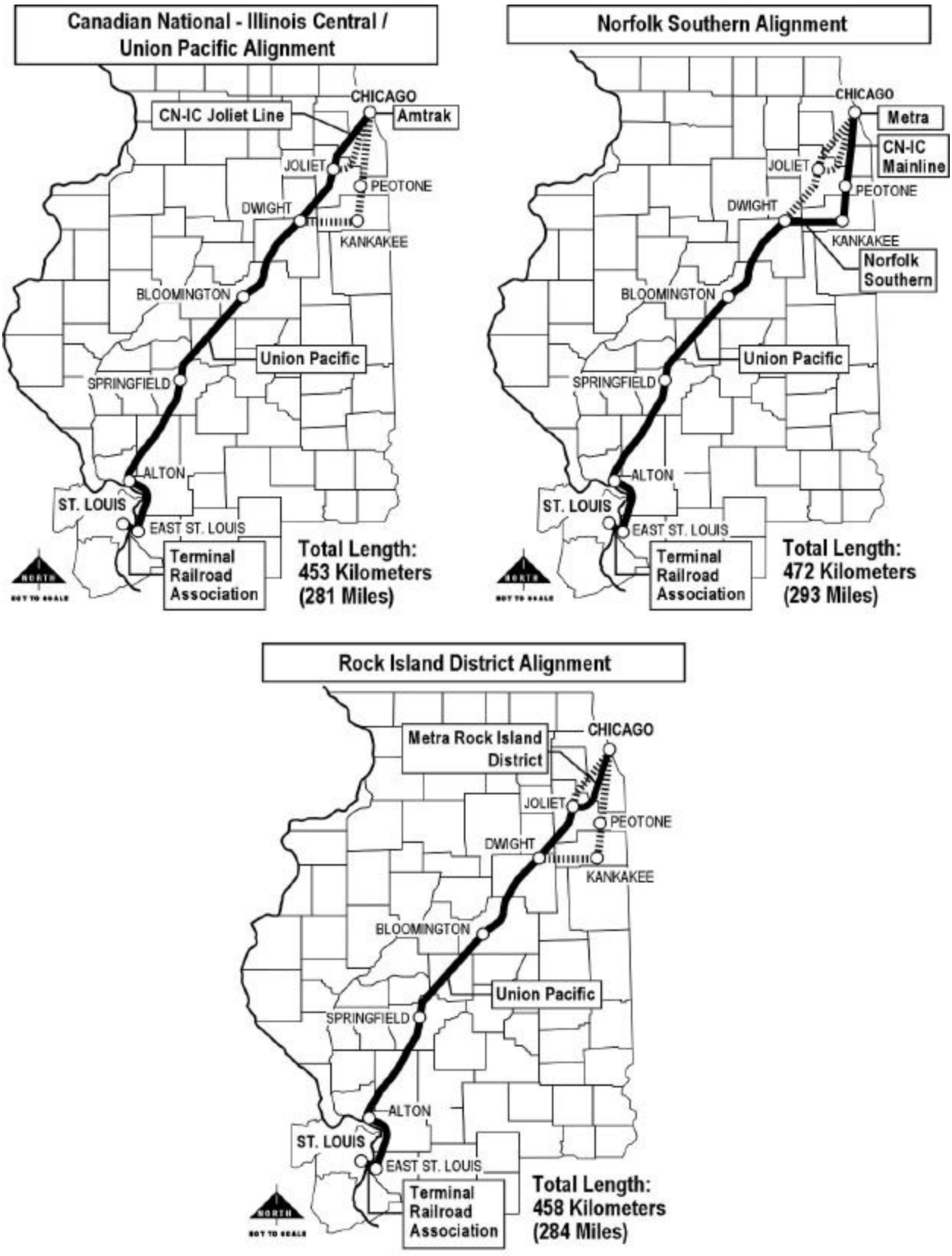

FIGURE 3.1-4
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ALIGNMENTS EVALUATED IN THE DRAFT EIS

Double Track and Freight Sidings. Much of the new construction proposed for the HSR Alternative was associated with the provision of double track and freight sidings through portions of the corridor. Additional double track and freight sidings would be required so that future high-speed trains would be able to meet and pass other high-speed trains and freight trains operating in the corridor without slowing down. This capability is essential if predicted travel times are to be met. The HSR Alternative evaluated in the Draft EIS included the construction of 20 to 42 kilometers (12 to 26 miles) of double track and 40 to 43 kilometers (25 to 27 miles) of freight siding.

Grade Crossing Treatment. There are over 300 highway-railroad grade crossings along the three alternative alignments evaluated in the Draft EIS. Increases in train speed warrant an increase in the level of grade crossing protection. Each highway-railroad grade crossing in the corridor was evaluated to determine what type of warning device or protection should be provided if HSR service were implemented. A summary of the methodology used to evaluate and recommend a treatment for each grade crossing in the corridor is provided in Appendix B of the Draft EIS. The recommended treatment for each crossing is also shown in this appendix.

The grade crossing treatments proposed can generally be divided into two categories: close and open. Redundant and unnecessary crossings were proposed for closure. For crossings recommended for closure where adequate alternative access is not available, a frontage/service road was also proposed. Crossings that were determined to be necessary were recommended to remain open. Some of these crossings have adequate warning devices (those that actively warn but do not physically prohibit intrusion), and "no change" was recommended at these locations. At other locations, enhanced warning devices will be required. Enhanced warning device recommendations included pedestrian bell and flashers, conventional gates, and electric lock gates. Protection devices—vehicle arresting barriers—were also recommended at crossings that would remain open where proposed train speeds exceeded 110 mph (177 kph). Constant Warning Time (CWT) circuits were recommended for all grade crossings proposed for retention. CWT circuits measure the speed of an approaching train and activate the warning device at a crossing so that it operates (or the gates will be down) for the required 20 seconds before the train is at the crossing, regardless of the train speed. Additionally, at a few locations, grade separations were recommended.

Stations. The HSR Alternative included stops at existing Amtrak stations in Bloomington/Normal, Springfield, Alton, and St. Louis. In Chicago, service on the CN-IC/UP alignment would begin at Union Station; service on the Norfolk Southern alignment would begin at Randolph Street Station; and service on the Rock Island District alignment would begin at LaSalle Street Station. Since Amtrak operates out of Union Station in Chicago, passenger connections with other Amtrak routes would be less convenient with the Norfolk Southern and Rock Island District alignments.

Between Chicago and Dwight, service on the CN-IC/UP and Rock Island District alignments would stop in Joliet; service on the Norfolk Southern alignment would stop in Kankakee, and Peotone if the South Suburban Airport were constructed. Station improvements would be required in Joliet with the Rock Island District alignment, and a new station would be required in Kankakee and Peotone with the Norfolk Southern alignment. Potential limited skip-stop service would also be provided at most of the other Amtrak stations in the project area in Dwight, Pontiac, Lincoln, and Carlinville.

3.1.2.3 Costs

Costs for construction, grade crossing treatment improvements, rolling stock, a maintenance facility, and right-of-way acquisition were developed for each HSR alternative alignment. These costs (in 1998 dollars) ranged from $289.4 million for the Rock Island District alignment to $369.9 million for the Norfolk Southern alignment.

3.2 PREFERRED ALTERNATIVE

3.2.1 Rationale for Selection

As demonstrated in the Draft EIS, implementation of high-speed rail service will meet the purpose and need defined for this project. This fact, coupled with the consideration of public and resource agency comment on the Draft EIS, led to the determination that the overall benefits of providing HSR service outweigh the potential environmental impacts and that HSR service should be provided in the Chicago – St. Louis corridor to the extent practicable.

The Preferred Alternative selected for this project is a combination of the No-Build Alternative (between Chicago and Dwight) and the High-Speed Rail Alternative (between Dwight and St. Louis). This combined alternative is entitled the Modified No-Build Alternative. The HSR Alternative evaluated in the Draft EIS assumed greater investment in infrastructure and more trains than is now contemplated with the Preferred Alternative. Various factors were considered in modifying the HSR Alternative, including comments from several railroads indicating the need for further investigation of infrastructure improvements at congestion points. (See Section 3.2.3 for a complete description of the project elements of the Preferred Alternative.)

Even though the improvements associated with provision of HSR service have been reduced from those presented in the Draft EIS, the Preferred Alternative will address the three needs identified for this project. A summary of the effectiveness of the Preferred Alternative at meeting the purpose and need is provided in the following subsections.

3.2.1.1 Reduced Travel Time and Improved Service Reliability

Under the Preferred Alternative, rail passenger travel time between Chicago and St. Louis will decrease to between four hours and four hours and 30 minutes. This is one hour to one hour and 30 minutes shorter than travel times achievable by automobile and bus. With the passenger rail stations located in the downtowns of Chicago and St. Louis, downtown-to-downtown rail passenger travel time between these two cities will be more comparable to air travel.

The rail communication and signal systems will be upgraded. With these improvements, HSR will be more reliable, and as a result, on-time performance will be better than that of the current Amtrak service. HSR passenger service, less affected by adverse weather and with better on-time performance will be more competitive with air travel in terms of reliability. Passengers traveling on the improved rail service will also avoid the unpredictable automobile traffic congestion conditions in the Chicago and St. Louis areas. Therefore, there will be reliability improvements relative to automobile and bus travel as well.

3.2.1.2 Safety

In general, fatality rate trends show that commercial air and rail continue to be the safest modes of travel in the U.S. and that automobile travel has injury and fatality rates approximately 10 times that of intercity rail systems. As travelers divert from automobile to rail, overall passenger safety in the corridor will increase. Station improvements that will accompany provision of HSR service, such as additional attendants and increased lighting, will also improve safety and security for rail passengers.

Other improvements will be made as part of the Preferred Alternative that will enhance the safety of those who live and travel near and cross the proposed facility. Warning devices at many of the highway-railroad grade crossings in the corridor will be upgraded in accordance with FRA guidelines.

Fencing that will direct pedestrians to warned crossings will be considered in urbanized areas as part of the Preferred Alternative. This will also help improve safety. However, no fencing will be installed unless agreed to by the local community.

3.2.1.3 Human Environment

The Preferred Alternative will result in lower volatile organic compound, carbon monoxide, and nitrogen oxide emissions from passenger transportation sources in the corridor than under No-Build conditions. (See Section 5.4, Air Quality.)

HSR service as part of the Preferred Alternative will be more energy efficient than Amtrak service under the No-Build Alternative; will improve rail passenger service's relative energy efficiency over air and automobile travel; and will be more competitive with bus travel's energy consumption rate. With HSR, total annual energy consumption for all passenger travel in the corridor will also be lower than with the No-Build Alternative. (See Section 5.13, Energy Consumption.)

3.2.2 Selected Alignment

As part of the Preferred Alternative, an alignment was not selected between Chicago and Dwight. There are several reasons the selection of an alignment through this area was postponed. First, funding is not currently committed for improvements through this area. Second, there are several other on-going projects between Chicago and Dwight that could influence the selection of an alternative alignment. Some of these projects include:

- the South Suburban Airport in Peotone;
- the reinstitution of the Grand Crossing, which would provide the Norfolk Southern alignment access to Union Station; and
- the switching of Southwest Metra service to Rock Island District track near 79th Street.

Final decisions on how these projects will proceed have not been made. Therefore, since funding is not committed, it was decided that selection of an alternative alignment between Chicago and Dwight would not be prudent at this time.

In the interim, the current Amtrak route—the CN-IC/UP alignment—will be used north of Dwight. However, no change in maximum operating speeds through this area will occur as a result of this action. No physical

improvements between Chicago and Dwight will be made as part of the Preferred Alternative, and no additional trains will be operated.

Ultimately, a "full-build" HSR Alternative in the Chicago - St. Louis corridor would consist of eight round trips per day. However, prior to expanding service beyond three round trips per day, it will be necessary to select an alternative alignment between Chicago and Dwight. As part of this selection and service enhancement, supplemental environmental documentation will be prepared, and an operational review will be conducted. Additional coordination with the other freight and passenger operators in the corridor will also be required.

As evaluated in the Draft EIS, the three alignments north of Dwight are similar in terms of environmental impacts, although the impacts associated with the Rock Island District alignment are generally the lowest. This alignment is also estimated to cost the least. The greatest advantage to the CN-IC/UP alignment is that it terminates at Union Station in Chicago, which is the station used by all other intercity rail passenger service in Chicago. Track connections appear to be physically feasible along the other two alignments that would allow them direct access to Union Station. These improvements have not been fully evaluated, but will be considered further prior to selecting any preferred alignment into Chicago.

South of Dwight, HSR service with the Preferred Alternative will operate on the existing Amtrak route, as evaluated in the Draft EIS, but with only three round trips per day.

3.2.3 Project Elements

This section provides a description of the project elements comprising the Preferred Alternative. Changes between the Preferred Alternative and the CN-IC/UP alignment presented in the Draft EIS are noted.

3.2.3.1 Service

High-speed rail service under the Preferred Alternative will consist of three round trips per day in the Chicago - St. Louis corridor. Maximum operating speed will be 79 mph (127 kph) between Chicago and Dwight and 110 mph (177 kph) between Dwight and St. Louis. (In a separate project currently underway, the track and rail communication and signal system from an area approximately 15 kilometers (nine miles) north of Dwight to Springfield is being upgraded. As a result of these improvements, 110 mph (177 kph) service will be allowed through this 15-kilometer (nine-mile) area north of Dwight.) Projected travel times through the corridor for the Preferred Alternative, based on computer simulation of a state-of-the-art locomotive with a tilt technology trainset, are between four hours and four hours and 30 minutes. The variance in travel time is based upon potential freight train interference at the Chicago and St. Louis terminals. Actual travel times will be known when service is implemented, but the anticipated travel time reduction associated with the Preferred Alternative is approximately 20 to 30 percent from the currently scheduled Amtrak one-way travel times that range from five hours and 25 minutes to five hours and 40 minutes.

Projected travel times for the Preferred Alternative are slower than those presented for the CN-IC/UP alignment in the Draft EIS because these times reflect a maximum operating speed of 79 mph (127 kph) between Chicago and Dwight, and a maximum operating speed of 110 mph (177 kph) between Lincoln and Springfield. The maximum speeds simulated through each community in the corridor to achieve the projected travel times are provided in Table 3.2-1.

Table 3.2-1
MAXIMUM SIMULATED TRAIN SPEEDS ALONG THE HIGH-SPEED RAIL CORRIDOR
in mph (kph)

	No-Build	Preferred
Chicago	40 (65)	40 (65)
Summit	79 (127)	79 (127)
Willow Springs	79 (127)	79 (127)
Lemont	79 (127)	79 (127)
Lockport	79 (127)	79 (127)
Joliet	30 (48)	30 (48)
Elwood	79 (127)	79 (127)
Wilmington	79 (127)	79 (127)
Braidwood	79 (127)	79 (127)
Godley	79 (127)	79 (127)
Braceville	79 (127)	79 (127)
Gardner	79 (127)	79 (127)
Dwight	79 (127)	79 (127)
Odell	79 (127)	110 (177)
Cayuga	79 (127)	110 (177)
Pontiac	79 (127)	79 (127)
Chenoa	79 (127)	110 (177)
Lexington	79 (127)	110 (177)
Towanda	79 (127)	110 (177)
Normal	40 (65)	40 (65)
Bloomington	40 (65)	40 (65)
McLean	79 (127)	110 (177)
Atlanta	60 (97)	99 (160)
Lawndale (Unincorporated)	70 (113)	110 (177)
Lincoln	79 (127)	79 (127)
Broadwell	79 (127)	110 (177)
Elkhart	79 (127)	110 (177)
Williamsville	79 (127)	110 (177)
Sherman (Unincorporated)	79 (127)	110 (177)
Springfield	25 (40)	40 (65)
Chatham	79 (127)	110 (177)
Auburn	79 (127)	110 (177)
Thayer	79 (127)	110 (177)
Virden	79 (127)	110 (177)
Girard	79 (127)	110 (177)
Nilwood	79 (127)	110 (177)
Carlinville	79 (127)	110 (177)
Plainview (Unincorporated)	60 (97)	79 (127)
Shipman	79 (127)	110 (177)
Brighton	79 (127)	110 (177)
Unincorporated Jersey County	79 (127)	110 (177)
Godfrey	79 (127)	79 (127)
Alton	70 (113)	110 (177)
East Alton	79 (127)	110 (177)
Wood River	79 (127)	79 (127)
Hartford	79 (127)	79 (127)
Granite City	79 (127)	79 (127)
Madison	79 (127)	79 (127)
East St. Louis	20 (32)	20 (32)

3.2.3.2 Equipment

The trainset that will be used for the proposed HSR system has not yet been identified. The option being considered is a new state-of-the-art locomotive with a tilt technology trainset. The options considered in the Draft EIS that did not include tilting equipment are no longer considered likely choices.

3.2.3.3 Double Track and Freight Sidings

The Preferred Alternative includes the provision of double track and freight sidings through portions of the corridor between Dwight and St. Louis. The new sections of double track and freight sidings are necessary so that future high-speed trains will be able to meet and pass other high-speed trains and freight trains operating in the corridor without slowing down.

Double track is proposed between MP 126.35 and MP 126.50 in the Bloomington/Normal area and between MP 204.55 in Thayer and MP 218.65 near Carlinville.

Three areas were identified for proposed freight sidings. The first is between MP 158.50 in Lincoln and MP 168.40 near Elkhart; the second is between MP 238.65 in Shipman and MP 249.30 in Godfrey; and the third is between MP 259.05 in East Alton and MP 262.90 in Wood River.

Construction of the proposed double track and freight sidings will occur within existing rights-of-way; no additional right-of-way will be required. Figure 3.2-1 shows the locations of the proposed double track and freight sidings for the Preferred Alternative.

South of Dwight, no changes to the proposed double track and freight sidings have occurred since issuance of the Draft EIS. Between Chicago and Dwight, the extension of the existing Hitt freight siding between MP 54.00 and MP 57.00 in Wilmington was dropped from consideration as part of the Preferred Alternative because no action is proposed through this area.

3.2.3.4 Grade Crossing Treatment

There are 311 existing highway-railroad grade crossings along the Preferred Alternative between Chicago and St. Louis. (In the Draft EIS, 322 crossings were identified along this corridor. However, 11 of those 322 crossings are now closed.) Since issuance of the Draft EIS, grade crossing treatment recommendations for the Preferred Alternative were changed for one or more of the following reasons:

1. **Grade crossing located in the no action area**. No action is proposed at the grade crossings located between Chicago and Dwight.

2. **Public opposition voiced regarding recommended treatment**. Comments were received in opposition to several grade crossing treatments where close or close with frontage/service road was proposed. These crossings are now proposed to remain open with enhanced warning devices as required.

3. **Changes in proposed grade crossing treatment types**. Vehicle arresting barriers (VAB) were recommended as a form of positive protection in the Draft EIS between Lincoln and Springfield

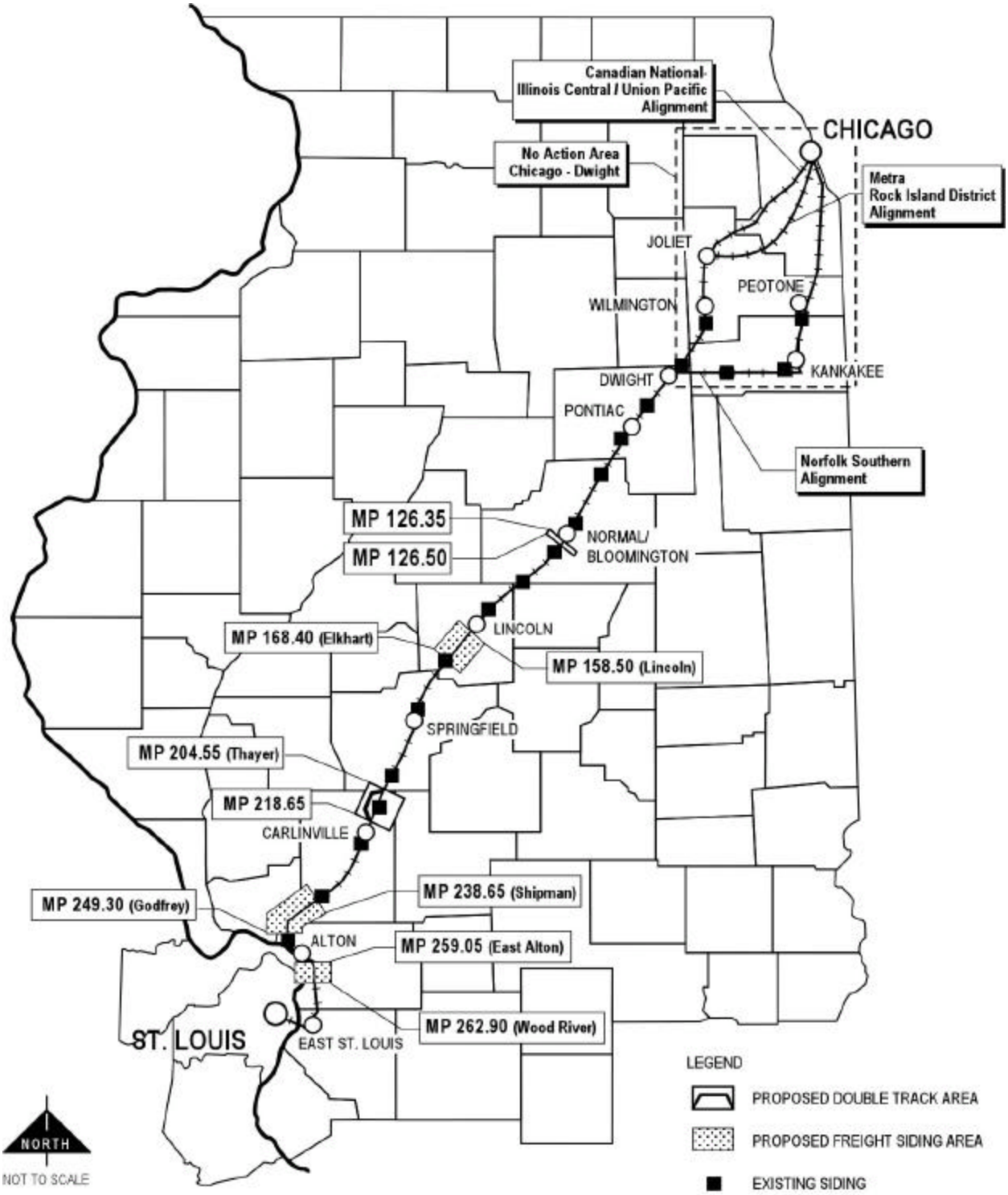

FIGURE 3.2-1
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
PROPOSED DOUBLE TRACK AND FREIGHT SIDING LOCATIONS

where 125-mph (200 kph) service was proposed. As part of the Preferred Alternative, speeds will not exceed 110 mph (177 kph) through this area. Therefore, positive protection is not required.

4. **Introduction of Quad Gates**. The Illinois Commerce Commission (ICC) has requested that all public grade crossings where speeds will exceed 90 mph (145 kph) be equipped with four quadrant gates (or quad gates) with loop detectors for trapped vehicle detection.

5. **Elimination of proposed electric lock gates and warning sign and lights**. These treatments were recommended at private crossings that were proposed to remain open. As part of the Preferred Alternative, all private crossings that will remain open will be provided with conventional lights and gates.

6. **Grade crossing treatment impact determined to be too great**. Grade crossing treatment recommendations that would impact wetlands, floodplains, or upland forest (typically at a crossing where close with a frontage/service road was recommended) have been changed to quad gates or conventional gates as appropriate. All recommendations to close with frontage/service road have been removed. This further minimizes the potential environmental impacts of the Preferred Alternative.

7. **Grade crossing closed or planned for closure by others**. Eleven grade crossings in the corridor have been closed outside of actions included with this project.

Appendix B lists the recommendations for each grade crossing under the Preferred Alternative. It also notes where modifications have been made since issuance of the Draft EIS. Table 3.2-2 summarizes the grade crossing treatment recommendations for the Preferred Alternative.

No crossings will be closed without the consent of the local community and the property owner involved. As shown in Table 3.2-2, 24 grade crossings (or less than eight percent) along the Preferred Alternative are proposed for closure. Of these 24, 14 are pedestrian crossings.

One grade separation is also proposed at Pontoon Road (MP 272.70) in Granite City. This is the only project element of the Preferred Alternative that will require right-of-way acquisition [0.2 hectares (0.4 acres)].

3.2.3.5 Stations

Under the Preferred Alternative, trains will stop at all of the stations currently served by the existing Amtrak route. If service increases to eight round trips per day, skip-stop service would be provided at the existing stations in Dwight, Pontiac, Lincoln, and Carlinville. No new stations are proposed.

3.2.3.6 Fencing

IDOT will contact each community in the Chicago - St. Louis High-Speed Rail corridor south of Dwight to discuss the possibility of fencing along the railroad tracks. If a community is interested in having fencing installed, IDOT will coordinate with that community to determine the location, style, and height of the proposed fencing as well as whether the fencing will be on one or both sides of the railroad tracks. If an agreement can be reached, fencing will be installed. Fencing will not be installed unless agreed to by the

Table 3.2-2
SUMMARY OF GRADE CROSSING TREATMENT RECOMMENDED ACTIONS
CHICAGO – ST. LOUIS HIGH-SPEED RAIL PROJECT PREFERRED ALTERNATIVE

County	Closed [1]	2002 RECOMMENDED ACTION										
		Close - Pedestrian	Close - Public Vehicular	Close - Private Vehicular	No Action	No Change	Ped. Bell and Flashers	Conventional Gates	Locked Gate	Quad Gates	Grade Separation	Total
Cook	0	0	0	0	18	0	0	0	0	0	0	18
Will	0	0	0	0	41	0	0	0	0	0	0	41
Grundy	1	0	0	0	2	0	0	3	0	10	0	16
Livingston	4	1	0	0	0	11	2	5	0	18	0	41
McLean	4	0	1	0	0	8	1	6	0	24	0	44
Logan	1	3	0	0	0	7	0	1	0	14	0	26
Sangamon	0	6	3	0	0	19	1	16	1	18	0	64
Macoupin	0	4	2	0	0	0	0	14	0	24	0	44
Jersey	0	0	0	0	0	0	0	1	0	2	0	3
Madison	1	0	2	1	0	6	0	5	0	8	1	24
St. Clair	0	0	1	0	0	0	0	0	0	0	0	1
St. Louis	0	0	0	0	0	0	0	0	0	0	0	0
Total (Preferred Alternative)	11	14	9	1	61	51	4	51	1	118	1	322

(1) Closed crossings that were included in the Draft EIS. These are located at MP 66.60 (Private Crossing), MP 78.70 (Private Crossing), MP 95.00 (Private Crossing), MP 95.50 (Private Crossing), MP 100.30 (Private Crossing), MP 106.30 (Private Crossing), MP 120.50 (Private Crossing), MP 124.35 (Hester Street), MP 143.40 (Private Crossing), MP 166.20 (Private Crossing), and MP 267.80 (Oldenburg Road).

local community. Fencing will be installed along the existing railroad right-of-way. Therefore, no additional right-of-way will be required.

3.2.3.7 Summary of Construction Requirements

Table 3.2-3 summarizes the construction and additional right-of-way that will be required with the Preferred Alternative. Revisions to project elements, including having no action proposed north of Dwight, have

dramatically reduced the amount of right-of-way required for this project. In the Draft EIS, right-of-way acquisition ranged from 39 hectares (97 acres) to 63 hectares (156 acres), depending upon alignment. As shown in Table 3.2-3, 0.2 hectares (0.4 acres) will be acquired as part of the Preferred Alternative.

Table 3.2-3
SUMMARY OF CONSTRUCTION REQUIREMENTS OF THE PREFERRED ALTERNATIVE

Item	
CHICAGO - DWIGHT	
No Action Area; No Physical Improvements Planned.	
DWIGHT – ST. LOUIS	
Double Track	
Kilometers (Miles)	19.8 (12.3)
Additional Right-of-Way – Hectares (Acres)	0 (0)
Freight Sidings	
Kilometers (Miles)	35.3 (21.9)
Additional Right-of-Way – Hectares (Acres)	0 (0)
Grade Separations	
Number	1
Additional Right-of-Way – Hectares (Acres)	0.2 (0.4)
New Enhanced Warning Devices at Grade Crossings	
Number of Grade Crossings	174
Additional Right-of-Way – Hectares (Acres)	0 (0)
Total Additional R/W Required – Hectares (Acres)	0.2 (0.4)

3.2.3.8 Costs

Capital costs estimated in the Draft EIS were refined and modified for the Preferred Alternative (i.e., for those improvements south of Dwight). Projected costs for construction, grade crossing treatment improvements, rolling stock, a maintenance facility, and right-of-way acquisition are estimated to range from $286 to $300 million (in 2001 dollars).

SECTION 4

Transportation Impacts

Section 4
TRANSPORTATION IMPACTS

This section summarizes the transportation impacts expected under the No-Build and Preferred alternatives. Projected annual person trips for rail, air, bus, and automobile intercity travel are presented. Additionally, impacts to future freight and commuter rail operations and vehicular traffic are discussed, including impacts from construction and vehicular impacts associated with the changes proposed at the highway-railroad grade crossings in the corridor.

This document has been prepared as a condensed Final Environmental Impact Statement (EIS). As such, it summarizes information from the Draft EIS that has not changed. The Draft EIS can be referenced for additional information on any of the topics discussed in this section.

4.1 PROJECTED RIDERSHIP

Ridership projections for this project were developed as part of the Financial and Implementation Plan and were presented in the Ridership Forecast Technical Report (Wilbur Smith Associates, 1994). These forecasts were used when evaluating alternatives in the Draft EIS. Since the high-speed rail (HSR) forecasts were developed, simulated end-to-end running times have increased and the proposed frequency of service has been reduced from eight round trips per day to three. A cursory analysis was conducted to modify the ridership forecasts to reflect these changes. As a result, projected annual rail ridership in the Chicago - St. Louis corridor was reduced from approximately 1.3 million to 600,000.

No-Build Alternative: Based on the developed forecasts, rail passenger ridership in the corridor is projected to increase 50 percent from 1998 by the year 2010 to 406,000 annual passengers under the No-Build Alternative. This ridership increase reflects overall population and travel demand growth in the corridor. The No-Build Alternative is not projected to divert additional travelers from other modes, as this alternative is a continuation of existing Amtrak service.

Preferred (Modified No-Build) Alternative: Projected ridership for the Preferred Alternative is approximately 601,700 annual passengers. This projected ridership level is 50 percent greater than for rail passenger service projected for the No-Build Alternative. Increased train speeds will result in rail passenger service being a more viable transportation mode in the corridor. As such, most of this additional ridership can be attributed to travelers diverting from other modes of travel to HSR because of the enhancements in service. It is projected that approximately 31 percent of HSR passengers in the year 2010 will be travelers diverted from other modes. Sixty-seven percent of the ridership will be generated from existing rail ridership and projected growth, while approximately two percent will be realized from induced demand.

Table 4.1-1 lists the projected annual person trips for the four modes of intercity travel in the corridor for both the No-Build and Preferred alternatives.

Table 4.1-1
EXISTING AND PROJECTED (2010) ANNUAL PERSON TRIPS (1,000'S)
IN THE CHICAGO-ST. LOUIS CORRIDOR

Mode	Alternative					
	Existing (1998)		No-Build (2010)		Preferred (2010)	
	Trips	Percent	Trips	Percent	Trips	Percent
Rail	271	0.8	406	0.9	602	1.3
Air	1,109	3.2	1,391	3.1	1,277	2.9
Bus	98	0.3	211	0.5	204	0.5
Auto	33,675	95.8	42,750	95.5	42,685	95.3
TOTAL	**35,153**	**100.0**	**44,758**	**100.0**	**44,768**	**100.0**

4.2 ADDITIONAL IMPACTS TO RAIL OPERATIONS

4.2.1 Freight Traffic

No-Build Alternative: No changes to existing freight operations will be required with the No-Build Alternative.

Preferred (Modified No-Build) Alternative: Implementation of HSR is not expected to result in a change in the number of freight trains operating in the Chicago - St. Louis corridor daily. The same number of daily freight trains assumed under the No-Build Alternative is assumed for the Preferred Alternative. Provision of three new freight sidings and improvements to existing sidings will address any impacts to freight service that might result from operating passenger trains at higher speeds. Prior to expanding service beyond three round trips per day, an operational review will be conducted to identify conflicts with freight traffic.

4.2.2 Commuter Rail Service

No-Build Alternative: No changes to existing commuter rail service in the Chicago area will be required with the No-Build Alternative. Future commuter rail service is assumed to be the same as existing service. Outside of the Chicago area, no other commuter rail service operates in the corridor.

Preferred (Modified No-Build) Alternative: Implementation of HSR service under the Preferred Alternative will not result in changes in the number of commuter trains operating daily, and scheduling modifications are not anticipated. Under the Preferred Alternative, intercity passenger service will operate on the same tracks as the Metropolitan Rail Corporation (Metra) Heritage Corridor Line between Chicago Union Station and Joliet. However, no action is proposed between Chicago and Dwight. Through this area, no new intercity passenger trains are proposed, and existing maximum speeds will be maintained. Prior to expanding service beyond three round trips per day, an operational review will be conducted to identify potential conflicts with commuter rail service.

4.2.3 Construction Related Impacts on Railroad Operations

No-Build Alternative: Under the No-Build Alternative, construction will be limited to regular maintenance activities. Therefore, impacts to railroad operations will be minimal.

Preferred (Modified No-Build) Alternative: In general, construction activities for HSR improvements will result in two types of impacts. The first impact will be the requirement to reduce the operating speeds through the construction zones that will add to rail travel time and, in turn, increased cost. The second impact will be the need to adjust the schedule of existing operations to create windows of opportunity for construction activities which require temporary shut down of rail operations on selected track sections for limited time.

Permission from the railroad owners will be required for any construction that will take place within the railroad right-of-way. Schedule adjustments will be required when construction activities will either directly impact the mainline track, such as when the new turnouts are being placed for the passing sections and new sidings, or when there is a potential safety risk, such as during the construction of a highway bridge superstructure over the tracks. Some of these activities may require up to eight hours of continuous track closure.

4.3 ADDITIONAL IMPACTS TO VEHICULAR OPERATIONS

4.3.1 Grade Crossings

No-Build Alternative: Under the No-Build Alternative, no major traffic impact is expected. No modifications to the existing grade crossings in the corridor are proposed.

Preferred (Modified No-Build) Alternative: All of the grade crossings in the project area were evaluated as part of the EIS process. Closure of nonessential grade crossings will enhance the safety of railroad passengers and highway users. Specific recommendations for each crossing are provided in Appendix B. A summary of the recommended treatments is contained in Table 3.2-2, in Section 3.

Implementation of the grade crossing treatment recommendations as part of the Preferred Alternative will impact vehicular traffic throughout the corridor. However, impact will be limited mostly to low volume roads because almost all major, high volume roads that were built or substantially upgraded over the years have included grade separations with the existing railroads. Also, only grade crossings on lower volume roads have been selected for closure. While less than eight percent of the grade crossings are proposed for closure, these crossings accommodate less than one percent of the average daily traffic (ADT) crossing the Canadian National-Illinois Central/Union Pacific (CN-IC/UP) alignment through the HSR corridor. Of the crossings proposed for closure, none has an ADT greater than 1,200 vehicles. Table 4.3-1 summarizes this information. In all instances where crossing closures are proposed, adequate reserve capacity exists on the adjacent crossings to handle the diverted traffic.

Because of the low volumes noted above, alternative access, rather than capacity, was the primary consideration in determining which crossings could be closed. In this regard, the Illinois Commerce Commission (ICC) regulation governing the maximum allowable adverse travel became one of the key criterion used for evaluation of potential closures. This criteria specifies 6.5 kilometers (4.0 miles) of adverse travel as the maximum allowable in unincorporated areas and 1.21 kilometers (0.75 miles) as the

Table 4.3-1
IMPACT OF CROSSING CLOSURES ON AVERAGE DAILY TRAFFIC UNDER THE PREFERRED ALTERNATIVE

ADT on Existing Grade Crossings	617,000
ADT on Grade Crossings Proposed for Closure	5,360
Percent of Total Traffic Using Grade Crossings Proposed for Closure	0.9
Highest Volume Crossing Proposed for Closure	22nd Street (MP 274.80) Granite City ADT=1,200

maximum in incorporated areas. The travel distance is measured as the shortest, usable path from one side of the closed crossing to the other. A summary of adverse travel that will result if the proposed crossing closures were implemented is presented in Table 4.3-2. The impacts associated with changes in access as a result of implementation of the Preferred Alternative are expected to be minor. Average adverse travel per crossing is 1.19 kilometers (0.74 miles).

Table 4.3-2
ADVERSE TRAVEL SUMMARY FOR VEHICULAR CROSSINGS SUGGESTED FOR CLOSURE AS PART OF THE PREFERRED ALTERNATIVE

Milepost	Crossing	County	Adverse Travel kilometers (miles)	Average Daily Traffic	Additional Daily VKT kilometers (miles)
118.05	Washington Street (Towanda)	McLean	0.55 (0.34)	440	242 (150)
185.90	Scarritt Street (Springfield)	Sangamon	0.81 (0.50)	950	766 (475)
194.50	Mulberry Street (Chatham)	Sangamon	0.73 (0.45)	877	637 (395)
203.40	TR 445B (Unincorporated)	Sangamon	6.26 (3.88)	75	469 (291)
210.90	Madison Street (Girard)	Macoupin	0.71 (0.44)	611	434 (269)
211.80	Old Rte. 4 (Unincorporated)	Macoupin	3.66 (2.27)	293	1073 (665)
262.05	Industrial (Unincorporated)	Madison	4.31 (2.67)	9	39 (24)
263.20	Evans Avenue (Wood River)	Madison	1.58 (0.98)	825	1305 (809)
274.80	22nd Street (Unincorporated)	Madison	0.97 (0.60)	1200	1161 (720)
280.90	Missouri Avenue (East St. Louis)	St. Clair	2.98 (1.85)	80	239 (148)
			Total	**5360**	**6365 (3946)**

4.3.2 Station Access

No Build Alternative: Under the No-Build Alternative, no major changes to station access will occur.

Preferred (Modified No-Build) Alternative: If HSR service were implemented, the existing Amtrak stations will be used. All current Amtrak stations in the corridor have excellent access, except the St. Louis station which is located on the edge of downtown between an elevated freeway and the existing railroad tracks. The new multi-modal transportation terminal planned by the City of St. Louis will substantially improve access to this station.

In Chicago, where public transportation is much more important for station access, Union Station is well served by Metra commuter trains, Chicago Transit Authority (CTA) elevated rapid transit lines, and CTA buses. Taxi service is also readily available.

The rail stations in other communities are all located in or near the heart of the town that they serve and are easily accessible to the local patrons. Drop-off and pick-up by friends and relatives is a very common mode of access.

Since much of the increase in rail ridership is projected to come by the way of diversion from air travel (see Section 4.1), the availability of car rental and taxi pick-up/drop-off service will be more important in the future in smaller towns and cities.

4.3.3 Parking

No-Build Alternative: No changes to parking at the Amtrak stations are proposed under the No-Build Alternative.

Preferred (Modified No-Build) Alternative: In the Draft EIS, parking demand was estimated for the year 2010 at each of the proposed HSR stations, assuming eight round trips per day. At that service level, the estimated demand ranges from 45 to 245 spaces. With three round trips per day, the estimated demand ranges from 20 to 115 spaces. Existing parking facilities are adequate to meet the demand associated with eight round trips per day service.

4.3.4 Safety

In the Draft EIS, accidents were estimated for all grade crossings in the HSR corridor. The purpose of that analysis was to determine the potential effectiveness of the grade crossing treatments proposed as part of the HSR Alternative. The results indicated that, relative to the No-Build Alternative, implementation of HSR service would reduce the predicted number of accidents occurring at the existing grade crossings because the overall accident exposure would be reduced. Since circulation of the Draft EIS, the grade crossing treatment recommendations have changed, and now include four quadrant gates at all public vehicular crossings where train speeds will exceed 90 mph (127 kph). There is no currently accepted method to predict accidents at grade crossings where four quadrant gates are provided. However, since 10 vehicular grade crossings will be closed and 174 will be provided with some form of enhanced warning devices as part of the Preferred Alternative, it is projected that fewer accidents will occur than if these improvements were not made, even though trains will be operating at higher speeds south of Dwight.

4.3.5 Construction Related Impacts on Vehicular Traffic

No-Build Alternative: Under the No-Build Alternative, construction will be limited to regular maintenance activities. Therefore, impacts to vehicular traffic will be minimal.

Preferred (Modified No-Build) Alternative: Under the Preferred Alternative, vehicular traffic will be temporarily impacted to varying degrees at locations where grade crossings will be modified or improved. The grade crossing improvements will, at a minimum, require traffic to slow down as it passes through the construction zone while new warning devices and other improvements are installed. In some cases, temporary diversion of traffic to adjacent crossings might be required.

In the case of the new grade separation proposed at Pontoon Road (MP 272.70), traffic may have to be diverted to adjacent roadways for up to four months for the construction of foundations, superstructure and approach roadways. Another option would be to construct a temporary detour around the construction site. This would reduce the amount of adverse travel but add to the total project cost.

These impacts to vehicular traffic could affect emergency services, schools, businesses, local festivals, and other activities requiring vehicular access. However, all of the construction related impacts on vehicular traffic will be temporary and are considered minor.

4.4 IMPACTS TO OPERATIONS ON NAVIGABLE WATERS

Under the Preferred Alternative, HSR trains would cross two drawbridges, both over Navigable Waters, in the City of Chicago. The first bridge crosses the South Branch Chicago River at approximately MP 1.90. The second crosses the South Fork of South Branch Chicago River at approximately MP 3.60. Information on vessel traffic and the number of times these bridges are raised is not readily available. For the bridge at MP 1.90, it is likely that the peak traffic seasons are in the spring and fall when recreational boats pass through this area. During these times, the bridge is typically raised two times during the week and two times per day on weekends for a duration of approximately 10 minutes. It is unlikely that the bridge at MP 3.60 is ever raised because in its lowered position it is at approximately the same height as the adjacent and parallel CTA Orange Line bridge which is not movable.

HSR trains would be required to yield to vessel traffic. However, since the number of times these bridges are raised is limited, this impact is expected to be minor.

SECTION 5

Environmental Consequences

Section 5
ENVIRONMENTAL CONSEQUENCES

This document has been prepared as a condensed Final Environmental Impact Statement (EIS) and focuses on impacts of the Preferred Alternative relative to the No-Build Alternative. The subsections in this document are identical to those used in the Draft EIS. The Draft EIS can be referenced for additional information on any of the topics discussed in this section.

The Preferred Alternative as defined in Section 3 is a combination of the No-Build and High-Speed Rail (HSR) alternatives evaluated in the Draft EIS, and is entitled the Modified No-Build Alternative. Revisions to project elements, particularly proposing no physical improvements north of Dwight, have dramatically reduced potential impacts. (Passenger trains would still operate north of Dwight on the current Chicago - St. Louis Amtrak route at the same frequency and speed. A summary of the quantitative impacts associated with the Preferred Alternative is provided in Table 5-1.) For comparison purposes, the impacts associated with the High-Speed Rail Alternative (CN-IC/UP alternative alignment) as evaluated in the Draft EIS are also listed in this table. Figures 5-1A through 5-1C show the environmental constraints in the Preferred Alternative project area. The reduction in impacts associated with the Preferred Alternative constitute the most notable change made in this section since circulation of the Draft EIS.

Where appropriate, direct, indirect, secondary, and cumulative impacts have been identified. The Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA) are directed by the National Environmental Policy Act (NEPA) of 1969 to address not only potential direct impacts from transportation projects, but also impacts which may be indeterminate and not easily recognized. Such impacts are grouped into general categories of indirect, secondary, and cumulative impacts. Indirect impacts are those which occur as a result of the project but are removed from the immediate right-of-way. Secondary impacts are those that are caused by an action and are later in time or farther removed in distance, but are still reasonably foreseeable. Generally, these impacts are induced by the initial action. They comprise a wide variety of secondary effects such as changes in land use, water quality, economic vitality, and population density. Cumulative effects are impacts that result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions. The cumulative effects of an action may be undetectable when viewed in the individual context of direct and even secondary impacts but, nonetheless, can add to other disturbances and eventually lead to a measurable environmental change.

To remove some of the redundancy from the Draft EIS, the impact assessment methodology and the general discussion on direct and indirect impacts that was consistent relative to wetlands and natural resources is provided here, instead of repeated in each section. The primary effect on wetlands and natural resources will be due to project construction; minimal effect will occur due to project operation and maintenance.

Table 5-1
SUMMARY OF IMPACTS

	Preferred Alternative	Comparable Alternative from the Draft EIS
Right-of-Way Acquisition – Hectares (Acres)		
Direct Conversion	<1 (<1)	49 (121)
Agricultural	0	31 (76)
Prime Farmland	0	32 (79)
Displacements (Number)		
Residential	0	11
Commercial	0	1
Institutional	0	1
Other Structures	1	1
Noise Impacts (Number of Receptors)	0	0
Stream and Tributary Crossings (Number)	28	56
Wetland Impacts – Hectares (Acres)		
Impacts	<1 (1)	6 (15)
Mitigation Required	<1 (2)	25 (62)
Natural Resource Impacts – Hectares (Acres)		
All Upland Vegetation	34 (85)	95 (234)
Native Vegetation (All)	<1 (<1)	2 (4)
Native Vegetation (Grade C+ or higher)	<1 (<1)	1 (2)
Floodplains (Projects with floodplain crossings)	1	6
Cultural Resources (Number)		
Above-ground Resources	0	0
Archaeological Resources	0	0
Forest Preserves and Parks (Number)	0	0
Undetermined Waste Sites (Number)	2	5
Highway-Railroad Grade Crossings (Number)		
Existing	322	322
Proposed for Closure – Pedestrian	14	17
Proposed for Closure – Vehicular	10	68

Note: For comparison purposes, the impacts associated with the High-Speed Rail Alternative (CN-IC/UP alternative alignment) as evaluated in the Draft EIS are also listed in this table. This alternative, like the Preferred Alternative (Modified No-Build), consisted of provision of high-speed rail service on the existing Chicago - St. Louis Amtrak route.

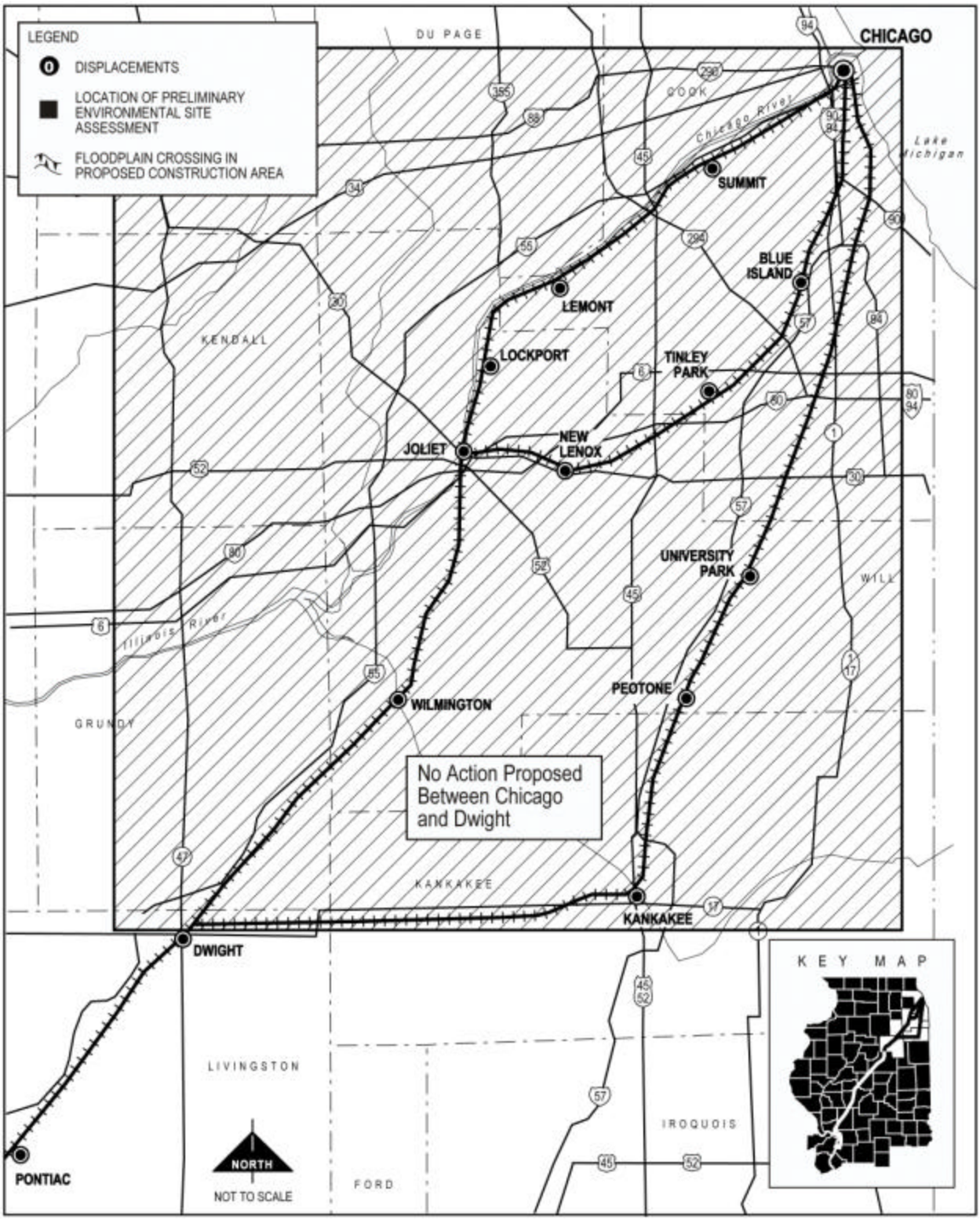

FIGURE 5-1A
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Chicago to Pontiac)

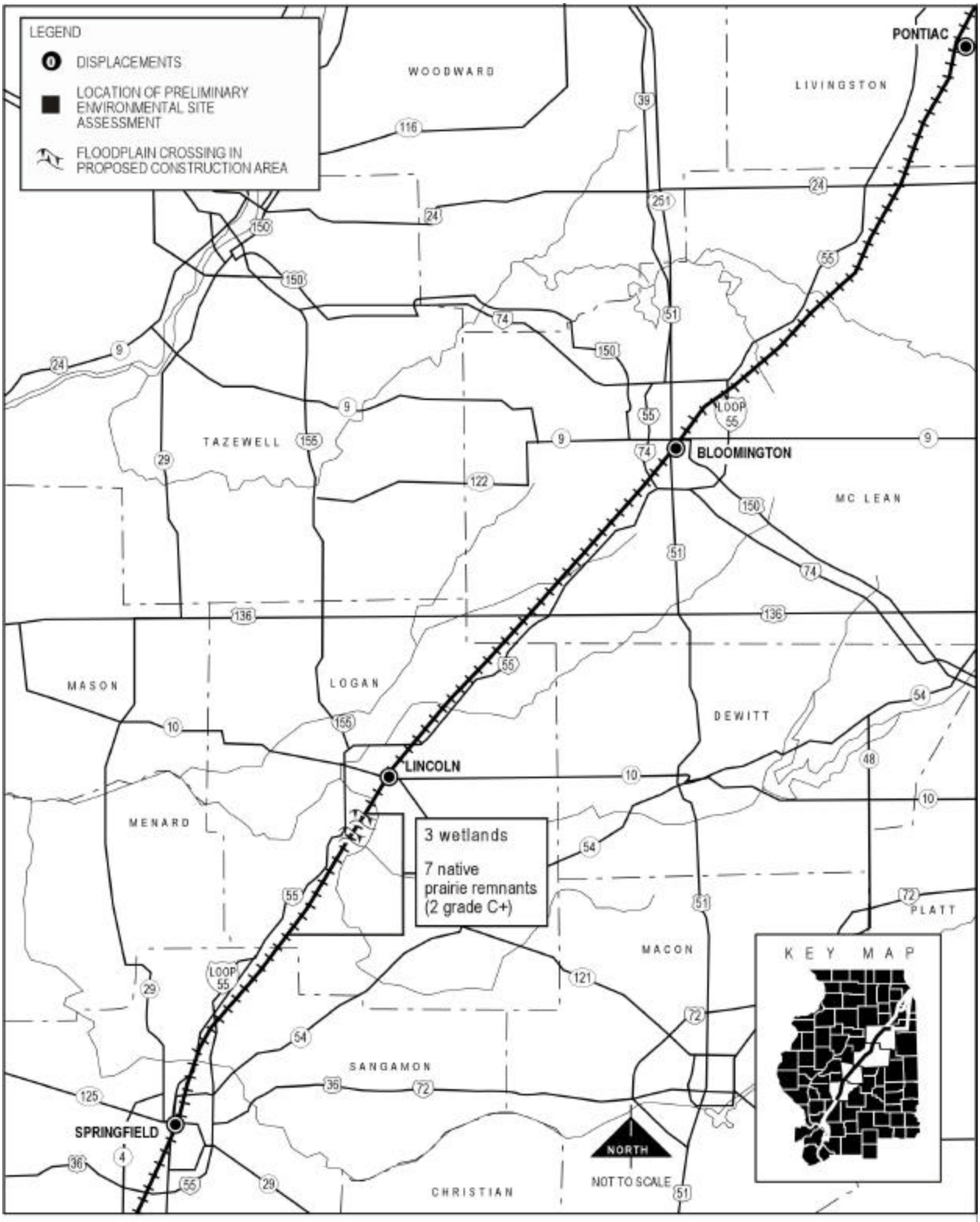

FIGURE 5-1B
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Pontiac to Springfield)

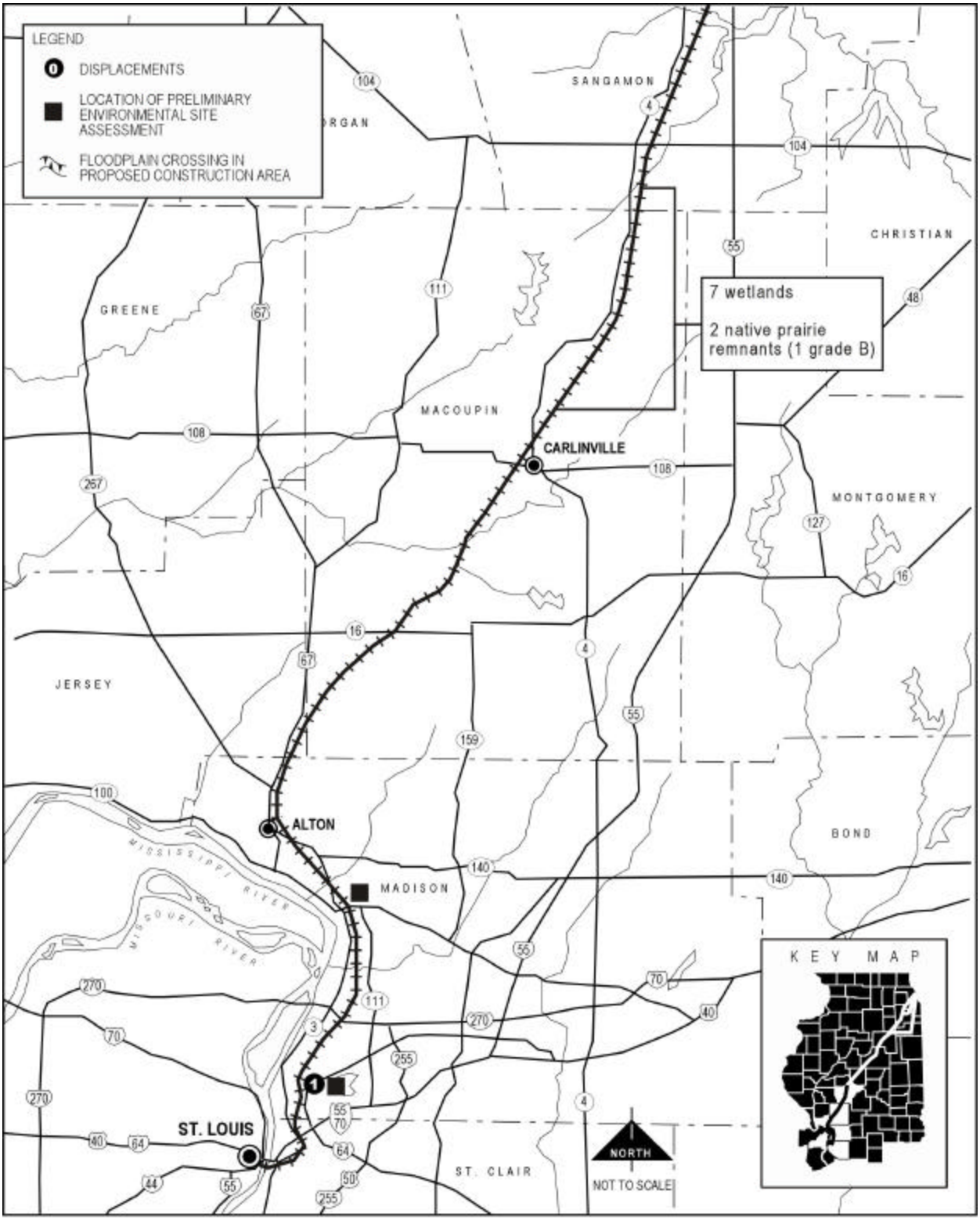

FIGURE 5-1C
CHICAGO-ST. LOUIS HIGH-SPEED RAIL PROJECT
ENVIRONMENTAL CONSTRAINTS MAP
(Springfield to St. Louis)

Construction activities associated with the Preferred Alternative are:

- provision of 19.8 kilometers (12.3 miles) of double track;
- provision of 35.3 kilometers (21.9 miles) of freight sidings;
- provision of one grade separation at Pontoon Road (MP 272.70);
- provision of enhanced warning devices at 174 grade crossings; and
- closure of 24 grade crossings.

Double track and freight sidings are primarily proposed through areas that were double tracked until the late 1970s. In these areas, a six-meter (20-foot) wide disturbance zone extending from the edge of track was assumed. Where new track is proposed on an existing single-wide subgrade, a 20-meter (65-foot) wide disturbance zone was assumed. Actual impacts within this disturbance zone are unlikely to affect the entire area as construction of new track will be done from the existing track to the maximum degree possible.

Modifications at grade crossings (i.e., grade separation, installation of warning devices, and closure) will have minimal impacts on wetlands and natural resources since nearly all grade crossings are in disturbed land or urban land communities.

Direct impacts will include short-term and long-term losses of wetlands and vegetation (modification of structure, species composition, and areal extent of cover types) through clearing, excavating, filling, and re-grading of the improved railroad base. Disposal of trees, shrubs, and other vegetative material cleared from the project work areas will be in accordance with the state regulations governing solid waste disposal. Heavy construction equipment could potentially damage roots of large trees and shrubs immediately outside the right-of-way. These impacts will be localized because forested areas are limited and could be mitigated by trimming tree crowns to compensate for root damage. Best management practices (BMP) to reduce impacts from vegetation clearing will include minimizing the zones of construction and re-vegetating/mulching areas disturbed.

Fugitive dust generated during project construction and operation could adversely affect vegetation due to the reduction in photosynthetic capacity of dust-covered leaves. Although such deposition could have adverse effects, the magnitude of such impact will likely be minimal since wind and rain remove dust on leaves, a relatively small area in close proximity to the dust source will be affected, and fugitive dust control will be implemented as part of BMP for construction operations.

Indirect adverse impacts will include the short-term and long-term increased potential for weed invasion, establishment, and expansion; reduction in plant photosynthetic capacity due to coverage by fugitive dust; exposure of soils to accelerated erosion; shifts in species composition and/or changes in vegetative density away from a more desirable condition (e.g., native communities); loss of natural biodiversity; and reduction of wildlife habitat. Construction activities and increased disturbance could introduce and provide conditions conducive to the spread of non-conservative or weedy plants in the railroad corridor. During revegetation weeds often out-compete the more desirable species, rendering a site less productive as a source of forage and/or habitat for wildlife.

Currently, maintenance activities along the existing tracks consist of applying herbicides and the cutting of vegetation within the right-of-way (approximately 15 meters/50 feet from the centerline of the track). It is anticipated that no change will occur in the type and frequency of maintenance activities as a result of

implementing high-speed rail service. Currently, high quality wetland and vegetation communities exist and survive successfully along the existing railroad tracks. Hence, it is likely that these existing communities, if not impacted by construction, will not be further impacted by future maintenance.

5.1 LAND USE AND DEVELOPMENT

Land use and development impacts are described in this section. Since the No-Build Alternative is a continuation of existing Amtrak service, no land use and development impacts are expected. Therefore, only impacts associated with the Preferred Alternative are described.

5.1.1 Regional Implications

The Preferred Alternative will utilize existing rail lines that serve established cities and villages. As a result, no direct major influences in land use are anticipated at the regional level. The direct impact on land use and development will be a function of: land available for development or redevelopment; regional and local markets; and the plans, zoning ordinances and economic development programs of local government. These potentials will occur in each of the cities where there will be a station stop for high-speed rail service.

The Preferred Alternative will provide an alternative to driving or flying for business or personal activities and reduce travel time for thousands of trips along the corridor. Over 1.5 million residents live within an eight-kilometer (five-mile) radius of six proposed stations: Chicago, Joliet, Bloomington/Normal, Springfield, Alton, and St. Louis. Each of these communities offers unique economic, educational, medical and cultural opportunities. By facilitating access to these corridor communities, high-speed rail service could enhance the way people live, work, shop, go to school, interact with other businesses and services, and choose to participate in cultural and recreational activities.

Improved rail service will increase the opportunities and convenience of attending universities or visiting medical centers. Decreased commuting time could provide part-time students with options for living at home to save money, and opportunities for people to obtain work in other communities along the corridor. Students and workers may also use high-speed rail service for weekend trips and for traveling to research and conference centers, such as in Springfield. Similarly, since Bloomington and Springfield will be more quickly accessible from Chicago, the way some businesses view these areas as places to locate and to market may change. Access to major medical centers will be enhanced, especially for those traveling long distances for specialized and/or frequent medical care. High-speed rail service will also expand possibilities for one-day field trips for school and special interest groups. The presence of these opportunities will also create an environment favorable for new economic activity and investment. New businesses considering relocation in Illinois stress the importance of local transportation options, the work force within a reasonable commuting time, and access to nearby cities and markets.

5.1.2 Rural Areas and Small Communities

The principal concerns of rural and small communities are the potential impacts of road closures. Examples of local concerns about closing highway-railroad crossings include: increased travel distance and time, particularly for emergency and school bus services; traffic and physical changes to crossings that remain open; changes in access to homes and businesses; barriers to community growth; and changes to existing traffic patterns. The approach to analyze grade crossing treatments and make recommendations

was intended to be responsive to these concerns and to minimize impacts. The approach and recommendations are described in Section 5.3.1, Grade Crossing Impacts.

Freight trains currently pass through all of the communities where high-speed rail service will operate. Freight trains are significantly longer and heavier than the proposed high-speed rail trains. Impacts from high-speed rail service will be nominal compared to the No-Build Alternative, considering freight train traffic will be the same with either the No-Build or Preferred Alternative.

Concern has been expressed about safety where there are established land uses on either side of the railroad tracks which attract pedestrian movement across or along the right-of-way. Of particular concern are children who are used to walking to school or recreational activities by trespassing on the railroad right-of-way. Fencing will be considered within many of the urbanized areas as part of the Preferred Alternative. Where fencing is provided it will be designed to provide the best possible protection to discourage trespassing and to direct pedestrians to a nearby warned crossing, usually within one block of the existing crossing. The Illinois Department of Transportation (IDOT) will work with local communities on the detailed design of fencing. Communities with historic qualities and unique architecture may request more decorative fencing along the railroad. Fencing will not be installed unless agreed to by the local community.

5.1.3 Station Area Impacts

The need for additional parking and/or local circulation improvements at or near HSR stations will evolve as the number of passengers increases. IDOT and the project operators will work with local communities to meet their needs for circulation improvements to support the expanded passenger ridership. As discussed in Section 4.3.3, available parking is sufficient to meet the projected demand.

5.2 SOIL RESOURCES AND AGRICULTURAL IMPACTS

The No-Build Alternative will neither require the acquisition of farmland nor affect farm operations, therefore, it is not discussed in this section. The effects of the Preferred Alternative on individual farm units are presented below.

5.2.1 Farmland Acquired for Proposed Improvements

The Preferred Alternative will require no farmland acquisition. All improvements will take place within existing railroad right-of-way except for the grade separation proposed at Pontoon Road (MP 272.70). However, the land required for this improvement is not agricultural.

5.2.2 Prime and Important Farmlands

The U.S. Department of Agriculture (USDA) divides farmland into four principal categories: prime farmland; unique farmland, other than prime; additional farmland of statewide importance; and additional farmland of local importance. The Preferred Alternative will not require the use of prime, unique, or important farmland.

5.2.3 Soils Capability Grouping

The soil capability grouping adopted by the USDA shows the suitability of soils for most kind of field crops. According to the USDA, soils are grouped according to their limitations when used for field crops, the risk of damage when they are used, and the way they respond to treatment. Eight capability classes are used to describe the general suitability of soils for most kinds of field crops. The Preferred Alternative will require the acquisition of 0.2 hectares (0.4 acres) of Class IV soils at Pontoon Road (MP 272.70) where the land is currently developed. These soils have very severe limitations that reduce the choice of plants and/or require very careful management.

5.2.4 Illinois Agricultural Land Evaluation and Site Assessment System

The Illinois Department of Agriculture uses the Land Evaluation and Site Assessment (LESA) system to assess overall impacts to agriculture caused by state and federal projects. The LESA system consists of two parts — land evaluation and site assessment:

- The land evaluation system is used to rate the agricultural productivity of farmland, as indicated by soils information. The Natural Resource Conservation Service determines and provides this information on U.S. Department of Agriculture Form AD-1006, which is derived from the Federal Farmland Protection Policy Act (7 USC 4201, *et seq*.); and

- The site assessment system considers all other factors relevant to agricultural concerns, such as compatibility of a proposed improvement with agricultural operations, benefits to agriculture, and compatibility with local comprehensive land use plans.

The U.S. Department of Agriculture Form AD-1006 was completed by the State of Illinois Agricultural Department and the U.S. Department of Agriculture, Natural Resource Conservation Service. However, subsequent to the completion of the AD-1006 review process, the scope of the Preferred Alternative has been substantially reduced from the Draft EIS, and no farmland will be acquired.

5.2.5 Severed Farm Units

A farm unit is defined as one or more parcels of land that are farmed as a single operation. It is farmed under one management, although it may be under multiple ownership. A severed farm operation is an operation in which the farmland is bisected either laterally or diagonally by proposed railroad right-of-way or highway grade separations, thereby dividing a parcel of land into two or more individual plots. No severed farm units will result from the Preferred Alternative

5.2.6 Severance Management Zones

Severance management zones are those areas of a farm, which, after being diagonally intersected by a proposed improvement (such as a frontage/service road, highway grade separations, or new railroad right-of-way), are adversely affected by the resulting triangular shape. These zones often cause problems for continued farming. The resulting triangular design makes it difficult to turn a tractor and farm implements without damaging or removing plants or causing the misapplication of farm chemicals. This often results in production loss. When the operational disruption caused by diagonal severance is substantial, or when the slope of the land allows planting in one direction only, a farmer may be forced to

change from row crops to pasture. This may have an adverse economic impact. No severance management zones will result from the Preferred Alternative.

5.2.7 Uneconomic Remnants

Uneconomic remnants have been defined as severed parcels that are less than two hectares (five acres) in size that will be created from the construction of new railroad right-of-way or grade separations. Uneconomic remnants also will include any parcel of real property in which the owner is left with an interest after the partial acquisition of the owner's property, and which the acquiring agency determines has little or no value or utility to the owner, and the acquiring agency will offer to acquire any such identified uneconomic remnants. These remnants will be considered a "taking", due to the economic constraints that will be placed on the land and the owner/operator for continued farming. No uneconomic remnants will result from the Preferred Alternative.

5.2.8 Landlocked Parcels

A landlocked parcel is a portion of land that has been isolated by the proposed construction of improvement associated with a project alternative, thereby rendering it inaccessible by public road, existing or proposed easements, proposed frontage/service roads, or relocated driveways. No property will be landlocked by the Preferred Alternative.

5.2.9 Adverse Travel

Adverse travel is the measurement of the additional kilometers (miles) traveled by a farmer to reach a severed or otherwise affected parcel of land created by the new railroad right-of-way or the construction of a highway grade separation. Although grade crossing consolidations will occur with the Preferred Alternative, no private farm crossings are proposed for closure.

5.2.10 Agricultural Zoning

Five counties in the corridor currently have some form of agricultural zoning. These counties include Will, McLean, Logan, Sangamon, and Madison Counties. Will County has adopted agricultural zoning that includes a four-hectare (10-acre) minimum lot size, designed to protect properties from converting to non-agricultural uses. McLean County requires all non-agricultural uses in an agricultural district to be processed as special uses, and Logan County has established a minimum two-hectare (five-acre) lot size in the agricultural district as a method of discouraging non-agricultural uses. The Preferred Alternative will have no impact on properties zoned for agriculture.

5.2.11 Designated Agricultural Protection Areas

The Agricultural Areas Conservation and Protection Act was enacted in 1980. This act allows for parcels of land greater than 142 hectares (350 acres) in size to be designated as agricultural protection areas. These agricultural protection areas were established to conserve, protect, and encourage the development and improvement of agricultural lands for the production of food and other agriculture products. No known designated agricultural protection areas will be impacted by the Preferred Alternative.

5.2.12 Agricultural Income Loss

No agricultural income loss will result from the Preferred Alternative.

5.2.13 Mitigation

No agricultural mitigation is required for the Preferred Alternative.

5.2.14 Irreversible and Irretrievable Commitment of Resources

No farmland will be irreversibly or irretrievably converted to new railroad right-of-way under the Preferred Alternative.

5.3 SOCIOECONOMIC AND COMMUNITY IMPACTS

5.3.1 Grade Crossing Impacts

No-Build Alternative: Over time, changes to grade crossings in the HSR corridor will occur under the No-Build Alternative. Some crossings will be closed; other crossings will be equipped with enhanced warning devices. These changes will be precipitated by the Illinois Commerce Commission (ICC), IDOT, the operating railroad, and/or the local community. However, any of these changes would be separate from the Chicago - St. Louis High-Speed Rail Project.

Preferred (Modified No-Build) Alternative: Increases in train speeds along the high-speed rail corridor warrant an increase in the level of grade crossing warning or protection. Changes in grade crossing treatments, particularly closing crossings, could impact local socioeconomic and community factors. The recommendations for grade crossing treatments are, therefore, a primary concern to the local communities within the Chicago - St. Louis corridor. All of the grade crossings in the project area were evaluated as part of the EIS process. Specific recommendations for each crossing are provided in Appendix B. A summary of the recommended treatments is contained in Table 3.2-2, in Section 3.

Information on ambulance, police, fire and school district service areas and routes; hospitals; regional grain elevators; and major agri-businesses was considered when the grade crossing treatment recommendations were developed. Additionally, field reviews of the crossings, evaluating land use, recent developments, and wetlands, were conducted to provide additional background information about each crossing that was used to determine the appropriate treatment recommendation. Finally, operational adjustments, such as limiting the maximum speed to 110 mph (177 kph), were made to allow more crossings to remain open. At speeds in excess of 110 mph (177 kph), positive protection, such as closing or grade separating the crossings, is required in accordance with FRA guidelines.

Under the Preferred Alternative, 24 grade crossings are proposed for closure. Recommendations for closure primarily focus on redundant crossings that are either pedestrian crossings, low volume roadways, or private crossings. Access will be maintained to all properties. The ICC regulation governing the maximum allowable adverse travel was adhered to and was one of the key criterions used for evaluation of potential closures. This criterion specifies 6.5 kilometers (four miles) of adverse travel as the maximum allowable in unincorporated areas and 1.21 kilometers (0.75 miles) as the maximum in incorporated areas.

5.3.2 Displacement and Relocation

5.3.2.1 Displacements

No-Build Alternative: Under the No-Build Alternative, no displacements will occur.

Preferred (Modified No-Build) Alternative: One outbuilding will be displaced under the Preferred Alternative, at Pontoon Road (MP 272.70) where a grade separation is proposed. This structure is located on property that includes a gas station.

5.3.2.2 Mitigation

The "Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended," applies to all federal or federally assisted activities that involve the acquisition of real property or the displacement of persons or businesses. Just compensation will be provided for the property acquisition that will be required for the proposed grade separation at Pontoon Road (MP 272.70). Both the United States and Illinois Constitutions require this. The courts have defined "just compensation" as monetary payment that is equivalent to the "fair market" value of the property. Fair market value has been defined as the highest price estimated in terms of money that the property will bring, if exposed to sale on the open market, with a reasonable time allowed to find a buyer, buying with the knowledge of all of the uses to which it is adapted, and for which it is capable of being used. The Bureau of Land Acquisition of the Illinois Department of Transportation will determine the fair market value. Relocation assistance will not be required for the Preferred Alternative.

5.3.3 Economic Impacts

The expenditure of funds for transportation infrastructure has both direct and indirect economic impacts. The direct impact can be measured by the number of jobs created, both in the production of materials and equipment used in the project and in the actual on-site construction activities. Development of high-speed rail between Chicago and St. Louis will require the employment of persons to upgrade the road bed, install signal and safety devices, and improve grade crossings. Additional jobs will be created in firms that produce the signal and safety devices, steel rails, and the rolling stock for the route. The wages that these individuals receive are then recycled throughout the economy as the new workers buy houses, furniture, groceries, and clothes. These expenditures, in turn, create new jobs, producing a multiplier effect on the economy. The geographic distribution of that impact will depend upon the location of firms supplying the labor and materials needed on the project.

5.3.3.1 Employment Impacts of Construction and Operations

No-Build Alternative: The No-Build Alternative will not result in any construction-related employment impacts. Also, no changes in operations-related employment are expected.

Preferred (Modified No-Build) Alternative: The economic impacts of the Preferred Alternative will be dispersed throughout Illinois and, to some extent, throughout the Midwest. Estimates of the employment that will be generated by the construction and operation of the proposed HSR system were developed for the HSR Alternative presented in the Draft EIS. Employment estimates ranged from 1,800 to 4,200 jobs

annually for three years of construction. Under the Preferred Alternative, new employment will be lower than estimated for the HSR Alternative in the Draft EIS because less construction is proposed.

The multiplier effect in the peak employment year during construction is estimated to be 1.90. Thus, each dollar spent during construction generates an additional $0.90 in system-wide economic activity. The multiplier impact is greater during years of operation because the costs are more labor intensive; a smaller portion of the costs is spent on materials and supplies. However, the absolute impact on employment is much smaller because operational costs are a fraction of construction costs. The multiplier varies between 2.23 and 2.28 but averages about 2.26 through the first seven years of operation. The impacts from operations will gradually increase as additional expenditures are required to maintain the tracks and rolling stock in top condition.

In the Draft EIS, operation of the HSR system was estimated to result in an increase of between 800 and 1,100 new jobs annually. As with the construction estimates, no new employment estimates were generated for the Preferred Alternative. However, since no new trains will be added, the increase in employment for the Preferred Alternative would be lower than the Draft EIS estimates.

5.3.3.2 Changes in Regional and Local Economic Activity

No-Build Alternative: The No-Build Alternative is not expected to result in any changes in regional and local economic activity.

Preferred (Modified No-Build) Alternative: Many of the employment and economic impacts discussed above will occur somewhere in Illinois. The precise location of these impacts will depend on which companies receive contracts to do the work. It is estimated that a high proportion of the new employment will occur in the six-county Chicago metropolitan area in the northeast section of the state. The concentration of major engineering, construction, and manufacturing firms in this section of the state makes it highly probable that this region will benefit substantially, both directly and indirectly, from construction period expenditures. During the actual construction period, some of the secondary impacts will be felt in communities along the route as construction crews spend money in local hotels, restaurants, and shops. Some firms outside of the Chicago area are also likely to receive contracts and/or subcontracts that will help spread the overall impacts throughout the state.

The impacts of expenditures from operations will probably be more concentrated, with the majority of new jobs created in communities that will primarily be served by the system: Chicago, Joliet, Bloomington, Springfield, Alton, and St. Louis. Ticket agents and other railroad personnel will be located in these communities, and the secondary impacts of their employment will be spread throughout the counties in which the communities are located. Again, however, the majority of the new employment is likely to be located in the Chicago area. Because Chicago is likely to be the focus for several high-speed rail lines radiating throughout the Midwest, it is likely that the administrative offices for the Chicago - St. Louis line will be in Chicago. Similarly, although the yards and repair facilities for the line could be located almost anywhere along the line, the fact that there are existing locations in the Chicago/Joliet area that could accommodate maintenance facilities for all lines entering the city makes it likely that the major maintenance facilities will be located in northeastern Illinois.

In addition to the impacts from direct expenditures on system construction and operation, the Preferred Alternative will increase the flow of travelers between cities along the route and thus enhance economic

activity in those communities with stations on the line. The majority of the projected ridership will involve mode transfers and is thus travel that will have occurred whether or not the high-speed rail were in place. However, induced ridership could account for 5 percent to 15 percent of total riders, and a high proportion of the induced ridership is likely to be pleasure oriented. For pleasure travelers, the train ride itself becomes part of the experience of a weekend shopping trip to Chicago or a short vacation that includes a tour of historic sites in Springfield associated with Abraham Lincoln. The impacts from induced travel will be heavily concentrated in the end-point cities, Chicago and St. Louis. Springfield, with its historic attractions and the State Fair, will also benefit. The other communities with stations will probably experience comparatively small increases in economic activity from induced-ridership expenditures.

The Preferred Alternative will require 0.2 hectares (0.4 acres) of additional right-of-way. Loss of property tax revenue due to conversion of property to transportation use is estimated to be below $1,000 annually for the Preferred Alternative.

5.3.4 Environmental Justice

Potential disproportionate impacts to low-income and minority populations were evaluated in accordance with Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." In response to this Executive Order, the project corridor was evaluated to identify the presence of low income and minority residents and the potential impacts to them.

No-Build Alternative: No disproportionately high and adverse human health or environmental effects on minority or low-income populations were identified for the No-Build Alternative.

Preferred (Modified No-Build) Alternative: No disproportionately high and adverse human health or environmental effects on minority or low-income populations were identified for the Preferred Alternative.

Of the activities associated with the Preferred Alternative, proposed grade crossing closures have the greatest potential to impact minority or low-income populations. A field review was conducted in August of 1999 to evaluate all crossings proposed for closure in regards to community cohesion and environmental justice. Under the Preferred Alternative, 24 crossings are proposed for closure. (See Appendix B.) Of these, 14 are pedestrian crossings, with other useable crossings in very close proximity. Within the villages and towns in the project area, up to one vehicular crossing may be closed with useable crossings located within a block or two. Table 5.3-1 lists the number of crossings proposed for closure in communities where the percentage of the population classified as minority or low-income exceeds the statewide average. As documented in the Draft EIS, no disproportionate adverse impacts on minority or low-income populations as a result of grade crossing closures were identified. One additional vehicular crossing was proposed for closure in a low-income area under the CN-IC/UP and Rock Island District alignments. Under the Preferred Alternative, no alignment has been selected north of Dwight.

Table 5.3-1
PROPOSED CROSSING CLOSURES IN MINORITY OR LOW-INCOME AREAS

Type of Crossing	Minority	Low-Income
Pedestrian	0	6
Vehicular	1	5

The Preferred Alternative will not displace any minority or low-income populations.

No noise or vibration impacts were identified for this project. Therefore, no disproportionate noise or vibration impacts to minority or low-income populations will occur.

No disproportionate transportation impacts to the minority or low-income populations identified in the corridor are projected.

5.4 AIR QUALITY

5.4.1 Conformity

In the Draft EIS, direct and indirect annual volatile organic compound (VOC) and nitrogen oxide (NO_x) emissions in the ozone nonattainment areas were calculated to determine if a conformity determination was required for this project. To determine the net change in emissions, the following was considered:

- the increase in emissions from new high-speed rail trains;
- the reduction in emissions from existing Amtrak trains removed from service;
- the reduction in emissions from intercity bus and automobile travel as a result of travelers diverting to HSR; and
- the increase in emissions from vehicles diverting from grade crossings proposed for closure.

Based on the emission analysis presented in the Draft EIS, this project is categorized as "exempt" under the general conformity regulations because no net increases in VOC or NO_x emissions are projected in the ozone nonattainment or maintenance areas that exceed the rates set forth in Illinois's or Missouri's general conformity regulations. Under the Preferred Alternative, emissions from new high-speed rail trains would be lower because the proposed number of round trips per day has been reduced from eight to three. While this would result in a lower reduction in emissions from intercity bus and automobile travel, the same conclusion can be drawn – this project is categorized as "exempt" under the general conformity regulations.

Additionally, proposed construction in the nonattainment areas is limited and would occur over a minimum of a three-year period. Pollutant emissions associated with construction will not exceed the annual threshold rates set forth in Illinois's general conformity regulations. No construction is proposed in Missouri as part of this project.

5.4.2 Air Quality Impacts in the High-Speed Rail Corridor

In the Draft EIS, an analysis of future mobile source emissions (VOC, CO, and NO_x) was conducted for this project to evaluate intercity passenger travel in the corridor. Results of the analysis indicated that future annual emissions would decrease under either the No-Build or HSR Alternative compared to existing conditions. Additionally, no increases (compared to the No-Build Alternative) in the annual VOC and carbon monoxide (CO) emissions were projected for the HSR Alternative. The lower projected annual emissions with HSR were attributed to diversions from buses and automobiles to HSR. NO_x emissions were projected to increase under the HSR Alternative.

Under the Preferred Alternative, it is projected that annual VOC, CO, and NO_x emissions from new state-of-the-art high-speed trains will be lower than from Amtrak trains. However, the actual trainsets to be used for this project have not been selected. Additionally, pollutant emissions in the corridor will be reduced as a result of passengers diverting from other modes of travel to HSR.

5.4.3 Local Air Quality

5.4.3.1 Short-Term Effects

No-Build Alternative: Since the No-Build Alternative will not require any construction, there are no short-term air quality impacts associated with this alternative.

Preferred (Modified No-Build) Alternative: Under the Preferred Alternative, there will be some local air quality impacts. These 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, the type of equipment, soil characteristics, the speed at which construction vehicles are operated, and the fugitive dust control methods employed. Much of the fugitive dust generated by construction consists of particulates of relatively large size that fall to the ground within a short distance of where they are generated. Some windborne particulates may settle on nearby buildings and vehicles. People outdoors near a construction site will be exposed to higher than average amounts of inhalable particulates. However, the impacts associated with construction activities are normally negligible, local, and temporary. Substantial concentrations of pollutants require sustained vehicular traffic volumes in the thousands, which is not characteristic of the type of construction that will be associated with this alternative.

5.4.3.2 Long-Term Effects

Microscale carbon monoxide analyses were performed for the years 2000 (existing), 2003 (estimated time of completion), and 2013 (estimated time of completion plus 10 years) at five locations south of Dwight. This modeling was used to estimate both one- and eight-hour CO concentrations to determine if any violations of the National Ambient Air Quality Standards (NAAQS) would occur as a result of this project. The carbon monoxide microscale analysis was prepared in accordance with procedures contained in the IDOT Air Quality Manual, dated May 1982. These procedures were adopted as standard after coordination with the Illinois Environmental Protection Agency (IEPA), Division of Air Pollution Control, and the Federal Highway Administration, Illinois Division Office. The analysis is consistent with the latest mobile source emissions factors issued by the U.S. Environmental Protection Agency (USEPA) known as MOBILE5a and conformity regulations dated November 11, 1993, (40 CFR Part 93). The calculations of CO concentrations for each receptor were performed using the CAL3QHC (Version 2.0) model (USEPA, 1992).

The results of the air quality analysis indicate that neither the No-Build Alternative nor the Preferred Alternative will result in CO concentrations in excess of the one-hour or eight-hour NAAQS of 35.0 ppm and 9.0 ppm, respectively. Under the Preferred Alternative, one-hour and eight-hour CO concentrations will increase slightly near grade crossings that will have traffic diverted to them from an adjacent grade crossing proposed for closure. However, this increase will be negligible. The highest future one-hour (7.4 ppm) and eight-hour (4.6 ppm) CO concentrations are projected at the Bloomington/Normal Station in the year 2013.

5.4.4 Mitigation

Results of the air quality analysis conducted for this project indicate that the project is considered exempt under the general conformity regulations of Illinois and Missouri. Additionally, according to results of the microscale CO analysis, no new violations of the NAAQS will occur. Therefore, each of the improvements is consistent with both the Federal Clean Air Act and its amendments and the provisions of the current State Implementation Plans (SIP).

No long-term air quality impacts are expected at either the local or regional level. Therefore, air quality mitigation measures are only discussed for construction-related impacts associated with the Preferred Alternative. During construction, adequate dust-control measures will be maintained so as not to cause detriment to the safety, health, welfare, or comfort of any person, or cause damage to any property or business. Fugitive dust will be generated during periods of intense construction activity and will be accentuated by windy and/or dry conditions. Good housekeeping practices, such as wetting and chemically treating exposed earth areas, covering dust-producing materials during transport, and limiting construction activities during high wind conditions, will minimize the dust impacts. Direct emissions from construction equipment and trucks are generally not expected to require mitigation. However, exhaust emissions from diesel-powered trucks are a distinct source of odor and a potential source of fugitive dust emissions. Keeping the trucks clean and routing them away from residential and other sensitive receptor locations will alleviate these impacts. Trucks can be kept cleaner by installing a grating at the entrance and exit ways to the construction site to "shake" loose dust that adheres to the truck surfaces. Watering down the trucks on an as-needed basis will also be effective. Covering trucks and rail cars carrying excavated material will further reduce fugitive dust emissions.

5.5 NOISE AND VIBRATION

5.5.1 Evaluation Criteria

5.5.1.1 Noise Criteria

Evaluation criteria for train noise impacts are based on those described in the Federal Railroad Administration manual, High Speed Ground Transportation Noise and Vibration Impact Assessment. These criteria, presented in Table 5.5-1 of the Draft EIS, are based on Federal noise standards and well-documented criteria and research into human response to noise. The change in cumulative noise is the basis for the criteria.

5.5.1.2 Vibration Criteria

Criteria for ground-borne vibration impact are based on those outlined in the FRA manual. For this project, vibration impact levels are 80 VdB for residential receptors and 83 VdB for institutional land uses with primarily daytime use.

5.5.2 Methodology for Assessing Noise and Vibration During Operation

5.5.2.1 Analysis of Train Noise

The general assessment methods described in the FRA and Federal Transit Administration (FTA) manuals were used to predict future train noise. As with the existing noise estimates, future noise estimates were calculated throughout the project area for receptors located within 75 meters (250 feet) from the track centerline.

5.5.2.2 Analysis of Train Vibration

Train vibration was predicted based on the general assessment methods outlined in the FRA and FTA manuals. The same receptors analyzed for potential noise impacts were analyzed for potential vibration impacts. Vibration levels are estimated based on a single passby of a train.

5.5.3 Noise and Vibration Impacts

5.5.3.1 Noise Impacts

No-Build Alternative: No noise impacts will occur under the No-Build Alternative.

Preferred (Modified No-Build) Alternative: Implementation of HSR service will result in higher operating speeds than currently experienced along most of the project area, and at greater than 80 mph (130 kph), the major source of train noise is the rolling interaction of the train wheels on the track rail. The noise resulting from this interaction increases with greater speeds. Noise levels were developed in the Draft EIS for HSR service consisting of eight round trips per day. Projected noise levels for the HSR Alternative were slightly higher than those associated with the No-Build Alternative. However, the projected increases were not great enough to be classified as noise impacts. Under the Preferred Alternative, three round trips per day are proposed. As a result, noise levels associated with the Preferred Alternative will be lower than the levels determined for the HSR Alternative presented in the Draft EIS. Therefore, it can be assumed that no noise impacts will occur with implementation of the Preferred Alternative.

5.5.3.2 Vibration Impacts

The major source of train vibration is the rolling interaction of the train wheels on the track rail. The vibration resulting from this interaction increases with greater speeds. However, improved technology associated with HSR equipment reduces vibration effects, offsetting some of the increases resulting from higher speeds.

No-Build Alternative: Projected vibration levels under this alternative are the same as those estimated for existing conditions. No non-residential receptors will be impacted. Sixteen residential receptors will exceed the vibration impact criterion of 80 VdB. These receptors are located in Chatham (MP 194.00).

Preferred (Modified No-Build) Alternative: Under the Preferred Alternative the vibration impact criteria will be exceeded at one location — the residential receptors in Chatham identified above. The projected vibration level at these receptors is 84 VdB. In Sherman (MP 178.00), the vibration level approaches the impact criterion for residential receptors at one location.

5.5.4 Mitigation

5.5.4.1 Mitigation During Construction

As with any construction project, areas around the construction site will likely experience varied periods and degrees of noise impact. Under normal circumstances, construction activity will be confined to the hours between 7:00 AM and 6:00 PM, on weekdays. Therefore, critical time periods in which sleep or outdoor recreation occur will not be subject to noise intrusion from construction activities.

Construction noise impacts can be reduced by including specific noise control requirements in the construction contract specifications. The specifications should require contractors to: 1) select the equipment and techniques that generate the lowest noise levels; 2) use equipment with effective mufflers; 3) certify compliance with noise monitoring; 4) select haul routes that minimize truck noise in residential areas; and 5) select air compressors that meet federal noise level standards and locate them away from or shield them from residences and other sensitive noise receptors.

Vibration impacts during construction are generally limited to annoyance effects and not to building damage effects. As mentioned above, construction will normally be limited to the daytime. Construction vibration impacts could be mitigated by restricting the procedures and time permitted for vibration-intensive activities, such as pile-driving and by requiring vibration monitoring to certify compliance with vibration limits. In addition, an active community liaison program could be implemented to ensure residents are kept informed of construction activities and have a means to register complaints.

For the more vibration-intensive activities, care will be taken to prevent vibration damage to adjacent structures. In areas where construction-related vibration is anticipated, surveys could be conducted before construction begins to document any damage caused by construction.

5.5.4.2 Mitigation During Operation

No specific noise or vibration mitigation measures are required for the Preferred Alternative. Vibration impacts will continue to occur at sixteen residential receptors in Chatham if HSR service were implemented. Estimates of existing conditions indicate that current vibration levels at these receptors currently exceed the residential impact criterion.

5.6 WATER RESOURCES

5.6.1 Impact Assessment Methodology

The evaluation of impacts to water resources considered the proximity of the water feature to proposed construction areas, anticipated construction methodology, existing quality and condition of project area streams as well as the specific types of impact.

The following assumptions were made regarding project construction. No new bridge construction will occur, but existing bridges or culverts may be widened where new double track and freights sidings are proposed. All bridge and culvert widening will be conducted from the existing track, limiting the impact to a zone extending eight meters (25 feet) back from the top of stream bank. No channel relocation will

occur with the proposed project. No bridge modifications will occur at any of the crossings of Navigable Waters of the U.S.

5.6.2 Direct and Indirect Impacts

The construction and maintenance of the Preferred Alternative can potentially affect water resources in a variety of ways. Short-term construction impacts can result most directly from clearing, excavation and fill activities that expose soils to erosion and elevate turbidity levels and siltation in receiving waters. Increases in suspended solids also can result in elevated levels of coliform bacteria, total phosphorus, heavy metals and organic chemicals, such as pesticides and herbicides.

Long-term maintenance activities include the management of right-of way vegetation, the cleaning of ballast, periodic repair and replacement of ties and tracks and the maintenance of bridge facilities. These actions can result in the temporary and localized discharge of pollutants. Some direct contact to streams from chemicals may occur due to wind drift. However, the majority of sprayed and/or applied chemicals will be filtered out or adsorbed as surface runoff flows through vegetated swales and wetlands within the right-of-way.

Stream and river encroachments can modify flow hydraulics in turn causing minor morphological changes to the stream channel. Morphological changes can cause bank instability, increase water velocity, decrease natural settling of particulate matter, impact pool/riffle habitat, and ultimately increase sedimentation downstream of the impacted area reducing aquatic habitat. Direct morphological changes are not expected to occur at the stream channel crossings since only minor fills will be necessary to extend pilings for bridge widening. These encroachments to perennial or intermittent streams identified as waters of the U.S. will require coordination with the U.S. Army Corps of Engineers (COE) in regard to an Individual Permit under Section 404.

The Preferred Alternative also has the potential to inhibit or redirect shallow groundwater movement due to the compaction nature of the construction activities. Flow patterns for major drainage will not be affected.

During the project construction activities, there is a relatively low risk of chemical and petroleum product spills; however, if this did occur, water quality of the streams would be adversely affected.

Fish and Aquatic Resources:

Site construction could physically alter waters of the U.S. by increasing sediment, turbidity, and toxin levels, or by removing riparian habitat. Increased sediment and turbidity levels could result from surface erosion of cuts and fills. Wash out areas and increased scour regions at culvert outlets could also increase sediment and turbidity levels.

Sediments in water reduce the chances of successful spawns and overwintering of fish. Sediments suffocate eggs of native fish and decrease food levels for vertebrates and invertebrates alike by covering habitat substrates. Decreases in macroinvertebrate populations will directly affect food availability to fish and other species. Toxin pollution could occur if petroleum products or other chemicals are released into the water during construction or maintenance. Toxins entering water bodies can affect fish and macroinvertebrate populations directly and indirectly. A direct impact could result in fish kill while an indirect impact could result in a species' inability to reproduce or properly function.

Disturbance to the riparian vegetation can also be harmful to fish and invertebrate populations. Vegetation stabilizes soils and provides a buffer against sediments and chemical transport to water bodies. It also provides a food source and substrate for invertebrates which are in-turn used as food by fish. Riparian vegetation shades the water, modulating water temperatures during summer months.

5.6.2.1 Surface Water Impacts

No-Build Alternative: Under the No-Build Alternative, there will be no additional siltation and sedimentation to the stream environments due to project construction activities. Thus, there will be no direct impact degrading water quality and aquatic habitat. Changes to channel morphology and the indirect impacts associated with this modification will not occur. Those areas presently exhibiting poor bank stabilization and erosion in conjunction with the railroad right-of-way will not benefit from placement of riprap to provide bank stabilization, since bridge widenings will not take place under this alternative.

Preferred (Modified No-Build) Alternative: A total of 28 streams, small tributaries, and drainageways will be potentially affected by the Preferred Alternative. These streams cross the project area where new double track and freight sidings are proposed. At these locations, existing bridges and culverts may have to be widened to accommodate the improvements.

Construction of the Preferred Alternative has the potential to temporarily degrade the stream water quality due to erosion/siltation. This impact will increase turbidity and lower dissolved oxygen to levels that may temporarily violate state water quality standards. For those streams within the proposed construction areas that are characterized by IEPA for their designated uses, only Salt Creek is listed as full support. (See Table 2.6-3 in Appendix A.) Anticipated impacts from operation and maintenance will be similar to existing conditions.

Fish and Aquatic Resources. Potential for impact to fish and aquatic resources under the Preferred Alternative is greatest at and immediately downstream from stream crossings where construction is proposed. The primary impact to fish and aquatic invertebrates will likely be habitat displacement and direct mortality associated with siltation and erosion. These impacts will be directly related to sedimentation and physical and chemical change to water quality. Given the mitigation measures proposed, these will be short-term impacts, not measurably affecting aquatic resources.

5.6.2.2 Groundwater Impacts

The Preferred Alternative will not measurably alter groundwater flow patterns since all improvements will lie adjacent to and parallel with existing railroad facilities. During construction, potential, but limited risk may be present for the release of motor fuel, oils, or other contaminants onto ground surfaces adjoining the alignment. Although minimal, the potential for impact will be the greatest where the alignment passes within a well-head protection area for a public water supply. The Preferred Alternative will pass through the United Water Illinois recharge area. During operation, none of the high-speed passenger trains will carry cargo or freight that will be toxic or hazardous to groundwater supplies, except the 10 to 12 tons of on-board diesel fuel in the engine which has been easily contained in previous spills.

5.6.3 Mitigation Summary

The greatest potential for degrading water quality will likely occur as a result of soil disturbance, and associated erosion and siltation. Transport of eroded material to the stream environment will result in increased turbidity, suspended solids, and sedimentation and reduced available dissolved oxygen. In order to minimize this type of impact, an erosion and sediment control plan will be incorporated into the final plans and implemented as part of the construction process. This plan will require erosion control inspections weekly, as well as after each 1.3-centimeter (0.5-inch) rainfall event. BMPs will be utilized to protect aquatic resources. Visual inspections will identify critical erosion control and maintenance needs, assure that turbidity is minimized and that the project complies with Section 404 and National Pollutant Discharge Elimination System (NPDES) permits. Mitigation measures will include the stabilization of stream banks immediately following construction activities, the diversion of surface water runoff from directly entering stream environment during construction activities, and avoidance of working within stream channels during periods of high flow.

A 12-meter (40-foot) long strip of riprap will be placed along streambanks to provide bank stabilization for those areas where bridge or culvert widening will occur. Application of a generally accepted fugitive dust control method will be implemented. Encroachment on stream environments will be designed and implemented to minimize disturbance of the streams' characteristics (i.e., channel morphology, flow hydraulics, stream bed elevation, etc.). BMPs will be implemented for construction of the freight siding between MP 158.50 and 168.40, near Salt Creek.

During the design phase of this project, the construction limits will be defined and minimized in those areas of stream crossings. Erosion, sedimentation and bank stabilization measures will be employed, consistent with IDOT's Bureau of Design and Environment Manual, and Procedure Memorandum 25-01. Construction areas will be graded, seeded and stabilized as soon as possible after construction is completed Mitigation measures outlined for vegetation and wetlands in Section 5.8.3 will contribute to stream protection.

Water withdrawal for construction activities will be controlled so as to prevent dewatering of any streams. Coordination with the Illinois Department of Natural Resources (IDNR), Office of Water Resources, will be conducted for any water withdrawal during the construction phase.

Fish and Aquatic Resources:

Mitigation measures to minimize effects on fish and aquatic resources include the use of appropriate runoff, erosion, sedimentation, and pollution control measures as described above. Mitigation measures identified for water resources will also apply to fish and aquatic resources.

5.6.4 Unavoidable Adverse Impacts

It is unlikely that erosion or sedimentation impacts can be completely avoided during the construction phase of the project. Given the magnitude of the stream kilometers (miles) within the project area, for most streams, the project construction activities occur in small isolated portions of the streams. The temporary impact will not appear to be comparable to the already existing conditions of many of the streams within the project area. Many have already had their stream characteristics and water quality compromised through channelization, and utilization for discharge, whether it be for point source or nonpoint source pollution.

The implementation of erosion and sediment control measures and stormwater pollution prevention measures at stream crossings will be part of the overall project as required by the NPDES and Section 404 permits.

5.6.5 Cumulative Impacts

Cumulative impacts are defined as those impacts contributing to the degradation of water resources in the project area from past, present, and conceivable future activities. Historically, streams and rivers with substantial flow have been used as flushing systems to dispose of aqueous wastes — municipal and industrial. The larger rivers have been dammed and many small streams and tributaries have been channelized for agriculture and drainage. These utilizations of the water resources, in turn, degraded the quality of the resource. Today, all of the streams within the project area have been impaired to some degree by point and nonpoint source pollution. However, the overall water quality of streams in Illinois has steadily been improving for the past 24 years (IEPA, 1994a). There has been an observable reduction in heavy metal concentrations and other typical pollutants along with increases in dissolved oxygen; this coincides with a reduction of point source impacts. Conversely, nonpoint source pollutant loads associated with agriculture have shown an upward trend.

If land usage remains similar to present day conditions, soil erosion of the cropland will continue to occur within portions of the stream environments via storm runoff. Localized changes in land use may convert cropland and increase impervious areas due to development. This situation, will increase sheet flow runoff to stream environments. Also, with increased development, further utilization of streams for discharge effluents from both municipal and industrial sources will be expected.

5.6.6 Irreversible and Irretrievable Commitment of Resources

It is not anticipated that long-term irretrievable and irreversible commitments of water resources will occur under the Preferred Alternative.

5.6.7 Water Related Permits

Section 404 - Construction of the Preferred Alternative will require the acquisition of water related permits under various state and federal laws. Section 404 of the Federal Clean Water Act regulates the discharge of dredged or fill materials into waters of the U.S., including wetlands. The introduction of fill or other materials (other than pre-cast structures) below the ordinary high water line of surface waters such as rivers, streams, ponds or wetlands will require a permit from the U.S. Army Corps of Engineers. The unavoidable filling of wetlands, as well as the construction of new stream crossings by the proposed project, will require the acquisition of a Section 404 permit.

The NEPA/404 merger process is a cooperative effort among review and regulatory agencies to expedite decision making by affecting a single and unified public interest decision as it relates to waters of the U.S. Coordination with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service (FWS), U.S. Environmental Protection Agency, and the Illinois Department of Natural Resources has been on-going as part of the project development. Coordination will continue to involve these agencies in the development of measures to mitigate adverse effects in order to assure that the project meets current regulations including Section 404(b)1 guidelines.

Section 10 of the Rivers and Harbors Act of 1899 regulates any construction, obstruction, excavation or filling affecting navigable waterways. No construction activity is planned at any of the crossings of navigable waterways in the project area. Therefore, neither U.S. Coast Guard Bridge Permits nor Permit Amendments will be required for this project.

Section 401 - Water quality certification will be required for all activities requiring a Section 404 permit. This certification issued by the Illinois Environmental Protection Agency will attest that the proposed action will not significantly degrade surface water quality.

National Pollutant Discharge Elimination System - It is anticipated this project will result in the disturbance of two or more hectares (five or more acres) of total land area. Accordingly, it is subject to the requirement for a NPDES permit for stormwater discharges from the construction sites. Phase II of the NPDES program is anticipated to go into effect in March of 2003. Phase II rules are expected to be similar to existing rules requiring a Notice of Intent, the development of a Storm Water Pollution Prevention Plan and the submission of a Notice of Termination when final stabilization of the construction site has been achieved. Phase II rules will allow the NDPES permitting authority to incorporate by reference, state, local or tribal erosion and sediment control program requirements. In addition, the NPDES permits will require this project to include applicable technology based standards of "Best Available Technology" (BAT) and "Best Conventional Technology" (BCT) into their construction program to protect surface waters from pollution related to runoff from construction areas. Permit coverage for the project will be obtained either under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR10) or under an individual NPDES permit.

5.7 GEOLOGY

Project construction will require the use of industrial minerals such as rock, gravel, clay, and soil. Therefore, some impacts to geological natural resources will occur as a result of the project since construction materials will be needed and grading will occur. Construction materials will be obtained from approved and licensed sources. Grading will occur within a defined construction zone, modifying surface geology and affecting local ecology. (See impact discussion in Section 5.6, Water Resources.) Since the proposed project will be constructed on existing rail alignment, the project will not restrict future geological natural resource extraction or the transmission of natural gas and petroleum products.

Railroad rails, embankments, and structures will be constructed in accordance with IDOT Specifications (or AASHTO and AREMA standards as appropriate) to avoid seismic-induced failure. Portions of the corridor including embankments and structures will be above grade. To reduce potential seismicity/soils impacts, elevated structures will be supported on deep foundations. Elevated areas on fill material will be constructed with light-weight fill and drains and surcharges (loading) to hasten the settlement process and reduce the long-term, post construction settlement. Cement or chemical grouting will be used to increase the cohesive strength of the underlying soils and thus reduce the liquefaction potential. Geotechnical and materials studies will be performed in the design phase to ascertain the best available technology to apply to reduce the risk to an acceptable level.

5.8 WETLANDS

5.8.1 Impacts

No-Build Alternative: With the No-Build Alternative, no wetland habitat will be lost. Track maintenance will continue within existing rights-of-way, including mowing, clearing and herbicide treatment. However no filling or grading will take place.

Preferred (Modified No-Build) Alternative: The Preferred Alternative will impact seven wetland communities, with palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) communities being affected. The total impact to wetlands will be 0.36 hectares (0.89 acres). (See Table 5.8-1.) Of this impact, 0.31 hectares (0.77 acres) are to palustrine emergent wetland communities, 0.04 hectares (0.09 acres) are to palustrine scrub-shrub, and 0.01 hectares (0.03 acres) are to palustrine forested. Most of the impact – 0.30 hectares (0.74 acre) – is attributed to the double track proposed between MP 204.55 (Thayer) and MP 218.65 (Carlinville). The remaining impact – 0.06 hectares (0.15 acres) – is attributed to the freight siding proposed between MP 158.50 (Lincoln) and 168.40 (Elkhart).

No high quality wetland areas (FQI >20) will be filled with the Preferred Alternative.

5.8.2 Cumulative Impacts

The cumulative historical loss of wetlands in the state is from 85 to over 95 percent (Mohlenbrock, 1988, Dahl, 1990). Most of the historic loss resulted from conversion to agriculture. An estimated 3,325,000 hectares (8,212,000 acres), or 12 to 25 percent of the State, was wetland during the 1780s (Dahl, 1990). In the mid-1950s, there were approximately 173,000 hectares (427,000 acres) of wetland (Shaw and Fredine, 1956). A 1982 survey by Interstate Water Pollution Control Administrators (ASIWPCA) (1984) estimated 20,000 hectares (50,000 acres) of wetland remaining. Because the surveys used different techniques for obtaining wetland estimates, the results should not be directly compared. The Office of Technology Assessment (OTA) reports that over the 28-year period from 1954 to 1982, 75,670 hectares (186,905 acres) of wetland (or 23 percent of the wetland present during the mid-1950s) were lost in the State (OTA, 1984). This equates to an average annual loss rate of 2,700 hectares (6,675 acres). This cumulative impact analysis assumes that wetland loss rates over areas covered by the proposed project area are comparable to current loss rates for Illinois. If the current trends in wetland protection and mitigation at the state and federal levels continue, the annual wetland loss rate in the immediate future should remain the same.

Implementation of the project is not expected to substantially alter development patterns in the corridor or near stations. Consequently, additional impacts to wetlands will not occur at an increased rate due to induced development. While this project will add to the cumulative loss of wetlands in the project area, with implementation of the Section 404 permit process, including maximum wetland avoidance and compensation, the potential for this project to add to the cumulative wetland loss will be minimized.

5.8.3 Mitigation

The design and development of this project has and will continue to follow a three step impact mitigation process prioritized as follows: 1) impact avoidance; 2) impact minimization; and 3) compensation including the repair, rehabilitation, and restoration of former wetland areas; preservation of existing

Table 5.8-1
WETLAND IMPACTS

Milepost	Wetland	COE District	Watershed	Size hectares (acres)	Wetland Loss - hectares (acres) PEM	PUB	PSS	PFO	Type of Alteration[1]	Mitigation Ratio[2]	Required Compensation hectares (acres)
158.50-168.40	A	Rock Island	Sangamon River	0.02 (0.04)	0.01 (0.03)				MA	2:1	0.02 (0.06)
	B	Rock Island	Sangamon River	0.06 (0.14)			0.04 (0.09)		MA	2:1	0.07 (0.18)
	C	Rock Island	Sangamon River	0.01 (0.03)	0.01 (0.03)				MA	2:1	0.02 (0.06)
204.55-210.60	A	St. Louis	Lower Illinois River	0.83 (2.06)	0.23 (0.57)				MA	2:1	0.46 (1.14)
	B	St. Louis	Lower Illinois River	6.93 (17.12)					--	--	0.00 (0.00)
212.55-218.65	A	St. Louis	Lower Illinois River	0.23 (0.57)				0.01 (0.03)	MA	2:1	0.02 (0.06)
	B	St. Louis	Lower Illinois River	0.39 (0.97)	0.04 (0.10)				MA	2:1	0.08 (0.20)
	C	St. Louis	Lower Illinois River	0.10 (0.24)	0.02 (0.04)				MA	2:1	0.03 (0.09)
	D	St. Louis	Lower Illinois River	0.49 (1.22)					--	--	0.00 (0.00)
	E	St. Louis	Lower Illinois River	0.77 (1.89)					--	--	0.00 (0.00)
			Total Size:	9.83 (24.28)	0.31 (0.77)	0.00 (0.00)	0.04 (0.09)	0.01 (0.03)			0.72 (1.79)

1- MA = Minimal Alteration

2- Permanent wetland loss will be mitigated at a ratio of 1.5:1, if the replacement wetlands are off-site, but located within the same basin, and 2.0:1 if the replacement wetlands are off-site, but out of basin. The actual acreage of created wetland required for mitigation will vary depending on where the mitigation is constructed relative to the wetlands impacted and could be slightly lower than indicated in the numbers above. If constructed in the Sangamon River basin, 0.69 hectares (1.71 acres) of compensation will be required. If constructed in the Lower Illinois River basin, 0.57 hectares (1.41 acres) of compensation will be required. If constructed in neither basin, 0.72 hectares (1.79 acres) of compensation will be required.

wetland sites; and replacement of affected wetland area (40 CFR 1508.20). Illinois Department of Transportation compensation ratios for wetland impacts are applicable to this project.

Wetland Impact Avoidance:

Given the linear nature of the project, the ability to avoid wetland resources by relocating the project footprint is limited. Mitigation via avoidance will be maximized by 1) using the existing railroad embankment as the base for new track, 2) constructing within the existing right-of-way, 3) where additional right-of-way is required, constructing in new right-of-way that is contiguous to the existing right-of-way, and 4) using the existing embankment to access construction areas and/or build new embankment. Where the right-of-way must be used for access, wetland areas will be avoided.

Wetland Impact Minimization:

Where avoidance is not possible, the area of disturbance (direct and indirect, temporary and permanent) will be minimized. Impact minimization measures will use the best technology currently available. Such practices include the following elements, which will be incorporated into the mitigation program:

a. During the final design phase additional design elements will be incorporated to further minimize impacts. These will include options such as steepening side slopes, building retention walls and/or bridging wetland areas.

b. During the final design phase and as part of the process for developing optimal wetland mitigation, a site-specific evaluation will be made of each wetland affected by project activities. This evaluation will focus on 1) identifying optimal locations for placing construction fences and erosion and siltation controls, 2) evaluating the source of wetland hydrologic support and generating site-specific recommendations to minimize dewatering or detaining excess water in the wetland, and 3) avoiding impacts to wetlands with a native mean C-value of 4.0 or greater, a native FQI value of 20 or greater, and/or wetlands that are particularly difficult to replace (e.g., dolomitic wet prairie).

c. Prior to commencement of construction activities, erosion control fencing will be placed at the limits of construction. Zones of fill, grading, compaction or equipment movement will be restricted to areas outside the protective fencing. Impacts from silt and sedimentation will be minimized through adherence to erosion control measures consistent with IDOT's Bureau of Design and Environment Manual, and Procedure Memorandum 25-01.

d. All solid waste material, including cleared vegetation, will be disposed in approved upland areas or licensed solid waste disposal sites, in accordance with state and federal regulations.

e. All culverts, bridges, and other drainage structures in the vicinity of wetlands will be sized and located in a manner that maintains the existing flow regime.

f. The day-to-day enforcement of wetland mitigation provisions will be provided by experienced resident professional engineers. Special conditions set forth in the Section 404 permit will be adhered to.

Wetland Compensation:

In addition to these design and construction actions to maximize avoidance and impact minimization of wetlands, a conceptual wetland mitigation plan will be prepared. This document will incorporate all practicable measures to minimize harm to wetlands. Prior to permit approval, this plan will be reviewed by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the Illinois Department of Natural Resources.

Compensation will occur for all adverse impacts to wetlands. IDOT's Wetlands Action Plan contains the guidelines for compensation ratios for wetland impacts. The Illinois Department of Natural Resources has approved IDOT's Wetlands Action Plan.

Minimal Alteration. Since all new right-of-way for the Preferred Alternative will be contiguous with existing railroad rights-of-way, the project will be considered a "programmatic action" under the Implementation Procedures for the Interagency Wetlands Policy Act. Permanent wetland loss will be mitigated at a ratio of 1.5:1, if the replacement wetlands are off-site, but located within the same basin, and 2.0:1 if the replacement wetlands are off-site, but out of the basin.

Where wetland impacts result in impacts of a temporary nature (less than 12 months), mitigation will involve reestablishing the wetland in accordance with IDOT's "minimal alteration--on-site" compensation ratio and implementing best management practices to prevent siltation and compaction.

Wetland Creation. Compensation for wetland impacts will be provided through the purchase of credits in an approved wetland mitigation bank. Coordination will be conducted with the U.S. Army Corps of Engineers during Phase II of this project to determine the availability of suitable wetland banks.

If an approved wetland bank is not available at the time of permitting, wetland impact mitigation will be provided through the conversion of non-wetland areas into wetlands. The actual acreage of created wetland required for mitigation will vary depending on where the mitigation is constructed relative to the wetlands impacted. If constructed at an off-site area in the Sangamon River basin the Preferred Alternative will require a maximum mitigation area of 0.69 hectares (1.71 acres). If constructed at an off-site area in the Lower Illinois River basin, the Preferred Alternative will require a maximum mitigation area of 0.57 hectares (1.41 acres). If possible, all mitigation will take place at a single site. Initial mitigation studies will focus on those areas nearest the project with existing, drained hydric soils, flat topography and the potential for easily restoring hydrology by severing drainage tiles or impeding surface drainage. A detailed plan will be prepared specifying grading, hydrological modifications and wetland plantings. All plantings will be comprised of native Illinois species. Design and implementation will be conducted in cooperation with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources.

Monitoring. Monitoring will occur for all wetland compensation areas of 0.10 hectares (0.25 acres) or greater. Monitoring will be performed according to IDOT's Wetlands Action Plan and any conditions stipulated by the U.S. Army Corps of Engineers. Greater details on the monitoring program will be developed as part of the conceptual wetland mitigation plan.

5.9 NATURAL RESOURCES

5.9.1 Upland Vegetation

5.9.1.1 Impacts

No-Build Alternative: Under the No-Build Alternative, the vegetation conditions for upland communities will remain similar to the conditions described in Section 2.9. There will be no removal of existing plant communities by project construction. However, track maintenance will continue to affect the adjacent vegetation for existing railroad rights-of-way. Also, existing successional trends will continue until modified by future maintenance or development, if any.

Preferred (Modified No-Build) Alternative: A total of 34.46 hectares (85.12 acres) of terrestrial vegetation will be affected by the Preferred Alternative. (See Table 5.9-1.) With the exception of forest and hedgerow areas and high quality remnant prairies, a permanent reduction in the areal cover of the various upland vegetation communities due to clearing and filling for project facilities will represent a minor impact because the cover types are relatively common in and adjacent to the project area and are readily replaceable. The loss of hedgerow, shrubland, and upland forest will constitute a greater resource loss. Replacement of hedgerow and shrubland requires on the order of 15 to 25 years. Replacement of upland forest communities requires time frames in the range of 15 to 150 years, while the creation of prairie habitat can take from 10 to 30 years. The restored habitat is often less diverse than similar natural communities of the same cover type. Consequently, restoring moderately disturbed prairie can produce a more diverse community than creating native prairie on highly disturbed soils.

Table 5.9-1
IMPACTS TO UPLAND VEGETATION

Community	Hectares	Acres
Forbland	20.85	(51.51)
Pasture	0	(0)
Agricultural	0.96	(2.36)
Developed	3.86	(9.54)
Hedgerow	1.95	(4.82)
Shrubland	3.87	(9.57)
Non-Native	1.98	(4.89)
Native Prairie	0.25	(0.61)
Upland Forest	0.74	(1.82)
Total	**34.46**	**(85.12)**

5.9.1.2 Mitigation Summary

Given the linear nature of the project, the ability to avoid a particular vegetation resource is limited. Where it is not possible to avoid disturbance to vegetation, the area of disturbance will be minimized, particularly

in forested sites. This will include constructing additional track from the existing embankment rather than from within the right-of-way adjacent to the embankment. Where the right-of-way must be used for access, the smallest portion of the right-of-way will be disturbed as part of the construction zone.

Per Council on Environmental Quality (CEQ) policy, restoring and enhancing environmental quality is proposed for all impact areas (40 CFR 1500.2, 1502.14, and 1502.16). All disturbed areas not occupied by project facilities will be immediately revegetated and mulched to stabilize disturbed soils, minimize erosion, and enhance the productivity and aesthetics. Cut and fill slopes will constitute the major areas requiring revegetation. Revegetation will involve use of plant materials that meet site-specific revegetation objectives in terms of soil erosion control, soil protection and stabilization, aesthetics, and compatibility with native vegetation adjacent to the disturbance areas. Species included in the seed mixes will 1) be adapted to the site of application; 2) provide immediate soil protection; 3) be sufficiently aggressive to preclude the establishment of invasive weeds (but not so aggressive as to hamper natural succession); 4) not visually contrast with the surrounding undisturbed vegetation; and 5) be commercially available at economically reasonable prices.

5.9.1.3 Unavoidable Adverse Impacts

Loss of terrestrial vegetation and waters of the U.S. will be an unavoidable adverse impact due to the linear nature of the project. However, revegetation will reduce the magnitude of this impact. Active cropland, non-native grassland, forbland and developed land are abundant in the project area and can be readily replaced. Hedgerows, once common in the agricultural landscape, are now a diminishing cover type. Hedgerows require from 15 to 25 years to regrow, so the loss of this habitat will be an unavoidable adverse impact that will extend into the long term.

5.9.1.4 Cumulative Impacts

Vegetation along the project corridor is not pristine; the degree of nativeness and quality of vegetation varies, with natural areas having higher quality. The reduction in native vegetation communities will be minimal compared to historic losses on a local or regional scale. However, because of the extensive historic losses and the relative importance of railroad rights-of-way as refuge for habitat-specific species, additional conversion of upland forest, savanna, remnant prairie, and wetland communities has an additive effect greater than the actual impact.

5.9.1.5 Irreversible and Irretrievable Commitment of Resources

Although it is technically feasible to remove a railroad embankment and restore the landscape, one must assume that the utility of the project right-of-way will warrant its indefinite maintenance and operation to serve the transportation need. Construction associated with the Preferred Alternative will necessarily involve the clearing of terrestrial vegetation and placing fill within the right-of-way. The loss of agricultural crops, urban, disturbed land, and non-prairie grassland communities will be retrievable as these areas are readily replaceable. Impacts to high quality remnant prairie communities will be irreversible. The loss of woody vegetation, particularly mature trees and large shrubs, will be irreversible in a reasonable time-frame as the successional process requires from 15 to 25 years for the development and growth of hedgerow woody species and from 15 to 150 years for forested communities to reach a level as areas that will be removed during construction. Also, the restored habitat is often less diverse than similar natural communities.

5.9.2 Native Vegetation

5.9.2.1 Impacts

No-Build Alternative: Under the No-Build Alternative, there will be no direct removal of native vegetation within or adjacent to the right-of-way. Native vegetation within the right-of-way will be allowed to exist, subject only to standard mowing, clearing and herbicide treatment consistent with current right-of-way management. Native prairie remnants will remain unprotected.

Preferred (Modified No-Build) Alternative: A total of nine native prairie remnants encompassing 2.51 hectares (6.20 acres) were identified along the construction zones of the Preferred Alternative. Four of the nine, or a total of 0.25 hectares (0.61 acres), will be removed for construction. (See Table 5.9-2.) The Preferred Alternative will impact one grade B prairie, one grade C+ prairie, and two grade C- prairies. The total impact to grade C+ or higher prairies will be 0.18 hectares (0.45 acres).

Table 5.9-2
NATIVE VEGETATION IMPACTS
Hectares (Acres)

COUNTY	Milepost	Grade	Size	Impact
Logan	161.00	C-	0.06 (0.16)	0.03 (0.08)
Logan	161.20	C-	0.06 (0.16)	0.03 (0.08)
Logan	163.00	C-	0.70 (1.75)	-
Logan	164.80	C+	0.36 (0.90)	0.03 (0.07)
Logan	164.90	C	0.06 (0.15)	-
Logan	164.95	C	0.06 (0.15)	-
Logan	165.00	C+	0.21 (0.51)	-
Macoupin	217.20	C-	0.51 (1.28)	-
Macoupin	218.65	B	0.46 (1.14)	0.15 (0.38)
TOTAL			**2.51 (6.20)**	**0.25 (0.61)**

5.9.2.2 Cumulative Impacts

The majority of the vegetation along the project corridor is not high quality; the degree of nativeness and quality of vegetation varies, with natural areas such as prairie having the highest quality. Before settlement, approximately half of Illinois supported prairie (Neely and Heister, 1987). The state has an estimated 930 hectares (2,300 acres) of prairie that remains relatively undisturbed, such as within cemeteries, forest preserves, and railroad rights-of-way. Of this acreage, less than 530 hectares (1,300 acres) is high quality prairie (Runkel and Roosa, 1989). The majority of the loss occurred during conversion to agriculture in the late 1800s and up to the mid-1900s. Current and predicted future losses occur mostly from industry and residential development.

This cumulative impact assessment assumes that prairie losses in the immediate future will reflect similar trends to losses today. Losses may be countered by actions to preserve existing prairies and restore degraded prairies.

Historic losses of prairie have been extensive. This increases the relative importance of remaining areas of prairie. Because of the historic losses and the relative importance of remaining prairies, impacts from this project have an additive effect greater than the actual impact. However, with mitigation of C+ and higher quality prairie areas in the counties in which impacts occur, the proposed project is not anticipated to add to the cumulative loss of prairie, particularly of high quality prairie.

5.9.2.3 Mitigation

The design and development of this project has and will continue to follow a three step impact mitigation process prioritized as follows: 1) impact avoidance; 2) impact minimization; and 3) compensation including repair, rehabilitation, and restoration of affected areas; preservation of existing prairies; and replacement of affected prairie areas in kind.

Prairie Impact Avoidance:

Given the linear nature of the project, the ability to avoid prairie areas by relocating the project footprint is limited. Mitigation via avoidance will be maximized by 1) using the existing railroad embankment as the base for new track; 2) limiting clearing activities to only those areas required for actual construction; and 3) using the existing embankment to access construction areas and/or build new embankment. Where the right-of-way must be used for access, prairie areas will be avoided.

Prairie Impact Minimization:

Where avoidance is not possible, the area of disturbance (direct and indirect, temporary and permanent) will be minimized. Impact minimization measures will use the best technology currently available. Such practices include the following elements, which will be incorporated into the mitigation program:

a. During the final design phase and as part of the process for developing optimal mitigation, a site-specific evaluation will be made of each prairie affected by project activities. This evaluation will focus on 1) identifying optimal locations for placing construction fences and erosion and siltation controls, and 2) identifying additional measures to avoid impacts to prairies with grades C+ and higher and/or prairies that are particularly difficult to replace (e.g., dolomitic prairie).

b. Prairie sites will be included in the erosion and sediment control plan prepared for the project. The zones of filling and/or grading will be accounted for and appropriate best management practices will be designed to protect the sites. Prior to commencement of construction activities, erosion control fencing will be placed at the limits of construction. Zones of fill, grading, compaction or equipment movement will be restricted to areas outside the protective fencing. Impacts from silt and sedimentation will be minimized through adherence to erosion control measures consistent with IDOT's Bureau of Design and Environment Manual, and Procedure Memorandum 25-01.

c. All solid waste material, including cleared vegetation, will be disposed in approved upland areas or licensed solid waste disposal sites, in accordance with state and federal regulations.

d. The day-to-day enforcement of prairie mitigation provisions will be provided by experienced resident professional engineers.

e. Per CEQ policy, restoring and enhancing environmental quality is proposed for all impact areas (40 CFR 1500.2, 1502.14, and 1502.16). All disturbed areas not occupied by project facilities will be promptly revegetated and mulched to stabilize disturbed soils, minimize erosion, and enhance the productivity and aesthetics. Plants used for revegetation will: 1) be adapted to the site of application; 2) provide immediate soil protection; 3) be sufficiently aggressive to preclude the establishment of invasive weeds (but not so aggressive as to hamper natural succession); and 4) be commercially available at economically reasonable prices.

Compensation:

In addition to these design and construction actions to maximize avoidance and impact minimization of remnant grade C+ and above prairies, a conceptual prairie mitigation plan will be prepared. This document will incorporate all practicable measures to minimize harm and compensate for impacts to high quality prairie areas and identify site-specific locations for compensating prairie impacts. The following measures will be incorporated:

a. A compensatory mitigation prairie site will be located near the site of impact.

b. Compensatory mitigation will utilize the Key to Restoration Options prepared by Packard and Mutel (1997). Restoration options likely to be implemented include options F through J. These are as follows: option F (prairie management), option G1 (prairie restoration through interseeding), option G2 (prairie maintenance), option H1 (restoring prairie conservatives in an old field), option H2 (restoring prairie in an old field), option I1 (restoring prairie on bare soil), option I2 (restoring prairie conservatives on bare soil), and option J (restoring prairie on stable soil).

c. Unless a higher ratio is required due to presence of high quality wetland flora, etc., compensation for direct adverse impacts (temporary and permanent) to prairies of grade C+ and higher will occur at a 1:1 ratio. Further, compensation will occur in-kind (i.e., wet prairie for wet prairie, mesic prairie, sand prairie, dolomitic prairie, etc.).

d. Following compensation, the total amount of prairie will <u>not</u> be reduced below the total prairie amounts identified in Table 5.9-2. Also, the proportion of each prairie grade will shift toward the higher grades or at least be the same as the existing amounts.

e. Seed and/or pads of sod will be collected from affected prairies prior to earth disturbance. This material will be stored in an appropriate manner for subsequent use to create new prairie communities and/or enhance low grade prairies.

f. If seed is not available from the unaffected portion of the prairie or immediately adjacent prairie, seed will be obtained from within 240 kilometers (150 miles) of the impact site.

g. Where the impact is less than or equal to 25 percent of a prairie, reseeding of the disturbed area with native plants will occur, followed by management of the entire prairie.

h. Where the impact affects more than 25 percent of a prairie, a new prairie area will be created or a lower-grade prairie not affected by the project will be managed to produce a comparable (or better) prairie grade.

Monitoring and Management. Monitoring will occur for each created or enhanced prairie area of 0.10 hectares (0.25 acres) in size or greater. Monitoring will involve photographic documentation from the same vantage point each year for a three-year period or until 80 percent ground cover by native, perennial prairie plants is achieved (whichever is later). Results of monitoring will be documented in an annual report submitted to IDOT and IDNR. This report will 1) present the floristic quality assessment (FQA) developed from a meander survey of each prairie area, 2) document quantitative FQA results from 0.65 square kilometer (0.25 square mile) quadrats, 3) identify percent ground cover by desirable plants, and 4) specify remedial actions. Further detail on the prairie monitoring program will be developed as part of a prairie mitigation plan prepared following final design.

Management practices for prairie areas will focus on prescribed burn management and removal of invasive plants. Annual monitoring and long-term maintenance will identify whether removal of invasive plants will be performed by manual or chemical methods. The decision will be based on the growth characteristics of the species targeted for removal and the extent of invasion.

For long-term management, interagency agreements will be required to establish cooperative management for each created, preserved, and enhanced prairie. These agreements will allow access to and management of the existing C+ and higher prairie areas within the railroad right-of-way as well as lower grade prairies being managed to improve vegetative quality by IDOT, IDNR, or their designated representative.

5.9.3 Terrestrial Animals

5.9.3.1 Impacts

Railroad site construction along the Preferred Alternative has the potential to cause adverse impacts on terrestrial wildlife. Direct adverse impacts to terrestrial wildlife will occur principally through the removal or significant modification of habitat within or immediately adjacent to existing or proposed railroad right-of-way. This will be most important for cover types that are either relatively uncommon in the project area and/or will have a long replacement time. Active cropland, non-native grassland, disturbed land and urban land are abundant in the project area and also can be readily replaced. Hedgerows, once common in the agricultural landscape, are now a diminishing cover type due to the gradual increase in farm units and the elimination of fence lines. This cover type consisting primarily of shrubs and early successional trees requires from 15 to 25 years to replace, so the loss of this habitat will constitute a long-term impact. From a practical standpoint, the loss of emergent wetland, wet prairie, mesic prairie, upland forest and savanna will constitute a long-term to permanent impact. These cover types are relatively uncommon in the project area. While it is technically feasible to replace these habitats, in reality, the time frame required ranges from five to 150 years and the restored habitat is likely to be less diverse than similar natural communities of the same cover type (adapted from Graber and Graber, 1976).

Indirect wildlife impacts can occur through disruption of secluded areas, through habitat fragmentation, and through severance of wildlife trails. Physical disturbance can occur in the short term such as that associated with construction, or in the long term such as the activities related to facility operation. Operational impacts such as the noise emanating from the passage of trains are already a part of the existing environment along the

HSR project area. Wildlife populations that exist along the alignment presumably have adapted to this intrusion. Although the affects on wildlife behavior resulting from the various types and recurrence frequencies of noise are not well known, there is evidence that some species may become acclimated to regular disturbances, such as those that might be experienced in habitats along an active rail line (Adams, 1994). However, increased disruptions during breeding or nesting season could adversely affect wildlife, especially those generated by construction activities. Vos, Ryder and Graul (1985) concluded that Great Blue Herons may habituate to repeated, non-threatening activities, while responding to unexpected disturbances. Similarly, this species was shown to be most responsive to human intrusions early in the breeding season, becoming less likely to leave the nest later in the season when nestlings were older and trees were full of foliage.

Linear habitat units offer travel corridors for small mammals and facilitate access to food resources and other habitats in adjacent fields. The construction of railroad facilities that sever these corridors can have long-term adverse effects on wildlife.

No-Build Alternative: With this alternative, no direct habitat loss due to project activities will occur to terrestrial wildlife or fish and aquatic resources. Routine maintenance and operation of the existing railroads will continue to have infrequent and short-term disturbance on wildlife and fish habitats. Relatively uncommon and irreplaceable habitats such as wetlands, remnant prairie, and savanna will remain undisturbed. Hedgerow areas also will remain and continue along the successional path. As no railroad improvement will occur under this alternative, the opportunity to more effectively manage wetlands and other waters of the U.S. and their associated aquatic resources will be foregone. Current sedimentation and turbidity in the rivers and streams due to small areas of naturally and poorly vegetated cut and fill slopes will continue.

Preferred (Modified No-Build) Alternative: Table 5.9-1 shows the estimated loss of wildlife habitat by cover type. A total of 2.23 hectares (5.50 acres) of native and non-native grassland and 0.73 hectares (1.82 acres) of upland forest will be cleared for the construction of the Preferred Alternative. Approximately 1.95 hectares (4.82 acres) of hedgerow and 3.87 hectares (9.57 acres) of shrubland will be lost. Wetland loss will be approximately 0.36 hectares (0.89 acres). The loss of prairie is most important from a floristic standpoint since this cover type is already a narrow remnant, and its value for prairie species is significantly reduced for area sensitive species such as the Savannah sparrow, bobolink, or Eastern meadowlark. However, various species of insects depend on this specific habitat type for feeding and reproduction. The loss of upland forest habitat will constitute progressive habitat fragmentation by moving the forest edge away from the railroad right-of-way.

While linear remnants of hedgerow habitat will remain in many areas, clearing will change the character of this cover type and will reduce its value for wildlife. Shroeder (1986) correlates avian species diversity with physical characteristics of windbreaks. Reductions in total area, the number of rows, height, canopy closure, and diversity of woody plants all were positively correlated with lowered wildlife species diversity. Where hedgerow habitat is cleared, species such as Northern orioles, house wrens, song sparrows, goldfinches, and mourning doves will be reduced in numbers.

Mammalian species highly dependent on hedgerow habitat such as the Eastern cottontail, gray squirrel, fox squirrel, and white-footed mouse also will be affected. In time, a reduction in the local population of these species will affect predators such as hawks, owls, and fox.

5.9.3.2 Mitigation Summary

Mitigation for wildlife habitat loss will consist of both minimization of habitat loss as well as active management to encourage the return of desirable habitats. Wetland loss will be compensated through a comprehensive wetland mitigation process as described in Section 5.8.3. Where the loss of remnant prairie habitat is unavoidable, prairie remnants will be inventoried in more detail and the seed bank made available for relocation and use by public agencies for prairie restoration. Hedgerow habitat clearing will be kept to the minimum necessary for construction. In all cases only one side of the railroad embankment will be disturbed. Following construction, right-of-way management will encourage the restoration of woody species.

5.9.3.3 Unavoidable Adverse Impacts

Given the linear nature of the project, the ability to avoid a particular animal habitat is limited. Habitat replacement will be addressed through a wetland mitigation program as part of the Section 404 permitting process and by allowing the vegetation within the railroad rights-of-way to reestablish through natural succession. However, the replacement of hedgerow, forest, and wetland habitats will take many years.

Total control of all project-related erosion and sedimentation is unlikely. Therefore, unavoidable sedimentation and erosion could adversely affect fish and aquatic resources. Implementation of best management practices and other mitigation measures defined under Water Resources (Section 5.6) and under Wetlands (Section 5.8) will reduce the potential for unavoidable adverse impacts. Encroachment into wetlands and streams could impact the fish and aquatic resources downstream of disturbances. Aggressive BMPs and mitigation will be implemented to restore disturbances and functional values in locations that contain fish or invertebrates where habitat could not be practicably avoided. Full mitigation of these sensitive areas will be feasible within the railroad corridor. The implementation of mitigation measures will potentially mitigate or reduce the level of impacts.

5.9.3.4 Cumulative Impacts

Habitat loss due to the proposed project will be minor compared to historic changes in the landscape. Since the 1850s major losses of forest, wetlands and prairie have taken place in Illinois. Future habitat losses are not likely to be significant as a result of the project since the facility is not likely to significantly induce development.

As indicated in the Water Resources cumulative impacts discussion (Section 5.6.5), most streams crossed by the project are not in pristine condition. This stream quality and condition is reflected in the numbers and types of aquatic inhabitants. With incorporation of BMPs and proposed mitigation measures, impacts to fish and aquatic resources will be minimized.

The cumulative historical loss of wetlands in Illinois since settlement is estimated at 85 percent. The magnitude of such loss and impairment of the functional value of remaining wetlands has been so large that wetland impacts are now regulated. Consequently, the potential loss of waters of the U.S. (or functional value impairment) caused by the implementation of this project, as well as by other past, present, and reasonably foreseeable potential projects in the area, will add to the cumulative loss of wetlands. However, implementation of the Section 404 permit process, including maximum wetlands avoidance and effective impact minimization, will reduce the potential for cumulative impacts.

5.9.3.5 Irreversible and Irretrievable Commitment of Resources

Wetlands lost due to the project will be replaced, albeit in a different location and over a five to 30 year time span depending on the type of community. As the right-of-way is allowed to revegetate, hedgerow and grassland habitats will reestablish themselves over periods of 15 to 25 years and two to three years, respectively. Other habitats will be irretrievably lost in those areas where the rail embankment is widened to provide additional track.

Temporary impacts to aquatic habitat from expansion of existing bridge structures will be reversible in a relatively short-term.

5.9.4 Threatened and Endangered Species

5.9.4.1 Direct and Indirect Impacts

Because of the development history of existing railroad rights-of-way, the project area holds valuable natural resources not found in the otherwise disturbed surrounding landscape. Native prairie is extremely rare in Illinois and offers some of the last remaining habitat available for many protected plants and animals. Even though many of the prairie remnants are partially degraded, they may be regionally significant in representing some of the last remaining fragments of this native ecosystem. Many protected plant and animal species also are associated with wetland habitats. This habitat has been significantly depleted in Illinois, and with it organisms that depend on it for all or part of their life stages. Although the proposed improvements for the Preferred Alternative are generally located within or adjacent to the existing right-of-way, the proposed project will require the loss of some wetland habitat for implementation.

Direct adverse impacts to protected plant and animal species can occur due to habitat loss or direct removal through vegetative clearing and earth-moving activities. Indirect impacts may result from construction disturbances during sensitive breeding periods, or through on-going maintenance activities such as the mechanical or chemical removal of woody species. Total avoidance of suitable habitats will be difficult and/or infeasible because of the linear nature of the project and the lack of ability to shift the proposed improvements away from the existing rail lines. Opportunities to avoid impacts rest primarily in the ability to limit construction areas and/or shift the location of facility improvements.

5.9.4.2 Species with No Habitat in Construction Areas

Tables 2.9-3 and 2.9-4 (in Appendix A) list threatened and endangered species identified by the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources as potentially occurring in the project area. For the following species no habitat is available within the areas of proposed construction.

The **Decurrent false aster** (*Boltonia decurrens*) is listed as federally and state threatened. This species has been found in St. Clair and Madison counties, generally in disturbed alluvial soils associated with the Mississippi River floodplain. No floodplain or wetland habitat will be affected south of Jersey County.

The **Least Tern** (*Sterna antillarum*) is listed as federally and state endangered. It is associated with large rivers, nesting on sandbars in shallow depressions. No new bridges will be constructed across large rivers.

The **Gray Bat** (*Myotis grisescens*) is listed as federally and state endangered. It nests in caves and feeds over rivers and reservoirs adjacent to forested habitat. Cave habitat is not present in or adjacent to the railroad right-of-way.

The **Pallid Sturgeon** (*Scaphirhynchus albus*) is listed as federally and state endangered. Potential habitat exists for this species in the Mississippi River near St. Louis. No construction will occur in this area.

The **Illinois cave amphipod** (*Gammarus acherondytes*) is listed as federally and state endangered. This species inhabits karst caves and associated subterranean streams. Karst habitat is not present immediately adjacent to the railroad right-of-way.

The **Bald Eagle** (*Haliaeetus leucocephalus*) is listed as federally and state threatened. The Bald Eagle breeds and winters along major rivers and large reservoirs, roosting in old trees with high branches. Large river and reservoir habitat is limited in the project area to the Des Plaines, Kankakee, and Mississippi Rivers. No roosting trees were observed during the avian survey conducted for this project, and no construction is planned near these rivers.

5.9.4.3 Impacts

No-Build Alternative: Under the No-Build Alternative, threatened and endangered species and their habitats will not be directly affected. Wildlife habitat will remain in its present condition, subject to the influences of future maintenance activities that include the removal of woody species and the application of herbicide to vegetation within 15 meters (50 feet) of the edge of track. There will be no alteration of existing plant communities by construction. However, track maintenance will continue to affect the adjacent vegetation, and existing successional trends will continue until modified by future maintenance or development, if any.

Preferred (Modified No-Build) Alternative:

Federally Endangered Plant Species. The federally and state endangered **leafy prairie clover** (*Petalostemum foliosum*) occurs in mesic dolomitic prairie and has been recorded in three counties in the project area. No construction is proposed in these areas. Therefore, no impact is anticipated.

Federally Endangered Animal Species. The federally and state endangered **Hine's emerald dragonfly** (*Somatochlora hineana*) has been located in the HSR corridor in the Des Plaines River valley near Lemont. No construction and no changes in operating characteristics are proposed in this area. Therefore, no impact is anticipated.

The **Indiana bat** (*Myotis sodalis*) winters in colonies in caves and mines. In Illinois there are three wintering colonies. Summer habitat includes woodlands, especially riparian areas with mature, dead trees with exfoliated bark. Roosting sites may be used by pregnant and lactating bats, which frequently utilize tree cavities and loose bark on living trees. Within the project area, this species has recent records in Macoupin County and historic records in Cook, Sangamon, and Madison Counties. No habitat for *M. sodalis* hibernation exists along the Preferred Alternative. Double track will be constructed in the area of MP 209.00 in Macoupin County. Here, woodland habitat will be removed in an area of open water surrounded by floodplain forest with mature trees. Subsequent investigation of these sites will be conducted to assess the likelihood of the Indiana bat

utilizing the habitat. If it is determined that Indiana bats roost in the area, then the scheduling of any construction in these areas would be timed to avoid disturbance during nesting and rearing.

Federally Threatened Plant Species. Also endangered in the state of Illinois, the **prairie white fringed orchid** (*Platanthera leucophaea*) was formerly a characteristic plant of wet to mesic prairies in Illinois but is now rare and local, known almost exclusively from northeastern Illinois. While the Preferred Alternative will require the loss of 0.25 hectares (0.61 acres) of native prairie and 0.31 hectares (0.77 acres) of palustrine emergent habitat, the presence of *Platanthera leucophaea* has not been recorded in the project area of the Preferred Alternative. Three season plant surveys did not find this species within the areas of proposed construction. Therefore, the Preferred Alternative will not impact this species.

State Endangered Plant Species. State endangered plant species such as the **large ground plum** (*Astragalus crassicarpus*), **prairie trout-lily** (*Erythronium mesochoreum*), **pink milkwort** (*Polygala incarnata*), **royal catchfly** (*Silene regia*), **Eastern blue-eyed grass** (*Sisyrinchium atlanticum*), and **prairie spiderwort** (*Tradescantia bracteata*) are found in dry to mesic prairie. None of these species were documented in field surveys of the project area. However, remnant prairies within the right-of-way offer potential habitat. Of the 2.51 hectares (6.20 acres) of prairie mapped within the construction zone of the Preferred Alternative, approximately 0.25 hectares (0.61 acres) will be removed for the construction of a freight siding and double track. Three season plant surveys were conducted within the construction zones and did not find these species. Therefore, the Preferred Alternative will not impact these species.

The state endangered **quillwort** (*Isoetes butleri*) is known to prefer seasonally wet dolomitic prairie. This type of habitat is not found in the areas of construction. Therefore, the Preferred Alternative will not impact this species.

Broomrape (*Orobanche ludoviciana*) is endangered in the state of Illinois. It prefers dry sand prairies and alluvial floodplains where it is parasitic on the roots of various species of Asteraceae, as well as giant ragweed. This species is known historically from Logan County. The Preferred Alternative will require the removal of 0.03 hectares (0.07 acres) of grade C+ prairie remnant in this county between MP 158.50 and MP 168.40 for the provision of a freight siding. However, plant surveys in the project area did not document this species. Therefore, no impact is anticipated.

The **little green sedge** (*Carex viridula*) prefers marl flats and disturbed calcareous sites and has been found in Cook County in the project corridor. The Preferred Alternative will not affect these habitats. Therefore, no impact will occur.

Wild hyacinth (*Camassia angusta*) is endangered in Illinois and has been known to occur in Macon County (outside of the project area) where it prefers prairies and moist woods. It could occur in degraded prairie habitats in central Illinois. Approximately 0.09 hectares (0.23 acres) of prairie habitat will be removed for construction of the Preferred Alternative through Logan County. *C. angusta* was not located in plant surveys of the project area. Therefore, no impact is anticipated.

The state endangered **grass pink orchid** (*Calopogon tuberosus*) has a broad range of habitats, occurring in northeastern Illinois most often in bogs and acid soils. It also has been documented in fens and mesic and wet-mesic sand prairies. It has been reported in the Hitts Siding Prairie now owned by the IDNR. No construction is proposed in the area of Hitts Siding Prairie. Since this species was not found in the area of proposed construction, no impact is anticipated.

State Endangered Animal Species. Potential habitat for the **red-shouldered hawk** (*Buteo lineatus*) includes riparian forest with large trees for nesting. This type of habitat occurs along the Preferred Alternative at MP 209.00 in Macoupin County. No forested habitat will be removed in these areas, and no red-shouldered hawks were noted utilizing the right-of-way during field surveys. Therefore, no impact to this species is anticipated.

The state endangered **sharp-shinned hawk** (*Accipiter striatus*) occurs in deciduous and coniferous forests and open woodlands, selecting mature forest near stream habitats for nesting. A detailed survey showed limited habitat potential for this species adjacent to the railroad tracks. Therefore, this species will not be adversely affected by the Preferred Alternative.

Henslow's sparrow (*Ammodrammus henslowii*), the **short-eared owl** (*Asio flammeus*), and **the northern harrier** (*Circus cyaneus*) are listed as endangered in Illinois. These species occur in grasslands and wet meadows, nesting in areas generally greater than 50 hectares (125 acres) in size. The Preferred Alternative will remove approximately 2.23 hectares (5.50 acres) of native and non-native grassland. All habitat loss will be in linear strips along existing railroad rights-of-way and be scattered at several locations in the project area. Large grassland areas suitable for nesting will not be affected. Therefore, the Preferred Alternative will not measurably impact these species.

The **long-eared owl** (*Asio otus*) is generally a migrant in Illinois, roosting in stands of conifers often adjacent to open grasslands for hunting. Field surveys of mixed forest habitats near the alignment indicated that habitat availability within the project area is limited. Therefore, this species will not be impacted by the Preferred Alternative.

The **upland sandpiper** (*Bartramia longicauda*) occurs in grassland, pastures, and hay fields often associated with developed and agricultural lands. This type of habitat is available along the Preferred Alternative. Approximately 23.08 hectares (57.01 acres) of native and non-native grassland, pasture, and forbland habitat will be removed under the Preferred Alternative. All habitat loss will be in a linear band within and adjacent to the existing right-of-way. Since this habitat would be restored following construction, the project is not expected to impact this species.

The **American bittern** (*Botaurus lentiginosus*) prefers wet meadows and emergent wetlands of cattail, bulrushes and sedges for feeding and nesting. Similar habitat is utilized by the **least bittern** (*Ixobrychus exilis*). Wetland habitat occurs at many locations adjacent to the alignment. Wetland habitat loss would be minimal with this project. Therefore, impact to this species is not likely.

The **snowy egret** (*Egretta thula*) and the **little blue heron** (*Egretta caerulea*) typically nest with other heron in stands of immature trees near shallow waters of marshes, lakes, and ponds. No nesting colonies of heron were found in field surveys of the alignment. Wetland habitat loss would be minimal with the Preferred Alternative. Therefore, no impact is anticipated to these species.

The **black-crowned night heron** (*Nycticorax nycticorax*) is widely adapted to various emergent and forested wetland habitats. Nesting occurs in bottomland forest as well as occasionally in herbaceous marsh habitat. Only 0.01 hectares (0.03 acres) of floodplain forest habitat will be removed. Therefore, the project will not affect this species.

Forster's tern (*Sterna forsteri*) usually prefers marsh habitat bordering large lakes. It nests on high dry areas within the wetlands. This combination of habitat is not available immediately adjacent to the Preferred Alternative. Therefore, no impact is anticipated.

The **common barn owl** (*Tyto alba*) is an occasional permanent resident in southern Illinois and has been sighted during breeding season in northeastern counties. It generally nests in silos, steeples, grain elevators, as well as hollow trees. This species was not found during surveys, and no habitat was identified in the proposed construction areas. Therefore, no impact is anticipated.

The **Eastern massasauga** (*Sistrurus catenatus*) occurs in wet prairies, bogs, and swamps. This habitat type is available in the project area but is widely distributed. Overall, 0.36 hectares (0.89 acres) of wetland will be removed with the Preferred Alternative. Impacts to the Eastern massasauga are not likely due to the limited distribution of known population and the minimal wetland loss associated with the Preferred Alternative.

The **Eryngium stem borer** (*Papaipema eryngii*) utilizes the prairie plant rattlesnake master as a host for larval development. Prior to recent surveys the only known populations of this species were in Will and Grundy Counties. Based on 1997 field surveys, populations of rattlesnake master were identified and located at ten sites along the Preferred Alternative. The presence of the Eryngium stem borer was confirmed at four of these locations. No construction is proposed in these areas. Therefore, the project will not affect this species.

State Threatened Plant Species. The **slender sandwort** (*Arenaria patula*) is threatened in the state of Illinois and occurs on limestone flats and dolomitic prairies along the Des Plaines River. It is known to occur in the Lemont area. No construction is proposed in this area. Therefore, no impact is anticipated.

The **narrow-leaved sundew** (*Drosera intermedia*) is listed as threatened in Illinois. This plant prefers bog habitats with acid soils. It is known from four counties in the project area, but neither this species nor its habitat were found within the project area. Impacts to this species are not anticipated.

The state threatened plant species **Hill's thistle** (*Cirsium hillii*) is found in dry open prairies and the **savanna blazing star** (*Liatris scariosa* var. *nieuwlandii*) and **ear-leaved foxglove** (*Tomanthera auriculata*) are found in prairies and savannas. The IDNR has noted the likelihood of the blazing star between MP 235.60 and 237.40. The ear-leaved foxglove also has been reported in the Hitts Siding Prairie. No construction is proposed in these areas, and these species were not found during field surveys. Therefore, no impact is anticipated.

State Threatened Animal Species. The **red-veined leaf hopper** (*Aflexia rubranura*) is listed as threatened in Illinois. This insect occurs in large prairie areas and has an affinity for populations of prairie dropseed (*Sporobolis heterolepis*). No specific studies were undertaken to locate *A. rubranura*. However, field surveys of the Preferred Alternative identified nine locations where populations of prairie dropseed occur. None of these will be affected by construction of the Preferred Alternative.

The **Illinois chorus frog** (*P. streckeri illinoensis*) is listed as threatened in Illinois. It prefers open sandy areas of river lowlands and has been known to be found in the vicinity of the proposed grade separation at Pontoon Road (MP 272.70) in Madison County. A survey of this site was conducted between February 22, 1998 and March 25, 1998, on seven nights when this species was active at other locations. The Illinois

chorus frog was not identified at the subject location. Therefore, it is unlikely that the Preferred Alternative will adversely affect this species.

The **Ottoe skipper** (*Hesperia ottoe*) is a butterfly listed as threatened in Illinois. It is a prairie insect dependent on undisturbed sand prairie habitat. No specific distributional studies of this insect were conducted. The Preferred Alternative is not likely to affect this species because no sand or hill prairies will be impacted by the Preferred Alternative.

Kirtland's snake (*Clonophis kirtlandii*) occurs in wet meadows, open swamp forests, reservoirs and occasional wet vacant urban areas. Potential habitat may exist within the project area. However, the total wetland loss with the Preferred Alternative is only 0.36 hectares (0.89 acres), and no wetland loss will occur within Sangamon County, its known distribution within the project area. Therefore, no impact is anticipated.

The **double-crested cormorant** (*Phalacrocorax auritus*) occupies lakes, rivers and open water areas for fishing. It prefers large trees adjacent to open water for nesting. This type of habitat will not be affected by the Preferred Alternative.

The **veery** (*Catharus fuscescens*) usually occurs in moist deciduous woods with relatively dense understories. It is estimated that at least 20 hectares (50 acres) of habitat is needed to maintain a viable population. Habitat of this type and size is limited in the project area. Field surveys investigated deciduous woodlands along the Preferred Alternative and found only low habitat potential. Worst case impacts will be limited to vegetation loss in a narrow strip along the existing right-of-way. No forest fragmentation will result from the Preferred Alternative. Potential impacts to the veery will, therefore, be negligible.

The **loggerhead shrike** (*Lanius ludovicianus*) inhabits open agricultural and grassland areas with hedgerows of osage orange, honey locust, and red cedar. Moderate habitat potential occurs at numerous locations along the Preferred Alternative. The railroad embankment itself may serve as an important habitat element in that it functions as a continuous hedgerow. Approximately 3.87 hectares (9.57 acres) of shrub habitat and 1.95 hectares (4.82 acres) of hedgerow habitat will be removed for construction on the Preferred Alternative. Given the broad habitat available in the project area, it is unlikely that the project will adversely affect the continued existence of this species.

The **yellow-crowned night heron** (*Nyctanassa violacea*) nests in bottomland forest with water and shallow marsh near for feeding. No heron colonies were found during field studies and potential habitat will not be affected by the project. Therefore, no impact is anticipated.

The **pied-billed grebe** (*Podilymbus podiceps*) prefers hemi-marsh and ponds less than seven hectares (17 acres) with dense emergent vegetation. The Preferred Alternative will not affect the availability of hemi-marsh habitat in the corridor. Therefore, no impact is anticipated.

The **king rail** (*Rallus elegans*) is found in a variety of habitats, including shallow marsh, shrub-carr, swamps, ditches, mudflats, and upland agricultural fields. While potential habitat is available in many areas along the Preferred Alternative, construction will occur in very limited areas. Given the extent of habitat available and the very small amount of habitat loss expected, no impact to this species is anticipated.

5.9.4.4 Mitigation Summary

Additional coordination will be conducted with the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources to assure that the proposed project will minimize or avoid impacts to protected plant and animal species during project construction, operation, and maintenance. This effort will include an agency consultation process and will be coordinated with and incorporate mitigation measures developed for both wetland and native vegetation impacts.

5.9.4.5 Unavoidable Adverse Impacts

Although minor amounts of limited habitat types such as wetlands, native prairie, and woodland will be impacted along the Preferred Alternative, no unavoidable adverse impacts are anticipated to threatened and endangered species.

5.9.4.6 Cumulative Impacts

No substantive cumulative impacts are anticipated with implementation of the proposed and recommended mitigation measures.

5.9.4.7 Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources related to threatened or endangered species will occur with the Preferred Alternative.

5.9.5 Natural Areas

5.9.5.1 Impacts

To assess the potential for impacts to natural areas, the location of each Illinois Natural Area Inventory site within 1.6 kilometers (one mile) of the project area was plotted on aerial photographs. The proximity of these sites to areas of project construction were determined and the potential for impact was assessed.

No-Build Alternative: The No-Build Alternative will not impact any Illinois Natural Area Inventory (INAI) sites in the project area.

Preferred (Modified No-Build) Alternative: Nine natural areas lie in the general vicinity of the Preferred Alternative (See Table 5.9-3). None of them will be directly impacted by the proposed project. In two areas (Elkhart Hill and Salt Creek) construction will be within the proximity of natural areas. In each area work will take place within the existing railroad right-of-way and outside of the boundaries of the natural areas. Necessary precautions will be taken to avoid indirect impacts to all natural areas. South of Salt Creek the alignment passes through Madigan State Park. While this park is not a designated Illinois Natural Area, it does provide valuable plant and animal habitat with a floodplain forest abutting the railroad right-of-way. A freight siding is proposed in this section between MP 158.50 and 168.40. All construction will take place within the existing right-of-way.

Table 5.9-3
IMPACTS TO NATURAL AREAS

Natural Area	Project Activity	Impact
Alton Geological Area	None	None
Carlinville Railroad Prairie	None	None
Carpenter Park	None	None
Denby Prairie	None	None
Elkhart Hill	Freight Siding (MP 158.50 - MP 168.40)	None – natural area lies 300 meters (1000 feet) to the east of the project area
Funks Grove	None	None
Mackinaw River	None	None
Ocoya Geological Area	None	None
Salt Creek	Freight Siding (MP 158.50 - MP 168.40)	None – Salt Creek lies to the north of the project impact area

5.9.5.2 Mitigation Summary

Where construction is proposed near designated Illinois Natural Areas, special precautions will be taken to assure that indirect impacts will be avoided. All clearing and construction activity will take place from the railroad bed. Erosion and sediment controls will be installed to protect adjoining properties. Protective fencing will be erected to assure that construction activities are kept within the right-of-way.

5.9.5.3 Unavoidable Adverse Impacts

The Preferred Alternative will not have unavoidable adverse impacts to Illinois Natural Areas.

5.9.5.4 Cumulative Impacts

The Preferred Alternative will not result in cumulative impacts to Illinois Natural Areas.

5.9.5.5 Irreversible and Irretrievable Commitment of Resources

The Preferred Alternative will not result in irreversible or irretrievable commitments of resources.

5.10 FLOODPLAINS

No-Build Alternative: No impacts to floodplains will occur with the No-Build Alternative.

Preferred (Modified No-Build) Alternative: There is one action associated with the Preferred Alternative that would occur in a floodplain – the proposed freight siding between MP 158.50 and MP 168.40. This freight siding would be located within the floodplains of Salt Creek and Elkhart Slough in areas where the existing track bed is wide enough to accommodate the improvement. No work should be performed below the

100-year flood elevation, and as a result, this improvement will not encroach upon the base floodplain. Therefore, there will be no impacts to floodplains, and no floodplain map revisions will be required.

Executive Order 11988 requires that federal agencies avoid taking any action in a floodplain unless and until the responsible federal official makes a Finding of No Practicable Alternative. Throughout project development, the number and length of proposed freight sidings were minimized to the extent practicable, while still providing enough storage for freight traffic to limit conflict with high-speed passenger service. The proposed freight siding will consist of provision of a new set of tracks on existing track bed within existing right-of-way. There is no practicable alternative to this improvement.

Illinois Executive Order 79-4 directs state agencies to comply with National Flood Insurance Program or any more restrictive state and local floodplain management regulations when undertaking any construction in a floodplain. Demonstrating that the proposed construction complies with this order will be part of the permit application process with the Illinois Department of Natural Resources, Office of Water Resources.

5.11 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

5.11.1 Historic Sites and Resources

No-Build Alternative: The No-Build Alternative will not impact any historical above-ground resources in the project area.

Preferred (Modified No-Build) Alternative: As part of the Preferred Alternative, no historic structures will be displaced. Additionally, no perceivable visual impacts to historic property were identified in areas where enhanced warning devices will be provided at existing grade crossings within existing right-of-way. IDOT will contact each community in the Chicago - St. Louis High-Speed Rail corridor south of Dwight to discuss the possibility of fencing along the railroad tracks. If a community is interested in having fencing installed, IDOT will coordinate with that community to determine the location, style, and height of the proposed fencing as well as whether the fencing will be on one or both sides of the railroad tracks. If an agreement can be reached, fencing will be installed. Fencing will not be installed unless agreed to by the local community. Finally, fencing will not be provided if it is determined that visual impacts to historic resources would result. Therefore, this project has no potential to have an effect on historic resources. As such, Section 106 obligations have been met. See Appendix D for concurrence from the State Historic Preservation Office.

5.11.2 Archaeological Sites and Resources

No-Build Alternative: The No-Build Alternative will not impact any archaeological resources in the project area.

Preferred (Modified No-Build) Alternative: Two sites in the project area are recommended for Phase II archaeological testing. However, no impacts to archaeological resources are expected at either of these locations.

5.12 FOREST PRESERVES AND PARKS

No-Build Alternative: The No-Build Alternative will not impact forest preserves or parks since this alternative will not require additional right-of-way or new construction.

Preferred (Modified No-Build) Alternative: The Preferred Alternative will not impact any forest preserves or parks in the project area. Construction activities will occur primarily within existing right-of-way. The areas where additional right-of-way will be required for the grade separation at Pontoon Road (MP 272.70) is not within a forest preserve or park.

5.13 ENERGY CONSUMPTION

5.13.1 Energy Consumption During Construction

No-Build Alternative: The No-Build Alternative will not require any construction. Therefore, no changes in energy consumption are expected.

Preferred (Modified No-Build) Alternative: During construction of the Preferred Alternative, additional energy will be expended beyond what will be used for the normal operation. This additional energy will be consumed on a short-term basis by construction of improvements required to implement the HSR service and by construction-related delays to existing freight and Amtrak passenger service. However, once HSR service begins, long-term energy savings will be realized.

5.13.2 Energy Consumption During Operation

Travel by rail is more energy efficient than travel by air or private automobile, as documented in Section 2.13. Since rail capacity can be increased at a relatively small incremental cost, any substantial increase in rail ridership that will arise from implementation of HSR service will result in conservation of travel-related energy. Additionally, new locomotives, as would be used with the Preferred Alternative, are designed to be at least 15 percent more energy efficient than current locomotives.

In the Draft EIS, it was estimated that the HSR Alternative could reduce energy consumption from intercity travel by up to eight percent (relative to the No-Build Alternative) in the Chicago - St. Louis corridor. This estimate assumed eight round trips per day and nearly 1.3 million passengers annually (year 2010) as part of the HSR Alternative. Under the Preferred Alternative, three round trips per day are proposed. Although no new ridership forecasts have been developed since circulation of the Draft EIS, it can be safely assumed that projected ridership would be below 1.3 million. Nonetheless, implementation of HSR service will result in some diversion from travel by air and automobile. And since travel by rail is more energy efficient than these two modes, overall energy consumption will be reduced.

5.14 SPECIAL WASTE

5.14.1 Hazardous Waste

No CERCLIS sites will be involved or impacted by the Preferred Alternative.

5.14.2 Undetermined Waste Status

Preliminary Environmental Site Assessments (PESA) for special waste were conducted by the Illinois Department of Transportation, Bureau of Railroads. The assessments concluded that the Preferred Alternative could involve special waste sites at two locations in Madison County. The first site is located between MP 259.05 and MP 262.90, where new double track is proposed. The second site is located at Pontoon Road (MP 272.70), where a grade separation is proposed. These sites are discussed in Section 2.14.

5.14.3 Mitigation

Additional testing may be warranted for the special waste locations investigated. At least six months prior to land acquisition the PESAs should be validated. If right-of-way acquisition does not include the ownership or operation of any aboveground or underground storage tanks or discarded waste and if construction grading and excavation does not involve any of the documented or suspected sites, then no additional preliminary testing for the project will be necessary. If the stipulations can not be met after the scope of involvement has been determined and after validation, then additional investigation could be required. In either case, the project will not be implemented until all risks and liabilities of involvement are known and are acceptable to IDOT.

5.15 SECONDARY AND CUMULATIVE IMPACTS

Implementation of Preferred Alternative is not expected to substantially alter development patterns in the corridor and near stations. It is possible that implementation of HSR service will result in undeveloped land in the vicinity of HSR stations developing slightly faster than they would have without HSR. However, it is unlikely that failure to implement HSR will significantly deter development of the agricultural and vacant land in the corridor.

The greatest potential for development, economic activity and job creation is in the station areas with the highest ridership and the greatest concentration of opportunities within a eight-kilometer (five-mile) radius.

Estimating jobs in tourism, education and from shifts in corporate employment and investment, induced by improved rail access, cannot be accurately quantified. Even though assumptions could be made, it is beyond current methodology to quantify these shifts between various regions and industries based upon the intangible response to improved access.

5.16 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES AND MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Environmental impacts associated with the Preferred Alternative will result in short- and long-term impact relationships which are fundamentally similar in kind and magnitude. In the preparation of this EIS, FHWA methodology was followed. This methodology requires that all significant short- and long-term environmental relationships created by project alternatives be quantified in light of the (1) avoidance, (2) minimization, and (3) compensation of unavoidable impacts on resources. In addition to wetlands, wildlife, air quality, water, farmland, and historical/archaeological factors, quantified resources include options of societal land use and development. Those commitments are represented by secondary and cumulative developments anticipated as a consequence of implementation of the Preferred Alternative

The long-term enhancement of the efficiency of the HSR corridor transportation system will occur at the expense of short-term construction impacts on nearby residents and businesses. Those short-term effects will include localized noise, air, and water pollution and traffic delays. Based on standard environmental specifications made part of construction contracts as directed by this EIS, they will not have a lasting impact on the environment.

Short-term gains to the local economy will occur during construction resulting from hiring local firms and labor, and local services and supplies.

Demonstrating advancements in high-speed ground transportation technologies in order to foster the implementation of high-speed steel wheel on rail transportation systems as an alternative to existing transportation systems answers the basic project purpose.

Based on its significant contribution to the long-term objects of regional and local plans of development, the proposed Chicago - St. Louis High-Speed Rail Project is consistent with the maintenance and enhancement of long-term productivity at the local, regional, state, and national level.

SECTION **6**

List of Preparers

Section 6
LIST OF PREPARERS

Name	Qualifications	Primary Responsibilities
Federal Highway Administration		
Jon-Paul Kohler	Planning and Program Development Manager, Illinois Division.	FHWA review.
Don R. Keith	Right-of-Way Officer, Illinois Division.	FHWA review.
J.D. Stevenson	Environmental Programs Engineer, Illinois Division.	FHWA review.
Federal Railroad Administration		
William R. Fashouer	Juris Doctor.	Environmental Counsel.
James Smailes	MS, Civil Engineering; BS, Civil Engineering.	General Engineer.
David A. Valenstein	MPA, Public Administration; BFA, BAR, Architecture.	Environmental Program Manager.
Mark E. Yachmetz	BS, Civil Engineering.	Associate Administrator for Railroad Development.
Illinois Department of Transportation		
Kathleen S. Ames	MS, Environmental Engineering; BA, Biology; IDOT, 1973 to present.	General content and impact review.
Frank Hartl	BS, Transportation Engineering; IDOT, 1974 to present.	High-Speed Rail Manager.
Jerry Isenburg	MA, Business Administration; IDOT, 1970 to present.	Rail Program Planning Section Chief.
Richard J. Nowack	BS, Biology; Registered Professional Landscape Architect; IDOT, 1975 to present.	Natural resources review.

Charles Perino	Ph.D., Plant Taxonomy; MS, Plant Taxonomy; BS, Geology; IDOT, 1982 to present; 10 years prior biological/environmental experience.	Water quality and wetland resources review.
John L. Rowley	BS, Agriculture Education; IDOT, 1983 to present; 25 years prior agricultural experience.	Agriculture review.
John E. Schwalbach	MA, Business Administration; BA; IDOT, 1999 to present.	Chief, Bureau of Railroads.
Barbara H. Stevens	MA, Economics; IDOT, 1979 to present.	Socio-economic impact review.
Merrill Travis	MA, Public Administration; IDOT, 1967 to 2001.	Former Chief, Bureau of Railroads.
John A. Walthall	Ph.D., Archaeology; MA, Anthropology; BA, Anthropology; IDOT, 1978 to present; 12 years prior archaeological experience.	Archaeological review.
John Washburn	MA, Environmental Science; BA and BS, Geology; IDOT, 1968 to present.	Hazardous waste, geology, and hydrogeology review.
Walt Zyznieuski	MA, Environmental Studies; IDOT, 1994 to present, 14 years prior environmental experience.	Air quality review.

Parsons Transportation Group (formerly De Leuw, Cather & Company)

Charles DeWeese	BS, Math – Railroad Operations; 35 years passenger and freight operations management, operations planning, railroad construction and maintenance.	Project management and operations analysis.
Robert Gilly, P.E.	BS, Civil Engineering; 30 years experience in railroad engineering.	Preliminary design.
Jere Hinkle, P.E.	MS, Civil Engineering; BS, Civil Engineering; 35 years experience in transportation planning and environmental analysis.	Environmental lead and technical oversight.

Tony Pakeltis, AICP	MUPP, Urban Planning and Policy; BUP, Urban Planning; BS, Environmental Design; 12 years experience in environmental document preparation.	Document coordination; Transportation, air quality and noise analysis.
John Priede, P.E.	BS, Civil Engineering, 35 years experience in transportation planning.	Energy analysis.
Peter Reinhofer	BS, Civil Engineering; 4 years experience.	Noise analysis.
Timothy Selover, P.E.	BS, Civil Engineering; 7 years experience.	Air quality analysis; document preparation; quality assurance.
Susan Simkus	BA, Business Administration; 7 years experience.	Document preparation; quality assurance.

Planning Resources Inc.

Rebecca Cerf	MS Environmental Biology.	Water resources and ecosystems analysis.
Juli E. Crane	MS, Fisheries and Wildlife; BS, Wildlife and Range Resources; PRI, 1996 to present; 7 years prior experience with NEPA documentation.	Wetlands and upland vegetation.
Amy Eckland	MS, Plant and Soil Science, BS, Natural Resource Management.	Environmental data coordination.
Lisa Freudenburg Hardy	MS, City and Regional Planning.	Public involvement, socio-economic/land use.
David A. Koldoff	BS, Environmental Biology; PRI, 1994 to present.	Wetlands, fish and aquatic resources.
N.J. Pointner, AIA, AICP	MA, City and Regional Planning; BA, Architecture; PRI, 1982 to present; 12 years prior experience with NEPA documentation.	Public involvement coordination.
Lan R. Richart	MS, Biology; BS, Zoology; PRI, 1983 to present; 5 years prior experience with NEPA documentation.	Director natural resources analyses.

Pamela J. Richart, AICP	MA, Human Environmental Planning; BA, Human Ecology; PRI, 1982 to present.	Agricultural analysis.

Sverdrup Corporation

Thomas Darnold, P.E.	BS, Civil Engineering, 20 years experience in traffic engineering and highway design.	Traffic/grade crossing analysis.
Tracey Lober, P.E.	BS, Civil Engineering; 12 years experience in transportation design and planning studies.	Traffic/grade crossing analysis, public involvement.
John McCarthy, AICP	MS, Urban Planning; BS, Economics; 29 years experience in planning and design.	St. Louis Multimodal Transportation Facility Project Manager.
Nancy Nourse	MS, Civil Engineering; BS, Civil Engineering; 11 years experience in hazardous waste analysis.	Special waste analysis.
Mary Cay O'Malley, P.E.	BS, Civil Engineering; 12 years experience in transportation design and planning studies.	Traffic/grade crossing analysis, public involvement.
David Peterson, P.E.	BS, Civil Engineering; Sverdrup, 1991 to 2001; 11 years prior experience in railroad and civil engineering design and construction.	Project management, train operations modeling.
Terry Winebrenner, P.E.	BS, Civil Engineering; 17 years experience in highway and civil engineering design.	Cost estimation.

Archaeological Research, Inc.

Elizabeth Goldsmith	MA, Anthropology; BA, History; 10 years experience in archaeological and historical research.	Historical and archaeological resources and research documentation.
Patricia Hamlen	MA, Anthropology, BA, Anthropology; 10 years experience in archaeological field investigations.	Field investigation.
John Hodgson	BA, Anthropology; 5 years experience in archaeological field investigations.	Field investigation.

David Keene	MA, Philosophy; BS, Anthropology; 20 years experience in archaeological and historical research.	Principal investigator for archaeological and historical investigations.
Karen Poulson	MA, Anthropology; BA, Anthropology; 5 years experience in museum studies and 5 years experience in archaeological investigations.	Prehistoric sites documentation coordination.
Kim Ullery	BS, Anthropology; 5 years experience in archaeological field work.	Field work and document coordination.
Greg Zaro	BA, Anthropology; 5 years experience in archaeological field investigations.	Field investigation.

Heritage Research, Limited

John Vogel	Ph.D., History; MA, Photography; BA, History; Heritage Research, Limited, 1980 to present.	Above-ground historic resources investigation.

Applied Real Estate Analysis, Inc.

Robert E. Miller	MRP, Urban Development and Cultural Resource Management; BA, American History; 26 years experience in real estate analysis and public policy consulting.	Real estate assessment coordination, employment and economics.
Maxine V. Mitchell, CRE	MCP, Urban Planning; BA, Economics; 29 years experience in real estate market analysis and public policy consulting.	Real estate analysis manager.
A. Andy Prodanovic, MAI	BA, Real Estate and Marketing; Illinois State Certified Appraiser; 24 years experience in real property valuation and real estate consulting.	Appraisal, right-of-way cost estimates, grade crossing analysis.

Corporate Strategies, Inc.

Robert Leilich	MS, Industrial Management, Cert. Transp. Economics; BS, Mechanical Engineering; 35 years railroad operations management and consulting.	Operations modeling, system design.

John C. Prokopy	BS, Mechanical Engineering; BS, Civil Engineering; 30 years railroad consulting, market planning, simulation modeling and design.	Operations modeling, technical analysis.

SECTION **7**

Distribution of the Final Environmental Impact Statement

Section 7
DISTRIBUTION OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

The Final Environmental Impact Statement is being distributed to the following federal, state, regional, and local agencies and other interested parties for their review and comments.

Federal

Advisory Council on Historic Preservation
Department of the Army, Chicago District, Corps of Engineers
Department of the Army, Rock Island District, Corps of Engineers
Department of the Army, St. Louis District, Corps of Engineers
Federal Emergency Management Agency
U.S. Coast Guard, Eighth District
U.S. Coast Guard, Ninth District
U.S. Department of Agriculture
U.S. Department of Housing and Urban Development
U.S. Department of the Interior, Fish and Wildlife Service, Chicago Field Office
U.S. Department of the Interior, Fish and Wildlife Service, Rock Island Field Office
U.S. Department of the Interior, Fish and Wildlife Service, Marion Illinois Suboffice
U.S. Department of the Interior, Illinois & Michigan Canal
U.S. Department of the Interior, Office of Environmental Policy and Compliance
U.S. Environmental Protection Agency, Region V, Office of Environmental Review
U.S. Senator Jean Carnahan
U.S. Senator Christopher S. Bond
U.S. Senator Richard J. Durbin
U.S. Senator Peter G. Fitzgerald
U.S. Representative Bobby L. Rush, District No. 1
U.S. Representative Jesse L. Jackson, Jr., District No. 2
U.S. Representative William O. Lipinski, District No. 3
U.S. Representative Luis V. Gutierrez, District No. 4
U.S. Representative Danny K. Davis, District No. 7
U.S. Representative Gerald C. Weller, District No. 11
U.S. Representative Jerry F. Costello, District No. 12
U.S. Representative Judy Biggert, District No. 13
U.S. Representative Timothy V. “Tim” Johnson, District No. 15
U.S. Representative Ray LaHood, District No. 18
U.S. Representative David D. Phelps, District No. 19
U.S. Representative John M. Shimkus, District No. 20
U.S. Representative William L. Clay, District No. 1 (Missouri)

State Agencies - Illinois

Chicago Area Transportation Study
Illinois Bureau of the Budget
Illinois Commerce Commission
Illinois Department of Agriculture
Illinois Department of Corrections
Illinois Department of Natural Resources
Illinois Department of Natural Resources, Office of Mines and Minerals
Illinois Department of Natural Resources, Office of Water Resources
Illinois Department of Public Health
Illinois Environmental Protection Agency
Illinois Geological Survey
Illinois Historic Preservation Agency
Illinois Natural History Survey
Illinois Nature Preserves Commission
Illinois State Clearinghouse
Illinois State Library
Illinois Water Survey

State Agencies - Missouri

Missouri Department of Transportation

Sub-State Clearinghouses

Bi-State Development Agency
East-West Gateway Coordinating Council
Greater Egypt Regional Planning and Development Commission
Kankakee County Regional Planning Commission
Logan County Regional Planning Commission
McLean County Regional Planning Commission
Northeastern Illinois Planning Commission
Southwestern Illinois Metropolitan and Regional Planning Commission
Springfield-Sangamon County Regional Planning Commission
West Central Illinois Valley Regional Planning Commission

Counties

Cook
Will
Kankakee
Grundy
Livingston
McLean
Logan
Sangamon

Macoupin
Jersey
Madison
St. Clair

Local Communities and Jurisdictions

Alton
Aroma Park
Atlanta
Auburn
Bloomington
Blue Island
Bourbonnais
Braceville
Bradley
Braidwood
Brighton
Broadwell
Carlinville
Cayuga
Chatham
Chenoa
Chicago
Dwight
East Alton
East St. Louis
Elkhart
Elwood
Frankfort
Funks Grove
Gardner
Garfield
Girard
Godfrey
Godley
Goodfarm
Granite City
Grant Park
Hartford
Hopkins Park
Joliet
Joliet
Kankakee
Lawndale
Lemont
Lexington

Lincoln
Lockport
Madison
Manteno
McLean
Midlothian
Miles Station
Mokena
Momence
Monee
New Lenox
Nilwood
Normal
Oak Forest
Odell
Orland Park
Park Forest
Peotone
Plainview
Pontiac
Reddick
Robbins
Sherman
Shipman
Springfield
St. Louis
Summit
Thayer
Tinley Park
Towanda
Union Hill
University Park
Venice
Virden
Williamsville
Wilmington
Wood River

Other Agencies or Groups

Center for Neighborhood Technology
Environmental Law and Policy Center
Illinois Farm Bureau
National Trust for Historic Preservation (Gaylord Building)
Rail Transportation Team
South Suburban Mayors and Managers Association
Township Officials of Illinois

United Counties Council of Illinois
Will County Governmental League
Community Public Libraries along the Corridor

Operating Railroads

Amtrak
Canadian National/Illinois Central
Kansas City Southern (Gateway Western)
Metra
Norfolk Southern
Terminal Railroad Association
Union Pacific

SECTION 8

Comments and Coordination

Section 8
COMMENTS AND COORDINATION

The Draft Environmental Impact Statement (EIS) was completed in May 2000, and a Notice of Availability appeared in the Federal Register on June 23, 2000. Comments on the Draft EIS were solicited from regulatory agencies, local units of government, operating railroads and interested citizens. Formal Public Hearings for this project were held in the cities of Alton, Bloomington, Chicago, Joliet, Kankakee, and Springfield, Illinois, from July 24, 2000 through August 1, 2000.

The following sections summarize agency and public coordination that has occurred since the Draft EIS was circulated, and summarize and respond to comments received on the Draft EIS.

8.1 AGENCY COORDINATION

All agency comments received on the Draft EIS are included in Appendix C.

8.1.1 Federal Agency Comments

Federal Emergency Management Agency. The Federal Emergency Management Agency (FEMA), in a letter sent June 28, 2000, had no objections to the proposed project. FEMA stated that the Draft EIS had an adequate discussion of impacted floodplains and effects on Special Flood Hazard Areas, however, the document should include a discussion of federal Executive Order 11988, Floodplain Management, and Governor's Executive Order 4 (Illinois Executive Order 79-4).

Executive Order 11988 requires federal agencies to avoid taking any action in a floodplain unless and until there is a Finding of No Practicable Alternative. FEMA commented that the Draft EIS did not contain a discussion of a Finding. If the proposed action must take place in a floodplain, an eight-step public involvement process needs to take place in order to identify and implement mitigative procedures. FEMA expressed concern that there was no discussion in the Draft EIS of whether the project will encourage future floodplain development.

Governor's Executive Order 4 requires state agencies to comply with National Flood Insurance Program (NFIP), when undertaking any construction in a floodplain. FEMA stated that there was no discussion in the Draft EIS of Executive Order 4. In addition, the letter commented that the Draft EIS did not identify the source of floodplain data and information.

FEMA requested that a table of how the proposed action will comply with statutes, regulations, and orders be included in the Final EIS. Additionally, the agency stated that the proposed project would require permits from local (municipal and county) agencies for floodplain development.

The letter stated that floodplain map revisions might be necessary depending upon the work performed in floodplains. The project sponsor would be responsible for supplying FEMA with hydrologic and hydraulic modeling necessary to revise regulatory floodplain maps. A statement to this effect should be included in the Draft EIS.

Response to Comment. Under the Preferred Alternative, the only construction that will take place in a floodplain area is the proposed freight siding, near Elkhart, between MP 158.50 and MP 168.40. However, this improvement will not require placing any fill in either of the floodplains identified through this area. Therefore, there will be no impacts to floodplains, and no floodplain map revisions will be required. Other projects identified in the Draft EIS that would have occurred in floodplains were eliminated to further minimize environmental impacts. Additionally, this project is not expected to encourage floodplain development. As noted in Section 5.15 of the Draft EIS, implementation of high-speed rail (HSR) service is not expected to substantially alter development patterns in the corridor and near the stations.

A discussion on Executive Order 11988, including a Finding of No Practicable Alternative, and Illinois Executive Order 79-4 is provided in Section 5.10 of the Final EIS. It is not anticipated that any local (municipal and county) floodplain permits will be required for this project.

Floodplain maps for the project area were obtained from FEMA in 1997. Subsequent review of certain maps was conducted at the FEMA Chicago office prior to issuance of the Draft EIS in 2000.

U.S. Army Corps of Engineers. In a comment form submitted at the Chicago Public Hearing on July 28, 2000, a representative from the U.S. Army Corps of Engineers stated that wetlands with a Floristic Quality Index (FQI) greater than 30 are considered "unmitigatable" and should be completely avoided. It was highly recommended that the applicant seek a pre-application consultation with the Chicago District Army Corps of Engineers, Regulatory Branch, prior to selection of alternative routes.

Response to Comment. The Preferred Alternative will not impact any wetlands with an FQI greater than 30. An alternative alignment between Chicago and Dwight has not been selected at this time. Prior to selection of a route into Chicago, additional coordination with the Corps of Engineers will be conducted.

U.S. Department of Agriculture, Natural Resources Conservation Service. The U.S. Department of Agriculture Natural Resources Conservation Service, in a letter dated July 31, 2000, has stated that they have reviewed the Draft EIS and have no substantive comments.

Response to Comment. No response is required.

U.S. Department of Housing and Urban Development, Environmental Staff. In a letter dated August 4, 2000, the U.S. Department of Housing and Urban Development (HUD) supported the proposed project and found the Draft EIS to adequately explain the need for a balanced transportation system. HUD suggested discussing the potential for transit-oriented development and intermodal connections or activity. HUD asked about connections to other transit modes. They asked about the availability of parking and the potential for a bike path along the right-of-way. This agency also questioned if the proposed project had considered alignments to O'Hare, Midway, and the Gary Airport, and the status of the Chicago – Detroit high-speed rail corridor. Finally, HUD suggested annotating the discussion of the volatility of gasoline prices by adding per gallon cost used.

Response to Comment. Improving intercity rail passenger service could lead to new transit-oriented development near the stations in the Chicago - St. Louis High-Speed Rail corridor. However, major changes in land use patterns as a result of this project are not anticipated. As appropriate, the Illinois Department of Transportation (IDOT) will work with local communities to ensure other transit modes connect to high-speed rail service.

A review of all existing Amtrak stations and parking lot capacity indicates that adequate parking is available at all station stops. (See Section 4.6.3 of the Draft EIS.)

A bike path along the right-of-way was not considered because of right-of-way limitations and because of safety concerns regarding the proximity to an active rail line.

Only termini in downtown Chicago were considered as part of this project. Additionally, reducing downtown-to-downtown travel time was identified as a need for the project. (See Section 1.3.1 of the Draft EIS.)

In response to the status of the Chicago – Detroit High-Speed Rail Project, the Michigan Department of Transportation is advancing projects related to the implementation of high-speed rail service in that corridor. These projects include station, track infrastructure, train control, and grade crossing improvements. In January 2002, 90 mph (145 kph) service was tested on a 73-kilometer (45-mile) stretch between Niles and Kalamazoo in southwest Michigan.

For comparison purposes, operating costs per person-kilometer (person-mile) were presented in the Draft EIS for the four modes of travel evaluated in the HSR corridor. Operating costs for high-speed rail service were estimated to be $0.07 per person-kilometer (or $0.11 per person-mile). For automobile, the operating cost presented in the Draft EIS included the cost of gasoline only but reflected the relatively high price of gasoline in 2000. A more appropriate cost for automobiles, for purposes of comparing it with passenger rail service, would include gas, oil, tires, and maintenance. Operating cost estimates for automobile that include these items range from $0.04 to $0.05 per person-kilometer ($0.06 to $0.08 per person-mile) depending on the type of vehicle (American Automobile Association, 1998). Operating costs for automobile fluctuate with the price of gasoline. As gasoline prices increase, the operating cost of high-speed rail service would become more competitive with the automobile.

U.S. Department of the Interior, Illinois & Michigan Canal. The U.S. Department of the Interior (DOI), Illinois and Michigan Canal wrote a letter on July 31, 2000, concerning the Illinois Central/Union Pacific (now the CN-IC/UP) alignment that passes through the Illinois and Michigan Canal National Historic Landmark and the Lockport Historic District. They are a federal commission within the Department of the Interior without regulatory power. The agency stated that the Draft EIS inadequately addressed the potential effects of the CN-IC/UP alignment on the Illinois Michigan Canal and the Lockport Historic District. The U.S. Department of the Interior believes that the proposed fencing would create a visual and physical barrier, which was not discussed adequately in the Draft EIS. The Agency is also concerned with public safety at the pedestrian grade crossing to the Gaylord Building.

The agency questioned how the proposed project will meet the Secretary of the Interior's Standards for Historic Preservation Projects or how the Standards could be met to adequately address the impacts. In conclusion, the U.S. Department of the Interior, Illinois and Michigan Canal requested that the CN-IC/UP alignment not be selected and stated a preference for the Rock Island District alignment.

Response to Comment. As part of the Preferred Alternative, no action is proposed between Chicago and Dwight. Therefore, no fencing would be installed through the Illinois and Michigan Canal National Historic Landmark or the Lockport Historic District. Additionally, passenger rail service through Lockport will remain constant at three round trips per day, with no change in maximum operating speed.

U.S. Department of the Interior, Office of the Secretary, Office of Environmental Policy and Compliance. In a letter dated August 17, 2000, the U.S. Department of the Interior Office of Environmental Policy and Compliance stated that there are several clarifications needed on the Draft EIS. Within the project area there are four rivers included on the Nationwide Rivers Inventory (NRI): Kankakee, Mackinaw, Mazon, and Sangamon Rivers. The letter stated that the Mazon and Sangamon Rivers are listed on the NRI for their scenic value, and strongly encouraged the proposed project to avoid additional crossing infrastructures over these rivers.

The department stated its plans to review and comment on mitigation plans for prairie and wetland.

The letter recommended that the most currently available Biological Stream Characterization (BSC) be listed for each stream section crossed. It also stressed the importance of providing extra protection for those streams in Illinois with a BSC of "A" or "B", because they are the highest quality streams remaining in the state.

In regards to endangered species, the agency was concerned about the statement that there will not likely be any adverse impacts to the federally endangered Hine's emerald dragonfly. If the CN-IC/UP alignment is not dropped from further consideration, then the U.S. Department of the Interior requested a Formal Consultation in accordance with Section 7 of the Endangered Species Act of 1973. The letter also requested more detailed information about the field surveys used for the eastern prairie-fringed orchid (*Platanthera leucophaea*) and the leafy prairie clover (*Dalea foliosa*.) These are federally listed plant species which occur in the study corridor. The Draft EIS stated the project would have no impact on these species.

The letter included comments from the U.S. Fish and Wildlife Service (FWS) which stated they are likely to object to the CN-IC/UP alignment, in the Chicago region. However, the agency would be likely to have no objection to the Norfolk Southern or Rock Island District alignments, assuming all of the previously identified environmental issues are adequately addressed.

The Department of the Interior's comments do not preclude separate evaluation and comments by the U.S. FWS when reviewing any forthcoming permit applications.

Response to Comment. The updated information provided by the U.S. Department of the Interior regarding Nationwide Rivers Inventory streams has been incorporated into the Final EIS. Under the Preferred Alternative, no new bridges or modifications to existing bridges are proposed across any of the rivers included on the Nationwide Rivers Inventory. Therefore, the project will not have an adverse effect on the scenic or recreational values of these streams.

Changes made in the High-Speed Rail project since the publication of the Draft EIS have significantly reduced the magnitude of potential impacts on wetlands and prairies. Conceptual prairie and wetland mitigation plans have been prepared to mitigate impacts from the proposed project and were presented in the Draft EIS (Sections 5.8.4 and 5.9.2.4). During the final design phase of the project, detailed mitigation plans will be prepared. These plans will be made available for review by U.S. DOI bureaus.

Table 2.6-3 in the Draft EIS provides information on the Biological Stream Characterization and water quality for those study area streams listed in the 1989 version of the BSC Report, and in the Illinois Water Quality Report 1998, the most recent documents available at the time the Draft EIS was prepared. The 1996 BSC Report and the Illinois Water Quality Report 2000 have subsequently been reviewed, and there are no changes

to the information presented in Table 2.6-3 of the Draft EIS. Streams listed in Table 2.6-3 without a rating are not rated in these published reports. No streams with a BSC rating of "A" or "B" will be impacted by this project.

Formal Consultation in accordance with Section 7 of the Endangered Species Act of 1973 was initiated with the U.S. Fish and Wildlife Service to address potential project impacts to the federally endangered Hine's emerald dragonfly (*Somatochlora hineana*). The process was initiated through formal correspondence in October, 2000. A detailed Biological Assessment was prepared and issued in March, 2001. Based on subsequent telephone conversations and meetings between project representatives and the U.S. Fish and Wildlife Service, formal consultation was suspended. No construction and no changes in train operations are planned between Chicago and Dwight as part of the Preferred Alternative. Habitat for the Hine's emerald dragonfly is located adjacent to this "no action" area, north of Lockport. Therefore, the Preferred Alternative will not impact this species. Correspondence pertaining to the Formal Consultation process is included in Appendix D.

Field investigations for the Leafy Prairie Clover (*Dalea foliosa*) and the Eastern Prairie Fringed Orchid (*Platanthera leucophaea*) were conducted as part of three season surveys conducted for the project in 1997 and 1998. A detailed summary of survey sites and dates for these species was provided to the U.S. Fish and Wildlife Service on October 17, 2000. The Service acknowledged the adequacy of the surveys in its response of November 30, 2000. (See Appendix D.)

U.S. Department of the Interior, Office of Surface Mining. In a letter dated August 1, 2000, the U.S. Department of the Interior, Office of Surface Mining had no comment on the Draft EIS. However, the letter advised that if coal removal was required, the Illinois Department of Natural Resources, Office of Mines and Minerals should be contacted.

Response to Comment. No response is required.

U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency (EPA) stated, in a letter dated August 3, 2000, that it concurs with the Purpose and Need Statement and the Range of Alternatives Evaluated. The letter noted that in order to meet the Purpose and Need, reliable service and avoiding conflict with Metra commuter service is necessary.

The U.S. EPA stated that the Rock Island District alignment is environmentally preferable and gave it a rating of "LO" (lack of objections.) The CN-IC/UP and Norfolk Southern alignments were rated "EO-2" (environmental objections - more information necessary.) The U.S. EPA noted that these objections could be removed if, for the Norfolk Southern alignment, the Alternative's local air pollution issue was resolved and if it was clearly preferable in terms of meeting the project's Purpose and Need. For the CN-IC/UP alignment, the objection could be removed if the potential impact of federally-listed threatened and endangered species were resolved and if it was clearly preferable in terms of meeting the project's Purpose and Need.

Response to Comment. As part of the Preferred Alternative, no alternative alignment was selected between Chicago and Dwight. No action is proposed through this area. Before IDOT selects an alignment north of Dwight, additional evaluation will be conducted. The U.S. EPA will be notified of such developments.

U.S. Department of Transportation, U.S. Coast Guard. The Coast Guard, in a July 7, 2000 letter, had no comment. They have regulatory involvement only with the construction of new bridges or the physical alteration of existing bridges.

Response to Comment. No response is required.

8.1.2 State Agency Comments

Chicago Area Transportation Study. The Chicago Area Transportation Study (CATS) had several comments in a letter written on August 4, 2000. They recognize the importance of maintaining grade crossings for emergency services and that accessibility contributes to economic vitality. CATS also notes the positive air quality impacts of high-speed rail.

Response to Comment. No response is required.

Illinois Department of Agriculture, Bureau of Land and Water Resources. In a letter dated August 29, 2000, the Illinois Department of Agriculture (IDA) had no objections to project implementation. The agency asked for more information on wetland mitigation in terms of the specific site locations and soils to be affected by proposed mitigation sites. They reinforced the need to maintain access to all farmed properties. The IDA requested that no prime farmland be considered for wetland mitigation or tree replacement purposes. Prime farmland should not be used as a source of borrow material for a new railroad bed. The Agency recommended that any wetland mitigation or tree replacement occur at the established wetland mitigation bank near Morris, Illinois. The agency provided the USDA-NRCS Form AD-1006, which documents the Farmland Conversion Impact Rating, for use in the EIS. (See Appendix C.)

Response to Comment. The Final EIS presents proposed commitments to wetland mitigation consistent with the guidelines established by the Illinois Department of Transportation's Wetlands Action Plan. The specific location and design of wetland mitigation will be developed in cooperation with the Illinois Department of Natural Resources. Efforts will be made to avoid the conversion of prime farmland to wetland use. The Preferred Alternative will not directly impact farmland.

Illinois Department of Natural Resources. The Illinois Department of Natural Resources (IDNR) requested the completion of additional surveys. The IDNR noted the need to ensure that plant surveys for threatened and endangered species were conducted in seasonal periods optimum for identification. Specific questions were raised for three species, the ear-leaved foxglove (*Tomanthera auriculata*), glade quillwort (*Isoetes butleri*) and prairie tout lily (*Erythronium mesochoreum*). In addition, the agency suggested continued monitoring of the Hine's emerald dragonfly, in order to determine the true population size.

The IDNR requested direct involvement with development of a prairie mitigation plan. The agency suggested that prairie mitigation ratio be 5:1 instead of the proposed ratio of 1:1 and that seed be obtained from existing prairie within 80 kilometers (50 miles) of the impact. The IDNR suggested an active mitigation plan for the entire corridor and that the site for mitigation of prairie loss be nearby in a protected area.

The letter noted that most of the Hitts Siding Prairie inventory area is a dedicated nature preserve. The IDNR requested clarification on the crossing at Hitts Siding, because part of the inventory area is within the railroad right-of-way and may be impacted.

Comments made previously on wetland areas were addressed by the Draft EIS. The IDNR requests additional review of material, noting concern for Hitts Siding Prairie, prairie mitigation and management, and data collection and survey of known quality prairie.

The letter then cited several "verbiage abnormalities."

Response to Comment. A detailed summary of survey sites and dates for *T. auriculata*, *I. butleri and E. mesochoreum* was provided to the IDNR on January 25, 2001. As noted above (U.S. Fish and Wildlife Service comments), Formal Consultation was initiated with the U.S. Fish and Wildlife Service regarding potential project impacts to the Hine's emerald dragonfly (*Somatochlora hineana*). The Consultation process was subsequently suspended. (See Response to Comment to U.S. Department of the Interior, Office of the Secretary, Office of Environmental Policy and Compliance.)

Changes in the project since issuance of the Draft EIS have resulted in a substantial reduction in the amount of potential impact to native vegetation in the project area. The Preferred Alternative will impact 0.25 hectares (0.61 acres) of native vegetation, 0.18 hectares (0.45 acres) of which is grade C+ or higher. A mitigation ratio of 1:1 is considered appropriate for this level of impact. As part of the final design phase of the project, detailed plans will be prepared for IDNR review and concurrence.

The Hitts Siding Natural Area is located between Chicago and Dwight, where no action is proposed as part of the Preferred Alternative. Consequently, potential impacts to 4.40 hectares (10.86 acres) of wetland and 0.46 hectares (1.13 acres) of Grade B prairie will be avoided.

The following information addresses the "verbiage abnormalities" identified in the Draft EIS:

- Midewin National Tallgrass Prairie was incorrectly described as a nature preserve in the Draft EIS.
- Edward R. Madigan State Park was incorrectly identified as Railsplitter State Park in the Draft EIS.
- Purpletop and plains three-awn grass were misidentified in the Draft EIS as purplegrass and plains three-wan grass, respectively.
- Technically defining wildlife as inclusive of both animals and plants may be appropriate in some cases. However, this approach is inconsistent with most popular and technical publications, regulatory guidance and public expectations. For example, even the IDNR website addresses only animal species in its section on wildlife of the Great Lakes Region. To avoid confusion, the Terrestrial Wildlife section has been re-titled Terrestrial Animals.
- It is acknowledged that insects often have host-specific relationships with native plant species that render prairie communities of special ecological value to invertebrate wildlife. However, impacts to native grassland have been dramatically reduced from those originally discussed in the Draft EIS, and the Final EIS is presented in a condensed format. Therefore, a discussion of species utilization of grassland habitats has not been provided in the Final EIS.
- The term "managed" has been dropped in discussions of Illinois Natural Areas Inventory, since this distinction was informational only and not intended as a means of distinguishing the relative value of INAI sites.

- It was suggested that Appendix A-1 be renamed "Common Vertebrate Species by Cover Type and Strata." However, this appendix is not included in the Final EIS.

- The replacement time of high quality prairie is addressed under Impacts in the Final EIS. The use of the term "restoration" in ecological literature runs the spectrum from returning the ecological integrity of a natural system from a previously disturbed state, to recreating viable natural communities where they have been removed or have not existed before. The degree to which either description is applicable will depend upon the pre-construction condition and the extent of project related disturbance. It was assumed conservatively, that all disturbance resulting from the project will result in a loss of the prevailing cover type. Accordingly, the text has been changed to acknowledge that recreating prairie from severely disturbed areas produces a much less diverse system than restoring modestly disturbed prairie communities.

Illinois Department of Public Health. The Illinois Department of Public Health, in a letter written on August 3, 2000, recognized air quality data presented in the Draft EIS and concurred that construction activities may adversely affect air quality over the short period by generating fugitive dust, but long-term health effects would not be expected.

Response to Comment. No response is required.

Illinois Farm Bureau. The Illinois Farm Bureau (IFB) requested, in a letter dated August 7, 2000, that the DOT consider the access needs of the rural population and accommodate them by providing safe and convenient public access across the railway. They recognize that proposed grade crossing treatments are an important aspect to the project, but feel that comments regarding specific treatments should come from the affected community or private crossing owner.

Response to Comment. As part of the Preferred Alternative, 24 grade crossings are recommended for closure. None of these crossings will be closed without the concurrence of the affected community. The Illinois Commerce Commission (ICC) may however improve, consolidate, or close crossings outside the purview of this project.

Illinois Nature Preserves Commission. The Illinois Nature Preserves Commission (INPC) noted, in a letter dated August 11, 2000, that a consultation with IDNR is required for actions that may negatively impact an Illinois Natural Area or dedicated Nature Preserve. The letter mentioned that there are eight dedicated Nature Preserves within 1.6 kilometers (one mile) of the corridor that are protected by the Illinois Natural Area Preservation Act (525 ILCS 30). The commission specifically noted avoiding disturbance at Denby Prairie, Paw Paw Woods, and Hitts Siding Prairie, since all three preserves are located along the project right-of-way.

The INPC recommended special vegetation management following project completion. Finally, the INPC recommended erosion control measures to ensure that increased sediments are not delivered to nearby wetlands and other natural communities.

Response to Comment. The Preferred Alternative will not impact any of the Illinois Natural Areas or Nature Preserves identified in the corridor. All proposed construction will take place outside of these areas.

Specific operation precautions in these areas are presented in the Final EIS. These include the establishment of no spray zones restricting the use of herbicides in area of the right-of-way where spray drift is likely. Revegetation of disturbed zones in the vicinity of the INAI sites will utilize native species and local ecotypes.

Site specific erosion and sediment control plans will be implemented in the proximity of the INAI sites in order to assure that the sites are not indirectly affected by soil runoff or sedimentation.

Illinois State Clearinghouse. In a letter dated July 28, 2000, the Illinois State Clearinghouse stated that it had received no comments during a 30-day review period, which indicates that the proposed project is apparently not in conflict with the State's plans, policies, and priorities.

Response to Comment. No response is required.

Illinois Historic Preservation Agency. The State Historic Preservation Office (SHPO) requested further documentation, in a letter dated October 13, 2000, including: defining the area of potential impact, a list of historic properties which could be potentially impacted, and criteria for adverse effect and efforts to seek public comment.

Response to Comment. As part of the Preferred Alternative, no historic structures will be displaced. Additionally, no visual impacts to historic property will occur as a result of providing enhanced warning devices at existing grade crossings within the existing right-of-way. IDOT will contact each community in the Chicago - St. Louis High-Speed Rail corridor south of Dwight to discuss the possibility of fencing along the railroad tracks. If a community is interested in having fencing installed, IDOT will coordinate with that community to determine the location, style, and height of the proposed fencing as well as whether the fencing will be on one or both sides of the railroad tracks. If an agreement can be reached, fencing will be installed. Fencing will not be installed unless agreed to by the local community. Finally, fencing will not be provided if it is determined that visual impacts to historic resources would result. Therefore. this project has no potential to have an effect on historic resources. As such, Section 106 obligations have been met. See Appendix D for concurrence from the SHPO.

8.1.3 Local Municipality Comments

Village of Aroma Park. On June 19, 2000 the Village Board of Aroma Park voted unanimously in favor of high-speed rail, supporting the Norfolk Southern alignment. The Village Mayor documented this action in a letter to Mayor Donald Green of Kankakee on June 26, 2000.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

City of Bloomington. The Mayor of Bloomington supported the high-speed rail project in a letter dated July 25, 2000. In a follow-up letter dated October 17, 2000 the mayor asked IDOT to keep the Miller Street crossing open for emergency vehicles and local residents.

Response to Comment. As part of the Preferred Alternative, the Miller Street (MP 127.19) crossing will remain open.

Village of Bourbonnais. The Village of Bourbonnais supported the high-speed rail on the Norfolk Southern alignment, in a letter dated August 4, 2000. Mayor Brooks strongly recommended grade separations at Roadway 6000 North and Larry Power Road. Additionally, the mayor requested further consideration be given to the location of any passenger-rail facility, recommending the interchange between Route 50 and I-57 as a more advantageous location.

Response to Comment. The Village of Bourbonnais is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Braceville. The Village of Braceville strongly objected to the closing of Main Street (MP 61.06). The mayor was concerned about emergency vehicle response time and the increase in traffic congestion at other rail crossings.

Response to Comment. The Village of Braceville is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Bradley. The Village of Bradley's Board of Trustees voted, on July 10, 2000, in favor of the high-speed rail through Kankakee County, using the Norfolk Southern alignment.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

Essex Township. Essex Township opposed the closing of 14000W (MP 115.32). The Township Supervisor was concerned about emergency vehicle access and slow-moving farm vehicles forced to use busier roads due to the closure.

Response to Comment. Essex Township is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Gardner. The Village of Gardner was opposed to closing railroad crossings. The Village was concerned about the safety of its citizens, emergency vehicle response time, and the general disruption to people's lives. The mayor recommended using the Norfolk Southern alignment, which does not pass through the Village. It was also noted that high-speed rail service would not benefit Gardner.

Response to Comment. In the Draft EIS, Division Street (MP 64.47) was the only crossing proposed for closure in the Village of Gardner. This recommendation has been changed as part of the Preferred Alternative in the Final EIS. This crossing is now proposed to remain open and be provided with quad gates.

Garfield Township. The Highway Commissioner for Garfield Township stated, in a letter dated September 29, 2000, that the township does not oppose the closing of Maher Road as long as a frontage road is constructed between Maher Road and Route 53. Additionally, the township does not oppose the closing of two private crossings as long as alternative access is provided.

Response to Comment. Since issuance of the Draft EIS, the recommendation for these crossings has changed. As part of the Preferred Alternative, the Maher Road crossing (MP 65.50) will remain open and be provided with quad gates. The private crossing at MP 66.60 has been closed; alternate access is available. The private crossing at MP 67.95 will remain open and be provided with conventional gates under the Preferred Alternative.

Goodfarm Township. The Road Commissioner for Goodfarm Township expressed concern over the closing of Stonewall Road (MP 69.09), Scully Road (MP 70.52), and Mazon Road (MP 71.14). The commissioner stated that if these roads were closed, farm equipment would be forced onto busier roads and increase the volume of traffic on roads with open crossings. Goodfarm Township requested these crossings remain open.

A second letter written on September 5, 2000 by the town clerk stated that Goodfarm Township agrees to the closing of the crossings at Filman Road (MP 68.33) and Gantzert Road (MP 69.74) if they receive $10,000 in compensation for each crossing.

Response to Comment. Since issuance of the Draft EIS, the recommendations for the crossings at Stonewall Road, Scully Road, and Mazon Road have changed. As part of the Preferred Alternative, all three of these crossings will remain open and be provided with quad gates. The crossings at Filman Road and Gantzert Road are being converted from public to private crossings. They will remain open and be provided with conventional gates.

Village of Grant Park. The Village of Grant Park, in a letter dated June 19, 2000, agreed with the need for a high-speed rail system through Kankakee County, using the Norfolk Southern alignment.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

Grundy County. The Grundy County Highway Department submitted a summary of opposition to grade crossing closures which reiterated comments received from individual villages and townships within the county. The Village of Braceville opposed the closing of both crossings within the Village. The Village of Gardner opposed the closure of any crossings within the Village. Garfield Township did not oppose the closure of Maher Road as long as a frontage road is built between Maher Road and Route 53 before closure. In addition, Garfield Township did not oppose the crossing closures at two private crossings (MP 66.60 and MP 67.95), as long as alternative access is provided for the farms affected. Goodfarm Township did not oppose the closure of Filman and Gantzert Roads if they receive $10,000 in compensation for each crossing. Closure of these crossings is being pursued by the ICC. Goodfarm Township opposed the closure of Old Mazon Road (MP 71.14).

Grundy County was not in favor of closing any crossings except those mentioned above.

Response to Comment. The recommendations for Grundy County vary by community. The Village of Braceville is located within the no action area of the Preferred Alternative, and therefore, no changes will be made to the existing crossings. South of Braceville, all of the crossings will remain open in Grundy County, except at MP 66.60. This crossing has been closed. Quad gates will be installed at the public crossings where speeds will exceed 90 mph (145 kph). Conventional gates will be provided at the private crossings that will remain open.

Herscher Community Unit School District No. 2. In communication dated November 2, 2000, the Herscher Community Unit School District No. 2 indicated that they object to the closure of any grade crossings within their school district. As part of this communication, the school district forwarded a copy of a resolution (dated May 9, 1994) outlining their objection.

Response to Comment. The Herscher Community Unit School District No. 2 is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Hopkins Park. The Village of Hopkins Park wrote to Donald Green, the Mayor of the City of Kankakee, on June 21, 2000, supporting the high-speed rail initiative using the Norfolk Southern alignment, which serves Kankakee County.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

City of Joliet. The City of Joliet endorsed the proposed high-speed rail project through the City of Joliet, using the Joliet Union Station, in a letter dated July 24, 2000. The Deputy City Manager stated that a grade separation will be required at Schweitzer Road (MP 41.44), due to considerable traffic from a new development on the west side of the tracks.

Response to Comment. The City of Joliet is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

City of Kankakee. The City Council and Mayor of Kankakee supported high-speed rail using the Norfolk Southern alignment, in a letter dated July 24, 2000. In addition, the city submitted resolutions, which support high-speed rail, from the Villages of Bradley, Aroma Park, Hopkins Park, Grant Park and the City of Momence, on July 27, 2000.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

Lemont Township. Lemont Township stated concerns over the CN-IC/UP alignment, in a letter dated July 31, 2000. The township expressed concerns about noise, vibration damage to historical buildings, safety, speed, quality of life, and scheduling. Lemont Township recommended use of another route and suggested the Norfolk Southern alignment.

Response to Comment. As part of the Preferred Alternative, no alternative alignment was selected between Chicago and Dwight. No action is proposed through this area. Before IDOT selects an alignment north of Dwight, additional evaluation will be conducted.

Village of Lemont. The Village of Lemont expressed concerns about impacts to their downtown, the potential to restrict the number of future commuter trains, increased speeds, the "close with frontage road" recommendation, fencing, and the limited benefits to Lemont residents, in a letter dated August 4, 2000. The Village of Lemont urged the state to choose an alternative route, which does not go through their village, suggesting the Norfolk Southern alignment.

Response to Comment. As part of the Preferred Alternative, no action is proposed between Chicago and Dwight. Therefore, no fencing would be installed and no changes to the existing grade crossing treatments would be made in Lemont.

City of Lockport. The City of Lockport opposed the CN-IC/UP alignment through its downtown historic district and continued to recommend using the Burlington Northern Santa Fe line, which runs outside the downtown area. The city stated that the train would alter the historic and natural landscape of the area and cause vibrations, damaging buildings and businesses located along the route. The letter also cited the Secretary of the Interior's Standards of rehabilitation and questioned the compatibility of the proposed action and the Standard. These comments were submitted via two letters: one submitted July 26, 2000 at the public hearing, and the second in a letter dated August 1, 2000.

Response to Comment. The Burlington Northern Santa Fe alignment was eliminated from consideration in the Draft EIS. The reasons for its elimination included the potential impacts to the I&M Canal, a Section 4(f) resource, and additional costs. (See Section 3.3.1 of the Draft EIS for additional information.)

As part of the Preferred Alternative, no action is proposed between Chicago and Dwight. Therefore, no fencing would be installed and no changes to the existing grade crossing treatments would be made in Lockport. Also, no changes in the number of trains operating or to the existing maximum operating speed are proposed through Lockport as part of the Preferred Alternative. Therefore, this project will not impact the Lockport Historic District. Potential noise and vibration impacts were evaluated as part of this project and no impacts were identified. It is extremely unlikely that the vibration caused by intercity passenger trains would cause damage to historic buildings.

Manteno Township. The Highway Commissioner of Manteno Township stated that closing the crossing at TR7A (MP 44.45), because it provides northerly access, would be a hardship for the town, and increase traffic at open crossings.

Response to Comment. Manteno Township is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Manteno. The Village of Manteno, in a letter dated July 21, 2000, indicated that high-speed rail service would not benefit their community, and they are opposed to any crossing closures in their Village.

Response to Comment. The Village of Manteno is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of Mokena. In their comment letter written on August 7, 2000, the Village of Mokena indicated that they are adamantly opposed to the Rock Island District Alignment.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

City of Momence. In a letter dated June 20, 2000 to Donald E. Green, Mayor of the City of Kankakee, the City of Momence endorsed the proposed high-speed rail using the Norfolk Southern alignment.

Response to Comment. No comment is required. An alignment between Chicago and Dwight has not been selected.

Norton Township Road Commission. The Norton Township Road Commission commented at the Kankakee Public Hearing that they object to the grade crossing closures proposed at 15000W (MP 116.33), 17000W (MP 118.34), and 19000W/TR 6 (MP 120.36).

Response to Comment. Norton Township is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Pilot Township Road District. The Pilot Township Road District submitted a comment at the Kankakee Public Hearing objecting to the grade crossing closures proposed at 9000W/TR60 (MP 110.12), 11000W (MP 112.32), 13000W/TR36 (MP 114.36), and 14000W (MP 115.32).

Response to Comment. Pilot Township is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Village of New Lenox. In a letter dated July 26, 2000, the Village of New Lenox had concerns regarding the responsibility for the cost of crossing improvements, impacts to commuter rail service related to speed of service and number of trains, bike and pedestrian trail plans, and noise from train horns.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

Reddick Community Fire Protection District. In letters by the Secretary of the District and the Fire Chief, the Reddick Community Fire Protection District stated its concerns about the closing of Roads 15000W (MP 116.33), 17000W (MP 118.34), and 19000W (MP 120.36) in Kankakee County. They were concerned about the increase in emergency response time if these crossings were to be closed as well as the safety implications of the relocation of farm equipment traffic to busier roadways.

Response to Comment. The Reddick Community Fire Protection District is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

City of St. Louis. The City of St. Louis strongly endorsed the high-speed rail from Chicago to St. Louis in a letter written July 14, 2000. The City is planning to construct a new multi-modal train station, which would serve high-speed rail.

Response to Comment. No response is required.

The South Suburban Mayors and Managers Association. The South Suburban Mayors and Managers Association, representing 38 communities and 600,000 residents in southern Cook and Will counties, supported the high-speed rail along the Norfolk Southern alignment in a letter dated July 31, 2000.

Response to Comment. No response is required. An alignment between Chicago and Dwight has not been selected.

Will County Governmental League. The Will County Governmental League, an association of thirty Will County communities, is supportive of high-speed rail, and suggested one or more station stops in Will County to serve the League members. The letter contained specific concerns from several different communities within Will County.

The City of **Braidwood** opposed the closing of the Center Street crossing (MP 57.71), because of the increased traffic on an already busy crossing, Illinois Route 113/53/129. Additionally, the City requested that the Illinois Route 113/53/129 crossing be widened.

The Village of **Elwood** opposed the closing of the Chicago Street crossing (MP 46.10), because of its heavy use and projected increase in population. The Village is concerned about public safety with increased emergency vehicle response times caused by closing Chicago Street.

The City of **Joliet** supported high-speed rail and a stop at Joliet Union Station. The City stated that a grade separation will be required at Schweitzer Road (MP 41.44), as a substantial development is expected west of the tracks.

The Village of **Lemont** expressed concerns about grade crossing closures and the potential disruption of its historic district.

The City of **Lockport** supported the high-speed rail using the Burlington Northern Santa Fe alignment, avoiding the historic district in downtown Lockport.

The Village of **Peotone** opposed the closing of Corning Street (MP 40.55), because it is a main thoroughfare in town. The Village was concerned about public safety with the closing of Corning Street.

The City of **Wilmington** opposed the closing of the crossing at Peotone Road (MP 51.94), due to increased congestion in the center of town. The City of Wilmington also requested a station stop in the City.

Response to Comment. Will County is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered.

Will County. The Will County Land Use Department was in full support of the high-speed rail. The Planning Division stated a slight preference for the Norfolk Southern alignment. However, the letter stated that the Rock Island District is advantageous because of the fewer number of impacted sites. It is of great importance to the Planning Division that the three major hubs of activity within Will County (the City of Joliet, the Joliet Arsenal, and South Suburban Airport) receive efficient service from high-speed rail.

Response to Comment. Will County is located between Chicago and Dwight. As part of the Preferred Alternative, no alternative alignment has been selected through this area, and no action is proposed. At the time when an alternative alignment is selected, all of the grade crossing treatment recommendations along the selected alignment will be reconsidered. No crossings will be closed without the consent of the local community.

8.1.4 Operating Railroad Comments

Amtrak. Amtrak stated its full support of the high-speed rail project, in a letter dated August 7, 2000. In the letter, Amtrak supported grade crossing closure and pledged continued support of programs to close more crossings. Amtrak supported efforts to increase adequate fencing and grade crossing treatments in urbanized areas.

Amtrak discussed the various alignments, opposing the Randolph Street Station because it will not allow connection to other communities that are part of the Midwest Regional Rail System. At this time, Amtrak supported the existing alignment, the CN-IC/UP route.

Finally, Amtrak requested that warning devices operate for at least thirty seconds before trains reach crossings, to ensure public safety.

Response to Comment. As part of the Preferred Alternative, no alternative alignment has been selected between Chicago and Dwight. In the interim, Chicago Union Station would be used for high-speed passenger trains. IDOT will work with Amtrak and the ICC regarding the appropriate grade crossing warning time.

Canadian National-Illinois Central. Canadian National-Illinois Central (CN-IC) owns and operates two of the three proposed alignments north of Dwight under consideration for high-speed rail. CN-IC expressed concerns over lack of discussion in the Draft EIS of the impact of high-speed rail on freight train travel and scheduling. CN-IC believes that the addition of 16 high-speed trains per day on either of their line segments will restrict their ability to provide predictable and timely freight service.

Response to Comment. All CN-IC track considered for high-speed rail service is located north of Dwight. At this time, no alternative alignment has been selected between Chicago and Dwight. Before IDOT selects an alignment north of Dwight, additional evaluation will be conducted. As part of the Preferred Alternative, no additional passenger trains will operate on CN-IC track.

Kansas City Southern Lines (Gateway Western). Kansas City Southern Railway, owner of Gateway Western, jointly owns the track between Godfrey (south of Alton) and East St. Louis. The Railway stated concerns about high-speed rail and the potential for grade crossing accidents and, therefore, supported the closing of crossings wherever possible.

Kansas City Southern questioned the impact of high-speed rail on freight train operations, the track upgrade requirements and who will fund the improvements. The Railway also questioned the dispatching arrangement on the line.

Response to Comment. The operation of high-speed rail service on the line may cause some freight train delay because of the need to establish signals for passenger train movement further in advance of the train because of longer braking distances for faster trains. IDOT has anticipated additional sidings for freight trains to mitigate that potential impact. In some cases, these additional sidings may improve freight operations.

IDOT has always believed that the cost of high-speed rail would not be borne by the freight railroads, and that view has not changed. Where freight railroad owners are asked to perform additional upgrading and maintenance, IDOT plans that the freight railroad owners will be properly compensated.

IDOT has agreed that there will be a capacity analysis completed before the number of trains is increased beyond three round trips per day. In addition to the physical capacity improvements that may be required as a result of that capacity analysis, IDOT will ensure that the institutional issue of fragmented dispatching based on historical ownership is evaluated.

Metra. Metra expressed concerns and recommendations for all three alignments between Dwight and Chicago. The letter recommended additional track crossovers to accommodate high-speed rail, commuter trains, and freight trains. They also recommended double tracking over the entire corridor in order to make stops on schedule. Metra had concerns about the volume of freight traffic in the corridor, especially Heritage Corridor, and mentioned that freight trains were not as much a problem on the Rock Island District Line.

The letter suggested increased trackside signals so that high-speed rail trains would be able to pass commuter and freight traffic to keep on schedule. Metra also recommended that speed limits be restricted to current speeds north of Joliet on the CN-IC/UP and Rock Island District alignments, due to the volume of travel by other trains. They questioned the location of a maintenance facility for the new high-speed trains, and suggested either Randolph or LaSalle Street if Amtrak does not have capacity at the 12th Street facility.

Regarding the CN-IC/UP alignment, Metra stated that improvements are needed at Joliet Station to prevent passengers from crossing two live tracks. They stated that there was no discussion of way freights, for local deliveries, when considering high-speed rail reliability. In Lockport, Metra stated that trains would most likely not be able to travel any faster than current conditions because of the Lockport historic district. In terms of terminal capacity, Metra stated that the CN-IC/UP alignment would be the best, however, there were concerns that increasing the number of Heritage Corridor runs would reduce terminal capacity.

Regarding the Rock Island District alignment, Metra suggested that a triple track line will probably be required between LaSalle Street Station and south of Gresham. Metra stated its plans to upgrade the SouthWest Service, which were not taken into account in the Draft EIS. Metra preferred a separate terminal/station at LaSalle Street. They stated that LaSalle Street Station is lacking facilities required for intercity travel, such as baggage handling, ticketing space, etc. The letter also questioned which maintenance facility will be used by the new trains.

In regard to the Norfolk Southern alignment, Metra stated that this could be the best route for high-speed rail because it has fewer grade crossings and only one rail-to-rail crossing. Metra stated there would be conflicts with Metra Electric Service if the new airport is opened. The letter stated that Randolph Street Station capacity was not addressed and Metra believes there is little rush-hour capacity remaining at the station. In addition, Metra commented that the Randolph Street Station lacks facilities for intercity travel. Finally, Metra suggested discussing the proposed Grand Crossing, which would enable trains to serve Union Station as opposed to Randolph Street Station.

Response to Comment. All Metra track considered for high-speed rail service is located north of Dwight. At this time, no alternative alignment has been selected between Chicago and Dwight. Before IDOT selects an alignment north of Dwight, additional evaluation will be conducted. As part of the Preferred Alternative, no additional passenger trains will operate on Metra track or where Metra provides service.

Norfolk Southern. Norfolk Southern (NS) stated that freight train activity could not coexist with high-speed rail on the same line. NS requested that the Final EIS include projected freight traffic growth on NS as many years into the future as passenger growth has been projected. The Railway suggested that more infrastructure is needed, specifically at "WR" in Granite City, between Kankakee and Dwight along the Norfolk Southern alignment, and at Englewood along the Rock Island District alignment. The letter stated that NS will retain ownership of track, right-of-way, and dispatching control of all trains operating between Dwight and Kankakee.

Response to Comment. The NS track considered for high-speed rail service is located north of Dwight. At this time, no alternative alignment has been selected between Chicago and Dwight. Before IDOT selects an alignment north of Dwight, additional evaluation will be conducted.

8.1.5 Additional Agency Coordination

The National Environmental Policy Act of 1969 (NEPA) and Section 404 of the Clean Water Act allow for a joint regulatory review process used by the Federal Highway Administration (FHWA) and IDOT to encourage early participation by federal and state resource agencies in an attempt to more efficiently complete the regulatory requirements of both NEPA and Section 404. The joint NEPA/404 process establishes interactive coordination between participating agencies at critical decision points during project development. These critical points, called concurrence points, are built into the process in an attempt to reach agreement among regulatory agencies on important project issues. Concurrence by an agency at a particular point does not mean the agency agrees that the project will be built or a permit will be granted. Rather, it means that the project can be advanced to the next step. Similarly, non-concurrence does not preclude FHWA and IDOT from exercising its right to go forward with project development; however, gaining concurrence does preclude revisiting decisions agreed to earlier in project development.

There are three concurrence points during this process. These include concurrence on:

1. purpose and need;
2. alternatives carried forward for detailed study; and
3. the Preferred Alternative.

Federal and state resource agencies provided concurrence on the first two points prior to issuance of the Draft EIS. On April 19, 2002, the Preferred Alternative for this project was presented at a NEPA/404 merger meeting. All agencies in attendance provided concurrence on the Preferred Alternative.

8.2 PUBLIC COORDINATION

This section focuses on comments received from citizens and interest groups on the Draft EIS and at the Public Hearings. The Public Hearings for this project were held in the cities of Alton, Bloomington, Chicago, Joliet, Kankakee, and Springfield, Illinois from July 24, 2000 until August 1, 2000. Public coordination conducted prior to issuance of the Draft EIS is documented in Section 8 of that document.

A total of 447 comments were received 468 signatures. These comments were received in five different formats:

- **Comment Form** - Comments written on the comment sheet provided at each of the Public Hearings;
- **Court Reporter** - Oral comments transcribed by a court reporter at each of the Public Hearings;
- **E-mail** - Letters sent via e-mail to the Illinois Department of Transportation;
- **Letter** - Letters delivered at each of the Public Hearings or sent via U.S. mail; and
- **Rail Transportation Team Form Letter** - Pre-printed letter indicating support for the Norfolk Southern alignment from residents of the City of Kankakee.

Table 8.2-1 illustrates the distribution of comments received, classified by type. The Table 8.2-2 illustrates the source of the public comments received by type and also by where it was received.

In order to summarize the public comments, they were grouped by major category. All comments received are contained in the Comments on the Draft EIS Report. Throughout the following text, percentages of comments addressing a particular topic are provided to generally characterize the amount of interest in a topic or alternative.

Table 8.2-1
COMMENTS BY TYPE

Comment Type	Number Received	Number of Signatures
Comment Form	153	160
Court Reporter	86	87
E-mail	48	51
Letter	95	104
Rail Transportation Team	65	66
Total	**447**	**468**

Table 8.2-2
COMMENTS BY SOURCE

Comment Type	Alton	Bloomington	Chicago	Joliet	Kankakee	Springfield	Mail	Total	Percentage (%)
Comment Form	3	7	10	3	50	6	81	160	34.2
Court Reporter	13	7	19	10	27	11	---	87	18.6
Letters	4	2	15	5	3	3	72	104	22.2
E-mail	---	---	---	---	---	---	---	51	10.9
Rail Trans. Team	---	---	---	---	---	---	66	66	14.1
						Total		**468**	

Note: Alton, Bloomington, Chicago, Joliet, Kankakee and Springfield are the locations of the Public Hearings where comments were received. Mail was received at IDOT's central office in Springfield. E-mail was received at the address established specifically for comments regarding this project.

In order to summarize the public comments, they were grouped by major category. All comments received are contained in the Comments on the Draft EIS Report. Throughout the following text, percentages of comments addressing a particular topic are provided to generally characterize the amount of interest in a topic or alternative.

Of the 468 comments received, 79 percent (371) of the comments indicated support for high-speed rail, seven percent (32) indicated opposition to the proposed project, and 14 percent (65) did not indicate a preference. Residents in some communities, such as Dwight and Gardner, do not believe that high-speed rail service would be a benefit to their community.

PURPOSE AND NEED

Balanced Transportation System. Twenty-seven percent of the comments received indicated there is a need for an alternative to auto and air travel in the Chicago - St. Louis corridor. These comments focused on the benefit of a more balanced transportation system, citing high-speed rail as a viable alternative to air and auto travel in the corridor. Specifically, many individuals stated that decrease in highway and air travel was a benefit.

Cost Benefit. Two percent of the comments indicated the project was a waste of taxpayer money and the cost of ridership would be too much for the "average" individual to afford. These individuals stated that the overall cost was too much when the burden would be on the taxpayers.

Response to Comment. The purpose and need for the high-speed rail project is documented in the Draft EIS. The purpose of the project is to enhance the passenger transportation network in the Chicago – St. Louis corridor. To do so, the project must result in reduced travel time, improved service reliability, improved safety and benefits to the human environment. As documented in Section 3.2 of this Final EIS, the Preferred Alternative meets the purpose and need for the project. FHWA, FRA, and IDOT believe that the benefits to travelers and the environment justify the project. While a fare structure was assumed as part of the ridership forecasting process for this project, the actual fares for a high-speed rail passenger trip have not yet been determined.

ALTERNATIVE ALIGNMENTS

Forty-five percent of all the comments indicated a preference for one alignment, where as 51 percent did not. Four percent of the comments discussed the alignments in general and gave preference to more than one alignment or indicated opposition to an alignment.

CN-IC/UP Alignment. Approximately four percent of all comments received were in favor of the CN-IC/UP alignment. The reasons cited for supporting this alternative were:

- Direct access to Union Station;
- Shortest and most direct route;
- Reduced potential for urban sprawl;
- Lower cost than other alignments;
- Serves Joliet with a larger population than Kankakee;
- Economically beneficial for local communities; and
- Decreased air pollution.

Those in support of the CN-IC/UP alignment expressed a number of concerns with the alignment that may need to be addressed through mitigation measures or other studies, including:

- Displacement of 11 residences;
- Potential impacts to Lockport's historic district and the potential to use the BNSF alignment through Lockport; and
- Concern about the closing of so many Chicago crossings.

Two percent of all comments were opposed to the CN-IC/UP alignment, citing the following reasons:

- Will adversely affect downtown historic district in Lockport; and
- Potential concerns near the CITGO Refinery.

Norfolk Southern Alignment. Thirty-eight percent of all comments received were in favor of the Norfolk Southern alignment, including all of the Rail Transportation Team comments (66 total comments.) Those in support of the Norfolk Southern alignment gave the following reasons:

- Prevents urban sprawl;
- Economic benefit for local community;
- New transportation alternative for Kankakee County;
- Beneficial if third airport is built in Peotone;
- Other alternatives have existing train service whereas Kankakee does not;
- Will help real estate business in Kankakee;
- Provides a better tax base for the community;
- Less grade crossing closures than other alignments;
- Does not impact Dwight;
- Less impact on towns along alignment;
- More community support along alignment; and
- Ridership will be greater than other alignments.

A few of the comments in support of the Norfolk Southern alignment expressed a concern that the train did not connect to Chicago Union Station. Suggestions included reconstructing the "Grand Crossing" in Chicago to connect the alignment to Union Station.

Less than one percent of the comments indicated opposition to the Norfolk Southern alignment and cited the following reasons:

- Cost is greater than other build alternatives;
- Alignment is not direct and adds too much time to round trip; and
- Threatens high quality prairie.

Rock Island District Alignment. Approximately two percent of all comments received were in favor of the Rock Island District Alignment. The reasons cited for supporting this alternative were:

- No undesirable impacts;
- Promotes tourism;
- Number of grade crossing closures are less than other alignments;
- Joliet has a larger population to serve than Kankakee;
- Direct route; and
- Does not go through historic district in downtown Lockport.

A few of the comments in support of the Rock Island District expressed a concern that the train did not connect to Chicago Union Station. Suggestions included adding a connecting track at 63rd or 79th Street in Chicago that would allow direct access to Union Station.

Less than one percent of all comments were opposed to the Rock Island District Alignment, noting the following reasons:

- Does not access Union Station.

Response to Comment. There is no need to respond to these comments at the present time. As part of the Preferred Alternative, no alternative alignment has been selected between Chicago and Dwight. In the interim, the current Amtrak route will be used. Once a decision has been made, IDOT will respond to the comments

related to the selected alignment. South of Dwight, the Preferred Alternative includes the alignment used by the existing Chicago – St. Louis Amtrak service.

Additionally, when an alignment is selected between Chicago and Dwight, the importance of direct access into Chicago Union Station (CUS) will be reevaluated. Terminating at CUS would allow high-speed rail passengers to connect to other Amtrak trains. Of the three alternative alignments under consideration north of Dwight, only the CN-IC/UP alignment serves CUS. New connections would have to be constructed for either the Norfolk Southern or Rock Island District alignments to provide direct access to CUS.

OPERATING SPEEDS

Four percent of all comments received discussed proposed operating speeds. Of that four percent, 55 percent were against the proposed project, 40 percent were in favor of the proposed project, and five percent had no opinion. Those that were in favor of the proposed plan cited the following advantages of high-speed rail:

- Shorter travel time between St. Louis and Chicago; and
- Good transportation alternative to car due to reduced travel time.

The comments received opposed to high-speed rail noted the following objections to the increased speed of the trains:

- Adverse impacts to property near tracks;
- Safety concerns;
- Derailment concerns; and
- Increased vibration will adversely impact the Lockport historic district.

Response to Comment. An accident analysis was conducted for the Draft EIS. Results indicate that predicted accidents would be reduced as a result of this project because many grade crossing warning devices will be enhanced. No impacts (e.g., noise or vibration) associated with increased train speeds were identified as a result of this project.

GRADE CROSSINGS

Almost 14 percent of all comments received expressed concerns regarding proposed grade crossing treatment recommendations. The comments about grade crossing closures consisted of the following remarks:

- Increased emergency vehicle response time;
- Farm vehicle traffic will be forced onto busier roads, causing safety problems;
- Limited access to farms that lie on both sides of the tracks;
- Closure bisects business community in town;
- Frontage road will act as dumping ground;
- Increases miles traveled per year on farming equipment and local vehicles;
- Closure of pedestrian crossing in Dwight will impact residents at Fox Development Center;
- Concerns about responsibility of maintaining frontage road; and
- Crossing closure will cause home to be landlocked.

Response to Comment. Between Dwight and Chicago, no action is proposed as part of the Preferred Alternative. Therefore, the existing grade crossing warning devices will be retained. South of Dwight, if a comment indicated opposition to a particular grade crossing treatment recommendation, that recommendation was changed. Table 8.2-3 lists all grade crossings that were commented on by the public. The table also includes the following information for each of these crossings: the existing crossing device, the Draft EIS recommendation, and the new recommendation. No property would be landlocked as a result of the recommendations made.

ECONOMIC BENEFIT

Of the comments received, 35 percent indicated that the high-speed rail project would bring about some form of economic benefit. Comments included the following:

- Encourage economic development in local communities along route;
- Help local real estate market;
- Increase jobs for construction;
- Provide a better tax base for local communities; and
- Elevate quality of life for the community.

Most of these comments were regarding the City of Kankakee.

ENVIRONMENTAL IMPACT

Almost 30 percent of all comments received discussed the high-speed rail's environmental benefits, including the following comments:

- Rail has less environmental impact than highway or air travel;
- Decreases air pollution by reducing the number of cars on the road; and
- Increases energy efficiency through rail use instead of car or air travel.

AIR QUALITY

Many comments cited the environmental benefit to the community, specifically the decrease in air pollution when people use the more energy efficient high-speed rail as opposed to automobile or airplane travel.

Table 8.2-3
GRADE CROSSING TREATMENTS COMMENTED ON BY THE PUBLIC

Milepost	Existing Crossing Device	DEIS Recommendation	New Recommendation
	Chicago to Dwight – Canadian National-Illinois Central/Union Pacific Alignment		
51.94	Flashing lights	Close	No Action
54.85	Flashing lights	Conv. Gates	No Action
57.71	Flashing lights	Close	No Action
	Chicago to Dwight – Norfolk Southern Alignment		
101.41	Cantilever flashing lights	Conv. Gates	No Action
105.10	None	Elec. Lock Gates	No Action
108.20	None	Close w/ Frontage Road	No Action
112.32	Crossbucks	Close	No Action
115.32	Flashing lights	Close	No Action
118.34	Crossbucks	Close	No Action
120.36	Crossbucks	Close	No Action
	Dwight to St. Louis – One alignment considered		
71.14	Crossbucks	Close	Quad Gates
73.55	None	Close	Ped. Bell & Flashers
75.93	Crossbucks	Conv. Gates	Quad Gates
104.30	None	Close w/ Frontage Road	Conv. Gates
110.10	Gates	Close	Quad Gates
114.80	None	Close w/ Frontage Road	Conv. Gates
147.60	Flashing lights	Grade Sep.	Quad Gates
169.80	Gates	Close w/ Frontage Road	Quad Gates
221.30	None	Close	Conv. Gates
226.20	Stop sign	Conv. Gates	Conv. Gates
230.10	None	Close w/ Frontage Road	Conv. Gates
266.25	None	Close w/ Frontage Road	Close w/ Frontage Road
268.20	None	Close w/ Frontage Road	Conv. Gates

Note: Some comments received referred to crossings that were not proposed for closure in the Draft EIS. Most of the comments received about the Close w/Frontage Road recommendations were regarding construction, operation, and maintenance, and were not in opposition. A number of comments were received regarding a crossing numbered "621-172". No crossing in the Chicago - St. Louis High-Speed Rail corridor is identified by this number.

SECTION 9

Literature Cited

Section 9
LITERATURE CITED

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APPENDIX **A**

Environmental Inventory Tables

Appendix A
ENVIRONMENTAL INVENTORY TABLES

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APPENDIX A-1

TABLE 2.6-2
SUMMARY OF PHYSICAL FEATURES OF
PERENNIAL STREAMS IN THE HIGH-SPEED RAIL PROJECT AREA

Table 2.6-2
SUMMARY OF PHYSICAL FEATURES OF PERENNIAL STREAMS IN THE HIGH-SPEED RAIL PROJECT AREA

Approx. Milepost	River Basin[1]	Water Feature	County	Bottom Substrate	Approx. Stream Velocity (ft/sec)	Approx. Stream bed Width (ft)	Turbidity	Approx. Depth (ft)	Other Features
IC-Joliet Line/Union Pacific Railroad									
32-36	DPGL	I&M Canal	Will	n/s	n/s	n/s	n/s	n/s	
33.80	DPGL	Fraction Run	Will	n/s	n/s	n/s	n/s	n/s	
38.20	DPGL	Hickory Creek	Will	silt, sand, gravel	0.3	70	n/s	0.4	pool community, bank stability poor, stream channelized
38.90	DPGL	Sugar Run	Will	n/s	n/s	n/s	n/s	n/s	
43.00	DPGL	Cedar Creek	Will	silt, cobble		12	Moderate	0.5	pool community
44.50	DPGL	Jackson Creek	Will	sand, silt, cobble	0.2	35	n/s	0.5-1.0	riffle/pool community, some channelization, fair streamside cover
47.30	DPGL	Grant Creek	Will	n/s	n/s	n/s	n/s	n/s	
49.40	KAN	Prairie Creek	Will	sand, gravel, cobble	0.3	10	Low	1.5	bank stability and streamside cover good east of right-of-way, channel widened west of right-of-way for cattle watering
52.50	KAN	Forked Creek	Will	silt, cobble	0.5	12	Moderate	1.0	bank stability poor
52.80	KAN	Kankakee River	Will	sand, gravel	n/s	n/s	Low	n/s	riffle community, outstanding fishing waters, proposed for state wild and scenic status
64.07	IL	Mazon River	Grundy	n/s	n/s	n/s	n/s	n/s	
67.26	IL	Unnamed tributary, Mazon River	Grundy	n/s	n/s	n/s	n/s	n/s	
72.50	IL	Gooseberry Creek	Livingston	n/s	n/s	n/s	n/s	n/s	
86.65	IL	Wolf Creek	Livingston	n/s	n/s	n/s	n/s	n/s	
91.13	IL	North Creek	Livingston	n/s	n/s	n/s	n/s	n/s	
92.20	IL	Vermilion River	Livingston	n/s	n/s	n/s	n/s	n/s	
93.87	IL	Turtle Creek	Livingston	n/s	n/s	n/s	n/s	n/s	
97.35	IL	Rooks Creek	Livingston	n/s	n/s	n/s	n/s	n/s	

Approx. Milepost	River Basin[1]	Water Feature	County	Bottom Substrate	Approx. Stream Velocity (ft/sec)	Approx. Stream bed Width (ft)	Turbidity	Approx. Depth (ft)	Other Features
100.30	IL	Unnamed channel	Livingston	n/s	n/s	n/s	n/s	n/s	
111.25	IL	Mackinaw River	McLean	sand, silt, gravel, cobble	0.2	50	Moderate	1.0	pool/riffle community, streamside cover good, bank stability fair, outstanding fishing waters, proposed for state wild and scenic status
117.10	IL	Money Creek	McLean	sand, silt	n/s	40	High	0.5-1.0	bank stability fair
127.50	SAN	Goose Creek	McLean	silt, cobble	n/s	25	Low	1.0-1.5	
136.55	SAN	Timber Creek	McLean	sand, silt, few cobbles	n/s	40	High	n/s	bank stability fair-poor, stream channelized west of railroad tracks
144.05	SAN	Clear Creek	Logan	n/s	n/s	n/s	n/s	n/s	
149.50	SAN	Kickapoo Creek	Logan	n/s	n/s	n/s	n/s	n/s	
158.20	SAN	Salt Creek	Logan	silt, sand, gravel	<0.1	40	High	0.5-1.0	sand bars present, bank stability fair
167.30	SAN	Elkhart Slough	Logan	silt	n/s	15	n/s	n/s	water pooled east of bridge, normal water level approx. 8" above current water level
172.35	SAN	Wolf Creek	Logan	n/s	n/s	n/s	n/s	n/s	
176.00	SAN	Fancy Creek	Sangamon	n/s	n/s	n/s	n/s	n/s	
180.10	SAN	Sangamon River	Sangamon	n/s	n/s	n/s	n/s	n/s	priority/outstanding fishing waters
192.00	SAN	Lake Springfield	Sangamon	n/s	n/s	n/s	n/s	n/s	
197.80	SAN	Panther Creek	Sangamon	silt, few cobbles, debris	n/s	n/s	n/s	n/s	no flow, water pooled west side of bridge
202.70	SAN	Trib. to Sugar Creek	Sangamon	n/s	n/s	n/s	n/s	n/s	concrete channel
203.10	SAN	Sugar Creek	Sangamon	silt, gravel, cobble	<0.1	25	Moderate	0.5	bank stability fair, streamside cover fair
218.10	SAN	Anderson Branch	Macoupin	silt, sand cobble	n/s	7	n/s	n/s	no water present at time of site visit
233.60	MSC	Macoupin Creek	Macoupin	n/s	n/s	n/s	n/s	n/s	priority/outstanding fishing waters

Approx. Milepost	River Basin[1]	Water Feature	County	Bottom Substrate	Approx. Stream Velocity (ft/sec)	Approx. Stream bed Width (ft)	Turbidity	Approx. Depth (ft)	Other Features
236.10	MSC	Coop Branch	Macoupin	n/s	n/s	n/s	n/s	n/s	bank stability fair NE bank heavily deposited, flow only from one section under bridge
254.00	MSC	Coal Branch Creek	Madison	n/s	n/s	n/s	n/s	n/s	
258.00	MSC	Wood River	Madison	sand & silt	n/s	n/s	n/s	n/s	
266.70	MSC	Cahokia Channel	Madison	n/s	n/s	n/s	n/s	n/s	
282.00	MSC	Mississippi River	St. Clair	n/s	n/s	n/s	n/s	n/s	
Illinois Central Mainline									
16.80 & 18.50	DPGL	Little Calumet River	Cook	n/s	n/s	n/s	n/s	n/s	
20.80	DPGL	Calumet Union Drainage Canal	Cook	n/s	n/s	n/s	n/s	n/s	
21.60	DPGL	Calumet Sag Channel	Cook	n/s	n/s	n/s	n/s	n/s	
27.10	DPGL	Butterfield Creek	Cook	n/s	n/s	n/s	n/s	n/s	
37.25	KAN	Rock Creek	Will	Sand, gravel, cobble	1.0	16	Low	0.5	bank stability fair, streamside cover fair
47.90	KAN	South Branch Rock Creek	Kankakee	silt, few cobbles	0.5	65	Moderate	1.0-1.5	bank stability fair-poor, riffle community, streamside cover fair
Norfolk Southern									
101.72	KAN	Kankakee River	Kankakee	sand, gravel, bedrock	n/s	n/s	Low	n/s	outstanding fishing waters, proposed for state wild and scenic status
110.20	KAN	Lehigh Raymond Run	Kankakee	n/s	n/s	n/s	n/s	n/s	
112.00	KAN	Bertrand Branch	Kankakee	n/s	n/s	n/s	n/s	n/s	
113.10	KAN	E. Branch Horse Creek	Kankakee	silt, sand, cobble	0.3	15	Moderate	1.5	stream channelized, streamside cover and bank stability poor, riffle/pool community, but heavy silt deposits

Approx. Milepost	River Basin[1]	Water Feature	County	Bottom Substrate	Approx. Stream Velocity (ft/sec)	Approx. Stream bed Width (ft)	Turbidity	Approx. Depth (ft)	Other Features
114.66	KAN	W. Branch Horse Creek	Kankakee	sand, silt, gravel	0.3	25	Moderate	1.0	channelized south of railroad tracks, streamside cover and bank stability poor to south, good to north, riffle/pool community
117.80	IL	Crane Creek	Kankakee	n/s	n/s	n/s	n/s	n/s	
117.80	IL	Granary Creek	Kankakee	n/s	n/s	n/s	n/s	n/s	
121.00	IL	Reddick Run	Kankakee	n/s	n/s	n/s	n/s	n/s	
122.50	IL	Unnamed tributary to Reddick Run	Livingston	n/s	n/s	n/s	n/s	n/s	
123.90	IL	E. Fork Mazon River	Livingston	n/s	n/s	n/s	n/s	n/s	
125.00	IL	Gooseberry Creek	Livingston	n/s	n/s	n/s	n/s	n/s	
126.40	IL	Unnamed tributary to Gooseberry Creek	Livingston	n/s	n/s	n/s	n/s	n/s	

Source: Huntington and Echeverria 1991, IEPA 1994, 1995a, 1995b, 2000, IDNR 1996c.

1 – Major River Basins:
DPGL - Des Plaines/Great Lake River Basin
KAN - Kankakee River Basin
IL - Illinois River Basin
SAN - Sangamon River Basin
MSC - Mississippi South Central River Basin

n/s – Not surveyed because these areas were outside the areas of proposed construction.

APPENDIX A-2

TABLE 2.6-3
SUMMARY OF WATER QUALITY FEATURES OF PERENNIAL STREAMS IN THE HIGH-SPEED RAIL PROJECT AREA

Table 2.6-3
SUMMARY OF WATER QUALITY FEATURES OF PERENNIAL STREAMS IN THE HIGH-SPEED RAIL PROJECT AREA

Approx. Milepost	River Basin[1]	Water Feature	County	Approx. Drainage Area (sq. mi.)	IEPA Designated Use[2]	IEPA Biological Stream Character	Water Quality[3]	ACOE Regulatory Jurisdictional Boundaries
IC-Joliet Line/Union Pacific Railroad								
32-36	DPGL	I&M Canal	Will	55	N/A	N/A	N/A	Chicago
33.80	DPGL	Fraction Run	Will	6	full support	N/A	good	Chicago
38.20	DPGL	Hickory Creek	Will	109	partial minor	Class C	fair	Chicago
38.90	DPGL	Sugar Run	Will	15	partial minor	Class D	fair	Chicago
43.00	DPGL	Cedar Creek	Will	7	full support	N/A	good	Chicago
44.50	DPGL	Jackson Creek	Will	47	full support	Class B	good	Chicago
47.30	DPGL	Grant Creek	Will	9	partial moderate	Class D	fair	Chicago
49.40	KAN	Prairie Creek	Will	45	full threatened	N/A	good	Chicago
52.50	KAN	Forked Creek	Will	137	full support	Class C	good	Chicago
52.80	KAN	Kankakee River	Will	4953	full support	Class B	good	Chicago
64.07	IL	Mazon River	Grundy	524	full support	Class A	good	Rock Island
67.26	IL	Unnamed tributary, Mazon River	Grundy	N/A	N/A	N/A	N/A	Rock Island
72.50	IL	Gooseberry Creek	Livingston	N/A	full support	N/A	good	Rock Island
86.65	IL	Wolf Creek	Livingston	N/A	full support	Class B	fair	Rock Island
91.13	IL	North Creek	Livingston	N/A	N/A	N/A	N/A	Rock Island
92.20	IL	Vermilion River	Livingston	1331	partial minor	Class A	fair	Rock Island
93.87	IL	Turtle Creek	Livingston	N/A	full support	N/A	good	Rock Island
97.35	IL	Rooks Creek	Livingston	17	full support	Class B	good	Rock Island
100.30	IL	Unnamed channel	Livingston	N/A	N/A	N/A	N/A	Rock Island
111.25	IL	Mackinaw River	McLean	309	full support	Class A	good	Rock Island
117.10	IL	Money Creek	McLean	49	full support	Class C	fair	Rock Island
127.50	SAN	Goose Creek	McLean	N/A	full support	N/A	good	Rock Island
136.55	SAN	Timber Creek	McLean	N/A	partial minor	Class C	fair	Rock Island
144.05	SAN	Clear Creek	Logan	N/A	full support	Class D	good	Rock Island
149.50	SAN	Kickapoo Creek	Logan	31	full support	Class B	good	Rock Island
158.20	SAN	Salt Creek	Logan	72	full support	Class C	good	Rock Island

Approx. Milepost	River Basin[1]	Water Feature	County	Approx. Drainage Area (sq. mi.)	IEPA Designated Use[2]	IEPA Biological Stream Character	Water Quality[3]	ACOE Regulatory Jurisdictional Boundaries
167.30	SAN	Elkhart Slough	Logan	N/A	N/A	N/A	N/A	Rock Island
172.35	SAN	Wolf Creek	Logan	N/A	partial minor	Class D	fair	Rock Island
176.00	SAN	Fancy Creek	Sangamon	N/A	full support	N/A	good	Rock Island
180.10	SAN	Sangamon River	Sangamon	655	partial minor	Class B	fair	Rock Island
192.00	SAN	Lake Springfield	Sangamon	N/A	full support	N/A	good	Rock Island
197.80	SAN	Panther Creek	Sangamon	24	full support	Class C	good	Rock Island
202.70	SAN	Trib. to Sugar Creek	Sangamon	N/A	N/A	N/A	fair	Rock Island
203.10	SAN	Sugar Creek	Sangamon	100	partial moderate	Class C	fair	Rock Island
218.10	SAN	Anderson Branch	Macoupin	N/A	N/A	N/A	N/A	St. Louis
233.60	MSC	Macoupin Creek	Macoupin	961	partial minor	N/A	fair	St. Louis
236.10	MSC	Coop Branch	Macoupin	22	N/A	N/A	N/A	St. Louis
254.00	MSC	Coal Branch Creek	Madison	N/A	N/A	N/A	N/A	St. Louis
258.00	MSC	Wood River	Madison	123	partial minor	Class D	fair	St. Louis
266.70	MSC	Cahokia Channel	Madison	37	partial minor	Class C	fair	St. Louis
282.00	MSC	Mississippi River	St. Clair	697,000	partial minor	N/A	fair	St. Louis
Illinois Central Mainline								
16.80 & 18.50	DPGL	Little Calumet River	Cook	231	non support	Class D	poor	Chicago
20.80	DPGL	Calumet Union Drainage Canal	Cook	N/A	non support	Class E	poor	Chicago
21.60	DPGL	Calumet Sag Channel	Cook	N/A	non support	Class D	poor	Chicago
27.10	DPGL	Butterfield Creek	Cook	9	partial moderate	Class C	fair	Chicago
37.25	KAN	Rock Creek	Will	12	full support	Class B	good	Chicago
47.90	KAN	South Branch Rock Creek	Kankakee	47	full support	Class B	good	Rock Island
Norfolk Southern								
101.72	KAN	Kankakee River	Kankakee	2159	full support	Class B	good	Rock Island
110.20	KAN	Lehigh Raymond Run	Kankakee	N/A	full support	Class B	good	Rock Island
112.00	KAN	Bertrand Branch	Kankakee	N/A	full support	N/A	good	Rock Island
113.10	KAN	E. Branch Horse Creek	Kankakee	73	full support	Class C	good	Rock Island
114.66	KAN	W. Branch Horse Creek	Kankakee	31	full support	Class C	good	Rock Island

Approx. Milepost	River Basin[1]	Water Feature	County	Approx. Drainage Area (sq. mi.)	IEPA Designated Use[2]	IEPA Biological Stream Character	Water Quality[3]	ACOE Regulatory Jurisdictional Boundaries
117.80	IL	Crane Creek	Kankakee	N/A	N/A	Class C	N/A	Rock Island
117.80	IL	Granary Creek	Kankakee	N/A	N/A	Class B	N/A	Rock Island
121.00	IL	Reddick Run	Kankakee	45	full support	N/A	good	Rock Island
122.50	IL	Unnamed tributary to Reddick Run	Livingston	N/A	N/A	N/A	N/A	Rock Island
123.90	IL	E. Fork Mazon River	Livingston	106	full support	Class C	good	Rock Island
125.00	IL	Gooseberry Creek	Livingston	N/A	full support	N/A	good	Rock Island
126.40	IL	Unnamed tributary to Gooseberry Creek	Livingston	N/A	N/A	N/A	N/A	Rock Island

Source: Huntington and Echeverria 1991, IEPA 1996, 1998, 2000, IDNR 1996c.
USGS Water Resources Investigations 13-75.

1 - Major River Basins:
DPGL - Des Plaines/Great Lake River Basin
KAN - Kankakee River Basin
IL - Illinois River Basin
SAN - Sangamon River Basin
MSC - Mississippi South Central River Basin

2 - Designated Uses:
Full Support -- water quality meets the needs of all designated uses protected by applicable water quality standards.
Full Threatened -- water quality presently adequate to maintain designated uses, however, if declining trend in water quality continues, partial support may be realized in future.
Partial Support with Minor Impairment -- water quality has been impaired to a minor degree.
Partial Support with Moderate Impairment -- water quality conditions are impaired; not all designated uses are attained due to exceedances.
Nonsupport -- water quality is severely impaired and inhibits the water body from meeting any of its designated uses.

3 - Water Quality qualifiers:
Good - full support of designated use:
none or one violation per parameter of acute standards within 5-year period; metals and organochlorine compounds generally occur at non-elevated levels although some may be at slightly elevated concentrations.
Fair - partial support of designated use:
- partial/minor: two violations per parameter of acute standards within a 5-year period; metals or organochlorine compounds occur at elevated levels.
- partial/moderate: two violations per parameter of acute standards within 3 consecutive years; metals or organochlorine compounds occur at highly elevated levels.

Poor - non-support of designated use:
three or more violations per parameter of acute standards within 5-year period; metals or organochlorine compounds consistently occur at extremely high levels.

N/A – Not available

APPENDIX A-3

TABLE 2.9-3
THREATENED AND ENDANGERED PLANT SPECIES POTENTIALLY OCCURRING IN THE PROJECT AREA

Table 2.9-3
THREATENED AND ENDANGERED PLANT SPECIES
POTENTIALLY OCCURRING IN THE PROJECT AREA

Species	Common Name	Habitat	Status	County	Potential for Occurrence
Petalostemum foliosum (Dalea foliosa)	Leafy prairie clover	Mesic dolomitic remnants prairie (Cook, Will, Kankakee, and northeast Grundy); presently it is known from four locations along a few miles of the Des Plaines River. Re-discovered in prairie habitat near Lockport in Will County, where the plants grow on shallow soil prairies where dolomitic bedrock is near the surface; since then it has been noted at a few additional dolomite prairies along the Des Plaines River.	Federal-E State-E	Cook, Kankakee, Will	This species is presently known only from four locations along the Des Plaines River corridor in Will County. Potential habitat occurs between MP 41.00 and 55.00 along the IC mainline and also sporadically in a wet prairie area near MP 29.70 along the IC Joliet line. Field surveys within the railroad rights-of-way, including these sections, did not find this species.
Boltonia decurrens	Decurrent false aster	Disturbed alluvial soils.	Federal-T State-T	Madison, St. Clair	This species may occur in wetlands associated with the Mississippi River floodplain at the extreme southern end of corridor.
Platanthera leucophaea	Prairie white fringed orchid	Mesic to wet prairies.	Federal-T State-E	Northeastern Illinois	Has potential for occurring in wet to mesic prairie habitats in north central Illinois. However, three season surveys of prairie habitats did not find this species.
Astragalus crassicarpus var. *trichocalyx*	Large ground plum	Dry rocky prairies, glades, gravel prairies, open woods, and blufftops. Prairies and plains.	State-E	Jersey, Macoupin, Madison	Although potential habitat exists within the HSR corridor, this species is extremely rare and was not recorded in field surveys within the railroad right-of-way.

Species	Common Name	Habitat	Status	County	Potential for Occurrence
Calopogon tuberosus	Grass pink orchid	Prairies, bogs, and fens. In the Chicago region the most frequent habitat is in bogs, marly fens, and peaty meadows; restricted to northeast counties. Also grows in mesic and wet-mesic sand prairie.	State-E	Cook, Grundy, Kankakee, Macoupin, Will	The grass pink orchid historically has been found in five counties along the project corridor but was not found in early summer surveys of project area wetlands.
Camassia angusta	Wild hyacinth	Prairies and moist open woods. Prairies and woodlands.	State-E	Logan, Sangamon	Potential habitat exists along the UP right-of-way, but this species was not noted in three season field surveys. This species is very rare and may be extinct in Illinois.
Carex viridula	Little green sedge	Dune swales, marl flats, disturbed calcareous sites.	State-E	Cook	During investigation the study team identified the state endangered little green sedge along the right-of-way of the IC mainline at approximately MP 45.55 in Kankakee County.
Erythronium mesochoreum	Prairie trout-lily	Mesic prairies in the Western Forest-Prairie Natural Division (Jersey, Macoupin). Common in dry to mesic prairies and occasional in open, sunny woodlands; found in the southern tallgrass region from eastern Nebraska east into Illinois.	State-E	Macoupin	The prairie trout-lily is known from Macoupin County and has previously been found in railroad rights-of-way, cemeteries and pastures. Spring plant surveys in the corridor failed to find this species.
Isoetes butleri	Quillwort	Seasonably wet spots in thin soil over limestone and dolomite bedrock in dolomite prairie.	State-E	Cook, Will	It has been reported in Cook and Will Counties and was found in 1991 in the Des Plaines Conservation Area. June surveys of the railroad right-of-way in suitable habitat areas failed to find this species.

Species	Common Name	Habitat	Status	County	Potential for Occurrence
Orobanche ludoviciana	Broomrape	Reaches eastern range limit in Illinois, where it occupies blowouts in dry sand prairies and on alluvial floodplains along rivers. This species is parasitic on the roots of various members of the Asteraceae.	State-E	Logan	Although it was not found in late summer surveys, it has potential habitat within the project corridor especially in central Illinois sections of the UP alignment where giant ragweed is abundant.
Polygala incarnata	Pink milkwort	Known from sand prairies, hill prairies, and barrens in scattered localities throughout Illinois. Last time this species was seen in project area was near Godley in Will County in 1989. Collected in Kenosha County at the Chiwaukee Prairie in 1966. Latest Kankakee County collection in 1939, six miles west of Kankakee in original prairie. Dry soil, upland woods, barrens and prairies.	State-E	Cook, Kankakee, Will	This species has the potential for occurring within the project area. However, summer surveys including prairie remnants between MP 54.00 and 57.00 south of Godley did not find this species.
Silene regia	Royal catchfly	Dry-mesic barrens and prairies. In Illinois it is known from both the Wabash and Lower Mississippi River drainages. Open woodlands and roadsides.	State-E	Cook, Macoupin, Madison, Will	The royal catchfly (*Silene regia*) is known from dry mesic barrens and prairies in the Wabash and Lower Mississippi River drainages. Summer surveys did not record this rare species in the railroad right-of-way.
Sisyrinchium atlanticum	Eastern blue-eyed grass	Reaches its northwest range limit in mesic prairie habitat in Illinois; found in Macoupin County railroad prairie in 1971; known to occur in Iroquois County and DuPage County. Greatest concentration of this species is in the Kankakee River valley in Indiana. Has been found in a sand barren in Starke County. Fields, meadows, open woods.	State-E	Kankakee, Macoupin	A summer survey of suitable prairie habitats within the project corridor did not find this species.

Species	Common Name	Habitat	Status	County	Potential for Occurrence
Tradescantia bracteata	Prairie spiderwort	Dry-mesic silt and sand prairies in western Illinois, often in disturbed habitats; known from seven localities in Illinois; several are along railroad right-of-way.	State-E	Logan, Jersey, Madison	Spring and summer surveys of the project corridor did not find this species, however habitat is present.
Arenaria patula	Slender sandwort	Dolomite prairies (Cook, Will, Kankakee, and northeast Grundy) along the Des Plaines, Fox, and Illinois Rivers. Rocky soils, barrens, and meadows.	State-T	Cook, Grundy, Kankakee, Will	Spring surveys of dolomitic prairies along the IC-Joliet Line did not find this species.
Cirsium hillii	Hill's thistle	Dry open soil in prairies. Dry open places, especially with jack pine and oak, but also prairie-like ground, thin soil over limestone and sandy banks.	State-T	Cook, Grundy, Kankakee, Macoupin, Madison, Sangamon, Will	Sandy soils and prairie remnants occur along the IC mainline between MP 42.00 and MP 52.00 and in three general sections along the UP. Summer surveys conducted within the railroad right-of-way in these and other proposed construction areas did not locate this species.
Drosera intermedia	Narrow-leaved sundew	Peat bogs and wet sand prairies in Illinois. Characteristic bog species. Usually in the wettest parts of bogs and on sandy shores subject to periodic inundation.	State-T	Cook, Grundy, Kankakee, Will	Summer surveys of wetlands along the rail right-of-way did not document the presence of this species.
Liatris scariosa var. *nieuwlandii*	Blazing star	Silt loam savannas on Wisconsinan and Illinoisan aged glacial till or loess soils in the Northeastern Morainal (Cook, northern Will) and Western Forest-Prairie Natural Divisions (Jersey, Macoupin). A plant of savannas in the Chicago region, growing only on the Morley-Markham-Ashkum silt soil catena. Dry sandy prairie remnants, fields, hillsides; woodlands and barrens with jack pine, oak, aspen; associated roadsides and railroads.	State-T	Cook, McLean, Macoupin, Sangamon, Will	Although this species was not noted in late summer surveys of the railroad right-of-way, potential habitat for this species exists within the corridor.

Species	Common Name	Habitat	Status	County	Potential for Occurrence
Tomanthera auriculata (Gerardia auriculata)	Ear-leaved foxglove	Disturbed prairies and savannas. Rare and local in dry to moist prairies at scattered locations in the tallgrass region from Minnesota south and eastward. Local in project area in moist prairies.	State-T	Cook, Grundy, Logan, Macoupin, Will	Although this is a rare species not found in late summer field surveys, possible habitat is scattered along the existing railroad right-of-way in prairie remnants.

APPENDIX A-4

TABLE 2.9-4
THREATENED AND ENDANGERED ANIMAL SPECIES POTENTIALLY OCCURRING IN THE PROJECT AREA

Table 2.9-4
THREATENED AND ENDANGERED ANIMAL SPECIES
POTENTIALLY OCCURRING IN THE PROJECT AREA

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Somatochlora hineana	Hine's emerald dragonfly	**Water** (stream) **Wetland** (non-forest)	Inhabits shallow, calcareous seepage marshes or the marshy margins of small, sluggish, calcareous streams, which are usually dominated by cattails. Wetlands typically feature shallow soils overlying dolomitic bedrock. Breeding habitat tends to be clear, silt free, shallow flowages that pass through cattails. Illinois populations are restricted to Will, DuPage, and Cook counties; all sites are located within 1.2 miles of each other and within 2.5 miles of the Des Plaines River.	Federal-E State-E	Cook, Will	This species is currently known from 13 sites in Illinois, all within 2.5 miles of the Des Plaines River.
Sterna antillarum	least tern	**Water** (stream, lake, reservoir) **Barren** (beach, sand)	Presence of sandbars; existence of favorable water levels; availability of food. In Illinois associated with large rivers and sandbars. In the Mississippi River, least terns nest in shallow depressions on sand islands.	Federal-E State-E	Cook, Madison	There has been no evidence of this species nesting in Illinois since 1974.
Myotis sodalis	Indiana bat	**Floodplain Forest Caves**	Caves, mines, small stream corridors with well developed riparian woods; upland forests.	Federal-E State-E	Statewide	Stream crossings with mature riparian forest occur at several locations along the corridor.
Myotis grisescens	Gray bat	**Upland Forest**	Caves; feeds over rivers and reservoirs adjacent to forests.	Federal-E State-E	Madison	Cave habitat is not present in area adjacent to the right-of-way.
Scaphirhynchus albus	Pallid sturgeon	**Open Water**	Rivers.	Federal-E State-E	Madison, St. Clair	Potential habitat exists for this species in the Mississippi River near St. Louis.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Gammarus acherondytes	Illinois cave amphipod	**Subterranean Stream**	Karst caves and streams.	Federal-E State-E	St. Clair	Karst habitat is not present in the area immediately adjacent to the railroad right-of-way.
Haliaeetus leucocephalus	Bald eagle	**Upland Forest**	Breeds and winters along major rivers and large reservoirs; old trees with high branches.	Federal-T State-T	Grundy, Jersey, Madison, St. Clair, Sangamon, Will	Large river habitat in the corridor is limited to the Des Plaines, Kankakee, and Mississippi Rivers; no roosting or nesting trees were observed during the avian survey.
Accipiter striatus	sharp-shinned hawk	**Agricultural** (crop, pasture) **Urban** **Forest** (deciduous, evergreen, mixed) **Wetland** (forest)	Occurs in deciduous and coniferous forests and open woodlands. Prefers open woodland, edges of woods, clearing, hedgerows, bushy pastures, and shorelines where small birds are found. Usually selects mature forest and stream habitats for nesting.	State-E	Cook	Field surveys and cover type analysis indicates that in the study area prime habitat for this species lies outside of the railroad right-of-way.
Ammodramus henslowii	Henslow's sparrow	**Agricultural** (crop, pasture) **Wetland** (forest, non-forest)	Occurs in grassy wet areas, marshy openings, and wet meadows. Taller, dense grassland mixes. Open grasslands with wet areas favored. Clover, orchardgrass, and Queen Anne's lace listed as cover species. Originally nested in prairie habitat, but now also nests in abandoned fields and hayfields with tall-dense cover. In Illinois Henslow's sparrow also are dependent upon relatively large grassland areas for nesting, rarely occurring on grasslands less than 50 hectares in size.	State-E	Cook, Grundy	Habitat occurs sporadically and adjacent to the railroad corridor.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Asio flammeus	short-eared owl	**Agricultural** (crop, pasture) **Wetland** (forest, non-forest) **Barren** (sand)	In Illinois, prefers wet prairies. Ground nester, raising young in same habitat. 55% nest in grasslands (prairies), 24% in grain stubble, and 14% in hayfields. Nests on the ground in open country including prairies, meadows, marshes, savanna and dunes. Nearly all of the recent nest records for Illinois are from grassland areas at least 50 hectares in size.	State-E	Cook, McLean	
Asio otus	long-eared owl	**Agricultural** (crop, pasture, orchards, groves, nurseries) **Forestland** (deciduous, evergreen, mixed)	Illinois populations are generally migrants. High value habitats, then, are those for roosting; stands of evergreen trees (pines, junipers) and hunting; open areas (pastures, grassy areas, forest edges). Found in light broad-leaved and coniferous forests, riverine forests, and parks.	State-E	Cook	The single site with mixed conifers within the project area proved too sparsely wooded and offered only marginal habitat for this species.
Bartramia longicauda	upland sandpiper	**Agricultural** (crop, pasture) **Urban** (Transportation/ communication, other)	Reported in open grasslands near airports, schools, roadsides, and other areas. Prefers pastures and hayfields (alfalfa and clover). In Illinois, associated with open grassland habitats such as pastures, hayfields and prairie remnants with an average grass height less than 30 cm.	State-E	Cook, Grundy, Kankakee, McLean, Madison, Sangamon, Will	Field surveys identified moderate habitat for this species along the IC mainline near MP 30.00. Other areas may occur near the railroad right-of-way especially in rural areas.
Botaurus lentiginosus	American bittern	**Wetland** (forest)	In Illinois this bittern usually inhabits tall grasses in a wet area (i.e., freshwater marshes and marshy lake shores) for feeding, nest construction and protection. Reported using prairie sloughs as nest sites and reported nesting among cattails, bulrushes, and sedges just above the water level at a marsh edge. Nesting has also been noted at woodland ponds.	State-E	Cook, Grundy, St. Clair, Will	Potential habitat for this species was identified at several locations in the corridor, including wetlands along the IC-Joliet Line near MP 29.70 and also south of Wilmington along the UP between MP 54.00 and 55.00.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Buteo lineatus	red-shouldered hawk	**Agricultural** (crop, pasture, orchard, groves, nurseries) **Forestland** (deciduous) **Wetland** (forest, non-forest)	The red-shouldered hawk inhabits moist and riparian forests including wooded swamps. It is often seen foraging along the forest edge and open woodland. Large trees are required for nesting.	State-E	Cook, Will	Potential nesting and feeding habitat occurs at several locations adjacent to the rail right-of-way, including MP 114.56 along the Norfolk Southern alignment in Kankakee County and MP 209.00 on the UP alignment in Macoupin County.
Circus cyaneus	northern harrier	**Agricultural** (crop, pasture) **Wetland** (non-forest)	In Illinois, harriers are most often observed during migration as they hunt over pastures and fallow fields. Nesting is usually restricted to relatively large undisturbed grasslands and marshes, among low shrubby vegetation, tall weeds or reeds, or shelter site. Most harrier nests in Illinois occur in grasslands at least 60 hectares in size and include a variety of cover types such as prairie grasses, brome, timothy, and fallow fields and even wheat fields. The nest is usually placed on the ground in a mound of dead reeds or grasses.	State-E	Grundy, Will	Within the project corridor northern harrier nesting and hunting habitat are adjacent to the right-of-way, with hedgerows providing shelter for potential prey. Moderate habitat exists along the IC mainline near MP 53.00 to 55.00.
Egretta caerulea	little blue heron	**Agricultural** (crop, pasture) **Wetland** (forest, non-forest) **Water** (stream, lake, reservoir)	Occurs in lakes, ponds, marshes, sloughs, marshy shores of streams, and coastal estuaries. In Illinois, this species typically nests in association with other herons. Nests are often placed in stands of young trees, primarily black willows and cottonwoods forming dense thickets. Feeding takes place in shallow waters of lagoons, marshes, and swampy areas.	State-E	Jersey, Madison, St. Clair	No nesting colonies of heron were noted along the project corridor. Foraging habitat is available within wetlands adjacent to the corridor.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Egretta thula	snowy egret	**Agricultural** (crop, pasture) **Water** (stream, lake, reservoir) **Wetland** (forest, non-forest)	In Illinois, snowy egrets nest in lowland thickets or forest in association with other species of colonial herons, especially little blue herons. Foraging is generally restricted to lagoons and marshes of the American Bottoms. Willow species and buttonbush stands are common nesting places; prefer wetlands that afford a dense thicket of small trees or shrubs near water's edge for nesting.	State-E	Madison, St. Clair	Foraging habitat is available within the corridor adjacent to the right-of-way.
Ixobrychus exilis	least bittern	**Wetland** (forest, non-forest) **Water** (stream, lake, reservoir, bay)	The least bittern inhabits shallow freshwater lakes and marshes, primarily in cattail marshes, where it nests among tall dense vegetation. Nests in dense growth of marsh emergents, above shallow water but near open water.	State-E	Cook, Grundy, Sangamon, Will	Wetland habitat is scattered along the project corridor but limited in the right-of-way.
Nycticorax nycticorax	black-crowned night heron	**Wetland** (forest, non-forest) **Water** (stream, lake, reservoir, bay)	Seems adapted to nearly every conceivable habitat in which a wading bird may exist. Nests are placed in a wide variety of bottomland forest trees although willow or cottonwood thickets are sometimes used. Also reported nesting in herbaceous marsh vegetation in Illinois.	State-E	Cook, Kankakee, McLean, Madison, St. Clair, Sangamon, Will	Currently only four sizable colonies remain in Illinois. Although an uncommon summer resident, there is potential habitat for this species along the corridor.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Papaipema eryngii	Eryngium stem borer	**Grassland** (prairie)	Occurs only in large prairie areas that have abundant populations of rattlesnake master (*Eryngium yuccifolium*), its larval host plant. In Illinois, only known populations occur in Will and Grundy counties.	State-E	Grundy, Will	The presence of the eryngium stem borer was confirmed at three locations within the study area: in Will County between MP 54.00 and MP 54.85 on the UP; in Grundy County at MP 66.60 on the UP; and in Kankakee County from MP 42.75 to MP 43.30 on the IC mainline.
Sistrurus catenatus	Eastern massasauga	**Wetland** (forest, non-forest) **Forestland**	Occurs in wet prairies, bogs, swamps, and rarely dry woodlands. May hide in underground cavities or crayfish holes.	State-E	Cook, Logan, McLean, Madison, Will	Potential habitat is available in the study area.
Sterna forsteri	Forster's tern	**Wetland** (non-forest) **Water** (stream, lake, reservoir) **Barren** (beach)	In the Midwest, this species occupies freshwater sites usually inhabiting marsh-bordered lakes (slightly larger than those preferred by black terns) associated with the marshes vegetated with *Phragmites* spp., *Typha* spp., and *Scirpus* grasses. Cattail stands and detrial cattail mat seem an important factor of breeding habitat. It prefers to nest on high, dry substrates, such as muskrat houses, where they construct large nests from marsh vegetation. A stable water level may be important as many nests are lost to flooding.	State-E	Cook	Overall habitat potential for this species is low due to the small size of water bodies.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Tyto alba	common barn owl	**Urban** (residential) **Agricultural** (crop, pasture, orchard, groves, nurseries) **Wetland** (non-forest)	The barn owl occurs in open and partly open areas often near human habitation, such as residential and agricultural areas, old fields and woodland edges. Nests are placed in silos, steeples, grain elevators, abandoned buildings, and hollow trees.	State-E	Cook	While actual nesting sites would not be available in the right-of-way, grassland and hedgerow habitat would support small mammals and other food sources.
Aflexia rubranura	red-veined leaf hopper	**Grassland** (prairie)	Occurs in large prairie area that have populations of prairie dropseed (*Sporobolis heterolepis*). It is known to occur near Midewin Tallgrass Prairie, and it can survive in small patches along the railroad.	State-T	Will	Its presence has been correlated with plant populations of prairie dropseed (*Sporobolis herterolepis*). Within the project corridor concentrations of prairie dropseed were noted at 25 locations.
Phalacrocorax auritus	double-crested cormorant	**Wetland** (Forest) **Water** (Stream, lake, reservoir) **Barren** (rock)	This species occupies lakes, rivers, swamps, and coasts depending primarily upon open water for fishing. In Illinois, it prefers large lakes and rivers, where it nests in trees and occasionally on artificial structures. Barren, rocky islands of lakes and rivers or the tops of cliffs overlooking open water may also be useful nesting sites.	State-T	Cook, Will	Abandoned stripmine lakes along the UP alignment from MP 54.00 to 57.00 offer moderate habitat potential. Open water near MP 31.50 on the IC mainline offers potential fishing areas.
Catharus fuscescens	veery	**Water** (stream, lake) **Wetland** (forest) **Forestland** (deciduous, evergreen, mixed)	In Illinois the veery usually occurs in moist deciduous woods with relatively dense understory, but it also has nested in savannas, bogs, and successional fields. It is estimated that at least 20 hectares of forest habitat is needed to maintain viable populations of this species.	State-T	Cook, Kankakee, McLean, Will	Moderate habitat potential was found for this species along the IC mainline alignment near MP 30.00. Many other areas along the UP offer wooded habitat, but of more limited size.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Clonophis kirtlandii	Kirtland's snake	**Wetland** (forest) **Water** **Urban** **Grassland** (meadow)	Occurs in wet meadows, open swamp-forests, reservoirs, and occasionally wet, vacant urban areas.	State-T	Cook, McLean, Sangamon, Will	In the project area it is restricted to Sangamon and County.
Hesperia ottoe	ottoe skipper		Sandy areas, including sand prairies, dune, and loess-sand hill prairies. Dependent upon relatively undisturbed sand-prairie habitat. In Illinois, the larval food plant is suspected to be little blue stem (*Andropogon scoparius*), and adults feed on blazing star (*Liatris* spp.), pearly everlasting (*Anaphalis margaritacea*), and purple coneflower (*Echinacea purpurea*).	State-T		Although not recently recorded in the study area, potential habitat may be present.
Lanius ludovicianus	loggerhead shrike	**Agricultural** (crop, pasture) **Urban** (residential) **Forestland** (deciduous, evergreen)	In the Midwest, this species inhabits open, agricultural area interspersed with grassland habitat. The use of wheat, hay and abandoned fields is limited by the presence or absence of surrounding preferred hedgerows and trees, mainly osage orange. Most of the nests found in Illinois are in osage orange, honey locust, red cedar, and rose.	State-T	Cook, Grundy, Logan, McLean, St. Clair, Sangamon, Will	Moderate to good loggerhead shrike habitat is available in scattered areas of central Illinois. These include sections of the UP near MP 208.00, 212.00, and 213.00.
Nyctanassa violacea	yellow-crowned night heron	**Agricultural** (crop, pasture) **Forestland** **Wetland** **Water**	Wetlands for foraging and bottomland forest for nesting.	State-T	Cook, Jersey, St. Clair, Will	Possible habitat exists in the woodlands interspersed with wetlands along the UP south of Wilmington between MP 54.00 and 57.00.

Species	Common Name	Land Use and Land Covers	Environmental Associations	Status	County	Potential for Occurrence
Podilymbus podiceps	pied-billed grebe	**Wetland** (non-forest) **Water** (stream, lake, reservoir, bay)	Found on freshwater ponds, streams, and marshes with emergent water plants; also found along open waters in marshes and shores of inlets and bays. Prefers ponds less than 7 hectares especially with dense stands of emergent vegetation. Associated with both seasonally and flooded wetlands. Uses cattail, bulrush, burreed, spike rush, arrowhead.	State-T	Cook, Grundy, McLean, Madison, St. Clair, Sangamon, Will	This habitat type occurs in areas south of Wilmington on the UP alignment, as well as other small wetland pockets along the corridor but is generally adjacent to of outside the right-of-way.
Pseudacris streckeri illinoensis	Illinois chorus frog		Open sandy areas of river lowlands. Ideal habitat of this type is available on the central Illinois sand prairies, adjacent to the Illinois River.	State-T	Madison	A threatened species in Illinois; has been documented at a location in the general area of Pontoon Road (MP 272.70) along the UP in Madison County. However, field monitoring during 1998 determined that this species was not present.
Rallus elegans	king rail	**Agriculture** (crop, pasture) **Water** (stream, lake, bay) **Wetland** (non-forest)	Found in marshes, shrub swamps, ponds, stream side, roadside ditches, mudflats or upland fields.	State-T	Cook, Grundy, Madison, St. Clair, Will	Potential habitat for this species is scattered along the project corridor in areas bordering and adjacent to the right-of-way.

APPENDIX **B**

Proposed Highway-Railroad Grade Crossing Treatments

Appendix B
PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

Appendix B
PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Cook	CHI-STL	Lumber Street	1.80	Cantilever flashing lights	Conv. Gates	No Action
Cook	CHI-STL	Homan Avenue	6.32	Flashing lights	Conv. Gates	No Action
Cook	CHI-STL	Station Platform (Pedestrian)	12.00	None	Ped. Bell and Flashers	No Action
Cook	CHI-STL	GATX	14.30	Gates	No Change	No Action
Cook	CHI-STL	Shell	14.70	Stop sign and bell	Conv. Gates	No Action
Cook	CHI-STL	3M Media	16.01	None	Close	No Action
Cook	CHI-STL	Station Platform (Pedestrian)	17.52	None	Ped. Bell and Flashers	No Action
Cook	CHI-STL	Old Willow Springs	17.54	Gates	No Change	No Action
Cook	CHI-STL	Rowell Chemical Corporation	19.85	Gates	No Change	No Action
Cook	CHI-STL	McGuire Street	23.40	Stop sign	Conv. Gates	No Action
Cook	CHI-STL	Boyer Street	23.50	Stop sign	Close w/Frontage Road	No Action
Cook	CHI-STL	Spruce Street	24.71	Gates	No Change	No Action
Cook	CHI-STL	Holmes Street	24.95	Gates	No Change	No Action
Cook	CHI-STL	Stephen Street	25.10	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-STL	Lemont Street	25.17	Gates	No Change	No Action
Cook	CHI-STL	Station Platform (Pedestrian)	25.35	None	Ped. Bell and Flashers	No Action
Cook	CHI-STL	Industrial Street	25.80	Gates	No Change	No Action
Cook	CHI-STL	Castle Flagstone	26.50	None	Close w/Frontage Road	No Action
Will	CHI-STL	Thomas	27.15	Gates	No Change	No Action
Will	CHI-STL	Unocal	27.25	Gates	Close w/Frontage Road	No Action
Will	CHI-STL	Seneca Petroleum	27.70	Gates	No Change	No Action
Will	CHI-STL	Uno-Ven North Gate	27.90	Gates	No Change	No Action
Will	CHI-STL	Romeoville Road	29.00	Gates	Grade Sep.	No Action
Will	CHI-STL	Private Road	29.70	None	Elec. Lock Gates	No Action
Will	CHI-STL	Texaco	30.60	None	No Change	No Action
Will	CHI-STL	2nd Street	32.06	Gates	No Change	No Action
Will	CHI-STL	6th Street	32.40	Gates	No Change	No Action
Will	CHI-STL	8th Street (Pedestrian)	32.51	Flashing lights	Ped. Bell and Flashers	No Action
Will	CHI-STL	9th Street/SR 7	32.59	Gates	No Change	No Action
Will	CHI-STL	10th Street	32.70	Gates	No Change	No Action
Will	CHI-STL	11th Street	32.74	Gates	No Change	No Action
Will	CHI-STL	13th Street	32.89	Gates	No Change	No Action
Will	CHI-STL	Division Street	33.11	Gates	No Change	No Action
Will	CHI-STL	Pedestrian Crossing	33.45	None	Grade Sep.	No Action
Will	CHI-STL	Ohio Street	36.64	Cantilever flashing lights with gates	No Change	No Action
Will	CHI-STL	Jackson Street	36.77	Cantilever flashing lights with gates	No Change	No Action
Will	CHI-STL	Laraway Road	40.36	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	Schweitzer Road	41.44	Flashing lights	Close	No Action
Will	CHI-STL	Sharp Road	41.96	Ordered Closed	Close	No Action
Will	CHI-STL	Millsdale Road	42.45	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	Arsenal Road	44.00	Gates	Conv. Gates	No Action
Will	CHI-STL	Diagonal Road	45.00	Ordered Closed	Close	No Action
Will	CHI-STL	Mississippi Street	45.77	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	Chicago Street	46.10	Flashing lights	Close	No Action
Will	CHI-STL	Hoff Road	46.64	Gates	No Change	No Action
Will	CHI-STL	Pump Crossing	47.82	Crossbucks	Close	No Action
Will	CHI-STL	Ordnance	48.60	Gates	No Change	No Action
Will	CHI-STL	Damien Mills Road	49.91	Stop sign	Conv. Gates	No Action
Will	CHI-STL	River Road	51.40	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	Peotone Road	51.94	Flashing lights	Close	No Action
Will	CHI-STL	Residential	52.42	Crossbucks	Close	No Action
Will	CHI-STL	Kankakee Street	52.54	Gates	No Change	No Action
Will	CHI-STL	Widows Road	53.00	Bell - Wig Wag	Conv. Gates	No Action
Will	CHI-STL	Strip Mine Road	53.42	Cantilever flashing lights with gates	No Change	No Action
Will	CHI-STL	Coal City Road	54.85	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	Main Street	57.31	Gates	No Change	No Action
Will	CHI-STL	Center Street	57.71	Flashing lights	Close	No Action

Appendix B
PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Will	CHI-STL	Division Street	58.41	Flashing lights	Conv. Gates	No Action
Will	CHI-STL	County Line Road	59.84	Flashing lights	Conv. Gates	No Action
Grundy	CHI-STL	Main Street	61.06	Flashing lights	Close	No Action
Grundy	CHI-STL	Mitchell Street	61.26	Flashing lights	Conv. Gates	No Action
Grundy	CHI-STL	Storm Road	64.07	Flashing lights	Conv. Gates	Quad Gates
Grundy	CHI-STL	Washington Street	64.36	Flashing lights	Conv. Gates	Quad Gates
Grundy	CHI-STL	Division Street	64.47	Flashing lights	Close	Quad Gates
Grundy	CHI-STL	Jackson Street	64.63	Cantilever flashing lights	Conv. Gates	Quad Gates
Grundy	CHI-STL	Main Street	64.75	Flashing lights	Conv. Gates	Quad Gates
Grundy	CHI-STL	Maher Road	65.50	Crossbucks	Close w/Frontage Road	Quad Gates
Grundy	CHI-STL	Farm	66.60	Closed	Close w/Frontage Road	Closed
Grundy	CHI-STL	Gorman Road	66.91	Crossbucks	Conv. Gates	Quad Gates
Grundy	CHI-STL	Farm	67.95	None	Close w/Frontage Road	Conv. Gates
Grundy	CHI-STL	Filman Road	68.33	Crossbucks	Close	Conv. Gates
Grundy	CHI-STL	Stonewall Road	69.09	Crossbucks	Conv. Gates	Quad Gates
Grundy	CHI-STL	Gantzert Road	69.74	Crossbucks	Close	Conv. Gates
Grundy	CHI-STL	Scully Road	70.52	Crossbucks	Conv. Gates	Quad Gates
Grundy	CHI-STL	Mazon Road	71.14	Crossbucks	Close	Quad Gates
Livingston	CHI-STL	Livingston Road/ TR 1H	71.95	Crossbucks	Conv. Gates	Quad Gates
Livingston	CHI-STL	Union Avenue/ SR 47	73.10	Gates	No Change	No Change
Livingston	CHI-STL	Mazon Avenue/ SR 17	73.51	Gates	No Change	No Change
Livingston	CHI-STL	North Depot (Pedestrian)	73.55	None	Close	Ped. Bell and Flashers
Livingston	CHI-STL	South Depot (Pedestrian)	73.65	None	Ped. Bell and Flashers	Ped. Bell and Flashers
Livingston	CHI-STL	Chippewa Street	73.70	Gates	No Change	No Change
Livingston	CHI-STL	Washington Street	73.95	Gates	No Change	Quad Gates
Livingston	CHI-STL	TR 19B	74.93	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	TR 220	75.93	Crossbucks	Conv. Gates	Quad Gates
Livingston	CHI-STL	TR 216B	76.88	Crossbucks	Conv. Gates	Quad Gates
Livingston	CHI-STL	Private Road	78.70	Closed	Elec. Lock Gates	Closed
Livingston	CHI-STL	TR 41C	78.96	Crossbucks	Conv. Gates	Quad Gates
Livingston	CHI-STL	TR 47B	80.21	Crossbucks	Conv. Gates	Quad Gates
Livingston	CHI-STL	Prairie Street	81.43	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	Scott Street	81.52	Gates	Close	Quad Gates
Livingston	CHI-STL	Tremont Street	81.65	Gates	No Change	Quad Gates
Livingston	CHI-STL	Hamilton Street	81.72	Gates	Close	Quad Gates
Livingston	CHI-STL	TR 69	82.69	Gates	No Change	Quad Gates
Livingston	CHI-STL	Main Street	86.92	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	TR 113A/Bunge Road	88.90	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	Aurora Street	90.62	Flashing lights	Conv. Gates	Conv. Gates
Livingston	CHI-STL	Main Street	91.13	Flashing lights	Conv. Gates	Conv. Gates
Livingston	CHI-STL	Division Street	91.59	Gates	No Change	No Change
Livingston	CHI-STL	Cleary Street	91.65	Gates	No Change	No Change
Livingston	CHI-STL	North Street (Pedestrian)	91.71	None	Close	Close
Livingston	CHI-STL	Howard Street	91.90	Gates	No Change	No Change
Livingston	CHI-STL	Madison Street	91.97	Gates	No Change	No Change
Livingston	CHI-STL	Washington Street	92.07	Gates	No Change	No Change
Livingston	CHI-STL	Reynolds Street/SR 116	92.47	Gates	No Change	No Change
Livingston	CHI-STL	TR 137A	93.59	Gates	Conv. Gates	No Change
Livingston	CHI-STL	TR 145A	94.71	Gates	Close	No Change
Livingston	CHI-STL	Farm	95.00	Closed	Close w/Frontage Road	Closed
Livingston	CHI-STL	Farm	95.50	Closed	Close	Closed
Livingston	CHI-STL	TR 159	95.85	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	Farm	96.40	None	Close w/Frontage Road	Conv. Gates
Livingston	CHI-STL	Farm	96.60	None	Close w/Frontage Road	Conv. Gates
Livingston	CHI-STL	CR 8	98.08	Gates	No Change	Quad Gates
Livingston	CHI-STL	TR 195A	99.20	Flashing lights	Conv. Gates	Quad Gates
Livingston	CHI-STL	Farm	99.50	Stop sign	Warn. Sign and Lights	Conv. Gates

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PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Livingston	CHI-STL	Farm	100.30	Closed	Close w/Frontage Road	Closed
Livingston	CHI-STL	TR 209	100.87	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	TR 1B	101.44	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Division Street	102.04	Gates	No Change	Quad Gates
McLean	CHI-STL	Owsley Street	102.37	Gates	No Change	Quad Gates
McLean	CHI-STL	Cemetery Street/ U.S. 24	102.57	Gates	No Change	Quad Gates
McLean	CHI-STL	TR 23A	103.69	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Farm	104.30	None	Close w/Frontage Road	Conv. Gates
McLean	CHI-STL	TR 35A	105.93	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Farm	106.30	Closed	Close w/Frontage Road	Closed
McLean	CHI-STL	Farm	107.50	None	Elec. Lock Gates	Conv. Gates
McLean	CHI-STL	Orange Street	108.90	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	North Street	110.10	Gates	Close	Quad Gates
McLean	CHI-STL	Main Street	110.27	Cantilever flashing lights with gates	No Change	Quad Gates
McLean	CHI-STL	Chestnut Street	110.36	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	TR 83	111.65	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Killian Road	113.49	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Private	114.80	None	Close w/Frontage Road	Conv. Gates
McLean	CHI-STL	TR 358A	115.18	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Washington Street	118.05	Flashing lights	Close	Close
McLean	CHI-STL	Madison Street	118.12	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Jefferson Street	118.25	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	TR 306A	120.03	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Farm	120.50	Closed	Close	Closed
McLean	CHI-STL	Ft. Jesse Road	123.40	Gates	No Change	No Change
McLean	CHI-STL	Beech Street	123.67	Gates	No Change	No Change
McLean	CHI-STL	Mulberry Street	123.79	Gates	No Change	No Change
McLean	CHI-STL	College Avenue	123.91	Gates	No Change	No Change
McLean	CHI-STL	Linden Street	124.00	Gates	No Change	No Change
McLean	CHI-STL	Station (Pedestrian Crossing)	124.15	None	Ped. Bell and Flashers	Ped. Bell and Flashers
McLean	CHI-STL	Broadway Street	124.20	Gates	No Change	No Change
McLean	CHI-STL	Fell Avenue	124.28	Gates	No Change	No Change
McLean	CHI-STL	Hester Street (Pedestrian)	124.35	Closed	Close	Closed
McLean	CHI-STL	University Street	124.68	Gates	No Change	No Change
McLean	CHI-STL	Washington Street	126.50	Cantilever flashing lights	Conv. Gates	Conv. Gates
McLean	CHI-STL	Miller Street	127.19	Gates	Close	Quad Gates
McLean	CHI-STL	Six Points Road	128.09	Gates	No Change	Quad Gates
McLean	CHI-STL	TR 443	133.70	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Farm	134.90	None	Close w/Frontage Road	Conv. Gates
McLean	CHI-STL	Funks Grove Road	136.35	Flashing lights	Conv. Gates	Quad Gates
McLean	CHI-STL	Farm	136.95	None	Close	Conv. Gates
McLean	CHI-STL	TR 533	139.12	Gates	No Change	Quad Gates
McLean	CHI-STL	Railroad Avenue	140.91	Gates	No Change	Quad Gates
McLean	CHI-STL	U.S. 136	141.16	Gates	No Change	Quad Gates
McLean	CHI-STL	Farm	143.40	Closed	No Change	Closed
McLean	CHI-STL	TR 38	143.74	Stop sign	Conv. Gates	Quad Gates
Logan	CHI-STL	Private	144.44	None	Elec. Lock Gates	Conv. Gates
Logan	CHI-STL	Elm Street	145.75	Gates	No Change	Quad Gates
Logan	CHI-STL	Vine Street	145.81	Cantilever flashing lights with gates	No Change	Quad Gates
Logan	CHI-STL	Race Street	145.85	Cantilever flashing lights with gates	No Change	Quad Gates
Logan	CHI-STL	Lazy Row Road/ TR 51	147.60	Flashing lights	Grade Sep.	Quad Gates
Logan	CHI-STL	Main Street	149.75	Flashing lights	Conv. Gates	Quad Gates
Logan	CHI-STL	Lincoln Street	150.15	Gates	Close	Quad Gates
Logan	CHI-STL	TR 222	152.18	Flashing lights	Conv. Gates	Quad Gates
Logan	CHI-STL	TR 93	153.46	Gates	No Change	Quad Gates
Logan	CHI-STL	Burlington St. (Ped. Crossing)	155.88	None	Close	Close
Logan	CHI-STL	Keokuk Street	155.95	Cantilever flashing lights with gates	No Change	No Change

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County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Logan	CHI-STL	Peoria Street (Ped. Crossing)	156.09	None	Close	Close
Logan	CHI-STL	Tremont Street	156.16	Gates	No Change	No Change
Logan	CHI-STL	Pekin Street	156.32	Gates	No Change	No Change
Logan	CHI-STL	Broadway Street	156.38	Gates	No Change	No Change
Logan	CHI-STL	Pulaski Street	156.45	Gates	No Change	No Change
Logan	CHI-STL	Clinton Street	156.52	Gates	No Change	No Change
Logan	CHI-STL	Decatur Street	156.60	Gates	No Change	No Change
Logan	CHI-STL	TR 128	159.40	Gates	Veh. Arr. Barrier	Quad Gates
Logan	CHI-STL	TR 149A	161.30	Flashing lights	Veh. Arr. Barrier	Quad Gates
Logan	CHI-STL	Pedestrian Crossing	163.40	None	Close	Close
Logan	CHI-STL	Main Street	163.45	Gates	Veh. Arr. Barrier	Quad Gates
Logan	CHI-STL	Farm	166.20	Closed	Close w/Frontage Road	Closed
Logan	CHI-STL	Oglesby Street	167.30	Cantilever flashing lights with gates	Veh. Arr. Barrier	Quad Gates
Logan	CHI-STL	TR 199A	168.50	Gates	Veh. Arr. Barrier	Quad Gates
Logan	CHI-STL	TR 50A	169.80	Gates	Close w/Frontage Road	Quad Gates
Sangamon	CHI-STL	TR 5	172.35	Flashing lights	Veh. Arr. Barrier	Quad Gates
Sangamon	CHI-STL	Pedestrian Crossing	172.90	None	Close	Ped. Bell and Flashers
Sangamon	CHI-STL	Pedestrian Crossing	172.95	None	Close	Close
Sangamon	CHI-STL	Main Street	173.00	Gates w/Median	Veh. Arr. Barrier	Quad Gates
Sangamon	CHI-STL	Emergency	173.30	Locked gate	Elec. Lock Gates	Locked Gate
Sangamon	CHI-STL	TR 33/ Wolf Road	176.70	Flashing lights	Veh. Arr. Barrier	Quad Gates
Sangamon	CHI-STL	Andrew Road	177.87	Gates	Veh. Arr. Barrier	Quad Gates
Sangamon	CHI-STL	Carter Brothers	179.60	None	Grade Sep.	Conv. Gates
Sangamon	CHI-STL	Sand Hill Road	180.60	Gates	Veh. Arr. Barrier	No Change
Sangamon	CHI-STL	Ridgely Avenue	183.40	Flashing lights	Conv. Gates	Conv. Gates
Sangamon	CHI-STL	Eighth Street	183.80	Gates	No Change	No Change
Sangamon	CHI-STL	Converse Street	183.85	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	North Grand Avenue	184.10	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Sixth Street	184.15	Gates	No Change	No Change
Sangamon	CHI-STL	Fifth Street	184.20	Gates	No Change	No Change
Sangamon	CHI-STL	Fourth Street	184.40	Cantilever flashing lights	Conv. Gates	Conv. Gates
Sangamon	CHI-STL	Union Street	184.60	Flashing lights	Close	Conv. Gates
Sangamon	CHI-STL	Carpenter Street	184.68	Gates	No Change	No Change
Sangamon	CHI-STL	Madison Street	185.00	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Jefferson Street	185.10	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Washington Street	185.21	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Adams Street	185.30	Gates	No Change	No Change
Sangamon	CHI-STL	Monroe Street	185.32	Gates	No Change	No Change
Sangamon	CHI-STL	Jackson Street	185.50	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Cook Street	185.64	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Lawrence Avenue	185.70	Gates	No Change	No Change
Sangamon	CHI-STL	Canedy Street	185.80	Cantilever flashing lights	No Change	Conv. Gates
Sangamon	CHI-STL	Scarritt Street	185.90	Cantilever flashing lights	Close	Close
Sangamon	CHI-STL	Allen Street	186.02	Cantilever flashing lights	No Change	Conv. Gates
Sangamon	CHI-STL	South Grand Avenue	186.18	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Cedar Street	186.33	Cantilever flashing lights	No Change	Conv. Gates
Sangamon	CHI-STL	Laurel Street	186.50	Gates	No Change	No Change
Sangamon	CHI-STL	Ash Street	186.70	Cantilever flashing lights with gates	No Change	No Change
Sangamon	CHI-STL	Iles Avenue	187.30	Gates	No Change	No Change
Sangamon	CHI-STL	Hazel Dell Road	189.40	Gates	No Change	Quad Gates
Sangamon	CHI-STL	Woodside Road	191.10	Gates	No Change	Quad Gates
Sangamon	CHI-STL	Farm	193.00	None	Close w/Frontage Road	Conv. Gates
Sangamon	CHI-STL	Farm	193.80	None	Close w/Frontage Road	Conv. Gates
Sangamon	CHI-STL	Walnut Street /CR 40	194.40	Gates	No Change	Quad Gates
Sangamon	CHI-STL	Mulberry Street	194.50	Gates	Close	Close
Sangamon	CHI-STL	Locust Street (Pedestrian)	194.60	None	Close	Close
Sangamon	CHI-STL	Spruce Street	194.72	Gates	No Change	Quad Gates

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County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Sangamon	CHI-STL	Farm	195.60	None	Elec. Lock Gates	Conv. Gates
Sangamon	CHI-STL	Farm	196.40	None	Elec. Lock Gates	Conv. Gates
Sangamon	CHI-STL	Farm	196.90	None	Elec. Lock Gates	Conv. Gates
Sangamon	CHI-STL	Covered Bridge Road/ TR 369	197.60	Flashing lights	Conv. Gates	Quad Gates
Sangamon	CHI-STL	TR 371	198.10	Crossbucks	Close w/Frontage Road	Quad Gates
Sangamon	CHI-STL	TR 391	198.60	Crossbucks	Conv. Gates	Quad Gates
Sangamon	CHI-STL	TR 405	199.70	Crossbucks	Conv. Gates	Quad Gates
Sangamon	CHI-STL	Washington Street	200.45	Flashing lights	Conv. Gates	Quad Gates
Sangamon	CHI-STL	Adams Street (Pedestrian)	200.50	None	Close	Close
Sangamon	CHI-STL	Jefferson Street (Pedestrian)	200.55	None	Close	Close
Sangamon	CHI-STL	Madison Street	200.60	Gates	No Change	Quad Gates
Sangamon	CHI-STL	Monroe Street (Pedestrian)	200.70	None	Close	Close
Sangamon	CHI-STL	Jackson Street	200.80	Cantilever flashing lights with gates	No Change	Quad Gates
Sangamon	CHI-STL	Van Buren Street (Pedestrian)	200.85	None	Close	Close
Sangamon	CHI-STL	Farm	201.20	None	Close w/Frontage Road	Conv. Gates
Sangamon	CHI-STL	Farm	201.30	None	Elec. Lock Gates	Conv. Gates
Sangamon	CHI-STL	Farm	201.70	None	Close w/Frontage Road	Conv. Gates
Sangamon	CHI-STL	Farm	202.10	None	Close w/Frontage Road	Conv. Gates
Sangamon	CHI-STL	FAS 625	202.30	Flashing lights	Conv. Gates	Quad Gates
Sangamon	CHI-STL	TR 445B	203.40	Crossbucks	Close	Close
Sangamon	CHI-STL	Main Street	204.40	Flashing lights	Conv. Gates	Quad Gates
Sangamon	CHI-STL	TR 7	205.40	Flashing lights	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Jackson Street	206.90	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Residential (Pedestrian)	207.10	None	Close	Close
Macoupin	CHI-STL	Holden Street	207.20	Gates	No Change	Quad Gates
Macoupin	CHI-STL	CR 58	208.50	Gates	No Change	Quad Gates
Macoupin	CHI-STL	TR 67	209.50	Flashing lights	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Industrial (Pedestrian)	210.70	None	Close	Close
Macoupin	CHI-STL	Center Street	210.80	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Madison Street	210.90	Gates	Close	Close
Macoupin	CHI-STL	West South Street	211.10	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Old Rte. 4	211.80	Gates	Close	Close
Macoupin	CHI-STL	TR 105	212.70	Crossbucks	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Morean Street	214.51	Gates	No Change	Quad Gates
Macoupin	CHI-STL	TR 145	216.20	Crossbucks	Conv. Gates	Quad Gates
Macoupin	CHI-STL	TR 394	217.10	Crossbucks	Conv. Gates	Quad Gates
Macoupin	CHI-STL	TR 175	218.40	Gates	Conv. Gates	Quad Gates
Macoupin	CHI-STL	TR 189	219.60	Crossbucks	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Farm	221.30	None	Close	Conv. Gates
Macoupin	CHI-STL	CR 60	221.90	Flashing lights	Conv. Gates	Quad Gates
Macoupin	CHI-STL	North Broad Street	222.90	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Buchanen (Pedestrian)	223.20	None	Close	Close
Macoupin	CHI-STL	Nicholas Street	223.30	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Residential (Pedestrian)	223.70	None	Close	Close
Macoupin	CHI-STL	Main Street/ SR 108	223.80	Gates	No Change	Quad Gates
Macoupin	CHI-STL	TR 249	225.30	Gates	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Farm	226.20	Stop sign	Conv. Gates	Conv. Gates
Macoupin	CHI-STL	Farm	227.50	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	Farm	228.60	None	Elec. Lock Gates	Conv. Gates
Macoupin	CHI-STL	TR 279	229.80	Crossbucks	Conv. Gates	Conv. Gates
Macoupin	CHI-STL	Farm	230.10	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	TR 234	231.00	Crossbucks	Conv. Gates	Conv. Gates
Macoupin	CHI-STL	CR 10	234.00	Flashing lights	Conv. Gates	Conv. Gates
Macoupin	CHI-STL	TR 238	234.60	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	Farm	235.60	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	Farm	236.80	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	Farm	237.20	None	Elec. Lock Gates	Conv. Gates

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County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Macoupin	CHI-STL	Farm	237.40	None	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	Keating Street	238.30	Gates	No Change	Quad Gates
Macoupin	CHI-STL	TR 385/ Prairie Dell Road	239.80	Crossbucks	Conv. Gates	Quad Gates
Macoupin	CHI-STL	Farm	240.60	Flashing lights	Close w/Frontage Road	Conv. Gates
Macoupin	CHI-STL	TR 399/ Bachman Road	241.30	Flashing lights	Conv. Gates	Quad Gates
Macoupin	CHI-STL	TR 415	242.90	Flashing lights	Conv. Gates	Quad Gates
Macoupin	CHI-STL	TR 32	244.30	Flashing lights	Close w/Frontage Road	Quad Gates
Macoupin	CHI-STL	TR 427	244.90	Gates	No Change	Quad Gates
Macoupin	CHI-STL	Center Street	245.80	Cantilever flashing lights with gates	No Change	Quad Gates
Jersey	CHI-STL	Farm	246.90	None	Conv. Gates	Conv. Gates
Jersey	CHI-STL	Terpening Lane	248.00	Flashing lights	Close w/Frontage Road	Quad Gates
Jersey	CHI-STL	TR 162A	248.50	Gates	Conv. Gates	Quad Gates
Madison	CHI-STL	Farm	250.10	None	Elec. Lock Gates	Conv. Gates
Madison	CHI-STL	Bethany Lane	250.95	Gates	No Change	No Change
Madison	CHI-STL	Pearl Street	252.10	Cantilever flashing lights with gates	No Change	Quad Gates
Madison	CHI-STL	Tolle Road	252.55	Cantilever flashing lights with gates	No Change	No Change
Madison	CHI-STL	Alby Street	253.25	Cantilever flashing lights with gates	No Change	Quad Gates
Madison	CHI-STL	Washington St./Humbert Rd.	255.60	Gates	No Change	Quad Gates
Madison	CHI-STL	Levee Road	258.35	None	Elec. Lock Gates	Conv. Gates
Madison	CHI-STL	Industrial	262.05	None	Close	Close
Madison	CHI-STL	Evans Avenue	263.20	Gates	Close	Close
Madison	CHI-STL	Rand Avenue	264.30	Gates	No Change	Quad Gates
Madison	CHI-STL	Hawthorne Street	264.85	Gates	No Change	Quad Gates
Madison	CHI-STL	Seventh Street	265.20	Crossbucks	Conv. Gates	Quad Gates
Madison	CHI-STL	Robins Road	265.65	None	Conv. Gates	Conv. Gates
Madison	CHI-STL	Farm	266.25	None	Close w/Frontage Road	Conv. Gates
Madison	CHI-STL	Canal Road	266.70	Crossbucks	Conv. Gates	Quad Gates
Madison	CHI-STL	Oldenburg Road	267.80	Closed	Conv. Gates	Closed
Madison	CHI-STL	Farm	268.20	None	Close w/Frontage Road	Conv. Gates
Madison	CHI-STL	Maryville Road	270.70	Gates	No Change	Quad Gates
Madison	CHI-STL	Pontoon Road	272.70	Cantilever flashing lights with gates	Grade Sep.	Grade Sep.
Madison	CHI-STL	25th Street	274.30	Gates	No Change	No Change
Madison	CHI-STL	22nd Street	274.80	Gates	Close	Close
Madison	CHI-STL	20th Street	275.00	Gates	No Change	No Change
Madison	CHI-STL	Niedringhaus Avenue	275.40	Cantilever flashing lights with gates	No Change	No Change
Madison	CHI-STL	Bissell Street	277.10	Gates	No Change	No Change
St. Clair	CHI-STL	Missouri Avenue	280.90	Gates	Close	Close
Cook	CHI-KANK	Private Road	30.23	Crossbucks	Warn. Sign and Lights	No Action
Will	CHI-KANK	Stuenkel Rd./University Pkwy.	31.40	Gates	Veh. Arr. Barrier	No Action
Will	CHI-KANK	Dralle Road	32.50	Gates	No Change	No Action
Will	CHI-KANK	N. Peotone Road	39.00	Gates	No Change	No Action
Will	CHI-KANK	Harlem Avenue	39.85	Gates	Close	No Action
Will	CHI-KANK	Crawford Avenue	40.35	Gates	No Change	No Action
Will	CHI-KANK	Main Street	40.50	Gates	No Change	No Action
Will	CHI-KANK	Corning Street	40.55	Gates	Close	No Action
Will	CHI-KANK	Wilson Street (Pedestrian)	40.65	None	Close	No Action
Will	CHI-KANK	Peotone Road	41.15	Gates	No Change	No Action
Will	CHI-KANK	Kennedy Road	42.20	Gates	Close	No Action
Will	CHI-KANK	Private Road	42.75	None	Close w/Frontage Road	No Action
Will	CHI-KANK	TR 3	43.30	Crossbucks	Conv. Gates	No Action
Kankakee	CHI-KANK	TR 7A	44.45	Gates	Close	No Action
Kankakee	CHI-KANK	TR 11	45.55	Gates	No Change	No Action
Kankakee	CHI-KANK	Third Street	46.50	Gates	No Change	No Action
Kankakee	CHI-KANK	First Street (Pedestrian)	46.65	None	Close	No Action
Kankakee	CHI-KANK	Division Street	46.75	Gates	No Change	No Action
Kankakee	CHI-KANK	E. Adams Street	46.90	Gates	Close	No Action
Kankakee	CHI-KANK	TR 23	48.00	Gates	No Change	No Action

Appendix B
PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Kankakee	CHI-KANK	TR 37	49.75	Gates	No Change	No Action
Kankakee	CHI-KANK	Indian Oaks	50.80	Gates	No Change	No Action
Kankakee	CHI-KANK	McKnight Road	51.35	Gates	Close w/Frontage Road	No Action
Kankakee	CHI-KANK	Robert Hall Road	51.85	Gates	No Change	No Action
Kankakee	CHI-KANK	North Street	53.85	Cantilever flashing lights with gates	No Change	No Action
Kankakee	CHI-KANK	Bike Crossing	54.00	None	Close	No Action
Kankakee	KANK-DWI	Entrance Avenue	101.27	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Fifth Street	101.41	Cantilever flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Main Street	102.66	Gates	No Change	No Action
Kankakee	KANK-DWI	Private	103.90	None	Elec. Lock Gates	No Action
Kankakee	KANK-DWI	CR 6/Pipeline Road	104.43	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Private Road	104.90	None	Close w/Frontage Road	No Action
Kankakee	KANK-DWI	Private Road	105.10	None	Elec. Lock Gates	No Action
Kankakee	KANK-DWI	4000W/TR 96	105.69	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Private Road	106.20	None	Close w/Frontage Road	No Action
Kankakee	KANK-DWI	SR 17	106.59	Gates	Grade Sep.	No Action
Kankakee	KANK-DWI	Private Road	107.13	None	Elec. Lock Gates	No Action
Kankakee	KANK-DWI	Irwin Road/TR 80A	107.46	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Private Road	108.20	None	Close w/Frontage Road	No Action
Kankakee	KANK-DWI	Lehigh	108.49	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Huber Road/8000W	109.25	Crossbucks	Conv. Gates	No Action
Kankakee	KANK-DWI	Private Road	110.00	Crossbucks	Close w/Frontage Road	No Action
Kankakee	KANK-DWI	9000W/TR 60	110.12	Crossbucks	Close	No Action
Kankakee	KANK-DWI	Goodrich Road/10000W	111.30	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	11000W	112.32	Crossbucks	Close	No Action
Kankakee	KANK-DWI	Herscher Road/12000W	113.33	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	13000W/TR 36	114.36	None	Close	No Action
Kankakee	KANK-DWI	14000W	115.32	Flashing lights	Close	No Action
Kankakee	KANK-DWI	Union Hill	115.96	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	15000W	116.33	Crossbucks	Close	No Action
Kankakee	KANK-DWI	Buckingham/16000W	117.34	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	17000W	118.34	Crossbucks	Close	No Action
Kankakee	KANK-DWI	18000W	119.35	Flashing lights	Conv. Gates	No Action
Kankakee	KANK-DWI	Private Road	119.70	None	Close w/Frontage Road	No Action
Kankakee	KANK-DWI	19000W/TR 6	120.36	Crossbucks	Close	No Action
Livingston	KANK-DWI	SR 17/ Shelley Avenue	121.42	Flashing lights	Conv. Gates	No Action
Livingston	KANK-DWI	TR 282	122.60	Crossbucks	Close	No Action
Livingston	KANK-DWI	TR 280	123.17	Crossbucks	Conv. Gates	No Action
Livingston	KANK-DWI	CR 3	124.43	Flashing lights	Conv. Gates	No Action
Livingston	KANK-DWI	TR 268	125.44	Crossbucks	Close	No Action
Livingston	KANK-DWI	3100 East	126.45	Crossbucks	Conv. Gates	No Action
Livingston	KANK-DWI	TR 250	127.24	Crossbucks	Close	No Action
Livingston	KANK-DWI	Private Road	128.30	None	Elec. Lock Gates	No Action
Livingston	KANK-DWI	Private Road	129.55	None	Elec. Lock Gates	No Action
Cook	CHI-RID	111th Street	12.90	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	Monterey Street	13.10	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	115th Street	13.50	Gates	No Change	No Action
Cook	CHI-RID	119th Street	14.00	Gates	No Change	No Action
Cook	CHI-RID	Vermont Street	15.70	Gates	No Change	No Action
Cook	CHI-RID	Grove Street	15.80	Gates	No Change	No Action
Cook	CHI-RID	139th Street	17.00	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	147th Street	18.40	Gates	No Change	No Action
Cook	CHI-RID	Central Avenue	21.70	Gates	No Change	No Action
Cook	CHI-RID	167th Street	21.90	Gates	No Change	No Action
Cook	CHI-RID	Private Road	22.40	Crossbucks	Close	No Action
Cook	CHI-RID	Private Road	22.80	Crossbucks	Close	No Action
Cook	CHI-RID	66th Court	23.30	Gates	No Change	No Action

Appendix B
PROPOSED HIGHWAY-RAILROAD GRADE CROSSING TREATMENTS

County	Alignment	Street	Milepost	Existing Devices	DEIS Recommendation	FEIS Recommendation
Cook	CHI-RID	Oak Park Avenue	23.50	Gates	No Change	No Action
Cook	CHI-RID	80th Avenue	25.20	Gates	No Change	No Action
Will	CHI-RID	191st Street	28.00	Gates	No Change	No Action
Will	CHI-RID	School House Road	29.20	Gates	No Change	No Action
Will	CHI-RID	Mokena Street	29.60	Gates	No Change	No Action
Will	CHI-RID	Wolf Road	29.80	Gates	No Change	No Action
Will	CHI-RID	Hamilton/Francis Road	30.20	Gates	No Change	No Action
Will	CHI-RID	Anderson Road	32.50	Crossbucks	Conv. Gates	No Action
Will	CHI-RID	Private Road	33.80	Locked gate	Close	No Action
Will	CHI-RID	Vine Street	34.40	Gates	No Change	No Action
Will	CHI-RID	Old Hickory Road	35.30	Gates	No Change	No Action
Will	CHI-RID	Gougar Road	36.10	Gates	No Change	No Action
Cook	CHI-RID	Crawford Ave./Pulaski Road	18.80	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	107th Street	12.40	Gates	No Change	No Action
Cook	CHI-RID	105th Street	12.20	Gates	No Change	No Action
Cook	CHI-RID	104th Street	12.00	Gates	No Change	No Action
Cook	CHI-RID	103rd Street	11.90	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	102nd Place	11.80	Gates	No Change	No Action
Cook	CHI-RID	99th Street	11.40	Cantilever flashing lights with gates	No Change	No Action
Cook	CHI-RID	97th Street	11.10	Flashing lights	Conv. Gates	No Action
Cook	CHI-RID	95th Street	10.80	Cantilever flashing lights with gates	No Change	No Action
Will	CHI-RID	Cedar Road	34.00	Gates	No Change	No Action
Cook	CHI-RID	Private Road	0.61	None	Close	No Action
Cook	CHI-RID	Private Road	1.10	None	Close	No Action
Cook	CHI-RID	Private Road	6.70	None	Close	No Action
Cook	CHI-RID	Private Road	10.00	None	Close	No Action
Will	CHI-RID	Private Road	39.25	None	Close	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	9.76	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	9.77	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	9.78	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Private Road	9.79	None	Close	No Action
Cook	CHI-RID	Private Road	9.81	None	Close	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	11.92	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	11.94	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	11.96	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	11.98	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	11.99	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	15.72	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	15.74	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	15.76	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	15.78	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	18.38	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	20.40	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	20.41	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	20.44	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	23.48	None	Ped. Bell and Flashers	No Action
Cook	CHI-RID	Station Platform (Pedestrian)	25.15	Ped. Bell and Flashers	No Change	No Action
Will	CHI-RID	Station Platform (Pedestrian)	27.23	None	Ped. Bell and Flashers	No Action
Will	CHI-RID	Station Platform (Pedestrian)	27.27	None	Ped. Bell and Flashers	No Action
Will	CHI-RID	Station Platform (Pedestrian)	29.70	None	Ped. Bell and Flashers	No Action
Will	CHI-RID	Station Platform (Pedestrian)	33.90	None	Ped. Bell and Flashers	No Action

DEFINITION OF TERMS

1. **County**

   County in which the referenced crossing is located.

2. **Alignment**

   Segment of Chicago - St. Louis route in which the referenced crossing is located.

   CHI-STL = Chicago to Joliet to St. Louis
   CHI-KANK = Chicago to Kankakee
   KANK-DWI = Kankakee to Dwight
   CHI-RID = Chicago to Joliet - Rock Island District

3. **Street**

   The name of the street on which the referenced crossing is located.

4. **Milepost**

   The number associated with each at-grade crossing along the alignment that indicates distance along the railroad in miles. Mileposts are listed in ascending order from Chicago to East St. Louis for the Canadian National-Illinois Central/Union Pacific alignment. Other segments — Chicago to Kankakee (Illinois Central Mainline), Kankakee to Dwight (Norfolk Southern), and Chicago to Joliet (Rock Island District) — are also presented in ascending order from north to south or east to west, as appropriate.

5. **Existing Devices**

   The current grade crossing warning device or devices, if any, at the referenced crossing:

   Closed = Closed crossing included in the Draft EIS.

   None = No warning device present.

   Crossbucks = Warning signs posted at crossing.

   Stop Sign = Stop sign posted at crossing.

   Bell = Audible signal warns of approaching train.

   Ped. Bell and Flashers = Flashing lights and a warning bell that sounds when trains approach.

   Flashing Lights = Flashing lights at crossing that warn of approaching train.

   Locked Gate = A non-mechanical locked gate that blocks passage over tracks.

   Gates = Retractable gates that are deployed when train approaches crossing.

   Cantilevered Flashing Lights with Gates = Retractable gates with flashing lights that are deployed when train approaches crossing.

6. DEIS Recommendation and FEIS Recommendation

Closed = Closed crossing included in the Draft EIS.

Close = Closure is suggested for existing grade crossing at identified location (street, road or pedestrian crossing).

Close w/Frontage Road = Closure is suggested for existing grade crossing at identified location with a service road provided. (DEIS Recommendation only)

No Action = No recommendation is made for this crossing because it is located in the no action area between Chicago and Dwight.

No Change = Existing grade crossing has active warning device; no new equipment is proposed, although upgrading of some components or reprogramming of current control mechanism may be necessary.

Ped. Bell and Flashers = Flashing lights and a warning bell that sounds when trains approach is suggested for a pedestrian crossing proposed to remain open.

Warn. Sign and Lights = Warning signs, flashing lights, and a warning bell that sounds when trains approach is suggested for a private residential crossing proposed to remain open. (DEIS Recommendation only)

Conv. Gates = Conventional gates that lower when trains approach. These gates block vehicle passage onto the tracks for the approach travel lanes. Flashing lights with constant warning time (CWT) capabilities would also be provided with conventional gates. At some locations, such as multi-lane highways or areas with restricted sight distance conditions, auxiliary flashing lights can be mounted on cantilevered structures extending across the roadway.

Quad Gates = Similar to conventional gates except four gates are lowered instead of two. These gates block all passage onto the tracks.

Locked Gate = A non-mechanical locked gate that blocks passage over tracks.

Elec. Lock Gates = A gate that is locked with an electronic lock mechanism that signals oncoming trains to stop if the gate is unlocked. (DEIS Recommendation only)

Veh. Arr. Barrier = Vehicle Arresting Barrier; positive protection using a net or screen that prevents vehicles from entering the crossing. (DEIS Recommendation only)

Grade Sep. = New grade separated crossing is suggested at this location.

APPENDIX **C**

Agency Comments on the Draft Environmental Impact Statement

Appendix C
AGENCY COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

Number **Page**

APPENDIX C-1

FEDERAL AGENCY COMMENTS

Federal Emergency Management Agency
Region V
536 South Clark Street, 6th Floor
Chicago, IL 60605-1521

June 28, 2000

Mr. Merrill L. Travis, Chief
Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Subject: Draft Environmental Impact Statement (DEIS) for the Chicago – St. Louis High-Speed Rail Project

Dear Mr. Travis:

Thank you for sending us the above-referenced DEIS for review and comment. Our comments are restricted to floodplain management issues. We have no objection to the proposed project.

The DEIS appears to have an adequate discussion of impacted floodplains and the effects of the proposed project on identified Special Flood Hazard Areas (SFHAs), the so-called "100-year" floodplain. However, the DEIS fails to discuss how the proposal will comply with federal Executive Order 11988, Floodplain Management, and Governor's Executive Order 4. These are significant omissions which should be addressed in either a revised DEIS or final document.

Executive Order 11988, Federal Railroad Administration, and Federal Highway Administration regulations promulgated to comply with the Order, require that federal agencies *avoid taking any action in a floodplain* unless and until the Responsible Federal Official makes a Finding of No Practicable Alternative. The DEIS does not contain any discussion of a Finding. If the action must take place in a floodplain, an eight-step public involvement process must take place to identify and implement mitigative procedures. Also, the Order instructs federal agencies to avoid taking actions, which contribute to further floodplain development. The DEIS is silent on how, and if, the proposed project will encourage future floodplain development.

Governor's Executive Order 4 directs state agencies to comply with National Flood Insurance Program (NFIP) or any more restrictive state and local floodplain management regulations when undertaking *any construction in a floodplain.* The Illinois Department of Transportation has to follow established procedures in this regard. The DEIS is silent on Executive Order 4.

While the DEIS notes where floodplains will be impacted by the proposed project, it does not identify the source of the floodplain data. The source of floodplain information should be referenced, as floodplain maps produced by this agency are under nearly constant review and revision.

The DEIS should include a table of how the proposed project will comply with federal and state statutes, regulations, and executive orders.

The DEIS mentions that the proposed project will require Illinois Department of Natural Resources (DNR) floodplain (floodway) permits. However, the proposed project will also require the issuance of local (municipal and county) floodplain development permits. The DEIS should note this basic requirement of NFIP participation by local governments.

Finally, rail crossings of streams and related construction may require floodplain map revisions based on new work performed in identified floodplains. The project sponsor would be responsible for supplying this agency with the hydrologic and hydraulic modeling necessary to revise the regulatory floodplain maps, This should be noted in the DEIS.

Thank you for the opportunity to comment on the DEIS. If you have any questions, please call Senior Program Specialist David Schein on 312-408-5539.

Sincerely,

David L Schein

for Terry Reuss Fell (Ms.), Chief
Hazard Identification and Risk Assessment Branch

Cc: David R. Boyce, P.E., IDNR
Ronald C. Marshall, P.E., FHA
David A. Valenstein, MPA, FRA
Anthony S. Pakeltis, AICP, Parsons Transportation Group
Commander (ob), Second Coast Guard District

USDA NRCS
Natural Resources Conservation Service

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			8/3	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

United States Department of Agriculture

1902 Fox Drive
Champaign, IL
61820

July 31, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Attn: Mr. Frank Hartl

The USDA Natural Resources Conservation Service (NRCS) has reviewed the DRAFT Environmental Impact Statement for the Chicago-St. Louis High-speed Rail Project. We have reviewed the proposed activity and have no substantive comments.

Thank you for the opportunity of reviewing the proposed project.

Sincerely,

FOR
WILLIAM J. GRADLE
State Conservationist

cc:

Tony Kramer, Assistant State Conservationist, NRCS, Champaign, IL
Bill Lewis, Planning Team Leader, NRCS, Champaign, IL
Paul Krone, Environmental Specialist, NRCS, Champaign, IL

pk:travis.doc

U.S. Department of Housing and Urban Development
Environmental Staff
Midwest Office
77 W. Jackson Blvd.
Chicago, Illinois 60604-3507
http://www.hud.gov/local/chi/chienv1.html

August 4, 2000

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 south Dirksen Parkway, Room 302
Springfield, Illlinois 62764

Dear Mr. Travis:

SUBJECT: Draft EIS
Chicago - St. Louis High-Speed Rail Projoect

Thank you for the opportunity to comment on the Draft EIS. As noted in our scoping letter, HUD supports the pursuit of this proposal, since it promises to provide quality transportation links between these two great cities and points along its corridor in a fashion that will minimize adverse noise and energy impacts associated with air and auto transportation. We found the Draft EIS a cogent, useful document that did an excellent job of explaining how a more balanced transportation system could relieve auto and air congestion and thus reduce adverse environmental impacts.

As the planning process for this significant project proceeds, you might want to consider the following:

1) Further development of the indirect impacts of the project. Many planners weigh the growth impacts of highway projects more heavily than the impact of the actual construction process. The rail project differs from highway projects in that it promises to stimulate development in traditional urban centers rather than outlying areas. Perhaps the EIS could explore the potential for transit oriented development as a means of reducing the environmental impact of development. The Center for Neighborhood Technology has studied this area and may have some interesting ideas.

2) Incorporating other transportation modes into project planning. How will bus routes and other rapid transit connect to the railway stops? Is adequate parking available? Is there potential for a bike path along the right of way?

3) If an alignment to the proposed Peotone airport is being considered, are similar alignments to O'Hare and/or Midway airports being considered? What about the Gary airport (or is that part of Chicago-Detroit corridor project)?

4) The EIS references another high speed corridor (Chicago-Detroit); what is the status of that project?

5) One part of the EIS (section 4.2) compares the cost per person-kilometer for the various transportation modes noting that the cost for automobiles is gasoline only. Given the volatility of gasoline prices it would be useful to annotate that figure with the per gallon cost used.

Once again, good luck on this important effort.

Very truly yours,

eugene goldfarb
Midwest Environmental Officer

United States Department of the Interior

ILLINOIS & MICHIGAN CANAL
National Heritage Corridor Commission
15701 South Independence Blvd.
Lockport, Illinois 60441
(815) 740-2047

IN REPLY REFER TO:

BUREAU OF RAILROADS				
Received	Info	Action	Date	Initials
Bureau Chief			8/2	
Program Planning				

July 31, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Attention: Mr. Frank Hartl

Dear Mr. Travis:

I am writing on behalf of the Illinois & Michigan Canal National Heritage Corridor Commission to comment on the Draft Environmental Impact Statement (EIS) for the Chicago – St. Louis High-Speed Rail Project. We are pleased to note that the draft EIS does not offer a single "preferred" alignment for the northern section of the route. We also believe that high-speed rail service can have a beneficial effect on the economy and quality of life in the National Heritage Corridor, and has the potential to facilitate tourist visits to the Corridor.

However, the draft EIS does not adequately assess or address the potential effects of the northernmost, or "Illinois Central / Union Pacific" alignment on historic properties, namely the Illinois & Michigan Canal National Historic Landmark and the Lockport Historic District, a district listed on the National Register of Historic Places. The correspondence from the Illinois Historic Preservation Agency notes potential visual impacts of new fences along the rail line, which lies between State Street in Lockport (the main street of the town) and the I&M Canal and public towpath trail. Any fences, regardless of their appearance, would form a visual and physical barrier not only to the rail line, but also to the canal (now accessible as several points in Lockport) and the Gaylord Building, a contributing structure in the Lockport Historic District, and a major public attraction.

While the EIS expresses an intention to meet the Secretary of the Interior's Standards for Historic Preservation Projects, it does not address the extent of the visual impacts or the impact of fencing on public access to the Illinois & Michigan Canal. Nor does the EIS address whether or how the Standards would or could be met to adequately address the impacts.

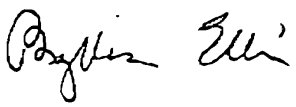
We are also concerned with public safety at the pedestrian grade crossing to the Gaylord Building. The rail line runs between the building which houses museum exhibits and a restaurant, and the nearest public parking. It is estimated that 400,000 pedestrian crossings occur at that site per year, including numerous school children.

For these reasons, we strongly request that the Illinois Central / Union Pacific alignment not be adopted.

However, we would welcome a high-speed rail alignment that includes a stop in the City of Joliet. This would greatly improve visitor access to the National Heritage Corridor, and would likely have a positive economic impact. For that reason, the Rock Island District alignment would be preferable to the Norfolk Southern alignment, which would bypass Joliet.

Thank you for the opportunity to comment.

Sincerely,



Phyllis M. Ellin
Executive Director

cc: Anne Haacker, Illinois Historic Preservation Agency
Carol Ahlgren, NPS-MWRO
Michael Madell, NPS Regional Environmental Coordinator
MaryAnn Naber, Advisory Council on Historic Preservation
Ross Ament, Heritage Corridor Convention and Visitors Bureau
Ana Koval, Canal Corridor Association

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

ER 00/484

JUN 28 2000

Ronald C. Marshall, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Marshall:

This is in regard to the request for the Department of the Interior's comments on the Draft Environmental Impact Statement concerning the **Chicago - St. Louis High-Speed Rail Project.**

This is to inform you that the Department will have comments, but will be unable to reply within the allotted time as we have just received your transmittal. Please consider this letter as a request for an extension of time in which to comment on the statement.

Our comments should be available by mid-August 2000.

Sincerely,

Terence N. Martin, P.E.
Team Leader, Natural Resources Management
Office of Environmental Policy and Compliance

cc:
Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway, Room 302
Springfield, Illinois 62764

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

August 17, 2000

BUREAU OF RAILROADS				
Received	Info	Action	Date	Initials
Bureau Chief			8/21	

ER-00/484

Mr. Ronald C. Marshall, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Marshall:

As requested, the U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Chicago - St. Louis High-Speed Rail Project; Cook, Will, Kankakee, Grundy, Livingston, McLean, Logan, Sangamon, Macoupin, Jersey, Madison, and St. Clair Counties, Illinois; and St. Louis County, Missouri. The entire project is located in Illinois except for about two miles at the south end of the corridor in the City of St. Louis, Missouri. This section is located in a heavily developed urban area just south of the St. Louis downtown area and would not impact resources of concern to the Department. We offer the following comments and recommendations concerning the Illinois portion of the project for your consideration.

NATIONWIDE RIVERS INVENTORY COMMENTS

Section 2.6.1.4 of the DEIS identifies streams with "special status." The DEIS identifies the Kankakee River as being "...listed as eligible for federal Wild and Scenic River designation." Actually, four rivers within the project area are listed on the Nationwide Rivers Inventory (NRI).

The NRI is a register of rivers that may be eligible for inclusion in the National Wild and Scenic River System. These rivers were included on the NRI based on the degree to which they are free-flowing, the degree to which the rivers and their corridors are undeveloped, and the outstanding natural and cultural characteristics of the rivers and their immediate environments. Section 5(d) of the National Wild and Scenic River Act (Public Law 90-542) requires that, "In all planning for the use and development of water and related land resources, consideration shall be given by all federal agencies involved to potential national wild, scenic and recreational river areas." In partial fulfillment of the section 5(d) requirements, the National Park Service (NPS) has compiled and maintains the NRI.

A Presidential directive and subsequent instructions issued by the Council on Environmental Quality require that each Federal agency, as part of its normal planning and environmental review

processes, take care to avoid or mitigate adverse effects on rivers identified in the NRI. Further, all agencies are required to consult with the NPS prior to taking actions that could effectively foreclose wild, scenic, or recreational status for rivers on the inventory.

NRI streams within the project area include:

1. Kankakee River - a 22-mile segment of this stream upstream of the Indiana state line is listed on the NRI because of its recreational values.
2. Mackinaw River - an 80-mile segment of this stream between the Illinois River and Colfax is listed on the NRI because of its recreational values.
3. Mazon River - a 47-mile segment of this stream from its source to its mouth is listed on the NRI because of its scenic and recreational values.
4. Sangamon River - a 150-mile segment of this stream generally between the South Fork and Saybrook is listed on the NRI because of its scenic and recreational values.

We would expect the proposal to have little, if any, impact on the recreational values of these streams. However, the DEIS indicates that many bridges may have to be expanded to accommodate the high speed rail line, and that some new bridges will need to be constructed in conjunction with frontage/service road development. The DEIS does not specify where these expanded and new crossings would occur.

Any expansion or proliferation of bridges could have an adverse effect on the scenic values for which the Mazon and Sangamon Rivers are listed on the NRI. We strongly encourage the proposer to avoid additional crossing infrastructures over these rivers to the maximum extent feasible. For further coordination with the NPS on this matter, please contact Mr. Michael Madell, Regional Environmental Coordinator, National Park Service, 700 Rayovac Drive, Suite 100, Madison, Wisconsin 53711-2476, Telephone: (608) 441-5600.

ENVIRONMENTAL IMPACT STATEMENT COMMENTS

Affected Environment and Environmental Consequences

The DEIS discusses potential project impacts to wetland, stream, prairie remnant, and other upland habitats of moderate and high quality value. Wetlands and prairies were surveyed and assessed using methods accepted in Illinois and impacts to high quality areas are fully acknowledged. Given that the project will utilize and/or parallel existing track, where possible, opportunities to avoid resource impacts through alternative alignments are limited except on the Chicago to Dwight section. Accordingly, mitigation consists primarily of minimization and compensation. Compensatory mitigation for both prairie and wetland impacts is proposed, although without detailed plans at this time. The Department looks forward to the opportunity to have its affected bureaus review and comment on more detail mitigation plans as they become available.

With respect to stream crossings, the DEIS provides characterizations of the streams and their

water quality. The Biological Stream Characterization (BSC) of Illinois Streams study is mentioned, but the ratings (A, B, C, D, E) are only provided for some streams, not all. In addition, the DEIS cites older BSC reports and 305b reports in characterizing the streams. We recommend that the most currently available BSC rating (from Illinois EPA and Illinois DNR) be given for each stream section crossed. Those streams with an "A" or "B" rating should be provided extraordinary protection from direct and indirect impacts since these represent the highest quality streams remaining in Illinois.

ENDANGERED SPECIES ACT COMMENTS

The U.S. Fish and Wildlife Service (FWS) does not concur that there will not likely be any adverse impacts to the federally endangered Hine's emerald dragonfly (*Somatochlora hineana*). As acknowledged on page 5-72 of the DEIS, the potential exists for direct adverse impacts to this listed species on the Illinois Central/Union Pacific (IC/UP) alignment in the vicinity of Long Run Seep Nature Preserve. As described in the DEIS, current understandings of the dragonfly behavior and populations do not allow conclusive determination of the magnitude of the adverse impacts. However, unless this alignment is dropped from further consideration, Formal Consultation in accordance with section 7 of the Endangered Species Act of 1973, as amended, will need to be initiated by the Federal Highway Administration with the FWS Chicago Field Office for this species.

Two federally listed plant species, the eastern prairie-fringed orchid (*Platanthera leucophaea*) and the leafy prairie clover (*Dalea foliosa*), also occur in the corridor studied. The DEIS concludes that there will be no impact to these species. However, we request that more detailed information (e.g., scope, method, and results) about the field surveys for these species are provided to the FWS Chicago Field Office to allow the FWS to determine if it can concur with that conclusion.

We note that several of the Illinois Endangered and Threatened species addressed in the DEIS as in the project corridor are also Federal Species of Concern. Thus, it would be prudent to avoid impacts to these species, as well, in an effort to help maintain the species' population levels sufficient to preclude the need for listing them as federally threatened or endangered at some point in the future.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

The DEIS indicates that Federal permits under Section 404 of the Clean Water Act for the crossing of streams, wetlands, or other waters will be needed from the U.S. Army Corps of Engineers for the build alternative. Accordingly, the Department's comments do not preclude separate evaluation and comments by the FWS when reviewing any forthcoming permit applications. The FWS may concur, with or without stipulations, or recommend denial depending upon effects.

The FWS advises that it would likely object to the IC/UP alignment in the Chicago region.

However, the FWS would likely have no objection to the issuance of any necessary Section 404 permits for the other two alignments in northeastern Illinois or other project work, provided the earlier identified environmental issues discussed above are adequately addressed, impacts to aquatic habitats are avoided or minimized to the maximum extent practicable, and adequate compensatory mitigation is provided to offset unavoidable impacts.

The Department has a continuing interest in working with the Federal Highway Administration and the Illinois Department of Transportation to ensure that project impacts to resources of concern to the Department are adequately addressed. For coordination on fish and wildlife resources, please contact the following FWS field offices:

- For Cook and Will Counties, contact the Field Supervisor, U.S. Fish and Wildlife Service, 1000 Hart Road, Suite 180, Barrington, Illinois 60010; Telephone: (847) 381-2253, Fax: (847) 381-2285.
- For the other project counties in Illinois, contact the Field Supervisor, U.S. Fish and Wildlife Service, Rock Island Field Office, 4469 48th Avenue Court, Rock Island, Illinois, 61201-9213, Telephone: (309) 793-5800, Fax: (309) 793-5804.

We appreciate the opportunity to provide these comments.

Sincerely,

Robert M. Baer, for

Michael T. Chezik
Regional Environmental Officer

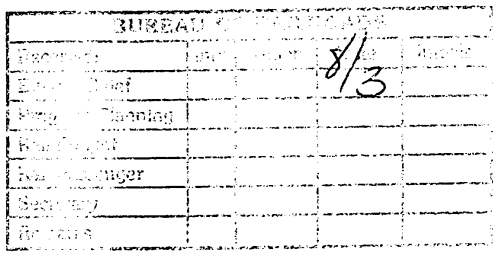
cc: Mr. Merrill L. Travis
Chief Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway, Room 302
Springfield, Illinois 62764

FWS, Region 3 (L. MacLean)
FWS, Region 3, FO, Chicago, IL
FWS, Region 3, FO, Rock Island, IL
FWS, Region 3, FO, Columbia, MO
NPS, Midwest Region, Omaha, NE
NPS, Madison, WI (M. Madell)

United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
Minton-Capehart Federal Building
575 N. Pennsylvania Street
Indianapolis, Indiana 46204-1521

AUG 0 1 2000



Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Dear Mr. Travis:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Chicago - St. Louis High-Speed Rail Project. The Office of Surface Mining's responsibility is to implement the Surface Mining Control and Reclamation Act of 1977 in cooperation with States and Indian Tribes. This law provides for active coal mine regulation, and abandoned mine land reclamation. In Illinois, the Department of Natural Resources, Office of Mines and Minerals, is the regulatory authority, and administers the abandoned mine reclamation program.

Having reviewed the draft document, we have no comments. Please be advised, however, that if coal is to be removed in the course of project construction, you should contact the Illinois Department of Natural Resources, Office of Mines and Minerals.

The Illinois Office of Mines and Minerals is best suited to provide information about current or past coal mining in Illinois, so we recommend that all further review and coordination for this project be directed to that agency at 524 South Second Street, Springfield, Illinois, 62701. Please contact Mr. Scott Fowler about active mining and coal resource issues, and Mr. Alfred Clayborne about abandoned mine issues.

If you have any questions, please call me at (317) 226-6700.

Sincerely,

Andrew R. Gilmore

Andrew R. Gilmore, Director
Indianapolis Field Office

cc: Scott Fowler
Al Clayborne

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 03 2000

REPLY TO THE ATTENTION OF
B-19J

OFFICE OF RAILROADS				
Recipient	Init.	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. Ronald C. Marshall
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Marshall:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the Chicago to St. Louis High Speed Rail Project (FHW-F54013-IL, CEQ # 000189).

As described in the DEIS, the proposed project would include provision of a high speed rail service in the 280 mile Chicago to St. Louis corridor as located in Cook, Will, Kankakee, Grundy, Livingston, McClean, Logan, Sangamon, Macoupin, Jersey, Madison, and St. Clair counties in Illinois, and St. Louis County in Missouri. As further described in the DEIS, implementation of a "Build" Alternative would include eight round trips per day, with maximum operating speeds between 110 and 125 miles per hour. If a "build" Alternative is in fact selected for implementation, the DEIS also indicates that existing track would be utilized throughout most of the project corridor, to the maximum extent feasible.

The DEIS states that the purpose of the project is to enhance the passenger transportation network in the Chicago-St. Louis corridor, in order to provide a more balanced use of its components. In this regard, the DEIS properly notes that, currently, 99 percent of the 35 million annual trips in the Chicago-St. Louis corridor are accomplished through automobile and air travel modes. Implementation of a "Build" Alternative, therefore, is intended to result in a noticeably more balanced use of the transportation network by diverting a number of trips which are currently made by automobile and airplane. In turn, a noticeably more balanced use of the transportation network might well provide tangible benefits to the human environment by facilitating a more efficient utilization of petroleum-based fuels and by lessening the emissions of transportation-associated air pollutants, particularly in the Chicago and St. Louis/East St. Louis environs. In recognition of the foregoing, our Agency hereby concurs with the project's Purpose and Need Statement.

The DEIS provides a full analysis of a "No-Build" Alternative, and a "Build" Alternative, with three distinct sub-alternatives proposed for the portion of the project between Chicago and Dwight. The three sub-alternatives evaluated in the DEIS are identified as the Illinois Central-Union Pacific Alternative (IUA), the Norfolk-Southern Alternative (NSA), and the Rock Island Alternative (RIA). Additional discussion was also presented for several other potential

"Build"Alternatives which were identified, evaluated, and rejected for cause, prior to circulation of the DEIS. Based upon our review of the DEIS and its discussion of issues related to alternatives analysis, our Agency hereby concurs with the project's Range of Alternatives Evaluated. We also concur that the DEIS has adequately and fairly described the project's reasonably foreseeable impacts on the human environment including, air quality, water quality, wetlands, farmed lands, and ambient noise levels.

In order for any of the "Build" Alternatives too fully meet the project's Purpose and Need requirements, certain conditions must be fulfilled. First of all, the reliability of service to be provided by the new facilities must be significantly improved over the levels typical of the existing service. Trains from St. Louis are routinely 45 minutes to 3 hours late upon arrival in Chicago, due to switching/trackage constraints in and around St. Louis and/or a lack of priority for passenger rail traffic on tracks primarily south of Springfield which are utilized but not owned by Amtrak. Continuation of these circumstances into the future would be inconsistent with expenditure of funds to provide high speed rail facilities and would prevent the project from meeting applicable Purpose and Need requirements by impeding the ability of the project to result in a noticeably more balanced use of the transportation network. In addition, since all three of the sub-alternatives will involve co-utilization of trackage with heavy Metra commuter use, substantial and continuing management attention will need to be applied to ensure that provision of the new service will not conflict with the ongoing ability of the existing commuter service to provide safe, efficient, and reliable transport of commuters to and from Chicago.

Based upon our review of the DEIS, it appears that the RIA would constitute the environmentally preferable "Build" Alternative. The RIA is shown to involve the least impact on Prime farmland acres, stream crossings, wetland acres, upland vegetation acres, prairie remnant acres, and good quality native vegetation acres. In addition, the RIA would also result in the fewest displacements and it has the lowest estimated capital costs. Consequently, our Agency rates this Alternative as "LO," lack of objections. The remaining two alternatives are shown to have distinctly greater natural resource impacts, and they are both significantly more expensive than the RIA. In recognition of the foregoing, we have assigned a rating of "EO-2," environmental objections-more information necessary, to both the NSA and the IUA alternatives. Our Agency's objections would be resolved if the project's forthcoming FEIS demonstrates: (1) for the NSA, that the alternative's local air pollution issue has been satisfactorily resolved and that selection of this alternative in preference to the RIA is clearly preferable in terms of meeting the project's Purpose and Need requirements, or (2) for the IUA, that the alternative's issue with regard to potential impact on a Federally listed Threatened/Endangered species has been satisfactorily resolved and that selection of this alternative in preference to the RIA is clearly preferable in terms of meeting the project's Purpose and Need requirements.

We appreciate the opportunity to review this project and its DEIS. If you have any questions on our comments, please contact Mike MacMullen of this office. Mike can be reached by phone at 312/886-7342, and his e-mail address is macmullen.michael@epa.gov.

Sincerely yours,

for Shirley Mitchell, Deputy Director
Office of Strategic Environmental Analysis

cc: Merrill L. Travis, Bureau of Railroads, IDOT, Springfield, Il.

U.S. Department of Transportation
United States Coast Guard

Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103
Staff Symbol: (obr)
Phone: 314-539-3900, x378
FAX: 314-539-3755

16590
7 July 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway, Room 302
Springfield, IL 62764

BUREAU OF RAILROADS

Received		Action	Date	Initials
Bureau Chief			7/17	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Subj: CHICAGO-ST. LOUIS HIGH SPEED RAIL PROJECT

Dear Mr. Travis:

We have completed our review of the DEIS for the subject project. We have no comments other than those previously submitted. If the project will not require the construction of new bridges or the physical alteration of existing bridges, than the Coast Guard has no regulatory involvement in the proposed action.

I appreciate the opportunity to comment on the proposed project.

Sincerely,

ROGER K. WIEBUSCH
Bridge Administrator
By direction of the Commander

Recorded 7/19/00

APPENDIX C-2

STATE AGENCY COMMENTS

CHICAGO AREA TRANSPORTATION STUDY
300 West Adams Street • Chicago Illinois 60606
(312) 793-3456

BUREAU OF RAILROADS				
Received	Info	Action	Date	Initials
Supv. Chief			8/7	
Rec. Unit Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

August 4, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads, IDOT
2300 South Dirksen Pkwy
Springfield, IL 62764

Dear Mr. Travis:

The following comments on the High-Speed Rail Draft Environmental Impact Statement (HSR DEIS) are based upon CATS staff review of and CATS Advanced Technology Task Force (ATTF) input on the draft document.

As the DEIS indicates, the effectiveness and efficiency of transportation within the Chicago region would be impacted by the introduction of high-speed rail into the transit mix. Several transportation issues were discussed or presented during the comment period, including, those comments made as follows:

- CATS agrees with the fact that the DEIS recognizes the importance of maintaining at-grade crossings that provide access to emergency services and facilities.

- The DEIS also recognizes the need to maintain accessibility to adjoining properties that contribute to the economic viability of the region.

- Included in the plan are air quality impacts. Since impacts cannot be measured in real time without HSR in service, estimates based upon 2010 ridership forecasts indicate 'no increase occurring in mobile source emissions of VOC's and CO regardless of the alignment or equipment options selected in the HSR corridor. The lower annual emissions with HSR will be attributed to diversions from buses and automobiles to HSR. NOx emissions, however, are projected to increase by one to seven percent. For each alignment, annual corridor VOC emissions will be up to one percent lower and CO emissions will be two percent lower than those under the 'no build' alternative.'

Thank you for the opportunity to provide input into this important issue.

Sincerely,

Aristide E. Biciunas by E.R.

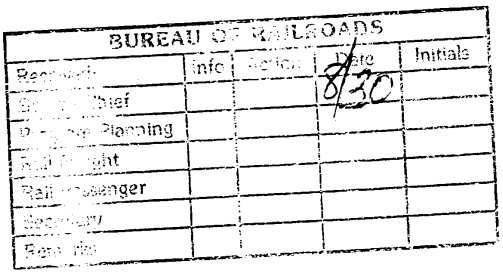
Aristide Biciunas
Executive Director

P:\High Speed Rail Draft EIS for WPC Agenda 072800.doc

Illinois Department of Agriculture
George H. Ryan, Governor • Joe Hampton, Director

Bureau of Land and Water Resources
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/782-6297 • TDD 217/524-6858 • Fax 217/557-0993

August 29, 2000



Mr. Merrill L. Travis
Illinois Department of Transportation
Bureau of Railroads, Room 302
2300 South Dirksen Parkway
Springfield, Illinois 62764

Re: Draft Environmental Impact Statement
Chicago - St. Louis High-Speed Rail
June 2000

Dear Mr. Travis:

The Illinois Department of Agriculture (IDA) has examined the proposed High-Speed Rail (HRS) proposal from Chicago to St. Louis. Previous comments were submitted regarding the proposal on April 25, 1995 regarding possible impacts to agricultural land. The IDA has examined the Draft Environmental Impact Statement (DEIS) to determine the project's compliance with the federal Farmland Protection Policy Act (7 USC 4201 et seq.) which requires consistency with the Illinois Farmland Preservation Act (505 ILCS 75/1 et seq.).

The project involves the development, implementation and operation of HSR service in the approximately 285 mile Chicago to St. Louis corridor. Existing track would be utilized for the proposed action throughout most of the project area. The first alignment, known as the Illinois Central/Union Pacific alignment, is the current Amtrak route. The second alignment, known as the Norfolk Southern alignment, utilizes Illinois Central mainline and Norfolk Southern (formerly Conrail) track via Kankakee to provide a better route of entry into Chicago and would provide access to the proposed South Suburban Airport site near Peotone, Illinois. The third alignment, known as the Rock Island District alignment, utilizes Metra Rock Island track between Chicago and Joliet and Union Pacific track between Joliet and Dwight. The DEIS only evaluates one alignment south of Dwight which matches the existing Amtrak route between Dwight and Granite City. South of Granite City and into St. Louis, the proposed alignment would operate on existing track, but on a different route than the one currently used by Amtrak.

New stations would be required in Joliet with the Rock Island District alignment. New stations would also be required in Kankakee and Peotone if the Norfolk Southern alignment is selected. In addition to adding new stations, the HSR project would also require the construction of 12 to 26 miles of double track, 25 to 27 miles of freight siding, 3 to 5 grade-separated highway-railroad grade crossing, and 15 to 17 miles of service roads.

While agriculture is the primary land use within the HRS corridor, the amount of agricultural land proposed for acquisition for all of the HSR alignments has been kept to a minimum by proposing frontage/service roads on 50-foot wide rights-of-way (ROW) adjacent to the existing railroad

alignment. Among the alternative alignments, the Norfolk Southern will require the most additional ROW with 156 acres, of which 134 acres are classified as prime farmland. It includes additional ROW for the construction of new track connections necessary to service the proposed airport site. The Rock Island District alignment will require the least amount of additional ROW with 97 acres of the three alternative alignments, of which 79 acres are classified as prime farmhand.

The greatest secondary agricultural impact is related to the maintenance of access to all farmed properties. Of the 310 to 350 existing at-grade crossings along the line, 85 to 91 crossings (68 to 74 vehicular crossings) are proposed for closure. In order to mitigate this impact, construction of the frontage/service roads, as planned with each of the HSR alternatives, will preserve access to any farmed properties. (pg . 5-13, Section 5-2-13).

Other agricultural impact items noted by the IDA are as follows.

1. Borrow Materials - This item was not discussed in the agricultural impacts. It is assumed that additional material will be needed for the construction of the railroad bed should new alignment be constructed from Dwight to Peotone to service the proposed South Suburban Airport. The IDA would ask that prime farmland be avoid as a source of borrow materials if non-prime land is available within a reasonable haul distance.

2. Severances - Only the Norfolk Southern alignment would sever agricultural land. This action is a result of the plan to connect the Norfolk Southern with the Union Pacific.

3. Uneconomic remnants - One uneconomic remnant will be created with the Norfolk Southern alignment resulting from the new ROW planned to connect the Norfolk Southern with the Union Pacific. This remnant should be considered as a source of borrow material.

4. Adverse Travel - The Norfolk Southern alignment has the greatest adverse travel, with 26 miles, compared to 16 miles for either the IC/UP or Rock Island District alignments.

5. Agricultural Displacements - No farm residences or agricultural buildings will be affected by any of the HSR alignments because alternatives are located on existing railroad ROW.

6. Wetland Impacts/Mitigation - While the document discusses the fact that wetland mitigation is required, there is no discussion as to the specific site locations and soils to be affected by the proposed mitigation site(s). Tree replacement is also not mentioned. Section 5.9.1.4 mentions that revegetation can occur on active cropland and can readily be replaced. To avoid compounding the project's environmental impacts, the IDA would request that no prime farmland or other farmland possessing viability for long term agricultural production be considered for wetland mitigation or tree replacement purposes. The IDOT has a established a wetland mitigation bank near Morris, Illinois. The IDA would recommend that any wetland mitigation or tree replacement be carried out at that site.

7. None of the alignments will impact established Ag Areas, formed in accordance with the Agricultural Areas Conservation and Protection Act (505 ILCS 5/1 et seq.).

Because the project will require less than 3 acres per mile of additional ROW in accordance with Section 2.b of the IDA/IDOT Cooperative Working Agreement on the protection of Illinois farmland, the IDA does not object to the projects's implementation.

We have determined the project meets the intent of the Illinois Farmland Preservation Act.

Two copies of the USDA-NRCS Form AD-1006 are enclosed for your use. One is for inclusion in the Final Environmental Impact Statement, the other is for your files.

Sincerely,

Teresa J. Savko
Office of Farmland Protection and Mined Land Reclamation

/TJS

Enclosures-2

cc: Director Joe Hampton, IDA
Joan Messina, IDA
Mike Williams, IDA
Jim Lippson, IDA
John Herath, IDA
Warren Goetsch, IDA
Steve Frank, IDA
John Rowley, IDOT

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request [illegible]
Name Of Project HIGH SPEED RAIL CHICAGO TO ST. LOUIS	Federal Agency Involved FHWA - FRA
Proposed Land Use COMMUTER RAIL SERVICE	County And State MULTIPLE COUNTIES
PART II *(To be completed by SCS)*	Date Request Received By SCS April 28 2000

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply — do not complete additional parts of this form).*	Yes ☒ No ☐	Acres Irrigated —	Average Farm Size 372
Major Crop(s) Corn, Soybeans, Wheat, Hay	Farmable Land In Govt. Jurisdiction Acres: 29,633,500 % 97		Amount Of Farmland As Defined in FPPA Acres: 27,695,900 % 91
Name Of Land Evaluation System Used Illinois	Name Of Local Site Assessment System Statewide		Date Land Evaluation Returned By SCS 5-3-2000

	Maximum Points	Alternative Site Rating: Site A ~~IC/UP~~	Site B ~~CONRAIL~~	Site C ~~ROCK ISLAND~~	Site D
PART III *(To be completed by Federal Agency)*					
A. Total Acres To Be Converted Directly		121	156	97	
B. Total Acres To Be Converted Indirectly		0	0	0	
C. Total Acres In Site		121	156	97	
PART IV *(To be completed by SCS)* Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		76.41	119.87	76.31	
B. Total Acres Statewide And Local Important Farmland		18.84	23.74	15.60	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.00043	0.00056	0.00035	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		25.2	56.9	64.5	
PART V *(To be completed by SCS)* Land Evaluation Criterion * X 1.5 Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*		~~72~~ 108	~~81~~ 121.5	~~87~~ 130.5	
PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*					
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area		(See attached ILLINOIS			
6. Distance To Urban Support Services		LESA CORRIDOR factors)			
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS * 150	~~160~~				
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)* * 150	~~100~~	108	122	131	
Total Site Assessment *(From Part VI above or a local site assessment)* * 150	~~160~~	66	92	66	
TOTAL POINTS *(Total of above 2 lines)* * 300	~~260~~	174	214	197	

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☒ State wide Corridor

Reason For Selection:

* When utilizing the state site Assessment Corridor Factors, 150 points are assigned to the Land Evaluation portion, and 150 points are assigned to the site Assessment portion, For a maximum of 300 points

Form AD-1006 (10-83)

Chicago to St. Louis
High Speed Rail Project
Draft EIS
FHWA and FRA Funds

PART VI-B Illinois Site Assessment CORRIDOR Factors	Maximum Points	IC/UP	Norfolk Southern	Rock Island
1. Amount of Agricultural Land Required	30	1	1	1
2. Location of the Proposed Alignment	30	20	21	20
3. Acres of Off-site Agricultural Land Required for Borrow Materials	15	15	15	15
4. Acres of Prime And Important Farmland Required for Mitigation	15	15	15	15
5. Creation of Severed Farm Parcels	10	0	10	0
6. Creation of Uneconomical Remnants	10	0	10	0
7. Creation of Landlocked Parcels	10	0	0	0
8. Creation of Adverse Travel	10	5	10	5
9. Relocations of Rural Residences and Farm Buildings	10	0	0	0
10. Utilization of Minimum Design Standards	10	10	10	10
TOTAL SITE ASSESSMENT CORRIDOR POINTS	**150**	**66**	**92**	**66**
PART VII				
Relative Value of Farmland	150	108	122	131
Total Site Assessment CORRIDOR Factors	150	66	92	66
TOTAL ILLINOIS LESA POINTS	**300**	**174**	**214**	**197**

081500
ts

Illinois
Department of
Natural Resources

http://dnr.state.il.us

524 South Second Street, Springfield, Illinois 62707-1787

George H. Ryan, Governor • Brent Manning, Director

August 16, 2000

Mr. Merrill L. Travis,
Chief, Bureau of Railroads
Illinois Dept. of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Re: Draft EIS
High Speed Rail Line

Dear Mr. Travis:

The Illinois Department of Natural Resources has reviewed the above referenced project and has the following comments.

Listed Species:

The Illinois Department of Natural Resources submitted a letter on July 30, 1999 to indicate that additional surveys be done for specific plants which are state -listed species that may have been missed during previous surveys due to lack of optimum conditions for finding the plant. According to the DEIS this has not been carried out. It is important that these surveys be completed. Please refer to that letter for specific information on that request.

Continued monitoring of the Hine's emerald dragonfly should be done to establish the true population size of this species along the Long Run Seep. If it can be shown that the population is large and can take additional mortality, the additional one train could be of less consequence in determining impacts.

Mitigation:

A) The IDNR needs to be directly involved in developing this mitigation plan. There is little actual detail in the DEIS on prairie restoration and management. The prairie mitigation section has several inadequacies and any plan that is developed needs to be reviewed by prairie restoration experts and managers, people who have first-hand experience with prairie restoration.

B) In **Section 5.9.2.4 Mitigation** under **Compensation**, paragraph c:-first sentence. Compensation for impact to grade C+ prairie will be 1:1. The IDNR feels this is inadequate compensation. Mitigation at the ratios of 5:1 would be acceptable due to the rarity of prairies, lack of diversity and the time element for them to become more mature.

C) In **Section 5.9.2.4. Mitigation** under **Prairie Impact Minimization** -paragraph e. It should be stated that the use of Native prairie plants historically known from the area will be achieved. It should also be a goal to utilize seed from the existing prairie to be obtained within a 50 mile distance from the impact.

D) As part of the mitigation, IDNR would like to propose that an active mitigation plan for the entire corridor be implemented to benefit the natural resources present. A comprehensive vegetation management plan would go a long way to alleviating some of the environmental concerns on future rail changes. This would help protect also from outside impacts such as would occur from fiber optic and pipeline projects which occur frequently along these same corridors.

E) The location of the mitigation for prairie loss should be nearby, but off site in a protected area owned by a governmental agency. These locations should be given some sort of permanent protection by dedicaton as a nature preserve or a registry.

Natural Areas:

A) Table 2.9-5 A portion (most) of Hitts Siding Prairie inventory area is a dedicated nature preserve.

B) **5.9.5.1 Direct and Indirect Impacts under IC/UP Alignment:** This section states "construction will be within the proximity of natural areas. In each area work will take place within the existing railroad right-of-way and outside of the boundaries of the natural areas". For Hitts Siding we believe a freight siding is being planned. Part of the inventory area is within the railroad right-of-way, therefore it seems that the natural area will be impacted. This needs to be clarified. Its been stated in the text that prairie and wetland will be destroyed along this section. From the IDNR inventory maps it appears the inventory area is along both sides of the tracks.

Wetlands:

Wetland comments were submitted on the Wetland Report to Dr. Charles Perino on October 15, 1999. These comments have been addressed in the DEIS for compliance with the Illinois Wetland Policy Act of 1989.

Other comments:

Based on the review by several IDNR Natural Heritage Biologists, it would be beneficial for the protection of the resources present along this corridor to have a meeting for **additional review of material.** Areas of concern are still voiced for: A) Hitts Siding Prairie B) Prairie mitigation and management C) Adequate surveys and data collected for existence of known quality prairie.

There appear to be some verbiage abnormalities that IDNR would like to see cleared up.

Section 2.1.3.2 Will County
under Special Areas - second paragraph, 4 sentence states that "It will serve as both a nature preserve and a recreational open space with biking and hiking trails."
Nature preserve is a technical term defined by law to refer to lands dedicated through the Illinois Nature Preserve Commission. It is our understanding that the US Forest Service will not and can not Dedicate property as a Nature Preserve. This verbiage is misleading.

Section 2.1.3.7 Logan County
under Special Areas, second paragraph - third sentence. This sentence identifies Edward R. Madigan State Park as Railsplitter State Park. The name was changed in 1995. This name change should also be reflected in all tables where parks and etc. are identified and all figures where appropriate.

Section 2.9.1 Upland Vegetation
under Grassland, second paragraph - third sentence. This sentence lists dominant grasses and includes one called "purplegrass." We are not 100% sure since common names can be different, but think this should be referred to as purpletop.

Section 2.9.1 Upland Vegetation
under Grassland, third paragraph - third sentence. This sentence lists introduced grasses south of Springfield and include "plains three-wan grass." We are not 100% sure since common names can be different. However, we think this is a letter transposition error and it should be, plains three-awn grass.

Section 2.9.3 Terrestrial Wildlife
Wildlife is technically defined to include all animals and plants. This section is misleading since it refers within the text and the Appendix A-1, to only vertebrate animals. A different heading would be better to avoid confusion.

Section 2.9.3 Terrestrial Wildlife
under Grasslands, first paragraph - second sentence. This sentence states "Species utilization is similar to that of non-native grassland habitat." This sentence is inadequate. For wide ranging vertebrate species this may be true. However, for insects which, by definition, are wildlife and that fact makes this statement untrue. Insects are also the most numerous (in both numbers and species) of the undomesticated animals present in grasslands. Many species require the presence of a single host plant species for the larvae to feed on. Without these plant hosts the insect will not be present. The concern we (IDNR) have over prairie loss is partly due to the loss of insect diversity. Since this group is poorly studied the loss of prairie (high quality or remnant) may affect this suite of species greater that any other. See, (Bousman, J.K. 1997. Survey of selected prairie insects on protected prairies in the southern till plain. Final report for the 1996-97 fiscal year to the Illinois Department of Natural Resources. Illinois Natural History Survey. 22pp.) for the regional significance of remnant railroad prairies on native insect conservation. Since insects are wildlife they should be better addressed in this section. We recommend that this sentence be dropped.

Section 2.9.5 Natural Areas
First paragraph, fourth sentence. "Eight of the INAI site are managed." Define "managed." The use of this term in this paragraph and in table 2.9-5 seams to imply public ownership. For example; Elkhart hill is privately owned. However, the DNR has provided the landowners with management guidelines and input. This site is continually evaluated and appropriate information given to the landowner. Activities on the vast portion of this INAI site is in accordance with the management guidelines for the natural community. We would call this managed and feel this categorization should be better defined. Also many of these sites are creeks, rivers and etc. which will never be "managed" as

such (unless the entire upper watershed is in public ownership) but may not require any activity at the present time. We do not see the use of this distinction unless it is to point out that these areas are not being managed so they don't count as much. In that case, the distinction need not be made because even without "management" they are still biologically significant. This distinction should be dropped.

Appendix A-1
This table is titled "Wildlife species by cover type and strata."
As noted before, wildlife refers to both plants and animals. The most appropriate title for this table should be "Common vertebrate species by cover type and strata." Common is an important distinction since the species lists are in no way comprehensive. Since no insect species are listed, vertebrate is the most appropriate term.

Section 5.9.1.2 Direct and Indirect Impacts
under High-Speed Rail Alternative: second paragraph. Remnant prairies are mentioned as significant permanent reductions however later in the paragraph it does not mention the replacement time for this community as it does for the other mentioned communities. Replacement times seems to merely be the time to maturity for the dominant species in the replaced. Since the final sentence in that paragraph states that restored habitat is less diverse than similar natural communities lets call this what it is. They are not proposing to restore an area they are planning to re-create an area. The final sentence should continue by stating that re-creations are less diverse than restorations.

Thank you for the opportunity to comment on this project. If you have any question, please contact me at 217-785-5500. We look forward to reviewing the Final EIS when completed.

Sincerely,

Steve Hamer
Transportation Review Program Manager
Division of Natural Resource Review and Coordination

cc: John Wilker, Mark Phipps, Bill Glass; IDNR Natural Heritage Biologist
Rich Nowack; IDOT Biological Resources Unit/Design and Environment

Illinois Department of
Public Health

George H. Ryan, Governor • John R. Lumpkin, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

August 3, 2000

BUREAU OF RAILROADS				
Received	Info	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Records				

Mr. Frank Hartl
Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Dear Mr. Hartl:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement for the Chicago to St. Louis High-Speed Rail Project. The primary potential public health impacts are related to the release of contaminants to air for persons living near the high-speed rail construction. The contaminants of concern are volatile organic compounds (VOCs), carbon monoxide (CO), nitrogen oxides (NO_x), and particulates.

The estimates in Section 5.4 of the document suggest that VOC emissions may double and CO and NO_x would increase in urban non-attainment areas as a result of high-speed rail construction. All these contaminants are projected to be less than the National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency. These increases are also expected to be offset by reductions in other modes of travel as a result of passengers using the high-speed rail service.

Particulates generated from fugitive dust emissions as a result of construction activities are a concern for residents living near the high-speed rail construction sites. Proper dust suppression methods should be used to minimize these exposures. Based on the projections in the Impact Statement, we concur that construction activities may adversely affect air quality over the short period by generating fugitive dust, but long-term health effects would not be expected.

Sincerely,

John R. Lumpkin, M.D.
Director of Public Health

cc: Mr. Merrill L. Travis
Chief, Bureau of Railroads

ILLINOIS FARM BUREAU®

"Improve the economic well-being of agriculture and enrich the quality of farm family life."

August 7, 2000

Mr. Merrill Travis
Illinois Department of Transportation
Bureau of Railroads – Room 302
2300 S. Dirksen Parkway
Springfield, IL 62764

Re: Comments on High Speed Rail

Illinois Farm Bureau appreciates the efforts of the Illinois Department of Transportation to ascertain and address the highway/railway crossing needs of rural Illinois residents. We ask that the Department consider these access needs of the rural population and accommodate them.

This High-Speed Rail project should provide:

- safe and convenient public access across the railroad;
- owners of private crossings with continued access; and
- that landowners are fairly compensated for any takings associated with the project.

Recognize, too, the special access needs of Illinois agriculture and provide adequate clearances for modern farm equipment. The selection of at-grade highway/railway crossing treatments should be designed accordingly.

Please consider the accompanying comments and thank you for this opportunity for input.

Sincerely,

Kevin B. Rund

Kevin B. Rund
Director of Local Government

Attachment

ILLINOIS AGRICULTURAL ASSOCIATION®
1701 N. Towanda Avenue • P.O. 2901 • Bloomington, Illinois • 61702-2901
P:\SHARED\GO... Phone: 309.557.2111 • Fax: 309.557.2559

Comments of the
ILLINOIS FARM BUREAU®
on the
ST. LOUIS TO CHICAGO
HIGH SPEED RAIL PROJECT
August 7, 2000

The Illinois Farm Bureau is a volunteer organization whose membership includes more than 90,000 farmers and landowners in the state of Illinois. That strong rural membership means that Illinois Farm Bureau's policies reflect the collective interests of most farmers of this state. In addition, Illinois Farm Bureau's associate membership includes a wide array of Illinois residents. Together, these two groups total more than 380,000. That reflects the broad base of Illinois Farm Bureau policy on issues of all types, including high-speed rail.

COMMENTS INCLUDED

We'll discuss the unique aspects of this project, the policy of Illinois Farm Bureau on the issue, and other considerations we feel should be made.

It is understood that the Illinois Department of Transportation (IDOT) feels it is very important to hear about the impacts of the proposed treatments of each specific crossing. However, as a statewide organization, Illinois Farm Bureau feels such comments are best left to those in the locale who are familiar with each situation. Illinois Farm Bureau has encouraged rural residents and each of the county Farm Bureaus involved to submit just such comments. This document will be limited to concerns of a more general nature that could have statewide impact.

EFFORTS AT GATHERING LOCAL INPUT

Illinois Farm Bureau appreciates the extensive work of the Illinois Department of Transportation through recent years to ascertain and consider the needs and desires of those most directly impacted by the treatment of each at-grade highway/railway crossing within the proposed high-speed rail corridors. That effort has apparently helped to resolve at least the most serious of the concerns about access facing the ag and rural communities.

We thank the Department and its staff for that effort and hope that the importance of that input will be remembered for future transportation projects and shared with other state agencies that may face a similar situation.

P:\SHARED\GOVCOMM\BSM\Commnets 2000-08.DOC

THE TRAIN DOESN'T STOP HERE

The issue of disrupting local access by closing rural roads (and rural community streets) is not new to Illinois farmers. Over the decades through the development of the Interstate highway system in this state, farmers have time-and-again been forced to accept local road closures to make way for the new system of roads. While nothing can totally compensate for the disruptions caused by such projects, farmers and other rural residents were consoled with the fact that the new Interstates were a transportation network they could, and would, reasonably utilize through its limited points of access. The Interstates added economic value for agriculture as a transportation network for grain and supplies. And, they substituted a different form of convenience in long-range automobile travel to partially compensate for the disruption to local road systems.

However, the blockage of local road access due to this passenger rail service project creates an entirely different scenario.

The closure of highway/railway crossings to accommodate passenger rail service offers virtually no direct economic value to agriculture. Other compensation is very minimal. There would be very little in the way of additional convenience for rural residents because of their extremely limited access to high-speed rail passenger service.

The high-speed rail project is being designed to serve a clientele other than rural Illinois residents. Yet, it is this same group of rural residents that would be forced to suffer the economic set-backs and added drudgery of adverse travel caused by the closure of highway/railway crossings in order to accommodate rail passenger service along the St. Louis to Chicago corridor. Additionally, these same residents would be asked to share in any tax burden designed to buoy the project's economic costs born by government--whether state or federal dollars.

Though rural residents would have to live with it daily, they would see very minimal, if any, benefits from this high-speed rail program. Impacts to rural residents should be minimized so that they not be asked to shoulder the burden of a project designed to benefit others.

IFB POLICY

The Illinois Farm Bureau Board of Directors generally supports the Illinois Department of Transportation's efforts to improve rail transportation in Illinois but opposes any public or private highway/railroad crossing closure which would significantly and adversely impact individual or public safety, property values without just compensation, or operating expenses for farmers and other businesses.

Illinois Farm Bureau policy goes on to say that the project should provide:

- safe and convenient public access across the railroad;
- owners of private crossings with continued access; and
- that landowners are fairly compensated for any takings associated with the project.

Crossings should not be closed without clearly-demonstrated and justifiable safety needs and ready, convenient, alternate access by farmers, rural residents, and emergency service providers.

ADVERSE TRAVEL

Among the highest impacts to rural residents resulting from a highway/railway crossing closure would be adverse travel. It would likely impose an obstacle with which residents would be confronted daily.

State agencies sometimes view access to farms only in terms of impacts on residential activities. But, these farms are businesses, as well. Just as the Illinois Department of Transportation would be cautious about cutting off direct access to dozens of local small business operations, it must consider some of those same impacts when considering a crossing in an agricultural area.

Over the course of a year, that additional travel would take its toll in two forms--added economic cost and the sacrifice of time lost.

Not only would residents in rural areas be impacted by highway/railway crossing closures in their daily lifestyles, but so would the private and government entities that routinely serve them. School buses, mail delivery, feed delivery, daily milk pick-up, motor fuel delivery, fertilizer delivery, parcel package services, heating fuel delivery, equipment maintenance services, veterinarian service, sales personnel, tire repair service, equipment dealer pick-up and delivery, garbage pick-up, appliance repair services, seed delivery, limestone delivery, business consulting services, soil testing services, building maintenance services, livestock buyers, crop scouting services, and others.

Because of the permanence of highway/railway crossing closings, these costs would be born into perpetuity. Those costs must be considered in any economic analysis of the cost of crossing closure or maintenance.

FARMLAND ACCESS

It is obvious that IDOT does not intend to prohibit a farmer's access to farmland he/she operates. We ask that IDOT work closely with both landowners and tenants to ensure a mutually agreeable solution to farmland access.

Frontage roads may be an acceptable means of providing access to private property when other avenues are not reasonably available. No responsibility for obtaining that legal or physical access should be born by the landowner(s) or tenant(s) in question. Those who will use the access and those over whose property that access will be provided should each be consulted on the most appropriate means of providing it.

The access routes should provide clearance of at least 25 feet in width and should be usable at any time and in any weather conditions when adjacent fieldwork might reasonably be undertaken.

EMERGENCY SERVICES

No highway/railway crossing should be closed if that closure would add more than a few minutes to any emergency run by police, fire or ambulance personnel or equipment. Closure of any highway/railway crossing used to access rural residents or farmsteads--even farm fields--could have serious emergency service impacts. Police protection and fire, rescue, and ambulance services are vital. In life-and-death situations, minutes count. Delays in access by emergency vehicles of only a few minutes could result in substantial economic and/or immeasurable human losses.

Farming is the most dangerous occupation in this nation[1]. The farm community relies on the availability of emergency services to mitigate that fact. In light of that, most farm communities dedicate thousands of volunteer hours to make these emergency services a viability reality. It would be inexcusable to thwart that effort in order to provide a mere convenience to rail passengers who are just "passing through."

Rural communities should have more than one available crossing in the community. These communities are often divided by the railroad. Without adequate and redundant crossing potential in the community, parts of it-- and the rural area it serves--could temporarily be cut-off from local emergency services. The likelihood of that potential could exponentially increase in disaster situations. The collapse of a building, the downing of power lines, the failure of a bridge, the flooding of a road, the toppling of trees, the derailment of a train, the collision of highway vehicles at the crossing--these and other possibilities dictate that more than one access route across railroad tracks be routinely maintained in communities.

RE-ROUTING OF FARM CHEMICALS AND FUELS

Despite local road jurisdictional acquiescence, no highway/railway crossing should be closed that would force the shipment of potentially hazardous materials into more highly populated or congested areas. While frequency of use of some crossings are at or near the perimeters of small communities might suggest those as candidates for closure, they often serve an important role as a less-threatening route for fuels, fertilizers and chemicals used in farming, agribusiness and in other businesses in the area. To close those may force that otherwise rural traffic into communities, even into the community's downtown area and its busiest streets.

[1] "Accident Facts", by National Safety Council, 1993 edition.

RE-ROUTING LARGE TRUCKS AND FARM EQUIPMENT

Where large trucks and/or farm equipment must be re-routed due to the closure of a public or private highway/railway crossing, the Department should ensure that the alternate route(s) will provide adequate weight and dimensional tolerances and will not inject that equipment into traffic flows that impose additional safety concerns.

CROSSING PROTECTION OPTIONS

At-grade highway/railway crossing protection systems installed on rural roads, private farm crossings and/or in rural communities must be designed to accommodate modern agricultural equipment. At minimum, clearances of at least 25 feet in width and 14 feet in height should be provided. In addition, the length of farm equipment—especially when towed in combination—should be accounted for and accommodated safely where traffic must be "stored" while awaiting the passage of a train.

The use of median barriers in combination with dual crossing gates would pose a problem for ag equipment—and consequently for other traffic on the road. Median barriers, if used, would have to be designed to be easily and safely mounted by farm equipment and to withstand repeated passage by such equipment without suffering significant damage. If that is not both possible and practical, then other forms of crossing protection should be used. In addition, owners and operators who move wide equipment should not be held in violation of any state or local traffic law nor held liable for damage to such devices for routine movement of equipment over them while straddling the median in an effort to avoid collision with obstacles alongside the roadway.

SUMMARY

Illinois Farm Bureau appreciates the efforts of the Illinois Department of Transportation to ascertain and address the highway/railway crossing needs of rural Illinois residents. We ask that the Department consider these access needs of the rural population and accommodate them.

This project should provide:

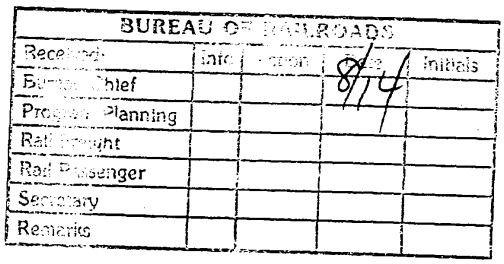
- safe and convenient public access across the railroad;
- owners of private crossings with continued access; and
- that landowners are fairly compensated for any takings associated with the project.

Recognize, too, the special access needs of Illinois agriculture and provide adequate clearances for modern farm equipment. The selection of at-grade highway/railway crossing treatments should be designed accordingly.

Thank you for considering these comments.

Illinois Nature Preserves Commission

524 SOUTH SECOND STREET
LINCOLN TOWER PLAZA
SPRINGFIELD, IL 62701-1787
217/785-8686



August 11, 2000

Mr. Merril L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Re: Draft Environmental Impact Statement for the proposed Chicago-St. Louis high-speed rail project.

Dear Mr. Travis:

The Illinois Nature Preserves Commission has reviewed the draft Environmental Impact Statement (EIS) referenced above and provides the following comments. Some of these comments are simply for purposes of clarification. Others are recommendations that could be included in the final EIS. Ultimately, the INPC hopes these comments will help ensure that adverse environmental impacts from this project are minimized and that dedicated Nature Preserves and Illinois Natural Areas Inventory sites are provided the protection afforded them under Illinois State statute.

* Twenty-two Illinois Natural Area Inventory (INAI) sites have been identified within a 1 mile corridor of the project area. INAI sites are recognized due to their high quality natural communities, natural features, and/or presence of State threatened or endangered species. According to the Natural Areas Preservation Act, local units of government and state agencies are required to undertake a process of consultation with the Illinois Department of Natural Resources whenever they authorize, fund, or take action that may have a negative impact against an Illinois Natural Area or dedicated Nature Preserve.

* Eight of the twenty-two INAI sites referenced above are dedicated Nature Preserves. As such, these areas are afforded protection under the Illinois Natural Areas Preservation Act (525 ILCS 30). Violation of the Act that results in damage to a dedicated Nature Preserve carries civil and criminal penalties. The eight Nature Preserves are: Denby Prairie, Carpenter Park, Stubblefield Woodlots, Funks Grove, Paw Paw Woods, Long Run Seep, Braidwood Dunes and Savanna, and Hitts Siding Prairie.

* Nature Preserves of particular concern are Denby Prairie, Paw Paw Woods, and Hitts Siding Prairie. Each of these Nature Preserves is located along the project right-of-way. The INPC recommends the HSR project plan avoid disturbance near these areas. Project planning and work activities near Denby Prairie should be especially careful because the natural community is within the project r.o.w.. Proper planning and coordination with INPC will go a long way in minimizing negative impacts to these Nature Preserves.

* The INPC further recommends special vegetation management following project completion. Such management would preclude the use of herbicides in favor of mowing and/or prescribed fire. Herbicides can cause serious damage to natural communities near the r.o.w.. Herbicide drift has been known to damage natural communities even further away. Mowing or prescribed fire is preferable along sections of the corridor near Nature Preserves and INAI sites. Signs could be strategically posted in these sensitive areas to alert maintenance crews that theses are "no spraying zones".

* Invasive species need to be controlled in disturbed areas, especially near INAI sites and Nature Preserves. Disturbed areas should be re-vegetated using seed of a local ecotype (i.e., source is within 50 miles). Vegetation monitoring and invasive species control should be conducted near sensitive areas for several years following project completion.

* Erosion control measures should ensure that increased sediments are not delivered to nearby wetlands and other natural communities.

Thank you for the opportunity to comment. Please do not hesitate to contact me at the number and address below if I can be of any further assistance. If you need more specific information regarding the location of INAI sites and Nature Preserves, please contact Steve Hamer (217) 785-5500.

Sincerely,

John C. Nelson
NE Illinois Threats Coordinator
More Hills State Park
914 South River Road
McHenry, IL 60050
(815) 385-9074

cc: Carolyn Grosboll (INPC)
Steve Hamer (IDNR)

SINGLE POINT OF CONTACT

Illinois State Clearinghouse

Administered by the

Illinois Department of Commerce and Community Affairs

James R. Thompson Center
100 West Randolph
Suite 3-400
Chicago, IL 60601

312/814-6028
FAX: 312/814-8485
TDD: 312/419-0667

George H. Ryan
Governor

Pam McDonough
Director

Printed on Recycled Paper

July 28, 2000

Illinois Department of Transportation
Mr. Frank Hartl
Bureau of Railroads
2300 South Dirksen parkway, Room 302
Springfield, IL 62764

SAI:	**00-063020**
REGION:	**Statewide**
CFDA #	
TITLE:	**Chicago - St. Louis High-Speed Rail Project from Chicago to St. Louis/Draft of Environmental Impact Statement**

The Illinois State Clearinghouse has processed the subject notification pursuant to Federal Executive Order 12372. Representatives of State, regional and local organizations whose activities might be affected by action on this project have been provided an opportunity for review and comment.

Based on the information provided and responses of interested parties, it has been determined that:

__X_ No comments were received during the 30-day review period, which indicates that the proposed project is apparently not in conflict with the State's plans, policies and priorities.

__ The comments received during the 30-day review period indicate that the proposed project is apparently not in conflict with the State's plans, policies and priorities. However, the attached comment(s) and/or recommendations(s) should be taken into consideration by the applicant and the funding agency.

___ The comments received during the 30-day review period indicate that the proposed project is not in conflict with the State's plans, policies and priorities provided the provision(s) outlined in the attachment(s) is/are met.

___ The comments received during the 30-day review period indicate that the proposed project is in conflict with the plans, policies and priorities of the State. See attachment(s) for further explanation.

This notice neither waives the necessity to obtain, nor excuses the failure to obtain, any additional notification, approval, permit, license, contract, right, or other arrangement which may be required for this project. The funding agency will conduct a programmatic review which is separate and distinct from this Executive Order 12372 review.

This letter is valid for two years from this date. However, any updated documents must be submitted to the State Clearinghouse if revision, continuation, or augmentation is sought for the project. Please reference the State Application Identifier (SAI) number in any future correspondence concerning this project.

Thank you for participating in the State Clearinghouse process. We wish you every success in your endeavors.

Virginia Bova
Coordinator/Single Point of Contact

Illinois Historic Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701–1507 • (217) 782–4836 • TTY (217) 524–7128

High Speed Rail Project
St. Louis to Chicago
IHPA #9910190052WSW

October 13, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Dear Mr. Travis:

We have reviewed the Draft Environmental Impact Statement for the Chicago-St. Louis High Speed Rail Project.

For purposes of compliance with the National Environmental Protection Act, the statement on page s-11 of the summary stating that coordination with the SHPO is continuing will be sufficient with the addition of a reference to section 106 of the National Historic Preservation Act of 1966, as amended (the Act).

However, if your department intends to utilize this study for purposes of meeting the documentation and consultation requirements of the Act and its implementing regulation 36 CFR part 800, "Protection Of Historic Properties", further documentation and analysis must be included this report when it is published in final form. Documentation to be included:

1. a definition of the area of potential effects (APE)
2. a table documenting the potential historic properties identified within the APE (much like the one included for natural resources) and the National Register status of each
3. the criteria of adverse effect as defined in 36 CFR part 800.5 and an explanation of which do or not apply and the reasons for this finding
4. a summary of efforts made to seek comment from the public concerning their views on possible effects to historic resources

Please inform us if you wish to include the above documentation with the body of the final EIS statement of if we will conclude the section 106 process in a separate format.

Thank you for this opportunity to comment at this time.

Sincerely,

Anne E. Haaker
Deputy State Historic Preservation Officer

C: John Walthall,IDOT
Carol Ahlgren, NPS
Mary Ann Nabor, ACHP
Phyllis M. Ellin, NPS

APPENDIX C-3

LOCAL MUNICIPALITY COMMENTS

2200 S. Lowe Rd
O. Box 117
Aroma Park, IL 60910

Village of Aroma Park

815-937-1240
Fax: 815-937-1813

June 26, 2000

Mayor Donald Green
City of Kankakee
385 East Oak Street
Kankakee, Il. 60901

Dear Mayor Green,

On July 19th, 2000 the Village of Aroma Park held there regular Village Board meeting. The vote was unanimous in the support for the high speed rail passing through our community.

If there is anything the Village of Aroma Park can do to help assist in the matter, please feel free to contact us.

Sincerely,

Norman Grimsley
Mayor

CITY OF BLOOMINGTON

JUDY MARKOWITZ, MAYOR

July 25, 2000

Remarks re: High Speed Rail by Bloomington Mayor Judy Markowitz

As Mayor of Bloomington, one of Illinois' fastest growing cities and corporate hub, I strongly support High-Speed Rail passenger service between Chicago and St Louis, operating at top speeds of 110 mph, passing through Bloomington with eight round trips per day.

This service, planned to be an alternative to current Amtrak service, will address existing rail passenger service problems in our corridor. It will be an outstanding option to car and bus travel, offering residents of Bloomington access to additional business opportunities in the Chicago and St Louis areas, as well as bringing tourists and economic development into our community.

Support of HSR must be coupled with the careful planning of highway-railroad at-grade crossing safety along the entire corridor, protection of the environment, and cooperative planning with our farmers so that they have access to their fields.

109 East Olive Street
Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2210 tel
309.434.2802 fax
Hearing Impaired
TTY 309.829.5115
an equal opportunity employer

It is time we move into the 21st century with our rail transportation as have Europe and Japan. I applaud Senator Durbin as co-sponsor of Senate bill 1900, the High Speed Rail Investment Act, and encourage Senator Fitzgerald to add his support to this piece of legislation.

Blomington and other downstate communities have much to gain by enhancing our pasenger transporation network, reducing travel time and improving service reliabiity.

Judy Markowitz

CITY OF BLOOMINGTON

JUDY MARKOWITZ
MAYOR

BUREAU OF RAILROADS

Received:	Info	Action	Date	Initials
Bureau Chief			10/18	
Program Planning		✓		
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

October 17, 2000

Mr Merrill Travis, Chairman
Bureau of Railroads, IDOT
2300 S. Dirksen Pkwy #302
Springfield IL 62764

Dear Chairman Travis,

I ask your consideration to keep the Miller Street crossing open when high speed rail comes through Bloomington. Miller is the only Bloomington crossing slated to be closed. Please take it out of the final plan for closure.

We have residents of two subdivisions directly across the tracks who use that crossing daily. In addition, their subdivisions are served by emergency vehicles using that crossing. The residents and I ask that Miller Street not be closed.

Thank you very much.

Sincerely,

Judy Markowitz
Mayor

109 East Olive Street
Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2210 tel
309.434.2802 fax
For Hearing Impaired
TTY 309.829.5115

an equal opportunity employer

Village of Bourbonnais

700 Main Street N.W. • Bourbonnais, Illinois 60914 • FAX (815) 937-3467 • (815) 937-3570

Grover L. Brooks
Mayor

Friday, August 4, 2000

Honorable George Ryan
GOVERNOR
State of Illinois
Springfield, Illinois 62706

Mr. Kirk Brown, Secretary
ILLINOIS DEPARTMENT OF
TRANSPORTATION
Springfield, Illinois 62706

RE: HIGH SPEED RAIL (HSR) INITIATIVE
BOURBONNAIS/KANKAKEE RIVER VALLEY

Dear Governor Ryan and Secretary Brown:

On behalf of the Village of Bourbonnais, I am writing to you to express our qualified support for the proposed High Speed Rail (HSR) initiative between Chicago and St. Louis, which would utilize the Illinois Central/Norfolk Southern route through the Kankakee River Valley, with access to the proposed South Suburban Airport site.

The Kankakee HSR would have a significant economic impact on the thousands of people who live in Bourbonnais and the Kankakee River Valley. Not only would the construction produce hundreds of needed construction jobs, but more importantly, would enhance travel to and from the area. Hundreds of area residents already commute to Chicago for employment, medical appointments, business meetings, cultural attractions and entertainment activities. HSR would reduce utilization of private vehicles and encourage greater utilization of public transportation.

In addition to meeting the transportation needs of current and future residents, HSR would also enhance economic development opportunities in the region. By facilitating access to Chicago, St. Louis and other destinations, HSR through Bourbonnais would encourage the development of new office and business facilities, ensuring employment opportunities for area residents..

HSR through Bourbonnais and the Kankakee River Valley would also have a positive impact on the many travel and tourism activities and facilities throughout the area, including Kankakee River State Park, the proposed lodge at the State Park, Perry Farm, area golf courses, and other destinations.

HSR, in order to be effective, needs to ensure separation from vehicular traffic. Bourbonnais knows only too well the impact a train collision with a truck can have, as evidenced by the Amtrak accident of last March. The proposed infrastructure improvements in the area suggest the closure of the McKnight Road grade crossing, the site of the Amtrak accident. However, no other improvements are proposed. We would strongly recommend that HSR initiative include grade separations at Roadway 6000 North, the site a a proposed interchange with I-57, Roadway 5000 North, which serves a growing industrial corridor, and Larry Power Road, which connects Routes 45 and 50, and serves as a primary route for area residents to regional commercial and retail facilities.

Friday, August 4, 2000

.orable George Ryan, Governor,
Secretary Kirk Brown, IDOT
Springfield, Illinois

RE: HSR INITIATIVE

In addition to safety concerns, HSR also needs to allow for convenient access to any passenger facility. Over the last 10 years, the Kankakee River Valley has witnessed significant growth along Route 50, immediately adjacent to the I-57 interchange with Route 50 (Exit No. 315). Route 50 and the parallel Route 45 are the two fastest growing corridors in the area, and every indication suggests that growth will continue to take place in this corridor. Because of this proximity, the Route 50/I-57 interchange is readily accessible to the majority of area residents, and would facilitate access by potential HSR users from Rantoul, Champaign, University of Illinois, Iroquois County and portions of western Indiana. The Illinois Central rail line is parallel to Route 50 in the area of the Route 50/I-57 interchange. Moreover, there is ample land available for future development which could allow for construction of related transportation improvements, such as regional bus facilities, and could also allow for development of commercial facilities, such as offices, convention centers and the like. We would strongly recommend that the HSR initiative undertake a more thorough analysis as to the preferred location of any passenger facility.

lways, I thank you for your continued interest in and support of Bourbonnais and the Kankakee River Valley. I would again like to express our support for the HSR Initiative through Bourbonnais, and ask that, in the interest of public safety, greater emphasis be placed on grade separations of HSR and area roadways, and that further consideration be given to the location of any passenger facility.

Sincerely,

Grover Brooks

Grover Brooks, Mayor

GB/fk

cc: BOARD OF TRUSTEES
State Senator Larry Walsh
State Senator Patrick Welch
State Representative Phil Novak
State Representative Mary K. O'Brien
Project File - HIGH SPEED RAIL

HSRSUPPORT 08-04-2000

VILLAGE OF BRACEVILLE

Box 187
Braceville, Illinois 60407

BUREAU OF RAILROADS

			8/7	

CERTIFIED MAIL

August 1, 2000

Mr. Frank Hartl, High Speed Rail Manager
Bureau of Railroads
2300 South Division Parkway
Springfield, IL 62764

REGARDING: PROPOSED CLOSING OF MAIN STREET CROSSING VILLAGE OF BRACEVILLE, GRUNDY COUNTY

Dear Mr. Hartl:

As mayor of the Village of Braceville, and on behalf of the elected Board of Commissioners, this letter is to strongly object to the planned closing of our Main Street crossing of the railroad that intersects our Village.

This Village is experiencing growth on BOTH SIDES OF THE RAILROAD, and closing of the Main Street crossing would greatly inconvenience this community.

The closing of former Illinois Route 129 south of this town was also a great inconvenience. All south-traveling traffic must now cross either at the Main Street or Mitchell Street crossings. Both are heavily traveled. If an emergency occurs and the Village residents must be evacuated to Pontiac, which is the route already planned for such a disaster, jamming all vehicles onto Route 53 would cause chaos.

It is our understanding, from the newspaper releases, that if the local official government objects, closing would not take place. **PLEASE CONSIDER THIS LETTER AS OUR OFFICIAL DISAPPROVAL OF CLOSING OF THE MAIN STREET CROSSING AT BRACEVILLE, ILLINOIS.**

We are in contact with our State Representative, Mary Kay O'Brien, regarding this matter.

Very truly yours,

VILLAGE OF BRACEVILLE

Arthur W. Scovel

Arthur W. Scovel
MAYOR

cc: Mary Kay O'Brien
All Commissioners

RESOLUTION NO. R-7-00-1

WHEREAS, it is in the interest of all the people of the Village of Bradley that High Speed Rail Transportation be provided to the Kankakee County Metropolitan area; and

WHEREAS, the Department of Transportation has a plan to establish High Speed Rail Transportation with a station in the City of Kankakee; and

WHEREAS, the Kankakee station would serve a substantial number of passengers from the Kankakee County Metropolitan area.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND THE BOARD OF TRUSTEES OF THE VILLAGE OF BRADLEY that they do hereby support and urge the Illinois Department of Transportation to provide high speed rail travel to the Kankakee County Metropolitan area with a train station in Kankakee, Illinois.

TRUSTEES:			
Robert O. Martin:	Aye - X	Nay - ___	Absent - ___
Jerry Balthazor:	Aye - X	Nay - ___	Absent - ___
Robert Redmond:	Aye - X	Nay - ___	Absent - ___
Bruce Adams:	Aye - X	Nay - ___	Absent - ___
Dennis Coy:	Aye - ___	Nay - ___	Absent - X
Caryl Wadley-Foy	Aye - X	Nay - ___	Absent - ___
TOTALS:	AYE - 5	NAY - 0	ABSENT - 1

APPROVED this 10th day of July, 2000.

Robert O. Martin

Robert O. Martin, President of the Board of Trustees of the Village of Bradley

ATTEST:

William J. Zajc by Gail Schultz, Deputy Clerk

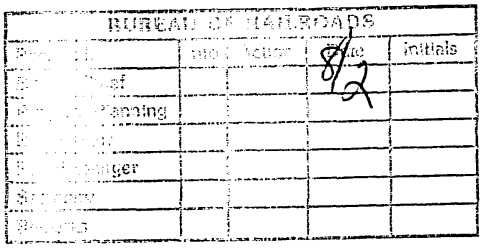
William J. Zajc, Village Clerk

South Suburban
Mayors and Managers
Association

David L. Owen
President

Edward W. Paesel
Executive Director

July 31, 2000



Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Attn: Frank Hartl

Re: Comments – Draft Environmental Impact Statement for the Chicago – St. Louis High Speed Rail Project.

Dear Mr. Travis:

On behalf of the South Suburban Mayors and Managers Association representing 38 communities and 600,000 residents in Southern Cook and Will counties we appreciate the opportunity to provide comments on the Draft Environmental Impact Statement for the Chicago-St. Louis High Speed Rail Project.

The Association has long supported the development of high-speed rail from Chicago to St. Louis. The Association has included such support in its Federal and State Legislative Policy Statements. We have also participated in various public meetings and discussions that have taken place in preparation for this phase of the project.

We believe it is important that Illinois keep its leadership role in the development of the high-speed rail project by providing dependable, fast service along the Chicago-St. Louis Corridor. By providing service on a more frequent basis and in substantially less time than currently available, rail will become a more attractive alternative to the automobile along this corridor.

The Association has also long supported the development of the South Suburban Airport in Will County near University Park/Peotone. We believe that the Norfolk Southern Alignment would be the best alternative so that the advantages of high-speed rail and the South Suburban Airport could be connected and maximized. Regardless of whether the airport is built, this alignment is viable from a ridership perspective and it impacts fewer at grade crossings than the other alignments with only three grade crossings in the first 37 miles from Chicago.

We applaud the efforts of the State of Illinois to develop this high-speed rail service and look forward to working with others involved to assist the State in implementing this vital service

CHICAGO SOUTHLAND
1904 West 174th Street • East Hazel Crest, Illinois 60429 • (708) 206-1155 • Fax (708) 206-1133

within the next several years. Please advise us of future opportunities to comment on and participate in this project in the future.

Sincerely,

Edward W. Paesel

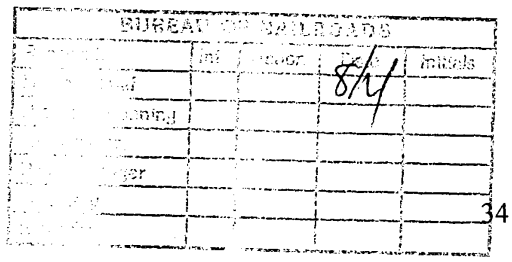
Edward Paesel
Executive Director

Cc: Mayor Dave Owen, President, SSMMA
Mayor Rudy Banovich, Chairman, SSMMA Transportation Committee
Brad Roback, SSMMA Transportation Planner

ESSEX TOWNSHIP

KANKAKEE COUNTY ILLINOIS

ESSEX TOWNSHIP SUPERVISOR
George Hoffman
3412 N. 14000 West Road
Essex, IL 60935
815/426-2555



ESSEX TOWNSHIP CLERK
Robert Bice
315 N. Pine Street
Essex, IL 60935
815/365-2275

3412 N. 14000 W. Rd
Essex, IL 60935
August 3, 2000

Mr. Merrell Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
Springfield, IL 62764

Dear Mr. Travis,

In regard to the closing of Railroad Crossing 115.32 (14000 W. Rd. Kankakee County), I feel it would cause a problem for all local residents in this area. Most importantly, fire and ambulance service would be greatly delayed in responding to emergency calls. We farm south of this crossing and use it many times a year. The alternate route is a busy state highway and would cause additional risk to both us, a slow-moving vehicle and those traveling on the road.

We were out of town the day of the public hearing and therefore rely on information from those in attendance and from what we read. I am a member of District #1 Kankakee County Board and am supervisor of Essex Township. I am extremely concerned about the impact of this closing on our residents and area community.

Thank you for your time and I would welcome any further discussion concerning this crossing.

Sincerely,

George O. Hoffman

George O. Hoffman

Railroad Meeting Council Chambers 933-0480
City Hall Kankakee
3-7 P.M Thurs July 27. 2000

Village of Gardner

Against High Speed Amtrak
Safety a Factor – Speed No need –
Somebody will Sooner or Later be hit
By This Train Either Driving or Walking.
Alot of Children who go to Schools
in Gardner will be much more at a
disadvantage. Village Employees,
The Fire and Ambulance Volenteers,
Business People of our town,
as well as there Customers will be
at a disadvantage By High Speed Rail.
We Really Don't Need This Speed
Through our Town. There is no
advantage for Amtrak They don't show
No Profit for a Gouernment Funded
Project that use our Tax Dollars From
Gardner, IL. This would be waisted
Funding for Tax Payers Throughout the
State. This money could go to Towns
for Funded Projects That would Help
Tax Dollars for Good use, Projects.

Thank You.
Mayor Tom Wise
Village of Gardner
Phone - 815-237-2592

BUREAU OF RAILROADS				
Receiver	Initial	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

RECEIVED
AUG 4 2000
CITY OF LOCKPORT

Public Comment Form (continued)
Chicago – St. Louis High-Speed Rail Project

Comments (attach additional sheets if necessary):

Village of Gardner, Ill. Grundy Co. 60424

Hello, my name is Tom Wise, Mayor of Gardner. I'm Against the High Speed Rail Project Safety is the number one factor. You want to close another Crossing in Downtown Gardner Division St. Crossing. This crossing is close to Fire and Emergency Department. This would really Inconvenience our Town. We Have Children and Adults cross YOUR TRACKS all Day, Sooner or later Someone is going to be Hit By one of These Trains going over 100 mph. Our Tax Dollars Could Be used for Far Better Tax Dollar Projects.

There is no Good Advantage AMTRAK is offering Gardner Residents For This High Speed Rail Project

(USE Dwight to Kankakee Route) Thank You

Mayor Tom Wise

815-237-2592 OFFICE
815-237-2901 WORK
815-237-2411 HOME

Mail comments to:

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
Springfield, Illinois 62764

Attn: Mr. Frank Hartl

Public comments must be received by August 7, 2000 in order to be included as part of the Public Hearing Record.

VILLAGE OF GARDNER

302 N. Center Street
P.O. Box 545
Gardner, IL 60424

Ph. (815) 237-2592
Fax (815) 237-0368

Craig

As Mayor of Gardner we do not need any more Railroad Crossings closed in our Town or Rural Crossings between Gardner and Dwight for Fire or Emergencies. First of all There is no benifit at all for Gardner Residents only inconveiences. The High Speed Rail Should Go To Dwight, Then to Kankakee

Thank you for your Interest

Tom Wise

Garfield Township Highway Commissioner
8815 S. Gorman Road
Gardner, Illinois 60424

September 29, 2000

Mr. Craig Cassem
County Engineer
Grundy County Highway Department
310 E. DuPont Road
Morris, Il. 60450

Re: High Speed Rail

Dear Mr. Cassem:

Please be advised that in response to your letter dated August 21, 2000, Garfield Township does not oppose the closing of the railroad crossing at Maher Road as long as a frontage road is constructed between Maher Road and Route 53 before the crossing is closed. The Township does not oppose the closing of the 2 farm crossings as long as an alternative access is provided to the farms affected.

Please call me if you have any questions.

Very truly yours,

Dean A. Christensen

Dean Christensen
Highway Commissioner

DC:db

Public Comment Form
Chicago – St. Louis High-Speed Rail Project

Mr. Merrill Travis, Chief
Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764
Attn: Mr. Frank Hartl

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Name: James Roeder

Address: 1840 West Scully Rd.

City/State/Zip Code: Dwight, IL 60420

Representing: Goodfarm Township Road Commissioner

I believe all current crossings in Goodfarm Township, Grundy County, Illinois should remain open. Mazon Rd., Scully Rd., and Stonewall Rd. are used daily by the residents of this part of Goodfarm Township. During the spring and fall, many pieces of farm machinery use these crossings to reach the old I-55 service road to travel to other farms. Without these crossing, farm equipment would have to share the road with all the other traffic on busier roads. Gantzert Rd. and Filman Rd. are used very little, but are subject to an agreement between the railroad and the landowner to remain open.

A set of passing tracks are located at Livingston Rd.- milepost 72, Mazon Rd.- milepost 71.14, and Scully Rd. – milepost 70.52. Parked trains on these passing tracks could block these crossing for use by the public and emergency vehicles.

Closing some crossings will result in greater traffic volume on the roads with open crossings. This increased use will make more frequent repair necessary and cost Goodfarm Township more. No roads maintained by Goodfarm Township could be closed, because access would still be needed to property along these roads.

Yours Truly,

James Roeder

James Roeder
Goodfarm Township
Road Conmmissioner

Goodfarm Township

GRUNDY COUNTY
R. R. 2
Dwight, Illinois 60420

September 5, 2000

Dear Craig,

Your letter regarding the proposed High Speed Rail.

It is Goodfarm Township understanding that IDOT will pay $10,000 a piece for closing of Gantzet Road and Filman Road, and we are in agreement with that.

Goodfarm Township is determined to keep crossing open at Old Mazon Rd. for acess of Ambulance and Fire Department to Janet Gantzets home and farmstead.

Sincerely Yours,
Roland Gantzet
Town Clerk

Village of Grant Park

GRANT PARK, ILLINOIS 60940
PHONE (815) 465-6531

June 19, 2000

Mr. Donald E. Green
City of Kankakee
City Hall 385 East Oak Street
Kankakee, Il 60901

Dear Mayor Green:

In reviewing your letter and information regarding a High Speed Rail System thru our county, I would certainly agree with your feelings on the need for it, and if we can help in any way please feel free to contact us.

Sincerely,
VILLAGE OF GRANT PARK
H. Russell Hilgert
H. Russsell Hilgert, Mayor

HRH:pe

GRUNDY COUNTY HIGHWAY DEPARTMENT

310 East DuPont Road
Morris, Illinois 60450

Phone: 815-942-0363
Fax: 815-942-4290
E-Mail: grundyhwy@uti.com

Craig Cassem, P.E.
County Engineer

James Fewell
Assistant County Engineer

November 2, 2000

Illinois Department of Transportation
Office of Planning & Programming
2300 South Dirksen Parkway
Springfield, Il. 62764

Attn: Mr. Merrill Travis
Chief, Bureau of Railroads

Re: High Speed Railroad
Crossing Closures
Grundy County

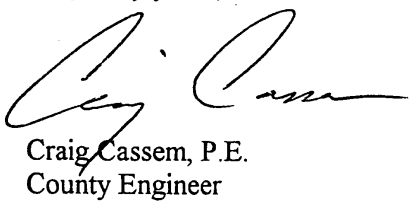
Dear Sir:

Please be advised that we have contacted the villages and townships in the County regarding the crossings that IDOT would like to see closed for the high-speed trains. The villages' and townships' positions are as follows:

- The Village of Braceville does not want either of the 2 crossings in the Village closed.
- The Village of Gardner does not want any of their crossings closed.
- Garfield Township does not oppose the closing of the crossing at Maher Road as long as a frontage road is constructed between Maher Road and Route 53 before the crossing is closed. The Township does not oppose the closing of the 2 farm crossings at MP 66.60 and MP 67.95 as long as an acceptable alternative access is provided to the farms affected.
- Goodfarm Township does not oppose closing the crossings at Gantzert Road and at Filman Road. The Township was informed that IDOT would pay the Township $10,000 to close each crossing. (The ICC recently announced that the incentive to close a crossing has been increased to a minimum of $25,000 and a maximum of $35,000.) The Township does not want to see the Old Mazon Road crossing closed.
- Grundy County in not in favor of closing any crossings except those mentioned above.

Please contact me if you have any questions.

Very truly yours,



Craig Cassem, P.E.
County Engineer

CC:db

cc: Mayor Tom Wise, Gardner
Mayor Arthur Scovel, Braceville
Dean Christensen, Garfield Township Highway Commissioner
Jim Roeder, Goodfarm Township Highway Commissioner

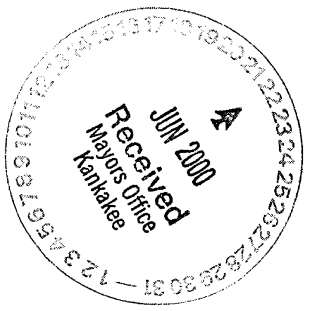
Enclosures:

September 29, 2000, from Garfield Township
September 28, 2000, fax from Gardner
September 5, 2000, from Goodfarm Township

Village Of Hopkins Park
DAVID LEGGETT, MAYOR

P.O. BOX AK
HOPKINS PARK, ILLINOIS
(815) 944-8625

June 21, 2000



Donald E. Green
Mayor, City of Kankakee
City Hall
385 East Oak Street
Kankakee, IL 60901

Dear Mayor Green:

This letter will serve to acknowledge receipt of your June 8, 2000 letter with a packet of material describing the High Speed Rail System proposed by the Illinois Department of Transportation. You informed me that Merrill Travis, Bureau Chief of Railroads for the Illinois Department of Transportation, had recently appeared at one of your City Council meetings and discussed a high speed rail route between Chicago and St. Louis with one of the scenarios going through Will County and the other through Kankakee County. You indicated that your City Council enthusiastically approved a Resolution in support of this high speed rail passing through your community.

Your letter and the information you provided was discussed at the last meeting of the Village of Hopkins Park. We want you to know that the Village of Hopkins Park endorses the concept of a high speed rail system between Chicago and St. Louis going through Kankakee County. Hopkins Park is entering a period of what we believe is going to be tremendous growth and we are convinced that a high speed rail system will have a positive impact on transportation and economic development in our County and in the Hopkins Park area specifically.

Sincerely,

David Leggett
Mayor, Village of Hopkins Park

OFFICE OF THE CITY MANAGER
JAMES P. SHAPARD
DEPUTY CITY MANAGER
OFFICE 815/ 724-3730
FAX 815/724-3737

CITY OF JOLIET

150 WEST JEFFERSON STREET
JOLIET, ILLINOIS 60432-4156

July 24, 2000

Mr. Kirk Brown, Secretary
Illinois Department of Transportation
Room 300
2300 South Dirksen Parkway
Springfield, IL 62764

RE: IDOT Public Hearing – Joliet, Illinois, July 26, 2000
(High Speed Rail Project)

Dear Mr. Brown:

The City of Joliet supports the proposed Chicago to St. Louis High Speed Rail Project. As the fastest growing municipality in Will County, and among the fastest growing communities in Illinois, we feel that a stop at Joliet Union Station is imperative.

A grade separation will be required at Schweitzer Road as substantial development is expected west of the grade crossing on Schweitzer. This development is expected to result in considerable traffic and a grade separation is necessary for safety.

Thank you for the opportunity to comment on this important project.

Sincerely,

James P. Shapard
Deputy City Manager
City of Joliet

JPS:pt

cc: City Manager
Mayor and City Council
Jim Haller
Will County Governmental League

idot.js

City of Kankakee

Donald E. Green
Mayor
City Hall 385 East Oak Street
Kankakee, Illinois 60901
(815) 933-0500 – Fax (815) 936-3619
web site: www.ci.kankakee.il.us

July 24, 2000

Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 S. Dirksen Parkway, Room 302
Springfield, Illinois 62764

Dear Mr. Travis:

We have the opportunity to review the summary of the High Speed Rail Draft Environmental Impact Statement. The only comment I would like to make is the City of Kankakee continues to support the proposed High Speed Rail passenger service between Chicago and St. Louis; and, very specifically, the Norfolk Southern alignment which would utilize the I.C. mainline between Chicago and Kankakee and the Norfolk Southern (formerly Conrail) between Kankakee and Dwight which would have the possibility of stops in Kankakee and Peotone.

Sincerely yours,

Donald E. Green
Mayor

DEG:ns

City of Kankakee

Donald E. Green
Mayor
City Hall 385 East Oak Street
Kankakee, Illinois 60901
(815) 933-0500 – Fax (815) 936-3619
web site: www.ci.kankakee.il.us

July 27, 2000

Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 S. Dirksen Parkway, Room 302
Springfield, Illinois 62764

RE: High Speed Rail

Dear Mr. Travis:

For your records, I am enclosing letters of support and/or resolutions from the Villages of Bradley, Aroma Park, Hopkins Park, Grant Park and the City of Momence.

Also, enclosed is a Resolution whereas the City of Kankakee is supporting high speed rail.

Sincerely yours,

Donald E. Green
Mayor

Enclosures
DEG:ns

Resolution No. 2000 - 25

WHEREAS, The Illinois Department of Transportation has proposed an overall plan for the State of Illinois to initiate the installation of a High Speed Rail, and

WHEREAS, The City of Kankakee, Illinois supports this transportation system for this community as a positive addition to our public transportation system, and

WHEREAS, 95-97 % of our intercity travel is still by cars; creating congestion and causing air pollution, and

WHEREAS, The third option - High Speed Rail is particularly effective and reliable at distances from 300- 500 miles, when cars are too slow and air travel is too costly, and

WHEREAS, High Speed Rail could reasonably expect to increase ridership by 3% and increase daily round-trips from Chicago to St. Louis , in a 110 mph, modern European tilt train.

THEREFORE BE IT RESOLVED, By Mayor Donald E. Green and members of the City Council to support and approve the High Speed Rail as a positive and modern addition to the transportation system of the City of Kankakee and Kankakee County.

APPROVED this 5th day of June, 2000.

Mayor Donald E. Green

ATTEST:

Katherine Carr, City Clerk

LEMONT TOWNSHIP

16020 – 127th Street • Lemont, Illinois 60439
(630) 257-2522 FAX (630) 257-1219

Supervisor
Robert A. Porter

Clerk
Edward J. Forkel

Assessor
Kenneth C. Jacobowski

Highway Commissioner
Sigitas P. Vaznelis

Tax Collector
Joseph C. Houdek

Trustees
Janine M. Davidson
James A. Gerry
Edward J. Hills
Francis E. Wozniak

Director of Human Services
Cynthia K. Laflin

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Railroads
Illinois Department of Transportation
Springfield, Ill. 72764

July 31, 2000

Dear Mr. Travis:

I would like to take this opportunity to make formal comments on the Chicago-St. Louis High Speed Rail Project on behalf of the Lemont Township government and as the elected Lemont Township Supervisor. These comments are:

1. Your process of gathering input from the public and from residents, which will be affected by this proposed project, is less than first class. In fact, one would suspect that this process is to limit public input as much as possible. Our agency became aware of this "new life" in this project by chance in seeing it in newspapers. I became aware of the hearings by an editorial in the July 26th editorial of the Daily Southtown. Upon calling your office, I was informed the draft report is only available at local libraries for review. I immediately went to the Lemont Library to "check-out" the CD to begin reviewing the draft. I found out the Village of Lemont is in the same situation. They threatened your office into sending them a copy of the CD. Maybe I should have used more forceful comments in getting a draft for our agency review. Our two local newspapers did not even mention the hearings.
2. Upon a light review of your draft report, it is becoming clear the intent of this project is to use the No-Build route. This route will take the high-speed trains multiple times in the middle Lemont's downtown district. The other two routes require land acquisition, rail installation, wetland mediation, additional permitting, more cost, and more time to bring the project on line. The other two alternative routes would be located in low or no population areas. The alternative through Peotone and Kankakee is not suggested, as the proposed airport is not on a fast track. Perhaps our Governor's hometown of Kankakee is a not-in-my-backyard concern.

3. Residents of Lemont have been commenting to me in the past few days that this high-speed train system is going to come through Lemont as new rails on the route have and are being installed this summer. I stopped a rail crew installing this rail last week to inquire on it. I was informed by the work crew chief, that the rail is going down for that new "Bullet Train" program coming in the next couple of years.
4. The No-Build route, which includes going through Lemont, is the fastest and least expensive plan. The plan shows two crossings being eliminated in Lemont Township on the route. Only one crossing is indicated for any safety improvements. The closure of the Boyer Road crossing will need to address the access alternative for the manufacturing plant and other property owners using this crossing.
5. Assuming the No-Build is the route of choice, then we would like to know more about concerns expressed to us regarding the followings:
   a. **Noise** – Your report implies no significant increase in noise is estimated with high-speed trains. Does this include the increase level of horn use by the train for longer distances for warning of pedestrians and vehicles? Does the train warning horn have be increased in sound level to push its distance further out to compensate for higher speed?
   b. **Vibration** – Your report implies no estimated significant increase in vibration. There are many historic buildings in downtown Lemont, which are immediately adjacent to the track. Several are only a few feet setback from the rail. Does the State of Illinois or the railroad back this vibration estimate with full recovery of costs for repair and loss of business to these businesses, if these "estimates" are not 100% correct?
   c. **Safety** – Your report indicates only one increase to crossing safety is necessary for the crossings in Lemont Township on this No-Build route. What is being considered to insure higher safety standards for the long distances between the crossings in the downtown area? Will the new project include fencing on both sides of the track in the downtown area? Is this new fencing going to be part of the build out costs or will our community be required to pay for fencing. A number of people cross the tracks in these open areas between the crossings. I did not see in your draft any concerns about any increased times for gates being down with this new high-speed train. Will the trip switches be located further upstream of the crossing to compensate for the speed/distance ratio for getting the gates closed for crossing safety?
   d. **Speed** - Your report indicates a speed in access of 70 mph in the downtown area. Illinois has no in-state experience data on accidents related to trains that maintain high speeds as a norm. Lemont has a number of chemical tanker trucks using our crossings to come and go from a number of chemical manufactures along the track. Does this report take into play regional response for emergencies if one of these trucks were to be struck by this bullet train? Tanker driver error could cause major human health concerns if your high-speed train splits one of these trucks and drags chemical product for longer distances prior to stopping. The Citgo Refinery (just west of Lemont) imports several products as HF. Release of this product results in

death more than medical recovery.

e. **Quality of Life** – A number of Lemont residents live adjacent to this No-Build track. A new senior citizen housing project is being built next to this track and our township PACE bus will be required to make multiple track crossings daily to service this area. Can you assure that this project will not cause any negative impact to their quality-of-life standards, as they now exist?

f. **Scheduling** – Lemont and the other communities fought a tough battle to add a commuter train on this route. The resistance was due primarily to this route having too many commercial/freight trains to find spacing for it. The rail people pointed out this rail line was difficult to accommodate commuter or faster rail services for commuters due to the high number of rail crossings. Has the level of freight trains been decreased to slot space for this high-speed train for three round trips per day?

In summary, the No-Build route may meet your objectives of cheapest to start, least amount of work, and best acceptance for financial support. The alternatives represent lesser impact to residents as there being less population areas to impact. It would provide a process for transportation for the new proposed airport location in Peotone, Illinois. It would provide Kankakee a transportation rail to St. Louis and Springfield. The alternatives make more sense for service with less impact to the high population area on the Chicago area No-Build route. None of these towns would get a benefit, as the train would not stop in their community. Their only result will be a decrease in their quality of life, higher risk on injury, possible property and building damage from vibration, and sound level increase.

We recommend use of the alternates for this project.

Sincerely,

Robert A. Porter
Lemont Township Supervisor

CC Rep. James H. Meyer,
Sen. Kirk Dillard
Mayor Richard Kwasneski
Lemont Township Board of Trustees

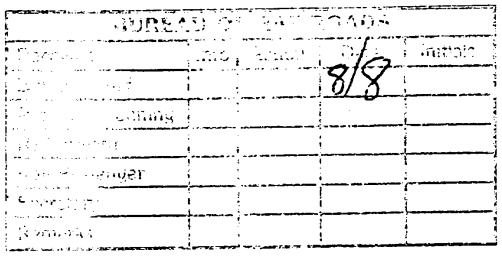
Village of Lemont

OFFICE OF THE MAYOR

418 Main Street • Lemont, IL 60439
(630) 257-1590
Fax (630) 243-0958

Village of Faith

Mayor
Richard A. Kwasneski



August 4, 2000

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
Springfield, IL 72764

Attention: Mr. Frank Hartl

RE: Public Comment on High-Speed Rail Draft Environmental Impact Study

Dear Mr. Travis:

In response to your invitation to submit written comments on the recently-released Draft Environmental Impact Study for High Speed Rail service between Chicago and St. Louis, I wish to offer some comments for the hearing record. As you may be aware, the Village of Lemont in 1994 objected to the proposal to establish a high-speed rail corridor, using Illinois Central track, through downtown Lemont (See the attached Resolution). Many of our objections still stand.

- Lemont is an I & M Canal National Heritage Corridor town and a former Illinois Main Street community, with many historic resources in its charming mid-19th century downtown area. The proposed Alternative 1 will run eight trains daily through the middle of the downtown, causing potential harm. By disrupting movement across the railroad corridor, it will hinder everyday use of the businesses and services available to our residents and visitors; by creating additional noise and vibration, it will be a threat to several historic buildings within 100 feet of the tracks.

- One of our transportation planning priorities is expanded Metra service on the Heritage Corridor, which to date runs three trains daily to Chicago. The DEIS does not adequately address the issue of future capacity available for expanded commuter service. Simply put, we would like to know the maximum number of Metra trains that can share the corridor with high-speed rail and freight service without burdening the public's need to travel across the tracks.

- It is our understanding that the "simulation speed" of trains through Lemont would be 70 MPH. This is the speed required to make the travel time of 3.5 hours, Chicago to St. Louis. What is the maximum regulated travel speed through Lemont? We hope the maximum speed is no higher than existing maximum train

speeds, which can be intimidating to pedestrians and motorists navigating our downtown streets.

- While we are appreciative that the DEIS recommends only two at-grade crossings in Lemont Township (fewer than the 1994 study), the closure of Boyer Street and the required frontage road linking it to McGuire Street should be discussed with local officials in greater detail. We object to any frontage road that would compromise our commitment to use the I & M Canal reserve strip for recreational and educational purposes.

- We understand that protective fencing would be a requirement where the rail corridor runds adjacent to public road. In Lemont, the rails parallel Main Street and New Avenue for a distance of approximately one and one-half miles. We believe this creates a visually obtrusive barrier, particularly in our historic downtown. In 1996 our design consultants preparing a streetscape plan for Main Street recommended against continuous fencing, however decorative it may be, along Main Street adjacent to the tracks. An intermittent limestone pillar-and-rail feature was installed instead to form a soft border beside the railroad. We do not wish to abandon this streetscape investment.

- We were dismayed that the state did not consult with us earlier on the DEIS. A project of this magnitude warrants 90-day notice, in writing, to the affected municipalities.

The only direct benefit to Lemont residents would be the availability of high-speed service to St. Louis via Joliet. We question if that benefit is worth the environmental cost. We would urge the state to make an alternative route (through Peotone, perhaps) a priority.

Thank you for the opportunity to express our objections and other comments.

Respectfully submitted,

Mayor Richard A. Kwasneski
Village of Lemont

c: Village Board members

Lockport: City of Historic Pride

City of Lockport

Frank C. Mitchell, *Mayor*
Paula R. Waxweiler, CMC, *City Clerk*
David H. Palya, *Treasurer*
Ronald L. Caneva, *Attorney*
Larry McCasland, *Administrator*

Central Square Building, Suite 4, 222 E. Ninth Street, Lockport, Illinois 60441-3497 Phone (815) 838-0549 Fax (815) 838-9498

ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)

PUBLIC HEARING, JULY 26, 2000

Renaissance Center--Joliet, Illinois

RE: The draft Environmental Impact Statement for the Chicago-St. Louis High Speed Rail Project

The City of Lockport has closely followed the progress of the proposed high-speed rail project from Chicago-St. Louis since the days of its inception. We applaud the efforts of the Illinois Department of Transportation and the many other involved parties who have worked to bring this project closer to fruition. The City of Lockport supports the efforts to further advance the transportation alternatives within our state. We believe this project, if done correctly, will not only enhance our transportation system but will help to increase economic development opportunities, help with air pollution reduction efforts, increase tourism, and generally produce many positive outcomes. However, the City of Lockport would like to go on record to state that we do not support this project if it is done at the expense of our historic downtown district which is part of the Illinois and Michigan (I&M) Canal National Historic Landmark. Our support for this project is dependent on the use of the Burlington North-Santa Fe alignment versus the Illinois Central-Union Pacific alignment.

The use of the Illinois Central-Union Pacific Alignment would cause several negative impacts to our historic downtown district including businesses, residents and the historic and natural landscape of the area. Even without the closure of rail crossings the consistent vibrations and whistle blowing that would occur with eight daily trains will still cause irreversible harm to the historic buildings and small businesses located immediately adjacent to the IC –UP tracks. We are very concerned that the draft EIS omits the relevance that the IC-UP alignment would be running immediately parallel to the Illinois and Michigan Canal which is part of the Illinois and Michigan Canal National Historic Landmark. The draft EIS does not explore the significance of this area being governed by federal legislation under the U.S. Secretary of Interior.

The Secretary of Interior's standards of rehabilitation clearly state that the establishment of new features that are "incompatible with the site...[so that] the character is diminished" are prohibited. The necessary infrastructure required to support the high-speed rail and to adhere to safety measures would be highly incompatible with historic downtown Lockport. Part of the historic character of the area is the open and public space between the natural and transportation corridors. A physical barrier between the railroad tracks and the I&M Canal would not only by aesthetically problematic for our downtown landscape but a barrier by its very nature will divide landscape and not allow it to be taken in as a whole. The historic district is more than a handful of registered buildings; it was created and registered as a historic landmark—meaning the whole is as equally important as its parts. Additionally, the necessary infrastructure required for this project would detract from our downtown atmosphere.

The vibrations caused by the trains alone would have a physically deteriorating effect on the historic buildings—many which are only a few yards away from the tracks. Two prominent limestone structures are located next to the tracks. These buildings may not be able to continuously withstand the vibrations caused by the trains. Even today, with far fewer trains at slower rates, downtown property owners state that the existing trains adversely affect their buildings. Additionally, the speed in which these trains will be traveling will not be conducive to the IC-UP alignment through Lockport. Pedestrians, bikers, and automobiles are in such close proximity that even with appropriate safety measures, there still will be a high likelihood of an accident occurring with trains going 110 miles per hour.

Finally, the Burlington North-Santa Fe alignment would create a much safer environment for both pedestrian and vehicular traffic, as it is located off of major thoroughfares and outside of the downtown district. With fewer at-grade crossings, less traffic, and outside of the historic district, this alignment is much more feasible in terms of safety. The speed in which these trains will travel and the amount of safety related infrastructure needed for protection, it is far more safer for our citizens and adaptable to our historic landscape to use the Burlington North-Santa Fe alignment.

Thank for the opportunity to allow the City of Lockport to comment on the draft Environmental Impact Statement.

Lockport: City of Historic Pride

City of Lockport

Frank C. Mitchell, *Mayor*
Paula R. Waxweiler, *CMC, City Clerk*
David H. Palya, *Treasurer*
Ronald L. Caneva, *Attorney*
Larry McCasland, *Administrator*

Central Square Building, Suite 4, 222 E. Ninth Street, Lockport, Illinois 60441-3497 Phone (815) 838-0549 Fax (815) 838-9498

BUREAU OF RAILROADS				
Received	Init.	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

August 1, 2000

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
Springfield, IL 62764

Attn: Mr. Frank Hartl

RE: The draft Environmental Impact Statement for the proposed Chicago-St. Louis High Speed Rail Project

Dear Mr. Travis and Mr. Hartl:

After reviewing the draft Environmental Impact Statement for the proposed Chicago-St. Louis High Speed Rail Project, the City of Lockport would like to bring to your attention several items that were seemingly lost to oversight in the document. Those items that we believe were either omitted or did not receive sufficient attention or review are as follows:

- The use of the Burlington North/Santa Fe alignment as an alternative for the proposed route of the high-speed rail.
- The impact of the high-speed rail to Lockport's historic district.
- The details regarding the status of Lockport's historic district as part of the Illinois and Michigan (I&M) Canal National Historic Landmark.
- The U.S. Secretary of Interior's standards of rehabilitation for National Historic Landmarks.
- The safety concerns for the high pedestrian and vehicular use of the crossings associated with the IC-UP alignment.
- The adverse affects caused by the vibrations and whistle blowing from the trains.

At the Public Hearing held in Joliet, IL at the Renaissance Center, our Economic Development Director was told by an IDOT representative that the Burlington North/Santa Fe alignment was not being considered due to the Illinois Historic Preservation Agency's (IHPA) response to IDOT regarding the affect of building two bridges over the I&M Canal in order to allow switch over from the IC-UP tracks to the BNSF tracks. After speaking with Anne Haaker of the Illinois Historic Preservation Agency (IHPA) about this comment, it is our understanding that the

IHPA did not intend for the agency's comments to be interpreted to mean that the BNSF alignment should no longer be a consideration for this project. Instead, we are in agreement with Ms. Haaker's statement that the draft EIS did not adequately explore the adverse affects on any of the cultural resources along either the IC-UP alignment or the BNSF alignment.

As you are aware, the City of Lockport has closely followed the progress of the proposed high-speed rail project from Chicago-St. Louis since the days of its inception. We applaud the efforts of the Illinois Department of Transportation and the many other involved parties who have worked to bring this project closer to fruition. The City of Lockport supports the efforts to further advance the transportation alternatives within our state. We believe this project, if done correctly, will not only enhance our transportation system but will help to increase economic development opportunities, help with air pollution reduction efforts, increase tourism, and generally produce many positive outcomes. However, the City of Lockport would like to go on record to state that we do not support this project if it is done at the expense of our historic downtown district which is part of the Illinois and Michigan (I&M) Canal National Historic Landmark. Our support for this project is dependent on the use of the Burlington North-Santa Fe alignment versus the Illinois Central-Union Pacific alignment.

The use of the Illinois Central-Union Pacific Alignment would cause several negative impacts to our historic downtown district including businesses, residents and the historic and natural landscape of the area. Even without the closure of rail crossings the consistent vibrations and whistle blowing that would occur with eight daily trains will
still cause irreversible harm to the historic buildings and small businesses located immediately adjacent to the IC –UP tracks. We are very concerned that the draft EIS omits the relevance that the IC-UP alignment would be running immediately parallel to the Illinois and Michigan Canal which is part of the Illinois and Michigan Canal National Historic Landmark. The draft EIS does not explore the significance of this area being governed by federal legislation under the U.S. Secretary of Interior.

The Secretary of Interior's standards of rehabilitation clearly state that the establishment of new features that are "incompatible with the site...[so that] the character is diminished" are prohibited. The necessary infrastructure required to support the high-speed rail and to adhere to safety measures would be highly incompatible with historic downtown Lockport. Part of the historic character of the area is the open and public space between the natural and transportation corridors. A physical barrier between the railroad tracks and the I&M Canal would not only by aesthetically problematic for our downtown landscape but a barrier by its very nature will divide the landscape and will prevent from being taken in as a whole. The historic district is more than a handful of registered buildings; it was created and registered as a historic landmark—meaning the whole is as equally important as its parts. Additionally, the necessary infrastructure required for this project would detract from our downtown atmosphere.

The vibrations caused by the trains alone would have a physically deteriorating effect on the historic buildings—many which are only a few yards away from the tracks. Two prominent limestone structures are located next to the tracks. These buildings may not be able to continuously withstand the vibrations caused by the trains. Even today, with far fewer trains at slower rates, downtown property owners state that the existing trains adversely affect their buildings. The City has joined four other entities to conduct our own vibration testing with an independent engineering firm to further illustrate the destructive consequences of the vibrations on the existing building infrastructure.

Additionally, the speed in which these trains will be traveling will not be conducive to the IC-UP alignment through Lockport. Pedestrians, bikers, and automobiles are in such close proximity that even with appropriate safety measures, there still will be a high likelihood of an accident occurring with trains going 110 miles per hour.

Finally, the Burlington North-Santa Fe alignment would create a much safer environment for both pedestrian and vehicular traffic, as it is located off of major thoroughfares and outside of the downtown district. With fewer at-grade crossings, less traffic, and being located outside of the historic district, this alignment is much more feasible in terms of safety. The speed in which these trains will travel and the amount of safety related infrastructure needed for protection, it is far safer for our citizens and adaptable to our historic landscape to use the Burlington North-Santa Fe alignment.

We urge you to consider an alignment that would not violate the historical integrity or safety of our town. The use of the proposed IC-UP alignment would be sacrificing the economic development, historic fabric and quality of life of downtown Lockport. It should be the Illinois Department of Transportation's goal to promote technological and transportation advancements for the benefit of the existing communities, not at their detriment.

Very Truly Yours,

Frank C. Mitchell
Mayor

VILLAGE OF LONG GROVE

July 28, 2000

BUREAU OF RAILROADS				
Received	Info	Action	Date	Initials
Bureau Chief			8/2	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

On behalf of the Village of Long Grove, I am writing to voice strong support for the proposed high-speed rail corridor between Chicago and St. Louis.

As we have seen in the draft environmental impact statement, this project has a number of benefits:

- Opportunity for new job creation
- $20 million in new economic activity
- An energy-efficient travel alternative
- Reduction in grade-crossing accidents

If reliable, comfortable and convenient rail service connecting Chicago with St. Louis in just 3.5 hours were available, many commuters would take advantage of it while traveling between Chicago, Bloomington, Springfield and St. Louis. When the entire Midwest high-speed rail network is finished, this corridor will provide easy connection through Chicago to virtually every major city in the Midwest. As a traveler, I find this option very attractive.

There are three suggested alternative routes designated in the draft Environmental Impact Statement. We strongly support the existing "Illinois Central" corridor for many reasons. First, a diversion to the proposed Peotone airport adds $50 million to the cost of this project, which has already been delayed for years by lack of funding. Adding cost and distance to provide service to a proposed airport that airlines have refused to serve does not make good business sense. Second, the Chicago - St. Louis high-speed rail corridor must be considered not alone, but as one leg of a 3,000-mile long Midwest rail network. This network will only work if all trains use the same station. According to the draft EIS, the Peotone route would serve Randolph Street Station, not Union Station. Given that the Midwest Regional Initiative studies believe that about 20% of passengers would switch trains in Chicago, the decision to use this station could jeopardize the entire initiative.

Providing safe, high-speed service will require closing some of the over 300 grade crossings along the corridor. This needs to be done in a way to meet the needs of both rail and auto travelers. We were pleased to see that you will not be closing any crossings without local approval.

We look forward to the advancement of this project.

Sincerely,

Lenore Simmons /kmq

Lenore Simmons
Village President

3110 RFD • LONG GROVE, ILLINOIS 60047-9635
(847) 634-9440 Fax: (847) 634-9408

D.M. "Cal" Doughty, Village Manager

Public Comment Form
Chicago – St. Louis High-Speed Rail Project

Your comments, ideas, and suggestions are important to us. Comments and information provided on this public hearing comment form will be included as part of the official public record. Please take a minute to write down your thoughts and drop off this form in the Public Comment Box located at the Court Reporter's Table or mail to: **Mr. Merrill Travis, Chief, Bureau of Railroads, Illinois Department of Transportation, 2300 South Dirksen Parkway, Springfield, Illinois 62764, Attn: Mr. Frank Hartl. Public comments must be received by August 7, 2000 in order to be included as part of the Public Hearing Record.** These comments will be utilized in selection of the Recommended Alternative, and preparation of the Final Environmental Impact Statement and the Record of Decision.

Name: Ray St Aubin

Address: 83 N Main Street

City/State/Zip Code: Manteno IL 60950

Representing: Manteno Township

Comments:

As a follow up on our conversation at the meeting held in Kankakee City Hall, July 27, 2000, I wish to again state that closing crossing TR7A would be a hardship on Manteno Township traffic. The road in question 11000 N Road is a northerly traffic access for the village of Manteno, plus it reduces the congestion on the intersection of 10000 N Road which is a primary class III truck route to the Illinois Diversetech Distribution Center.

Thanks for you consideration

Ray StAubin

Highway Commissioner

GERALD JARVIS
Village President

LORI TOEPPER
Village Clerk

CAROL KELLER
Treasurer

VILLAGE OF MANTENO

269 NORTH MAIN STREET
MANTENO, ILLINOIS 60950
PHONE (815) 468-8224
FAX (815) 468-8240

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			11/21	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

July 21, 2000

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Attn: Mr. Frank Hartl

Re: High Speed Rail Project

Dear Mr. Travis:

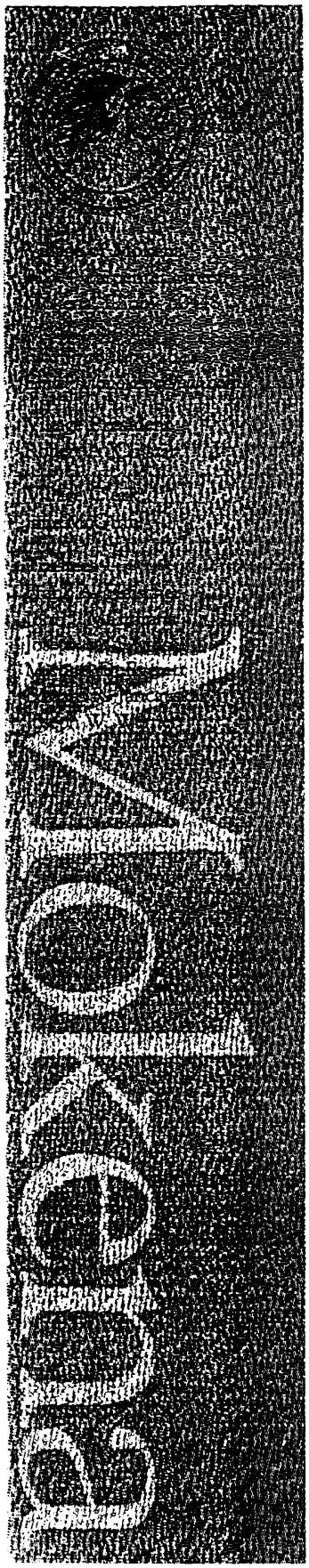
The High Speed Rail Project is viewed by the Village of Manteno as having a potential major impact on our community. We have had the opportunity to attend presentations and address our local commissions and boards on the predominant issues; we realize that clear information and communication will continue to be important aspects in understanding the project.

At this time, Manteno has great concern over the possibility that **any** of our railroad crossings would be jeopardized with closing. IDOT has stated that we would not experience any closings without Village approval and we count on that assurance. Closure of a pedestrian crossing at First Street would not create significant problems. However, with our current and projected growth patterns, all road crossings in the Manteno Township are significant and valued. As a community that is divided by an interstate (I57), a major highway (Rt 50) and the railroad, we are extremely sensitive to and would oppose any factors that may further split our abilities to provide necessary traffic flow and emergency access to any part of the Village.

We have found that our residents, in general, perceive the high speed rail as not contributing anything of real value to the Village. There is a common discomfort over increased rail activity and the safety-related issues that would accompany such traffic. Any future progress of the project will certainly depend upon recognition of public and municipal response and concern. Hopefully, all communities will be given early, accurate information and have input into something that will definitely affect them well into the future.

Sincerely,

Gerald Jarvis, President



August 7, 2000

Mr. Frank Hartl
Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764.

Via Fax Facsimile
217-524-1889

Re: Public Comment - Chicago to St. Louis High Speed Rail Project

Dear Mr. Hartl:

I'm writing on behalf of the Village of Mokena to provide input concerning the draft environmental impact statement recently circulated addressing the feasibility of a High Speed Rail Project from St. Louis to Chicago. Although I am dissatisfied with the procedures IDOT utilized to notify area Communities of the recent public hearings, I am hereby submitting the Village of Mokena's comments.

The Norfolk Southern alignment would provide significant regional transportation benefits affiliated with the proposed regional airport in Peotone. Should a third regional airport be developed in the Peotone area, High Speed Rail routing through that area would likely make good planning sense. Therefore, in support of both regional rail and air transportation capacity, the Village of Mokena supports this option.

Utilization of the existing AMTRAK line from Joliet to Chicago for High Speed Rail also has some merit given the fact that AMTRAK service already exists on this line. However, subjecting the Municipalities directly along this route to the impacts of High Speed Rail will likely result in local opposition to this option.

The Village of Mokena is adamantly opposed to the utilization of the Rock Island Line for High-Speed Rail purposes. Obvious safety concerns accompanied by the potential of negative impacts concerning the normal Metra (commuter) services are the two most significant issues affiliated with this position.

The above comments represent a preliminary review of this matter by the Village of Mokena. We would like to reserve the right to provide additional input as information becomes available. In addition, I request that any further reviews or reports concerning this matter be provided to area Communities well in advance of any future public hearing or comment process.

Sincerely,

Robert A. Chiszar
Village President
Village of Mokena

RAC:mkg

THE CITY OF MOMENCE

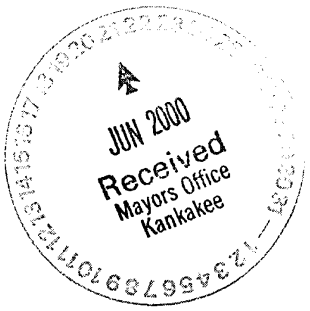
MOMENCE, ILLINOIS 60954

REX W. PETERSON, Mayor
MARGARET CLIFTON, Clerk
ERNEST E. MONK, Treasurer

ALDERMEN

Cheryl J. Hess	James Vickery
James L. Saindon	Christopher Sharkey
John R. Metz	Boyd Hebert
James A. Moody	Stanley Jensen

June 20, 2000



Donald E. Green
Mayor, City of Kankakee
City Hall
385 East Oak Street
Kankakee, IL 60901

Dear Mayor Green:

This letter will serve to acknowledge receipt of your June 8, 2000 letter with a packet of material describing the High Speed Rail System proposed by the Illinois Department of Transportation. You informed me that Merrill Travis, Bureau Chief of Railroads for the Illinois Department of Transportation, had recently appeared at one of your City Council meetings and discussed a high speed rail route between Chicago and St. Louis with one of the scenarios going through Will County and the other through Kankakee County. You indicated that your City Council enthusiastically approved a Resolution in support of this high speed rail passing through your community.

By this letter please be informed that the City of Momence endorses the concept of a high speed rail system between Chicago and St. Louis going through Kankakee County. We believe this will have a significant positive impact on transportation and economic development in our county.

We also encourage Mr. Travis to make a presentation before the City Council In Momence, Illinois.

Sincerely,

Rex W. Peterson
Mayor, City of Momence

VILLAGE OF NEW LENOX
701 WEST HAVEN AVENUE
NEW LENOX, ILLINOIS 60451-2137
VILLAGE OFFICE 815/485-6452
FAX NUMBER 815/485-7726
POLICE DEPARTMENT 815/485-3188
POLICE FAX 815/485-3884

July 26, 2000

Illinois Department of Transportation
Bureau of Railroads – Room 302
2300 South Dirksen Parkway
Springfield, IL 62764

Re: FHWA-IL- EIS-99-01-D

Dear Sirs:

Thank you for allowing me this opportunity to submit to you our concerns relative to the Rock Island District alignment for the proposed Chicago – St. Louis High Speed Rail Project. As I understand, the original environmental impact study that was done in 1994 did not include the Rock Island alignment. As we have learned, the new proposal now includes three possible alignments, one of which transverses the Village of New Lenox. I would like to take this opportunity to comment on this proposed alignment.

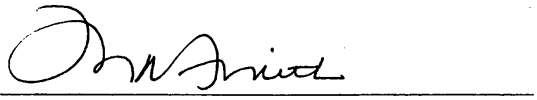
First, many of my concerns could have been alleviated if copies of the draft environmental impact statement would have been sent to us and to other communities that may be affected by the project. The Village of New Lenox would then have the chance to review the possible impacts to our community.

The first area of concern relates the railroad crossing upgrades that may need to be completed. Who is to bear the cost of the upgrades? Would each municipality be required to install the four-gated railroad signal or would we be required to share in the costs? The Village also has concerns relative to the speed and number of trains and how that may impact Metra's commuter passenger service. Would the number of local commuter trains be limited? How does this affect the proposed South West Service Corridor which will extend commuter rail service to Manhattan? In terms of our long-term recreational trail plans, the Village envisions a bicycle / pedestrian trail along Hickory Creek. Would the development of the High-Speed Rail, prevent us from realizing this goal? In terms of at-grade crossing closing, I understand that no street or road with an ADT of more that 2,210 vehicles is scheduled for closure. Currently, the Village has a gated access road to a sewer treatment lagoon. How will the proposed plans affect that access road? The final area of concern relates to the proposed FRA rules pertaining to train whistles. How does the High-Speed Rail compound that ruling?

Again, thank you for this opportunity to voice these concerns.

Very Truly Yours

Village of New Lenox



Mayor Mike Smith

REDDICK COMMUNTY FIRE PROTECTION DISTRICT

BOX 93
Reddick, IL. 60961
August 4, 2000

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			8/7	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. Frank Hartl:

The Trustees of Reddick Community Fire protection District have attended the public hearings on the proposed plans for the High Speed Railroad to go from St. Louis to Chicago. The proposed route going through Dwight and into Kankakee is of concern to us. The closing of Road 1900 West in Kankakee County is of the greatest concern to us as we serve the area surrounding Reddick. The area immediately north and east of Reddick is reached most effectively by using 19000 W. Road.

The Department is located in down town Reddick. If Road 19000 W is closed and we are called to provide emergency service to the immediate north east area we would need to go west through the center part of Reddick to get to Illinois 17 where there is a proposed guarded rail crossing for the high speed train. Where as, if Road 19000 W remains open we then could exit Reddick with little travel through the residential part of Reddick, going east to road 19000 W then north to service the emergency.

Keeping Road 19000 W open will permit our department to provide the fastest response time to the area north east of Reddick.

If you have need of further information please contact the president of the trustees, Richard White at 815-365-2896, treasurer, Louis Mombrun at 815-365-2286 or myself C. Ray Prussner at 815-365-2807.

Thank you for any consideration given to this request.

C Ray Prussner, Secretary

BUREAU OF RAILROADS				
Received:	Initial	Action	8/2	Initials
Bureau Chief				
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				

Public Comment Form
Chicago – St. Louis High-Speed Rail Project

Your comments, ideas, and suggestions are important to us. Comments and information provided on this public hearing comment form will be included as part of the official public record. Please take a minute to write down your thoughts and drop off this form in the Public Comment Box located at the Court Reporter's Table or mail to: **Mr. Merrill Travis, Chief, Bureau of Railroads, Illinois Department of Transportation, 2300 South Dirksen Parkway, Springfield, Illinois 62764, Attn: Mr. Frank Hartl. Public comments must be received by August 7, 2000 in order to be included as part of the Public Hearing Record.** These comments will be utilized in selection of the Recommended Alternative, and preparation of the Final Environmental Impact Statement and the Record of Decision.

Name: JAMES B. PERRY, FIRE CHIEF

Address: 107 S. WABASH ST

City/State/Zip Code: REDDICK IL. 60961

Representing: REDDICK FIRE PROT. DIST.

Comments:

SEE ATTACHED LETTER.

To: Bureau of Railroads From: Chief James Perry Reddick Fire Department

To Mr. Merrill Travis,

Hello, My name is James Perry. I am the Chief of the Reddick Fire Protection District in Reddick Illinois. I am greatly concerned by the proposed high-speed rail system that may run through my community. The closings of certain crossings are my main concern. With the closing of Kankakee County15000 West, 17000 West, and 19000West crossings this will hamper our life and property saving efforts, by lengthening our response time. The Farming equipment that is now using these crossings will be forced to use Illinois Route 17, which will increase the chances of serious accidents. Please take my concerns about this very serious matter into consideration, and reroute this high-speed rail elsewhere. We do not need these extra problems in this community or in trying to save peoples life and property.

Thank you,

James B Perry

James B. Perry
Chief
Reddick Fire

Mail response to:
James B. Perry
P.O. Box 81
Reddick, Illinois 60961
(815) 365-2284 Non-Emergency
(815) 365-2226 Home
(815) 365-4212 Fax

OFFICE OF THE MAYOR
CITY OF ST. LOUIS
MISSOURI

CLARENCE HARMON
MAYOR

CITY HALL - ROOM 200
1200 MARKET STREET
SAINT LOUIS, MISSOURI 63103-2877
(314) 622-3201
FAX: (314) 622-4061
harmon@stlouis.missouri.org

July 14, 2000

Mr. Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 S. Dirksen Parkway
Springfield, IL 62764

Dear Mr. Travis:

This is to express my strong support for Illinois' proposal to upgrade the Chicago-St. Louis Amtrak route, by investing in track and signal improvements to permit higher speeds and better reliability.

Doubling the number of daily Chicago-St. Louis train frequencies from 4 to 8, and reducing the travel time from 5 hours to 3.5 hours, would offer an enticing and much-needed alternative to air and road travel in this corridor. I am confident that such service improvements would spur a dramatic increase in rail travel. Complementing your efforts in Illinois, the City of St. Louis is eager to build a new multimodal train station, and we hope to commence construction later this year.

I strongly endorse the goal of higher-speed trains between St. Louis and Chicago and urge the State of Illinois to seek the necessary funding for this worthwhile project.

Sincerely,

Clarence Harmon
MAYOR

CH: bmw

THE WILL COMMUNITY

Will County Governmental League

WILL COUNTY GOVERNMENTAL LEAGUE COMMENTS

CONCERNING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR THE CHICAGO-ST. LOUIS HIGH SPEED RAIL PROJECT

(FHWA-IL-EIS-99-01-D)

Illinois Department of Transportation Public Hearing, Joliet, Illinois
July 26, 2000

The **Will County Governmental League** (WCGL), an association of 30 Will County communities, wishes to comment on the Draft Environmental Impact Statement (DEIS) for this High Speed Rail Project. As an opening comment, the WCGL membership is supportive of bringing High Speed Rail service to Will County. Our members generally view this as a positive project that supplements existing and proposed transportation systems in the County. The WCGL as a policy statement supports improving all modes of transportation in Will County, including enhancing limited Amtrak and Metra Heritage Line service to Joliet Union Station.

Our membership has not expressed a preference for service locations (i.e., either Joliet or Peotone), but has expressed the opinion that one or more station stops must be located in Will County to serve Will County and south suburban residents. The WCGL supports consideration by IDOT of an additional station stop, such as in the City of Wilmington (see Wilmington's comments) to serve the southern Will/Grundy County area. In support of this need, Will County's population grew from 357,000 in 1990 to 459,000 in 1998 (fastest numerical growth county in Illinois) and is projected to grow by 2020 to 735,310 without the South Suburban Airport or 820,007 with the South Suburban Airport. Similarly, the WCGL has no position on which of the three alternative alignments should be selected, but supports the City of Lockport's position (see Lockport's comments) that the Burlington North-Santa Fe rail line should be used through that community.

The WCGL membership have expressed a number of comments regarding the DEIS. Many, but not all, of those comments relate to rail crossings including strong opposition to the closure of several crossings identified in the DEIS as well as the need for additional crossings and improvements in Will County. These specific member comments are as follows:

The **City of Braidwood** opposes closing the Center Street crossing, because it would reroute traffic to the IL 113/53/129 crossing which is already congested

50 EAST JEFFERSON STREET, SUITE 101 • JOLIET, ILLINOIS 60432-4298 • (815) 722-7280 • Fax: (815) 722-0528

and a bottleneck to east-west traffic in town. The current traffic back-ups at the IL 113/53/129 crossing are phenomenal due in no small part to a high volume of commercial truck traffic, some with 50 foot trailers, which are unable to navigate this crossing. The City of Braidwood requests that the current IL 113/53/129 crossing be widened and improved now to accommodate this truck traffic, in addition to leaving the Center Street crossing open under the DEIS. The closure of the Center Street crossing also adds to public safety problems now present at the IL 113/53/129 crossing and raises new public safety problems due to delayed emergency response times. The City questions any closure of crossings in Braidwood. With the increase in area residents and recreational club locations, the City of Braidwood believes that more crossings, not less, will be needed in town.

The **Village of Elwood** opposes the closing of the Chicago Street crossing, because of its current heavy use and projected increased population and commuter traffic due to the Joliet Arsenal Redevelopment Project. This project alone is projected to add 3,000 – 4,000 construction jobs and workers in the vicinity of the Chicago Street crossing. The closure of Chicago Street would leave Main Street as the one entrance into Elwood. Trains currently sit and block the Main Street crossing for up to twenty minutes at a time via a spur line. This raises public safety concerns with emergencies and the Village also believes that more crossings are needed, not less. The Village, however, would support closing the Diagonal Road crossing due to the poor layout of this crossing and the consequent public safety concerns.

The **City of Joliet** supports the proposed Chicago to St. Louis High Speed Rail Project. As the fastest growing municipality in Will County, and among the fastest growing communities in Illinois, the City of Joliet feels that a stop at Joliet Union Station is imperative. A grade separation will be required at Schweitzer Road as substantial development is expected west of the grade crossing on Schweitzer. This development is expected to result in considerable traffic and a grade separation is necessary for safety.

The **Village of Lemont** is concerned about the possibility of at-grade crossing closures (two are proposed in Lemont Township), potential disruption of its historic downtown, the aesthetic impact of protective fencing along Main Street, and the potential for interference with expanded Metra service. Lemont will submit a more detailed written comment on its own behalf before the August 7, 2000 deadline.

The **City of Lockport** supports the Chicago-St. Louis High Speed Rail project using the Burlington North-Santa Fe alignment. The use of the Illinois Central-Union Pacific Alignment would cause several negative impacts to the City of Lockport's historic downtown district including businesses, residents and the historic and natural landscape of the area. Even without the closure of rail crossings the consistent vibrations and whistle-blowing that would occur with eight daily trains will cause irreversible harm to the historic buildings and businesses located immediately adjacent to the IC-UP tracks. The draft EIS omits the relevance of the fact that the IC-UP alignment would be running

immediately parallel to the Illinois and Michigan Canal which is part of the Illinois and Michigan Canal National Historic Landmark. The draft EIS does not explore the significance of this area being governed by federal legislation under the U.S. Secretary of Interior. Additionally, the necessary infrastructure required for this project would detract from the City of Lockport's downtown atmosphere. The Burlington North-Santa Fe alignment would create a much safer environment for both pedestrian and vehicular traffic, as it is located off of major thoroughfares and outside of the downtown district.

The **Village of Peotone** opposes closing the Corning Street crossing, because it constitutes a main thoroughfare through town. It's closure would create a public safety problem with serving the east side of town from emergency service stations all located on the west side of the railroad tracks and would displace a large volume of traffic onto an alternative crossing 2-3 blocks away.

The **City of Wilmington** opposes the closing of the crossing designated as Peotone Road, due to the rerouting of traffic from the north side of Wilmington to the Kankakee Street crossing. This will increase congestion in the center of town and would negatively impact public safety response times. The City of Wilmington further requests that a station stop be placed in the City to serve the southern Will/Grundy County area.

Thank you for this opportunity on behalf of the Will County Governmental League and our members to make public comments on the Draft Environmental Impact Statement for the Chicago-St. Louis High Speed Rail Project. WCGL members request your consideration of our combined and individual comments to the DEIS and that the requested changes be incorporated into the Final EIS.

WILL COUNTY LAND USE DEPARTMENT
58 East Clinton Street • Suite 500 • Joliet, Illinois 60432

BUREAU OF RAILROADS				
[illegible]	[illegible]	[illegible]	Date	Initials
Bureau Chief			8/8	
Program Planning				
[illegible]				
[illegible]				
[illegible]				
[illegible]				

August 7, 2000

Mr. Merrill Travis, Chief
Bureau of Railroads, IDOT
2300 South Dirksen Parkway
Springfield, IL 62764

Attn: Mr. Frank Hartl

Re: Chicago – St. Louis High-Speed Rail Project

Dear Mr. Travis,

The Will County Planning Division would like to have this letter included as public comment regarding the Chicago – St. Louis High-Speed Rail Project. The comments below reflect the Will County 2020 Transportation Framework Plan Draft as well as important aspects of the Land Resource Management Plan. Note that the Will County 2020 Transportation Framework Plan Draft is still a draft, so the views included here may shift before final approval.

The Transportation Framework Plan Draft supports alternate forms of transportation in its myriad forms. The plan expresses some preference for the eastern Illinois Central line in that it could be designed to directly service the South Suburban Airport, should that project come to fruition. It also notes a smaller number of grade separation treatments that would be needed along this alignment.

The Land Resource Management Plan (LRMP) also has a number of policies that relate to the High-Speed Rail Project. One of the first Goals of the LRMP reads "Use of the County's land resources in a manner sensitive to inherent environmental limitations". It is clear that the route that best accomplishes this is the Rock Island District line due to the fewer number of impacted sites and the lesser acreage involved in those impacts.

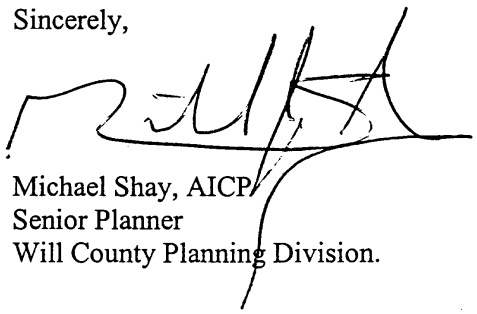
Both the Rock Island District and the Illinois Central lines create the potential for additional commuter opportunities to Will County's most populous area. These two lines also create a better opportunity to serve the Joliet Arsenal Development Authority in the future should the need and ability arise.

BUILDING	ENGINEERING	PLANNING	WASTE SERVICES	ZONING	MAIN FAX
(815) 727-8634	(815) 740-8140	(815) 727-8430	(815) 727-8834	(815) 727-8850	(815) 727-8638

Regardless of the final choice of a route, it is of great importance that three major hubs of activity within Will County (the City of Joliet, the Joliet Arsenal, and South Suburban Airport) receive efficient service from the High-Speed Rail line.

Thank you for taking note of this input and including it in the public comment. If you have any further questions feel free to contact me at (815) 727-8430.

Sincerely,



Michael Shay, AICP
Senior Planner
Will County Planning Division.

APPENDIX C-4

OPERATING RAILROAD COMMENTS

National Railroad Passenger Corporation
Midwest Regional Rail System
210 South Canal Street, Room 798
Chicago, Illinois 60606
Telephone: (312) 655-3620
Fax: (312) 655-2562

August 7, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

Dear Mr. Travis:

Subject: Chicago – St. Louis High-Speed Rail Project
Draft Environmental Impact Statement
ILDOT – O - 0022

The National Railroad Passenger Corporation (Amtrak) appreciates the opportunity to provide comments on the "Draft Environmental Impact Statement" for the Chicago – St. Louis High-Speed Rail Project. Our comments focus on the statements of fact contained within the document.

The Chicago – St. Louis High-Speed Rail Corridor is a federally designated Section 1010 High-Speed Rail Corridor. Every effort must be made to ensure the federally mandated national transportation policy is progressed, including a dramatic reduction of highway-railroad grade crossings. Amtrak fully supports this federal mandate. Recent Congressional testimony indicated that high-speed rail transportation is a cost-effective enhancement to the economic fabric of the host State.

Amtrak has enjoyed a tradition of a highly successful partnership with the Illinois Department of Transportation (IDOT). This partnership has been recently strengthened by our joint proposal to acquire new high technology train sets for this very important high-speed rail corridor. The IDOT / Amtrak partnership serves as a very successful testimony of private-public partnership. Amtrak is proud of its relationship with IDOT.

As you know, Amtrak has maintained a very high level of interest with this project and the many challenges which have been faced by IDOT. IDOT has elected to undertake the initiative of providing a high quality infrastructure to support high-speed rail

passenger service in a mixed freight and passenger corridor. We applaud IDOT's foresight and wisdom for planning and executing this venture. Several years from now, and for many decades, the citizens of Illinois and the many visitors to the state, will benefit from this vision.

Amtrak, as operator of the state-supported train service between Chicago and St. Louis, is a major institutional beneficiary of the many years of hard work and dedication of the IDOT employees to progress the goals of:

- Increased rail passenger safety.
- Increased safety to the automobile and vehicle operators that cross this high-speed corridor at public and private grade crossings.
- Dramatically decreased travel time between Chicago and St. Louis, and the many intermediate communities served by Amtrak throughout this route.
- Enhanced transportation mobility option.
- Improved rail service reliability.
- Alternatives to downtown travel congestion.

As the nation's operator of intercity rail passenger service we recognize, and are most sensitive, to the wide variety of potential impacts for the various high-speed rail alternative alignments. We recognize that the following potential impacts, as summarized in Table S-1, Page S-8, are present:

- Right-of Way Acquisition
- Residential, Commercial and/or Institutional Displacements
- Noise and Vibration Impacts
- Stream and Tributary Crossings
- Wetland Impacts
- Natural Resource Impacts
- Floodplains
- Cultural
- Resources
- Waste Sites
- Highway/Railroad At-Grade Crossings
- Railroad/Railroad At-Grade Crossings

IDOT's comprehensive approach for dealing with each of these sensitive issues clearly demonstrates a keen knowledge and understanding of incremental railroad infrastructure development, and a realistic response to addressing the issues in a meaningful and perceptive fashion.

Amtrak fully endorses IDOT's proposal to close 29-percent of the existing 310-350 public and private grade crossings, as highlighted in S.4.10, Grade Crossing Treatments.

Amtrak has committed, and will continue to commit, technical resources to assist with activities to ensure that as many public and private grade crossings are permanently closed, as soon as possible.

Amtrak has supported IDOT's grade crossing closure program through participation by Amtrak locomotive engineer employees who are members of the Brotherhood of Locomotive Engineers labor organization. Our locomotive engineers, and their supervision, have participated with the identification of grade crossings which are of "greatest concern" to the locomotive engineer operating the train. This provides a unique perspective by the "train operator" in identifying the grade crossings which cause greatest concern to the train operator. Thus, the process owner for operating the locomotive has positive input into the grade crossing enhancement / grade crossing elimination process. We pledge to continue this commitment.

Amtrak requests the Illinois Commerce Commission (ICC) accept the challenge to progress far beyond the 29-percent grade crossing closure goal established by IDOT in support of this high-speed rail corridor development program, and continue an aggressive and comprehensive program to permanently eliminate as many public and private grade crossings as possible. The ICC has demonstrated the leadership to establish aggressive grade crossing mitigation standards and to enhance the safety of the Chicago – St. Louis High-Speed Rail Corridor communities, railroad employees, and the traveling public.

Based on the Final 1999 Federal Railroad Administration Statistics, the State of Illinois ranks nationally with grade crossing and pedestrian trespass fatalities and injuries, as follows:

#1 in Highway-Rail Grade Crossing Fatalities
#2 in Highway-Rail Grade Crossing Injuries
#3 in Pedestrian Trespass Fatalities
#3 in Pedestrian Trespass Injuries

Amtrak fully supports IDOT's efforts to work with local communities to ensure that adequate fencing and grade crossing treatments are addressed in urbanized areas, as presented in S.5, Areas of Controversy. Amtrak would support the installation of fencing in communities where Amtrak trains currently operate, in the earliest possible timeframe. Fencing installation should commence as soon as possible.

The potential use of Metra's Randolph Street Station, as presented in S6, Unresolved Issues with Other Agencies, as a high-speed rail station is an unacceptable option to Amtrak. Connectivity to other communities within the Midwest Regional Rail System and throughout the United States, would be lost by using the Randolph Street Station concept for high-speed rail. We recognize that the "NS Corridor" and the proposed

track connection at Grand Crossing have potential as high-speed rail corridor and high-speed rail corridor track connections. Both elements will require environmental assessment activities to support a means of connecting this corridor to the Chicago Union Station. Amtrak is prepared to work closely with IDOT and the owner railroads, with these of alternatives.

On Page I-1, IDOT recognizes that 99 percent of all annual trips between Chicago and St. Louis "are accomplished through automobile and air travel." This is an unacceptable burden to the highway system and airport system, and to the traveler who is relegated to using these modes. The Chicago – St. Louis High-Speed Rail Corridor provides a safe and affordable transportation alternative. It also provides enhanced amenities and passenger comfort for the projected increased ridership for the high-speed train operations. High-speed rail provides a reliable transportation alternative to travelers in any weather condition.

Section 1.3.3, Human Environment, provides the high-speed rail traveler with:

- Restroom facilities
- Food and beverage services
- Accommodations for the physically challenged
- Laptop computer accommodations
- On-board telephone service
- Checked and unchecked baggage service
- Senior discounts
- Family travel discount opportunities
- Student discount rates
- Connections to other intermodal transportation modes

Grade Crossing Treatment, Page 3-21, indicates that, "All at-grade crossings proposed for retention, including those recommended for 'no change,' will be equipped with Constant Warning Time (CWT) circuits, which measure the speed of an approaching train and activate the warning devices so that they will operate (or the gates will be down) for the required 20 seconds before the train is at the crossing, regardless of train speed." Amtrak is requesting that the "warning devices" operate for at least 30 seconds prior the train reaching the grade crossing.

Section 3.3.4, New Alternative Alignment between Peotone and Wilmington. Amtrak has carefully reviewed the information presented in this and other sections. The annual ridership projections presented in Table 4.1-1, indicates that all three options will have virtually identical ridership potentials. At this time, Amtrak supports passenger train operations over the existing alignment between Chicago's 21st Street Interlocking and the Joliet rail passenger station, using the Canadian National (CN) main line.

In Section 5, Amtrak supports IDOT's aggressive approach towards environmental mitigation. It appears clear that the IDOT prioritized approach includes:

1. Avoidance of environmentally sensitive areas.
2. Addressing and minimizing any areas which *could be* considered sensitive.
3. Mitigation of any environmental impacts, which appear to be extremely minimal.

Amtrak is confident that the future acquisition of advanced trainset technology being contemplated jointly by IDOT and Amtrak will provide considerable reduction in the emissions generated by locomotives in compliance with the latest U.S. Environmental Protection Agency (EPA) emission regulations, minimizing vibration generated by the anticipated lighter weight trains, and a reduction of noise generated by these new trainsets.

Amtrak requests that a copy of the Final Environmental Impact Statement for this project be forwarded to my attention when published.

Please call me at any time if you have any questions.

Sincerely,

Robert A. Kollmar

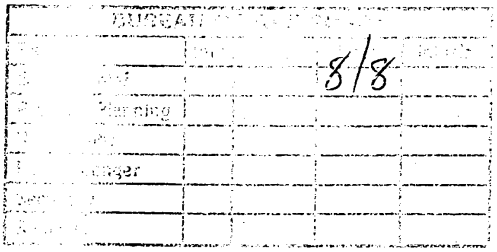
Robert A. Kollmar
Senior Director, Operations & Construction
Midwest Regional Rail System

/RAK

cc: Frank Hartl, Illinois Department of Transportation

Ed Harris
Vice President
Midwest Division

Canadian National/Illinois Central
17641 South Ashland Avenue
Homewood, Illinois 60430-1345
Telephone: (708) 957-6575
Fax: (708) 206-6839



August 7, 2000

Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway, Room 302
Springfield, IL 217 782-2835

Re: FHWA-IL-EIS-99-01-D
Draft Environmental Impact Statement
High Speed Rail in the Chicago-St. Louis Corridor

Dear Mr. Travis:

Canadian National Railway, through its subsidiaries, owns and operates two of the three line segments in northern Illinois under consideration for high-speed passenger rail operations. Canadian National Railway has and will continue to have considerable interest in the possible development of high-speed rail passenger service in the Chicago-St. Louis corridor. We will limit our comments on the Draft Environmental Impact Statement to one section that causes us serious concerns. That concern is heightened by the fact that the section in question makes explicit an underlying assumption - prevalent throughout the report – that the effect of high-peed passenger service on rail freight operations will be insignificant and unimportant. Such an assumption is incorrect and could result in negative environmental impacts.

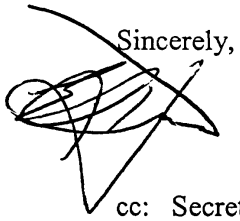
Section 4.5.1 reads in part: "Some freight train scheduling modifications may be required to prevent conflicts with HSR service. Following standard railroad procedures, high-speed passenger trains will receive scheduling priority over freight trains. The increased frequency of passenger trains will further restrict rail time available for freight movements. Since high-speed operations will occur primarily during the daytime, some new or existing freight trains may have to be rescheduled for nighttime travel." Section 4.5.3 similarly downplays the temporary impacts that construction of high-speed rail facilities would have on rail freight operations.

Our two lines that are possible candidates for high-speed passenger service are not now at capacity, though they could be well before 2010. (Those lines do today frequently suffer from congestion as a result of our interactions with other railroads.) We make every effort to operate to a schedule throughout our nearly 16,000-mile system so we can provide shippers the predictable services demanded by today's logistics. The addition of 16 high-speed trains per day on either of our line segments under consideration will restrict our ability to provide predictable and timely freight services. Changes in our

operations and schedules on either segment will have ripple effects throughout our system. Any degradation in our service will inevitably lead to diversion of freight back to the highway, increasing air pollution, fuel consumption, highway congestion and damage and negating many of the benefits high-speed passenger rail would be designed to achieve.

We strongly urge that a final environmental impact statement and any future studies of the impacts of high speed passenger rail service in the Chicago-St. Louis corridor include a fuller –and we believe more realistic – treatment of the effects that such service will have on rail freight operations and the serious environmental impacts that could result from the restraints such services would impose on our ability to serve our customers. We stand ready to participate and will welcome the opportunity to assist in such efforts.

Sincerely,



cc: Secretary Kirk Brown
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Mr. Ronald C. Marshall, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield. IL 62703

MEMORANDUM

KANSAS CITY SOUTHERN LINES 114 WEST 11TH STREET KANSAS CITY, MO 64105

Date: August 4, 2000

To: Merrill Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

BUREAU OF RAILROADS				
Received:	Info	tion	Date	Initials
Bureau Chief			8/9	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

From: Gerald Davies
Executive Vice President and COO
Gerald K Davies

Subject: Chicago – St. Louis High-Speed Rail Project

I have listed below the Kansas City Southern Railway response (as the the owner of Gateway Western) to the proposed High-Speed Rail Project. These comments are focused on the portion of the line from Godfry (south of Alton) to East St. Louis, which is jointly owned by Union Pacific (UP) and Gateway Western (GWWR). The general HSR concept on track used primarily by freight trains is more directly relevant to KCS than the environmental impact data in the study.

(1) With higher speeds, the likelihood of grade crossing accidents increases. Madison and St.Clair counties, Illinois are notorious pro-plaintiff venues where the defendants in crossing accident cases often find themselves at a significant disadvantage. To mitigate such liability, GWWR (through KCS) and UP should support the closing of crossings wherever possible. The plan does call for some closures.

(2) How does the passenger operating schedule affect freight train operations on the joint line? Obviously, today, preference is given to Amtrak trains over freight, but what impact do high speed operations bring to bear?

(3) What will be the track upgrade requirements and who will fund these improvements to support higher speeds? Will track maintenance standards and costs increase to support higher speeds? KCS doesn't have funds available so would like to know what plans are on the table to compensate the joint line owners for capital upgrade and ongoing maintenance expenses?

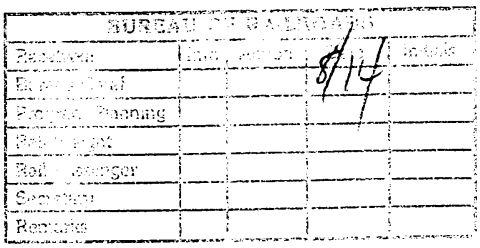
(4) Presently, UP dispatches the trackage north of Wann, GWWR dispatches the trackage using a track warrant system between Wann and WR tower, then UP takes over south of WR. Is this a workable arrangement with high speed rail operations?

Thank you for requesting our review of this draft. We would like to receive a final copy of the Environmental Impact Study. We look forward to understanding the implementation plan and receiving responses to our questions.

Metra
547 W. Jackson Blvd. Chicago, Illinois 60661 Telephone: 312-322-6900 TTY# 1-312-322-6774

August 10, 2000

Mr. Merrill L. Travis, Chief
Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway, Room 302
Springfield, IL 62764



Dear Mr. Travis:

With this letter, Metra offers comments on the Draft Environmental Impact Statement (DEIS) for the Chicago-St. Louis High-Speed Rail Project. The text and tabular information has been reviewed by Metra staff in Planning, Technical Services, Engineering, and Transportation; their collective comments accompany this letter. Our comments attempt to address some serious concerns about how the high-speed service would operate over the existing physical plants of the three routes. We have summarized our most important points, including comparative benefits and potential difficulties, in the attachment.

We are obviously interested in circumstances north of Dwight, where high-speed trains would operate over tracks shared by commuter trains. There seems to be a significant lack of improvements to the infrastructure that we believe would make this concept work efficiently, without creating problems for itself and for the current users. Since any of the routes would affect our service in some way, our foremost concern is to minimize negative influences on our service-performance measures. There are some definite reasons why we might prefer one route over another, which should become clear after reviewing our positions on the various elements and alternatives.

We appreciate the opportunity to comment on this DEIS, and look forward to further development of this project. If you have any questions regarding our comments, or wish to pursue further discussion based on them, please give us a call at 312-322-6934 or 312-322-8030.

Sincerely,

William K. Tupper
Chief Engineering Officer

Gary Foyle
Director of Planning & Analysis

Attachment
P:\LYLE\STL-HIGH.PAP

Chicago-St. Louis High-Speed Rail Project
Draft Environmental Impact Statement

Comments from

Metra

August 8, 2000

General (for all three routes between Chicago and Dwight)

- The report does not include any additional track crossovers and related interlockings or like improvements in the corridor to facilitate trains passing each other. This is particularly important in commuter rail territory, where many more trains are operated than "out in the country". Of course, commuter territory has many more freight trains as well, with a very high number of opportunities for delays. Even the presence of two or more main tracks does not preclude the possibility of a high-speed train needing to go around a local train (passenger or freight) that is either behind schedule, broken down, or awaiting clearance to proceed (especially into yards).

- The plan to use single track with passing sidings south of Joliet is also fraught with the danger of delays caused by missing scheduled meets between high-speed trains going in opposite directions. Such meets often don't go as planned because of mechanical or other difficulties, or just waiting for a UP freight to get in the clear onto a passing siding. In our opinion, single-track with passing sidings will probably prove to be inadequate. We strongly suggest that full double-tracking be considered to avoid an inauspicious beginning for the new service that could very well deter future ridership growth, keeping the service from reaching its full potential.

- Another important criterion for deciding which line to utilize is the number of at-grade rail-to-rail crossings, and the volume of rail traffic that would cross the high-speed route. Metra already encounters all-too-frequent delays to its trains, particularly on the Heritage Corridor; from both the crossing traffic and standing freight trains awaiting clearances to move into classification yards. Freight trains are not as big a problem on the Rock Island, but then again there are many more commuter movements on that route.

- In concert with the two previous points, trackside signals will also have to be upgraded. For instance, more closely spaced blocks will provide some ability to increase train frequencies by operating them closer together. Interlocked mainline crossovers will be very important to allow the high-speed passenger trains to pass the locals (commuter and freight) to keep on schedule.

- We agree with the intention to upgrade the at-grade highway crossings, particularly the use of Constant Warning Time Devices. However, in a previous letter regarding this issue 6½ years ago, we went on record about the advisability of providing grade-separations wherever high-speed rail service would be implemented. It appears to us that north and east of Joliet on the Heritage and

Rock Island routes, the new trains should be restricted to present speed limits. It will be difficult enough to fit them into the mix while running non-stop, let alone having to be concerned with e.g., high-speed trains zooming past stopped commuter trains picking up/dropping off passengers.

- A downtown train maintenance location is not mentioned for Chicago (or St. Louis). There must be a provision for routine train servicing/refueling/repairs and heavy maintenance, etc. It might be anticipated that Amtrak would be able to accommodate the new trains at their 12th Street facility south of CUS, but what about if the trains go into Randolph Street or LaSalle Street?

Heritage Corridor (MHC) Section

- The report does not address improvements needed at the Joliet station. Amtrak and Metra currently use timber crosswalks for access to boarding islands, with passengers crossing two live tracks that carry BNSF freight trains. The long platforms adjacent to the depot have not been used since the UP removed a set of crossovers in the interlocking plant which prevents Amtrak trains from getting to the true platforms.

- Freight trains that cross the route are one thing, but Metra also often encounters freight trains standing on the main line on this route, waiting to connect with the crossing routes to get into major freight classification yards like Clearing or Corwith. There are also way freights (for local deliveries) to consider. We didn't see any figures or discussions on that topic.

- In the report on grade crossings on the Heritage that Metra responded to 6½ years ago, there was great concern over too many closings that would disrupt local travel, particularly in Lockport. Now, Lockport officials are expressing concern about their historic district buildings being harmed by the noise or vibration of the high-speed trains, in addition to being concerned about the trains hitting the crossings too fast. Because of the rail traffic mentioned above, it would be unlikely that the high-speed trains could travel any faster than the Heritage Corridor or Amtrak trains do now.

- This would likely be the best route for the high-speed trains in terms of terminal capacity, particularly when Metra moves the SouthWest Service trains to LaSalle Street Station (see below). It would be preferable to accommodate passengers connecting to other Amtrak services. However, Metra would be concerned about potential interference to increasing the number of Heritage Corridor runs and reduced terminal capacity. Close planning coordination is requested by Metra.

Rock Island District (RID) Section

- A triple-track main line would probably be required between LaSalle Street Station and south of Gresham (the interlocking plant at 89th Street/Vincennes Avenue), where the Beverly Branch converges/diverges from the RID Main Line. This would allow "express" movements of high-speed trains in order to avoid conflict with Metra service and freight trains. Train capacity could be a real problem when Metra relocates SouthWest Service (SWS) trains to this station. (One of three projects that are on the front burner is upgrades to the SWS, providing an increase from the present 16 to 30 trains per day while also extending service 12 miles to Manhattan). It appears that this was not taken into account (and was perhaps not known at the time) when assuming that RID/LaSalle Street might be able to accommodate the high-speed trains.

- The capacity of LaSalle Street Station itself is not addressed, although the high-speed trains could create a separate terminal that would divert from the RID north of Roosevelt Road. At present, there is substantial vacant land there, but the costs are unknown and could be prohibitive. A separate-terminal concept would be preferable to Metra.

- Baggage handling, ticketing space, and other related elements are lacking for any intercity services at LaSalle Street Station. This location breaks up the transferability to other Amtrak trains that are all located at Union Station. Also, a downtown train maintenance location is not mentioned. Would IDOT pay to expand Metra's 47th Street facility, or would they be planning to take the trains over the soon-to-be-closed St. Charles Air Line to Amtrak's existing facility at CUS? The latter would make little sense; might as well take the revenue trains directly into CUS.

CN/IC and Metra Electric District (MED) Section

- This could be the best candidate route for the new high-speed trains, but there are some questions too. Without a third airport decision, adding nine to twelve additional miles might seem a bit odd. However, depending upon arrangements with the CN/IC, the total grade separation of the route north of Steunkel Road in University Park is a real plus. Also, there is only one rail-to-rail crossing at Kensington, where the South Shore enters the MED trackage. It would not be practical to run on the MED tracks, which would be utilized for fast service from the potential airport to downtown. However, regarding the plan to switch onto the MED between 23rd and 31st streets, i.e., as the freight tracks turn onto the SCAL, there will be problems mixing in with MED train frequencies and perhaps clearances as well.

- The capacity of the Randolph Street Station is not addressed. There is very little extra capacity left at Randolph Street Station in the rush hours. Train capacity is already complicated since the City of Chicago began construction of a busway to McCormick Place. There is little or no room for midday parking of trains between Randolph Street and Roosevelt Road, with both Metra and

NICTD jamming all available tracks. To further complicate the problem, NICTD is in the process of filing its MIS for an additional Indiana route from Valparaiso to Chicago. That will see additional commuter trains into Randolph Street. Also, this station lacks baggage handling and ticketing space for intercity services.

- No specific discussion of the proposed closure of the St, Charles Air Line was found, although we are assuming that the sentence in the first paragraph on page 3-13 (". . . a separate plan that would end all IC operations on this corridor north of around 72nd Street.") refers to just that. We understand that Amtrak is already in the process of rehabilitating and reactivating the former Nickel Plate connection at Grand Crossing in Chicago, using the bridge that has remained there since the route was abandoned to transfer trains from the IC tracks to the NS (ex-Conrail) tracks that run along the Skyway into Union Station. The high-speed trains should be routed via this new connection into CUS, where there is more capacity available and convenient connections to the other intercity train service. Union Station is also very convenient to many Metra services.

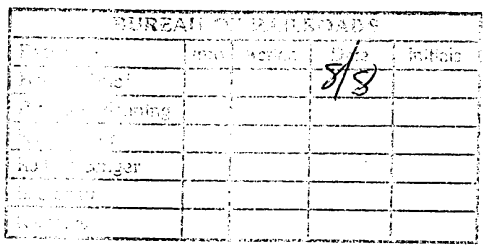
NORFOLK SOUTHERN

Norfolk Southern Corporation
Corporate Affairs
2 Commerce Square, 29th Floor
2001 Market Street
Philadelphia, PA 19103
215 209-4285

Bill Schafer
Director Corporate Affairs
215-209-4287 Phone
215-209-4286 Fax

August 7, 2000

Via Fax – 217-524-1889



Mr. Merrill L. Travis
Chief, Bureau of Railroads
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Dear Mr. Travis:

Norfolk Southern is pleased to comment on the Draft Environmental Impact Statement (DEIS) for the Chicago-St. Louis High Speed Rail Project. NS believes that, in general, the emerging high speed passenger corridors have the potential to improve mobility for rail freight and passenger users alike. NS will be glad to help with the informed planning of these corridors going forward.

Our comments are offered without the benefit of any substantive discussions with Illinois DOT or Parsons Transportation Group, and are necessarily a preliminary reaction of Norfolk Southern to the DEIS document. As the Final Environmental Impact Statement (FEIS) is developed, potential freight growth must be recognized, because we foresee the possibility of major changes in the future that could alter the character of the Kankakee-Dwight route substantially – changes that will require significantly more infrastructure for high speed passenger rail than envisioned in the DEIS.

Norfolk Southern would like to receive the Final Environmental Impact Statement. Please send five copies to me, at the address above.

I will be happy to discuss further our comments or any other aspect of the High Speed Passenger Project with you or your consultant.

Sincerely,

Bill Schafer

Attachment

Draft Environmental Impact Statement
Chicago-St. Louis High Speed Rail Project

Preliminary Comments of Norfolk Southern

Before commenting on specific parts of the Draft Environmental Impact Statement (DEIS), we list below some of the planning guidelines that will apply to the Kankakee-Dwight route:

1. **Safety – all designs and proposed services will result in a level of safety for freight train operations exceeding that existing today.**

2. **Liability and Indemnity – these provisions will be negotiated to NS's satisfaction. One goal will be to indemnify NS fully against any liability exposure that would not exist if passenger trains were not present.**

3. **Planning Horizon – the Final Environmental Impact Statement (FEIS) should project potential freight traffic growth on NS as many years into the future as passenger growth has been projected.**

4. **Width of Right-of-Way – the right-of-way provided for freight and passenger service should be wide enough to accommodate at least three main line tracks.**

5. **Changes in Freight Traffic Patterns – NS's line is a potential route to bypass Chicago. The ability to upgrade this route for heavy-duty freight service must be preserved.**

6. **Commingling of Freight and High Speed Passenger Trains – NS is not agreeable to simultaneous operation of conventional freight trains and 110 mph passenger trains on the same tracks. Operation of passenger trains at speeds greater than 90 mph must be on tracks normally separate from those routinely used by freight trains.**

7. **Control of Route – NS will retain ownership of track and right-of-way and dispatching control of all trains operating between Dwight and Kankakee.**

Comments on DEIS

S.4.1 and S.4.2 – additional right-of-way and displacements may be understated. See guideline 4 above.

2.3.3.1 – the number of Norfolk Southern freight trains that operate between Dwight and Kankakee vary from day to day, from a recent minimum of three to seven. The Final Environmental Impact Statement (FEIS) should reflect the variable nature of this traffic as well as the potential for freight traffic to grow substantially.

3.1.2.1 and Table 3.1-1 – the proposed route of the high speed trains crosses Norfolk Southern at "WR" at Granite City. Between Dwight and St. Louis, this is the only at-grade railroad crossing (out of 11) that experiences a "heavy" level of crossing traffic (that is, 50 or more freight trains per day). The level of disruption to NS freight traffic caused by sixteen high-speed passenger trains will be unacceptable at "WR" without sufficient mitigation, such as grade-separation of the traffic flows. Further, the DEIS does not appear to assume any freight growth on the NS line in the planning horizon. The study should attempt to assess the potential freight growth by the year 2010, and the results should be reflected in the FEIS.

3.1.2.1 (Illinois Central Mainline/Norfolk Southern) – coordination and planning with NS will be necessary for construction between the IC mainline at Kankakee and the UP mainline at Dwight. Enough right-of-way should be acquired for three mainline tracks. Based on potential freight growth in the planning horizon (year 2010), single-track-with-freight-sidings will be insufficient. Two mainline tracks in this segment should be planned for. Also not stated (at least in this section) is the signaling that will be required for 110 mph operation.

3.1.2.1 (Metra Rock Island District Line/Union Pacific) – if this alignment is chosen, the high speed passenger trains will have significant and unacceptable impact on Norfolk Southern freight operations at Englewood, where NS's mainline crosses Metra at grade. Like "WR", NS's existing level of crossing traffic is "heavy". The operation of sixteen high-speed trains over this crossing will result in extended periods of time when NS freight trains will be unable to cross Metra at this location. With this alignment, Illinois DOT should plan to grade-separate the crossing at Englewood.

3.1.2.1 (grade crossing treatment) – in addition to 110 mph trains operating on tracks separate from freight trains, the route should be completely "sealed", with all highway crossings either closed, grade-separated or equipped with four-quadrant gates, median barriers and/or vehicle arresting barriers.

4.5.1 – the study should assume that the high speed passenger service will have no impact on freight train operations. If passenger trains are expected to receive

"scheduling priority" over freight trains, sufficient infrastructure should be provided so that no freight service – new or existing – will need to be rescheduled or delayed because of the presence of the passenger trains. NS freight trains "rescheduled for nighttime travel", as described in this paragraph, is unacceptable.

APPENDIX **D**

Additional Agency Coordination

Appendix D
ADDITIONAL AGENCY COORDINATION

Number **Page**

APPENDIX D-1

CORRESPONDENCE WITH THE U.S. FISH AND WILDLIFE SERVICE

U.S. Department
of Transportation

**Federal Highway
Administration**

Illinois Division

3250 Executive Park Drive
Springfield, Illinois 62703

October 5, 2000

HPP-IL

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			10/11	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. John Rogner
U.S. Fish and Wildlife Service
Chicago District
1000 Hart Road, Suite 180
Barrington, Illinois 60010

Dear Mr. Rogner:

Subject: Chicago-St. Louis High Speed Rail Project
Initiation of Section 7 Formal Consultation

In the U.S. Department of Interior's (DOI) letter dated August 17, 2000, the Office of Environmental Policy and Compliance provided formal comments on the Draft Environmental Impact Statement prepared for the High Speed Rail Project proposed between Chicago and St. Louis. The DOI letter indicated that if the Illinois Central/Union Pacific (IC/UP) alignment was proposed for continued consideration, formal consultation under Section 7 of the Endangered Species Act of 1973, as amended, would be required relative to the project's potential adverse affects on the Hines emerald dragonfly (*Somatochlora hineana*).

Although no critical habitat would be affected by the project, the Fish and Wildlife Service noted concerns that the IC/UP alternative would pass near the Long Run Seep Nature Preserve, an area utilized by a known meta-population of *S. hineana*. The project would increase the number of trains passing through this area and thereby increase the potential for collisions between passenger trains and dragonfly adults.

Since the IC/UP alternative remains under consideration, the Federal Railroad Administration and the Federal Highway Administration, as joint lead agencies, wish to initiate formal consultation, in compliance with Section 7 of the Endangered Species Act of 1973, as amended. A Biological Assessment is currently being prepared and will be submitted to your office by mid-November 2000.

If you have any questions, please contact Jon-Paul Kohler at (217) 492-4988. Thank you for your continued cooperation.

Sincerely yours,

/s/ Jon-Paul Kohler

Jon-Paul Kohler
Environmental Engineer

For: Ronald C. Marshall, P.E.
Division Administrator

cc: David Valenstein, Federal Railroad Administration, Washington, D.C.
Richard Nelson, U.S. Fish and Wildlife Service, Rock Island Field Office
Joyce Collins, U.S. Fish and Wildlife Service, Marion Field Office
Merrill Travis, IDOT, Bureau of Railroads
Mike Hine, IDOT, Bureau of Design and Environment

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Illinois Field Office
1250 S. Grove Avenue, Suite 103
Barrington, Illinois 60010
847-381-2253 Fax 847-381-2285

IN REPLY REFER TO:

DEC 0 2 2000

FWS/AES-CIFO

November 30, 2000

Lan Richart
Planning Resources, Inc.
402 West Liberty Drive
Wheaton, IL 60187

Dear Mr. Richart:

This responds to your letter dated October 17, 2000 regarding endangered and threatened species searches along proposed routes for the Chicago to St. Louis High Speed Rail project. Your letter conveyed the results of searches for the eastern prairie fringed orchid (*Platanthera leucophaea*) and leafy prairie clover (*Dalea foliosa*). You requested concurrence, on behalf of the Federal Highway Administration and Federal Railway Administration, that the high speed rail project was not likely to adversely affect these 2 listed species based upon the results of your searches and plan modifications to avoid likely habitat areas.

Based upon the information in your October 17, 2000 submittal, we concur that this project is not likely to adversely affect the eastern prairie fringed orchid or the leafy prairie clover within Will, Cook and DuPage Counties, Illinois. We must defer to our Rock Island Field Office for that determination in the remaining Illinois counties.

We also acknowledge that we await your biological assessment for this project and potential impacts to the Hine's emerald dragonfly (*Somatochlora hineana*) and will commence Formal Consultation upon receipt of the assessment.

This letter provides comment under the authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act of 1973, as amended (87 Stat. 884. as amended; 16 U.S.C. 1531 *et seq.*). If you have any questions regarding our comments, please contact Mr. Jeff Mengler at 847/381-2253, ext. 226.

Sincerely,

Cynthia K Dade

for John D. Rogner
Field Supervisor

U.S. Department
of Transportation

**Federal Highway
Administration**

Illinois Division

3250 Executive Park Drive
Springfield, Illinois 62703

March 12, 2001

HPP-IL

BUREAU OF RAILROADS				
Received:	Info	Action	Date	Initials
Bureau Chief			3/14	
Program Planning				
Rail Freight				
Rail Passenger				
Secretary				
Remarks				

Mr. John Rogner, Field Supervisor
U.S. Fish and Wildlife Service
Chicago Field Office
1000 Hart Rd., Suite 180
Barrington, IL 60010

Dear Mr. Rogner:

Subject: Chicago-St. Louis High Speed Rail Project
Section 7 Formal Consultation
Biological Assessment

The purpose of this letter is to transmit the Biological Assessment prepared for the Chicago-St. Louis High Speed Rail Project and to request that the Service prepare its Biological Opinion pursuant to Section 7 of the Endangered Species Act of 1973, as amended. The Draft Environmental Impact Statement for the project, issued in June 2000, evaluated three alternative alignments. In its letter dated August 17, 2000, the U.S. Department of Interior (DOI), Office of Environmental Policy and Compliance indicated that if the Illinois Central/Union Pacific Alignment was proposed for continued consideration, formal consultation under Section 7 would be required relative to the project's potential adverse affects on the Hines emerald dragonfly (*Somatochlora hineana*).

Although no critical habitat would be affected by the project, the Illinois Central/Union Pacific alternative would pass near the Long Run Seep Nature Preserve, an area utilized by a known meta-population of S. *hineana*. The project would increase the number of trains passing through this area and thereby increase the potential for collisions between passenger trains and dragonfly adults. The enclosed Biological Assessment presents the technical information and analyses in support of a determination that the proposed action would not jeopardize the continued existence of the species and would not destroy or adversely modify designated critical habitat.

Thank you for your continued cooperation. We look forward to receipt of the Biological Opinion.

Sincerely yours,

/s/ Jon-Paul Kohler

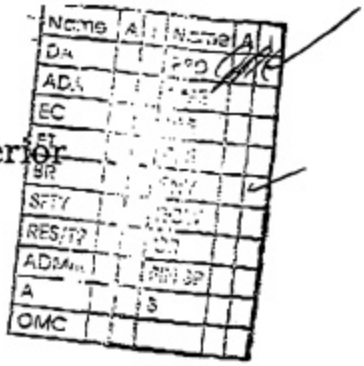
Jon-Paul Kohler
Planning and Program
Development Manager

For: Ronald C. Marshall, P.E.
Division Administrator

Enclosure

cc: David Valenstein, Federal Railroad Administration with enclosure
Gary Williams, IDOT, Bureau of Railroads
Mike Hine, IDOT Bureau of Design & Environment

United States Department of the Interior



FISH AND WILDLIFE SERVICE
Chicago Illinois Field Office
1250 S. Grove, Suite 103
Barrington, Illinois 60010-5091
847-381-2253 Fax 847-381-2285

IN REPLY REFER TO:

FWS/AES-CIFO

June 7, 2001

Mr. John-Paul Kohler
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Kohler:

This letter follows the telephone conversation held on May 29, 2001 among representatives of the Federal Highway Administration, Illinois Department of Transportation, Planning Resources Incorporated and the U.S. Fish and Wildlife Service. The main purpose of the call was to discuss various aspects of the formal section 7 consultation requested by your agency regarding the effects of the Chicago to St. Louis High Speed Rail Project on the Hine's emerald dragonfly (*Somatochlora hineana*). During the conversation we mutually agreed to put formal consultation under section 7 of the Endangered Species Act on hold pending the resolution of several issues.

One of the issues involves how the project will minimize or avoid impacts to this listed species. One of the methods discussed during the call was to develop a device to exclude dragonflies from the tracks. During the conversation on May 29, 2001 we agreed that if dragonflies were excluded from the tracks, then the potential for take would be reduced or eliminated. After consulting with an expert, we believe that some sort of exclusionary device may work. We recommend that it be constructed so that air would pass through, so as to not create an area where midges and other prey would congregate. In addition to engineering and cost considerations, we recommend that you evaluate the potential effectiveness of an exclusion device.

The Federal Highway Administration proposes to develop high-speed rail passenger service between Chicago and St. Louis. You indicated that, in the short term, you may be able to achieve project goals by completing the high speed portion of the route south of Dwight, and use additional Amtrak trains from Dwight to Chicago. You also indicated that you wanted to begin work south of Dwight. We mutually agreed that you could proceed with that work because it does not affect how work between Dwight and Chicago will take place, and therefore does not make an irretrievable or irreversible commitment of resources that would adversely affect a listed species.

We also discussed the need for the Service to consult with any other Federal agencies involved in train traffic in the Long Run Seep Nature Preserve area because any take that currently occurs is not permitted. We will contact other involved agencies and encourage them to consult with us. We may

be able to fold all train traffic into a programmatic consultation, that would meet the needs of all Federal agencies.

We look forward to completing formal consultation with you on this project after you have decided upon how to meet project goals of providing rail transportation between Chicago and Saint Louis, either on a long term high speed basis, or a short term basis with part of the route being provided by slower Amtrak trains. We are especially interested in how efforts to design a structure to exclude dragonflies proceeds.

Thank you for your interest in endangered species, and we look forward to working with this partnership to provide rail transportation and conserve a federally listed endangered species. We recommend that we have regular contact through the continued design phases of this project, perhaps in the form of monthly or bimonthly conference calls. If you have any questions please contact Kris Lah at (847) 381-2253 ext. 215 or Karla Kramer at (847) 381-2253 ext. 230.

Sincerely yours,

John D. Rogner

John Rogner
Field Supervisor

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Illinois Field Office
1250 S. Grove, Suite 103
Barrington, Illinois 60010-5091
847-381-2253 Fax 847-381-2285

IN REPLY REFER TO:

FWS/AES-CIFO

August 27, 2001

Mr. Jerry Stevenson
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Stevenson:

This letter follows our meeting held on July 10, 2001 among representatives of the Federal Highway Administration, Illinois Department of Transportation, Planning Resources Incorporated and the U.S. Fish and Wildlife Service (Service). The main purpose of the meeting was to discuss the agreement to suspend formal section 7 consultation requested by your agency regarding the effects of the Chicago to St. Louis High Speed Rail Project on the Hine's emerald dragonfly (*Somatochlora hineana*), a species federally listed as endangered. During the meeting the Service agreed to provide you with information to avoid take of Hine's emerald dragonflies during its activity season.

Hine's emerald dragonflies emerge as adults in late May (Vogt and Cashatt 1994, Soluk *et. al.* 1996, and Mierzwa *et. al.* 1997) and oviposit (lay eggs) until late August (Vogt and Cashatt 1997). Hine's emerald dragonflies feed at any time during the day (Mierzwa *et al.* 1995, Cashatt and Vogt 1996, Soluk et al. 1998). Adult crepuscular and midday feeding swarms have been observed, with crepuscular feeding swarms occurring at twilight or dusk (Vogt and Cashatt 1992 and 1994, Kirk and Vogt 1995). Therefore to avoid taking Hine's emerald dragonflies, trains should travel at reduced speeds during the hours of 5:15 A.M. and 8:30 P.M. from May 20 through August 31.

The Service considered several factors to determine a speed at which trains would be unlikely to kill Hine's emerald dragonflies. Road killed Hine's emerald dragonflies have been found along roads, including Ridges road in Door County, Wisconsin where the posted speed limit is 30 miles per hour. Motorists likely adhere to the posted speed limit because this particular road is narrow and adjacent to the bay. A sheriff's deputy residence and vehicle are located on the road as well. Hine's emerald dragonflies tend to fly in straight lines at speeds of 10-15 miles per hour, and do not make many turns when flying. The majority of Hine's emerald dragonflies fly below three meters when crossing railway lines (Soluk *et al.* 1998). Dr. Daniel Soluk has noted Hine's emerald dragonflies behavioral reactions to his vehicle while in the field and has observed them

avoiding his car (by going over or around) while traveling at 15 miles per hour but has had to apply the brakes when traveling at 20 miles per hour to avoid collision. At two known Hine's emerald dragonflies sites, River South Parcel and Middle Parcel railway speed is reduced to four to six miles per hour during the flight season. Research has shown that these trains probably do not kill adult dragonflies from direct impacts (Mierzwa *et. al* 1998, U.S. Fish and Wildlife Service 1999). Therefore to avoid taking Hine's emerald dragonflies, train speeds should not exceed 15 miles per hour along the entire stretch of the action area, Long Run Seep Nature Preserve, from May 20 until August 31 between the hours of 5:15 A.M. and 8:30 P.M. It is believed that following these parameters will allow continued use of the Illinois Central Union Pacific (ICUP) rail line along Long Run Seep while avoiding take of Hine's emerald dragonflies. If the parameters of this window can not be followed, the Federal Highway Administration can consult with the Service according to the guidelines of section 7.

We will work with other operators on the ICUP line to provide guidance to avoid take of the Hine's emerald dragonfly.

In addition, the Service agrees with the Federal Highway Administration that work completed south of Dwight will not affect how work between Chicago and Dwight will be carried out, and therefore does not make an irretrievable or irreversible commitment of resources that would adversely affect a listed species. You may complete the Environmental Impact Statement for this portion of the project.

Thank you for your interest in endangered species, and we look forward to working in cooperation with you to provide rail transportation and conserve a federally listed endangered species. We recommend that we continue to have regular contact during the design phases of this project. If you have any questions please contact Kris Lah at (847) 381-2253 ext. 215 or Karla Kramer at (847) 381-2253 ext. 230.

Sincerely yours,

John D. Rogner

John Rogner,
Field Supervisor

Literature Cited

Cashatt, E. D., and T. E. Vogt. 1996. Population and habitat monitoring of Hine's emerald dragonfly (*Somatochlora hineana* Williamson) in northeastern Illinois in 1995. Report to U.S. Fish and Wildlife Service. Illinois State Museum, Springfield, Illinois. 77 pp.

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Vogt, T. E., and E. D. Cashatt. 1997. The 1996 population monitoring and adult ecological studies of Hine's emerald dragonfly (*Somatochlora hineana*) at Material Service Corporation Yard 61, Romeoville, Illinois. Illinois State Museum, Springfield, Illinois. 24 pp. + appendices.

Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

November 9, 2001

Mr. John Rogner
United States Department of the Interior
Fish and Wildlife Service
Chicago Illinois Field Office
1250 S. Grove, Suite 103
Barrington, Illinois 60010-5091

Dear Mr. Rogner:

We are in receipt of your August 27, 2001 letter to Mr. Jerry Stevenson of the Federal Highway Administration. In our July 10, 2001 meeting, we understood that train restrictions could be placed so that taking of the Hine's emerald dragonfly could be avoided. During our meeting, we believed the restriction on train speed to be in the neighborhood of 50 miles per hour. We further believed that daytime speed restrictions would begin at 9:00 A.M. This is the basis that we used to decide that we could possibly restrict the trains as one option to avoid taking of the Hine's emerald dragonfly. Had we known that the train restrictions would be as represented in your August 27, 2001 letter, we would not have left the meeting feeling that we were able to resolve an important issue.

We respect the opinion of Dr. Daniel Soluk and the other sources cited in your letter. We have reviewed many documents containing information on the Hine's emerald dragonfly and have provided statements from those documents in support of the discussion that we had at our July 10, 2001 meeting.

After reviewing field notes and reports from Dr. Everett Cashatt and reports from Dr. Daniel Soluk and TAMS during field seasons from 1991 through 2000, it was noted that the earliest observed Hine's emerald dragonfly for the season was a single individual seen May 30, 1991, in Illinois. No other observation dates occurred in May for the other years of study. The other years' data showed June 6, 16, 19, 21, 25, 26, and 30 for earliest dates. Peak abundance is in mid-July. Adults have been seen specifically at Long Run Seep Nature Preserve on the following recorded dates: June 6, 1991; June 23, 1993; July 13, 1994; June 30-July 12, 1995. They have been recorded July 16, 17, and 22, 1998, at the railroad tracks west across New Avenue from Long Run Seep Nature Preserve (Soluk *et al* 1998). Therefore, it is requested that the start date of the train restrictions be June 1.

Regarding the train speed restriction, the study written by Dr. Daniel Soluk *et al,* 1996, states that dragonflies exhibit avoidance behaviors in the presence of motor vehicles driving more than 50 miles per hour. Also several of the reports documented various types of Hine's emerald flight behavior, often exhibiting agility, in addition to flying in a straight line: male territorial patrols involve dragonflies darting rapidly throughout their territories and frequently hovering and often pivoting while hovering. Feeding flights were described as "irregular and often near clusters of shrubs or the forest edge." Flight patterns were different yet with copulatory behavior and with the slow flight during pre-oviposition (Vogt and Cashatt 1994). Since no larval habitat for the Hine's emerald occurs at the railroad tracks west of and across New Avenue from Long Run Seep Nature Preserve (Soluk *et al* 1998), it is presumed that more time would be spent by Hine's emeralds within Long Run Seep Nature Preserve than outside it. The slow pre-ovipositional flights presumably do not occur at the railroad tracks. Also, the Hine's emerald must cross two-lane New Avenue with a posted speed limit of 55 miles per hour prior to reaching the railroad tracks. During the 1995 and 1996 roadside surveys, no Hine's emeralds were found roadkilled or flying at four different Illinois roads, including New Avenue. This supports the previously mentioned 1996 study by Dr. Daniel Soluk *et al,* that dragonflies exhibit avoidance behaviors in the presence of motor vehicles driving more than 50 miles per hour.

The basis for the 15 miles per hour train speed restriction proposed in your letter appears to be based on information from Door County, Wisconsin. Because the populations of the Hine's emerald dragonfly at the Door County sites are significantly larger than the population at the Long Run Seep site, we believe comparisons between the two locations to be inappropriate. In addition, the breeding areas at the Door County sites are much closer to County Road Q and Ridges Road than the railroad tracks are to the breeding areas at Long Run Seep. It is also expected that many Hine's emeralds and other dragonfly species would be flying over these Door County roads at one time. Therefore, in light of the observations above, it is requested that train speeds of 50 miles per hour be allowed.

Regarding time of day of reduced train speeds, the following was noted during our examination of the reports: several reports stated that the Hine's emerald peak flight period was 9:00-11:00 A.M. (Mierzwa *et al* 1995, Mierzwa *et al* 2000). There are very few recorded observations of Hine's emeralds flying prior to 9:00 A.M. During the 1995 study, observation began at 8:30 A.M. and feeding began at 8:45 A.M. The other activities, i.e., territorial patrols, copulation, and oviposition, began at 9:07 A.M., 9:20 A.M., and 9:33 A.M. respectively during that study (Cashatt and Vogt 1996). The TAMS 2000 study specifically observed Hine's emerald abundance during certain times of day and showed that the lowest Hine's emerald flight activity occurred in the early morning hours of 6:37-9:11 A.M. and 6:40-9:57 A.M. Keep in mind that this study area was at one of the largest Illinois populations, the River South Parcel. In general, their activity peaks between 9:00 A.M. and 1:00 P.M. for the Illinois population. In addition, activity is temperature-dependent such that Hine's emerald flight activity rarely occurs prior to 7:00 A.M., only when the maximum temperature is 95 to 100.4 ° F. (Vogt and Cashatt 1994). Hine's emeralds typically do not fly during rain events, and rarely

when there is cloud cover. They fly only in sheltered areas during windy days, such as near tree lines or clusters of shrubs. This further reduces the likelihood of Hine's emeralds flying during the early morning hours. Since Hine's emeralds rarely fly prior to 9:00 A.M., it is requested that the start time of reduced train speeds be 9:00 A.M.

In light of this information, we respectfully ask that you consider the additional documented information cited in this letter in developing train restrictions in line with the discussions in our July 10, 2001 meeting. In summary, we request that the train speed restrictions be 50 miles per hour during the hours of 9:00 A.M. and 8:30 P.M. between the dates of June 1 and August 31.

If you believe we should meet to bring this to a close, I can be reach at (217) 782-2825.

Sincerely,

Gary Williams
Chief, Bureau of Railroads

cc: Jerry Stevenson, FHWA

Literature Cited

Cashatt, E. D. and T. E. Vogt. 1996. Population and habitat monitoring of Hine's emerald dragonfly (*Somatochlora hineana* Williamson) in northeastern Illinois in 1995. Illinois State Museum, Springfield, Illinois, and TAMS Consultants, Inc., Chicago, Illinois. 77 pp.

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Soluk, D. A., D. S. Zercher, J. D. Miller and B. J. Swisher. 1998. Preliminary assessment of *Somatochlora hineana* larval habitat and patterns of adult flight over railway lines near Lockport and Lemont, Illinois. Technical Report. Illinois Natural History Survey, Champaign, Illinois. 7 pp.

Vogt, T. E., and E. D. Cashatt. 1994. Distribution, habitat, and field biology of *Somatochlora hineana* (Odonata: Corduliidae). Annals of the Entomological Society of America 87(5): 599-603.

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11/8/01

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Chicago Illinois Field Office
1250 South Grove Avenue, Suite 103
Barrington, Illinois 60010
847-381-2253 847-381-2285 (Fax)

IN REPLY REFER TO

FWS/AES-CIFO
(T 253)

November 28, 2001

Mr. Gary Williams
Illinois Department of Transportation
Bureau of Railroads
2300 South Dirksen Parkway
Springfield, Illinois 62764

Dear Mr. Williams:

This responds to your letter dated November 16, 2001 regarding proposed train speed restrictions at Long Run Seep. During the meeting held on July 10, 2001 among representatives of the Federal Highway Administration (FHWA), Illinois Department of Transportation (IDOT), Planning Resources Incorporated (PRI) and the U.S. Fish and Wildlife Service (Service) we agreed to provide you with parameters to avoid take of the Hine's emerald dragonfly (*Somatochlora hineana*), a species federally listed as endangered. The purpose of this proposal was to enable us to suspend the section 7 consultation because there would be no adverse effects on the species. By avoiding take of the Hine's emerald dragonfly the Federal agencies involved in overseeing train traffic along Long Run Seep Nature Preserve would be in compliance with section 7 of the Endangered Species Act of 1973, as amended (Act). In our letter of August 27, 2001, we indicated that FHWA had the option of consulting under section 7 of the Act if you could not avoid take.

The following are the parameters that we provided for you to avoid taking Hine's emerald dragonflies. Train speeds should not exceed 15 miles per hour along the entire stretch of the action area, Long Run Seep Nature Preserve, from May 20 until August 31 between the hours of 5:15 A.M. and 8:30 P.M. According to section 7(a)(1) of the Act federal agencies are to "carry out programs for the conservation of endangered species" and section 7 (d) states that federal agencies "shall not make any irreversible or irretrievable commitment of resources with respect to the agency action." Please let us know which parameters you propose to impose. If you will not be able to abide by the parameters we have provided for you, we suggest that we have another meeting between FHWA, IDOT, PRI, and the Service to discuss other alternatives to conserve the Hine's emerald dragonfly population near Long Run Seep.

If you have any questions please contact Kris Lah at (847) 381-2253 extension 215 or Karla Kramer at (847) 381-2253 extension 230.

Sincerely,

John D. Rogner
Field Supervisor

cc: J.D. Stevenson, U.S. Federal Highway Administration

Illinois Department of Transportation
Office of Planning and Programming
2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 29, 2002

Mr. Anthony Pakeltis
Deleuw, Cather & Company
525 West Monroe Street
Chicago, IL 60661-3629

Dear Mr. Pakeltis:

Enclosed for your information and reference are notes taken at our meeting with the U.S. Fish and Wildlife Service on January 10, 2002. At this meeting held at the IDOT District One office in Schaumburg, we discussed the completion of the Chicago to St. Louis High-Speed Rail Environmental Impact Statement in light of the Service's concerns regarding Hines Emerald Dragonfly in the Long Run Seep area.

In summary, it was concluded that through this stage of informal consultation, the Agencies can proceed with the Final Environmental Impact Statement without any changes to the service north of Dwight, Illinois. If a subsequent decision is made regarding the use of the alignment adjacent to Long Run Seep for this action, the agencies will consult with the Service regarding potential mitigation matters.

Thank you for your attention to this matter. If you need further information or clarification, please call me at 217/782-2835.

Sincerely,

Gary Williams
Chief, Bureau of Railroads

Enclosures

cc: Director Wheeler

Meeting Notes
Chicago – St. Louis High-Speed Rail Project
Illinois Department of Transportation District 1 Office
January 10, 2002
11:00 a.m.

On January 10, 2002, a meeting was held regarding Hine's Emerald Dragonfly consultation with the U.S. Fish and Wildlife Service for the Chicago – St. Louis High-Speed Rail Project. Representatives from the U.S. Fish and Wildlife Service (FWS), the Federal Highway Administration (FHWA), the Illinois Department of Transportation (IDOT), and project consultants were in attendance. A summary of the Section 7 Endangered Species Act issues discussed is provided below.

General Discussion and Clarification on Consultation to Date

It was agreed that the parties involved were still in *informal consultation* regarding the Hine's Emerald Dragonfly, and that it was acceptable to discuss the IDOT letter dated November 9, 2001 at this meeting. (Attachment 1).

IDOT does not operate trains, including through the Long Run Seep area, and has no control over the speed limits set. IDOT provides state funding to both Amtrak and Metra.

FWS indicated that they would consult directly with Amtrak, Metra, and Canadian National (the current train operators in the Long Run Seep area) regarding existing train operations. IDOT noted that it is likely that Amtrak would coordinate with IDOT if consultation were initiated between the FWS and Amtrak.

The Draft EIS indicated that approximately 18 trains per day currently operate adjacent to the Long Run Seep area. This includes six Amtrak and six Metra trains. However, freight traffic fluctuates.

The FWS reiterated that they do not object to proceeding with a Preferred alternative where improvements are only made south of Dwight. Doing so will not affect an alignment decision north of Dwight and therefore does not make an irretrievable or irreversible commitment of resources that would adversely affect a listed species (i.e., the Hine's Emerald Dragonfly).

IDOT stated that a decision on an alignment between Chicago and Dwight could be several years away. However, completion of the Final EIS is required to receive federal funding for improvements south of Dwight.

Completion of the Final EIS

In regards to threatened and endangered species, FWS stated that they would not object to the Preferred alternative and completion of the Final EIS and Record of Decision if the alternative requires no changes in the Long Run Seep area:

1. The number of long-distance passenger trains remains at six.

2. The long-distance passenger trains would not operate above the current maximum speed.

Future Consultation Issues

The FWS letter dated August 27, 2001 (Attachment 2) provided parameters for train operations through the Long Run Seep area. Any future federal action regarding the High-Speed Rail Project that would increase train speed or the number of trains operating through the Long Run Seep area would require formal consultation with the FWS.

FWS reiterated that if the Rock Island District or Norfolk Southern alignments, as presented in the Draft EIS, were chosen for the route of entry into Chicago, no further consultation with FWS would be required.

Mitigation

Although not required for the current High-Speed Rail Project, potential mitigation in the Long Run Seep was discussed. Two potential measures—a barrier system and habitat enhancement—were identified. Neither of these measures has been tested, and adequate research is not available at this time. FWS indicated there are different opinions on the installation of a barrier system (i.e., should it be researched first, or tested in-place).

Other Items

IDOT will provide FWS with appropriate names and telephone numbers of Amtrak personnel so that FWS may contact Amtrak regarding consultation on the Hine's Emerald Dragonfly. The list of attendees is attached (Attachment 3).

January 10, 2002

High Speed Rail Meeting
RE: Hine's Emerald Dragonfly

Name	Representing	Phone Number
Richard Christopher	IDOT/OCC	(312) 793-4838
Susan Dees	IDOT – BDE	(217) 785-0150
Frank Hartl	IDOT – Railroads	(217) 782-0697
Jerry Isenburg	IDOT – Railroads	(217) 782-4132
Karla Kramer	U.S. Fish & Wildlife Service	(847) 381-2253 (Ext. 230)
Kris Lay	U.S. Fish & Wildlife Service	(847) 381-2253 (Ext. 215)
Tony Pakeltis	Parson Transportation Group	(312) 930-5268
Larry Piche	IDOT – BDE	(217) 782-4770
Lan R. Richart	Planning Resources, Inc.	(635) 668-3788
J.D. Stevenson	FHWA	(217) 492-4638
Gary Williams	IDOT – Railroads	(217) 782-2835

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1/18/02

BUREAU OF RAILROADS

Received:	Info	Action	Date	Initials
Bureau Chief			2/25	
Program Planning				
Rail Freight				
Rail Passenger				
Remarks				

United States Department of the Interior

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IN REPLY REFER TO

FWS/AES-CIFO
(T520)

February 20, 2002

Mr. Jerry Stevenson
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Dear Mr. Stevenson:

This is in response to a letter with attached minutes dated January 29, 2002 signed by Mr. Gary Williams of the Illinois Department of Transportation regarding a meeting held on January 10, 2002. During this meeting among representatives of the Federal Highway Administration (FHWA), Illinois Department of Transportation (IDOT), Planning Resources Incorporated (PRI) and the U.S. Fish and Wildlife Service (Service) we discussed issues surrounding the completion of the Chicago to St. Louis High-Speed Rail Environmental Impact Statement (EIS)

We have reviewed Mr. Williams' letter and discussed it with him over the telephone and informed him about inaccuracies that it contained. However, Mr. Williams assured us that our interpretation is not what was intended. This letter is intended to clarify any misunderstanding about the Service's position in regard to train traffic that passes along Long Run Seep Nature Preserve. At issue is a statement on page 1 of the minutes under the heading "Completion of the Final EIS," which reads:

> "In regards to threatened and endangered species, FWS stated that they would not object to the Preferred alternative and completion of the Final EIS and Record of Decision if the alternative requires no changes in the Long Run Seep area:
>
> 1. The number of long-distance passenger trains remains at six.
> 2. The long-distance passenger trains would not operate above the current maximum speed."

Our Clarification:

The Service does not object to the completion of the Final EIS for the Chicago to St. Louis High-Speed Rail project for work that only takes place south of Dwight with the understanding that no preferred alternative has been selected for the project north of Dwight. The EIS should clearly indicate that impacts north of Dwight are not addressed and that they will be at a later date. The reason for the Service's position is that work completed south of Dwight will not affect how or if work north of Dwight will actually take place, and therefore does not make an irretrievable or irreversible commitment of resources that would adversely affect a listed species.

The Service continues to have concerns about the impact that the current number and current speeds of trains passing along Long Run Seep Nature Preserve (located north of Dwight along one of the alternatives) has on the federally endangered Hine's emerald dragonfly. It is our understanding from the meeting that the proponents for the High Speed Rail project have no control or authority over current train traffic in the Long Run Seep area, and that technically the current train traffic is not part of the High Speed Rail project. The current traffic receives no funding from proponents of the High Speed Rail project and is not the subject of any agreements between Amtrak and FHWA or other proponents of the project. The impact of the trains used for the High Speed Rail project would be subject to consultation regulations under section 7 of the Endangered Species Act. The current traffic may be subject to the requirements of section 7 if a federal agency is involved. In our meeting on January 10, 2002, you stated that the trains that would pass along Long Run Seep would be operated by Amtrak. Therefore, the Service will inform Amtrak of their regulatory responsibilities under the Endangered Species Act. The Federal Highway Administration, however, does not have to consult with the Service on this issue until they are involved with trains passing along Long Run Seep.

If you have any questions please contact Kris Lah at (847) 381-2253 extension 215 or Karla Kramer at (847) 381-2253 extension 230.

Sincerely,

John D. Rogner

John D. Rogner
Field Supervisor

cc: Gary Williams, Illinois Department of Transportation

APPENDIX D-2

CORRESPONDENCE WITH
THE ILLINOIS HISTORIC PRESERVATION AGENCY

AUG 7 2002

Preservation Services

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

IHPA REVIEW
H/A
AC
AR
File

August 5, 2002

Ms. Anne E. Haaker
Deputy State Historic
Preservation Officer
Historic Preservation Agency
Union Station Floor 1
Springfield, IL 62701

RE: High Speed Rail – Project IHPA # 9910[illegible]0052WSW

Dear Ms. Haaker:

This letter is in response to your comments, dated October 13, 2000, on the Chicago – St. Louis High-Speed Rail Project Draft Environmental Impact Statement. In that letter, you requested the following be provided as part of concluding the Section 106 process:

1. A definition of the area of potential effects (APE);
2. A table documenting potential historic properties identified within the APE and the National Register status of each;
3. The criteria of adverse effect as defined in 36 CFR part 800.5 and an explanation of which do or do not apply and the reasons for this finding; and
4. A summary of efforts made to seek comment from the public concerning their views on possible effects on historic resources.

Since issuance of the Draft EIS and conclusion of additional work, a Preferred Alternative has been selected. The Preferred Alternative is a combination of the No-Build and High-Speed Rail Alternatives presented in the Draft EIS. As part of the Preferred Alternative, no action is proposed between Chicago and Dwight. Passenger trains will continue to operate on the current Amtrak route; however, through this area, no additional trains will operate, and existing maximum speeds will be maintained. South of Dwight, the existing service level is maintained while train speeds up to 110 mph will be allowed. Physical improvements associated with the Preferred Alternative include:

- Provision of 12.3 miles of double track;
- Provision of 21.9 miles of freight siding;
- Provision of enhanced warning devices at 172 existing grade crossings; and
- Provision of one grade separation at Pontoon Road in Granite City.

With the exception of the one grade separation, all of the proposed improvements will occur within existing right-of-way. Additional information regarding construction for the Preferred Alternative is provided on the map from Section 3 of the FEIS.

Appendix B identifies those crossings where warning device upgrades are proposed. There are two sets of crossing device upgrades. The first are for those crossings that have only crossbucks or no protection. Upgrades for these crossings that remain open would be movable two mast gates with flashing signals or quad gates. The latter warning device has flashing signals and movable mast arms that are supported on pedestals in all four quadrants of the crossing. These crossings are in areas where there are no historic structures present in the crossing environs.

The other set of crossings with proposed improvements are those that currently have flashing lights with or without movable two-mast gate protection. Upgraded improvements to these crossings would be quad gates. This improvement would consist of in-place replacement of the existing pedestal, signals and gates supplemented with construction of the pedestals, signals and gates in the crossing quadrants where none currently exist. The resultant improvement would be the provision of additional warning devices physically complementing and mirroring those currently in place.

The area of potential effect (APE) as defined for the Chicago-St. Louis High-Speed Rail Project is limited to the footprint of the proposed physical improvements. Since all of the improvements are in context with the surrounding environs, no potential visual impacts were identified, thereby limiting the APE to the improvement footprint. The one exception is the Pontoon Road grade separation where additional right of way is required. However, no historic resources were identified in the vicinity of the Pontoon Road crossing. In addition, no noise or vibration impacts are projected as a result of the project, again limiting the reach of the APE.

No historic resources were identified within the APE. Therefore, it has been determined that this project does not have the potential to cause effects on historic properties as outlined in 36 CFR part 800.

Public Hearings for this project were held in July and August of 2000. The National Trust for Historic Preservation and the Canal Corridor Association requested to become consulting parties because of their interest in historic resources in the Lockport area. As noted, Lockport is located within the no action area of this project. Therefore, it is not appropriate to consult with these organizations at this time.

During project implementation, IDOT will contact each community in the Chicago - St. Louis High-Speed Rail corridor south of Dwight to discuss the possibility of fencing along the railroad tracks. If a community is interested in having fencing installed, IDOT will coordinate with that community to determine the location, style, and height of the proposed fencing as well as whether the fencing will be on one or both sides of the railroad tracks. If an agreement can be reached, fencing will be installed. Fencing will not be installed unless agreed to by the local community. Finally, fencing will not be provided if it is determined that visual impacts to historic resources would result.

We would like to conclude the Section 106 process with the Environmental Impact Statement and trust that this documentation will be sufficient. Please contact me at 217.782.2835 if you have any questions or would like to discuss this project further.

Sincerely,

John Schwalbach
Chief, Bureau of Railroads

Attachments

cc: J. Walthall, IDOT – BDE
Kathy Ames, IDOT – BDE
Anthony Pakeltis, Parsons

CONCUR

By: Anne E. Haaker
Deputy State Historic Preservation Officer
Date: 9/6/02