Union Pacific Railroad Track Improvement Project
from Joliet to Dwight in
Will, Grundy, and Livingston Counties, Illinois

Federal Railroad Administration

FINDING OF NO SIGNIFICANT IMPACT

Introduction

The Illinois Department of Transportation (IDOT) proposes to undertake the Union Pacific Railroad (UPRR) Track Improvement Project (the Project) involving a series of proposed improvements to a section of the UPRR track between Joliet and Dwight, Illinois extending 36 miles across Will County, Grundy County and northeastern Livingston County. The Project passes through or near the Illinois communities of Joliet, Elwood, Wilmington, Braidwood, Godley, Braceville, Gardner, and Dwight.

In cooperation with the Federal Railroad Administration (FRA) the Illinois Department of Transportation (IDOT) prepared an Environmental Assessment (EA) for the Project in compliance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.* and the FRAs Procedures for Considering Environmental Impacts (64 FR 28545). The EA is available on the FRA's website at www.fra.dot.gov.

The Project includes the following components: 1) track upgrades from Joliet (milepost (MP) 36.7) to Dwight (MP 72.8) to allow 110-mph train speeds where safe and practical; 2) a new second mainline track from Joliet (MP 36.7) to Elwood (MP 44.69); and 3) a freight siding between MP 55.0 and MP 57.13. Subsequent to the preparation of the EA, IDOT proposed certain revisions to the Project including the acquisition of additional right-of-way for the second mainline track and improvements to the existing siding in Dwight. These revisions are minor in nature and IDOT conducted additional analysis to account for the change, which analysis are attached as appendices B and C, and have been incorporated into this decision.

IDOT has applied for and been awarded $186.38 million to fund the Project as part of FRA's High Speed Intercity Passenger Rail (HSIPR) program, while IDOT and UPRR have committed $62.13 million.

Statement of Purpose and Need

Purpose of the Proposed Action

The Project is part of an incremental approach to improving existing railroad infrastructure to reduce travel time for the passenger rail mode and is the most cost-effective approach to improving current intercity rail service and facilitating development of high-speed rail within the Chicago – St. Louis corridor. This Project's

purpose is to enhance capacity and increase the fluidity of operations on the UPRR Joliet Subdivision in the line section between Joliet and Dwight.

The Project's purpose is also to benefit the existing medium and long-distance Amtrak service, including the Lincoln Service between Chicago and St. Louis; the Kansas City Mule and Ann Rutledge trains between St. Louis and Kansas City, MO; and the Texas Eagle, providing service between Chicago and St. Louis, and then southwest to Little Rock, AR, Dallas/Ft. Worth, TX, and other points west to Los Angeles, CA. These trains serve one suburban Chicago stop and eight intermediate stops between Chicago and St. Louis, including Joliet, Bloomington-Normal and Springfield, Illinois. The existing number of Amtrak trains on the line is ten per day (five northbound, five southbound). This level of intercity passenger rail operations is not expected to change as a result of the Project or in the near term.

South of the Project limits, other improvements to implement high speed rail are being implemented, as contained in the Chicago – St. Louis High Speed Rail Project EIS, completed in January, 2003, with the Record of Decision (ROD) signed in January, 2004. This EIS and ROD included the upgrade of the existing single track and 22 miles of siding, 12 miles of second track, one grade-separated highway-railroad grade crossing, and the installation of enhanced warning devices at 174 grade crossings along the UPRR/Amtrak route between Dwight and St. Louis to allow 110-mph operation. Since the ROD, IDOT has made significant progress on the Chicago to St. Louis Corridor, in cooperation with the UPRR, who owns the right-of-way south of Joliet and operates rail freight services on the corridor. Additionally, this Project complements the projects already awarded FRA HSIPR funds that will be implemented in the section of line south of Joliet. FRA has already awarded IDOT over $1.33 billion through two grants within the Illinois High-Speed Rail Program from Chicago to St. Louis. Additionally, the State of Illinois has committed $122 million to the program.

The Project purpose also complements potential future improvements within the Dwight–Joliet corridor that are under consideration in the current Tier 1 Environmental Impact Statement (EIS) for the Chicago-St. Louis HSIPR program. In February, 2011, FRA and IDOT issued a Notice of Intent (NOI) to prepare a new Tier 1 EIS for further high speed passenger rail service improvements from Chicago, IL to St. Louis, MO, building upon the selected alternative of the 2004 ROD. The NOI included a proposal to examine 110-mph passenger train service and to effectively consider a single "build" alternative utilizing the UPRR corridor between Joliet and Dwight.

The proposed action addressed in this FONSI and accompanying EA has independent utility in addressing mainline track capacity and operational issues for existing and expected near-term freight and Amtrak services, and does not preclude other options to address the Dwight north to Chicago portion of the proposed Chicago-St. Louis HSIPR program.

Need for the Proposed Action

The Proposed Action is needed to enhance capacity and improve on-time performance along the existing Chicago to St. Louis route, and to increase average speeds and shorten average trip times between Joliet and Dwight. Under the current schedules, there are about 15 trains per day operating over this section of line, including ten Amtrak trains (including the two long distance "Texas Eagle" trains and eight intermediate distance "Lincoln Service" trains) and five UPRR freights (a combination of local and through trains).

Under the present infrastructure configuration, delays to passenger and freight trains can and do occur on the 36-mile line section between Joliet and Dwight on the Chicago to St. Louis corridor. For example, "Lincoln Service" trains 300 and 301 (first departures of the day northbound and southbound, respectively) are scheduled to meet north of Dwight, but the limited siding and track capacity, along with frequent road crossings in this section, constrains the meet locations, frequently subjecting these trains to delays. In a similar context, trains 302 and 303 are scheduled to meet in this same section of line.

Reducing travel time and improving service reliability are paramount to increasing the performance of intercity passenger rail transportation between Chicago and St. Louis. In order to be attractive, passenger rail must meet or better the travel time of auto travel on the parallel interstate freeways with 65 mph speed limits. An overall reduction in travel time between Chicago and St. Louis is required to achieve that need. On-time performance, another key aspect of reliability, must also be improved.

<u>Alternatives</u>

Proposed Action

IDOT has proposed minor revisions to the Proposed Action since completion of the EA. In the EA, the Project included three separate components as well as corridor wide improvements. For the entire Project area, the signal system would be upgraded to a Centralized Traffic Control (CTC) signal system and would include a Positive Train Control (PTC) overlay. The Proposed Action was the only build alternative evaluated in the EA. The first component includes improvements to the existing track to support the extension of the 110-mph speed limit for passenger trains on the corridor to the segment between Dwight, IL and Joliet, IL and includes track upgrades, crossing upgrades, 30 turnouts, and other related work. The second component includes a new and upgraded second mainline track between Joliet and Elwood, IL (i.e., track improvements to the existing double tracks between MP 36.7 and MP 38.50, and a new second mainline track between MP 38.50 and MP 44.69). In approximately the northernmost two miles of the Project area, which are already double-tracked, the track improvements will include the addition of seven crossovers/turnouts. The third component, located between MP 55.0 and MP 57.13, consists of a new siding track adjacent to the north side of the existing single mainline track. (Note: The siding is located in the City of Braidwood, but for purposes of consistency with the EA, will be referred to as the Mazonia Siding.) A new

turnout and approximately 12,200 feet of track will be constructed for the Mazonia Siding.

Since the EA was published, IDOT has revised the Project described above to include the acquisition of additional right-of-way for the second mainline track and improvements to the existing Dwight siding. The additional right-of-way needed for the new Second Mainline track is located between Joliet and Elwood, IL and consists of three separate parcels of land totaling 13.9 acres between MP 36.76 and MP 44.69. The improvements to the Dwight Siding track include reconstruction of a 2.6-mile siding track adjacent to the existing single mainline track with an expanded centerline distance of 20 feet (from 14 feet). No new right-of-way will be acquired for the Dwight Siding reconstruction. Detailed drawings of the revised Project can be found in Appendix D.

As part of the Project, the existing UPRR access and services to freight customers will be preserved, which may require additional, minor infrastructure investments to accommodate access.

At-Grade Crossings

There are 38 at-grade crossings (including four private grade crossings and three field-to-field crossings) in the Project corridor. Because the UPRR right-of-way is 100 feet wide at existing grade crossings, the crossing areas are wide enough to accommodate the addition of a second track. All public grade crossings located within the Project corridor will be upgraded from the existing warning devices to four-quadrant gates with vehicle detection equipment. For private crossings located on farming property, the crossing is primarily used to move farming equipment from one field to another on farms that are bisected by the rail line. In this situation, the crossing is proposed to receive a Field-to-Field Treatment that will incorporate a locked, reduced-access gate system. Both the land owner and Emergency Medical Services will have access to release this locked system when no trains are within the approach circuits.

No grade crossings will be involved in the third component (Mazonia Siding Project). For additional information regarding at-grade crossing treatments, see Section 3.3.1 - Transportation of the EA.

Culvert and Bridge Crossings

The existing culverts and bridges will be extended to accommodate the additional embankment required to construct the new second main track. The EA indicates that the first component of the Project will have a low potential impact on the bridges and culverts since the work is contained within the existing right-of-way and on the same track alignment. The second and third components will require extending some of the existing culverts and bridges to accommodate the additional embankment required to construct the second main track between Joliet and Elwood (second component) and the siding track north of Braidwood (third component). There are no large culverts or bridges located within the third (Mazonia Siding) component.

Within the second component, there is one large culvert at MP 38.8 and there are bridges at MP 42.6 and MP 44.4 where the rail line crosses waterways. These will be modified with the addition of a second track. The existing roadbed on the bridges and approaches will be modified for the second track in accordance with current FRA standards. Temporary easement or right-of-way acquisition may be required at the stream crossings of the Sugar Run Creek at MP 38.8, the Cedar Creek at MP 42.6 and Jackson Creek at MP 44.4 in Will County. Work on these structures will be limited to extending the culvert at MP 38.8 to the east, extending the bridge at MP 42.6 to the east and replacement of the one-track bridge at MP 44.4 with a double track bridge. A conceptual drawing of the proposed replacement structures has been prepared by the UPRR and is included in the EA's Appendix D.

Right-of-way and Construction Requirements

No displacements are expected as part of the Project. Within the first component of work, temporary easements could be required between MP 36.7 and MP 72.8 for track and signal work.

The additional right-of-way needed for the second component, the new Second Mainline track located between MP 36.76 and MP 44, is approximately 13.9 acres. Additional temporary easements could be required at the stream crossings of the Sugar Run Creek at MP 38.8, Cedar Creek at MP 42.6 and Jackson Creek at MP 44.4 in Will County. Work on these structures will be limited to extending the culvert at MP 38.8 to the east, extending the bridge at MP 42.6 to the east and replacement of the single track bridge at MP 44.4 with a double track bridge. Culvert work with extensions will be conducted at MP 40.49, MP 40.51, MP 41.8, MP 42.95, MP 43.2, MP 43.58 and MP 44.10. Culvert work without extensions or replacement will be conducted at MP 39.35, MP 41.90, MP 41.97, MP 42.20, MP 43.9 and MP 44.90 as shown in Appendix E to the EA.

Within the third component (Mazonia Siding), temporary easements will need to be obtained by UPRR for construction access and to stage materials; however, these easements will not require the relocation of businesses or residences, or impact sensitive environments. The existing culverts at MP 56.3 and MP 55.7 will be replaced. An easement will be required at MP 55 and MP 57.13 to construct construction pads for new turnouts. Work on these structures will be limited to the turnout area and culverts within the UPRR right-of-way.

Construction activities for the 110-mph passenger service will include use of a Track Renewal Train (TRT) to install new rail and concrete ties along the existing mainline. This work will also include resurfacing of the stone ballast, renewal of crossing surfaces and approaches, and upgrade of the signals and crossing warning systems. Staging areas for construction equipment, materials, and spoils will be limited to the existing and proposed UPRR right-of-way between Joliet and Dwight, or within the UPRR right-of-way at the Joliet Intermodal Facility which is currently under operation.

No Build Alternative
The No Build Alternative includes existing and expected near-term freight and Amtrak services between Chicago and Dwight. These services will operate on the existing track configuration of double track between MP 36.7 and MP 38.50 and single track between MP 38.5 and MP 72.8. The No Build alternative assumes the UPRR Joliet Intermodal Terminal is built; however the number of freight trains assumed to operate along this section of track remains at five trains per day due to the uncertainty of when the additional freight trains may choose to use this segment of track.

Under the No Build alternative, no physical improvements would be made between Joliet and Dwight other than the normal maintenance activities performed by UPRR. North of Dwight, the existing maximum operating speed of 79 mph would be maintained, as defined in the 2003 FEIS and the 2004 ROD. No physical improvements and no changes in Amtrak operating characteristics (i.e., number and speed of trains) would be made north of Dwight.

Benefits of the Proposed Action
The Proposed Action will be of immediate benefit to the rail passenger and freight services using this line today. Both IDOT and UPRR are committed to ensuring that the benefits of this Project are made available as soon as possible. UPRR is in full support of the Project and is prepared to initiate work.

Extending the length of second mainline track in the UPRR Joliet Subdivision will increase the options a dispatcher will have available for arranging meets or other complex moves. This will reduce the potential for delay to one or more of the trains operating over this line.

The proposed Mazonia Siding Track improvements between MP 55.0 and MP 57.13 will improve fluidity of train movement, decrease delays in passenger trains, and reduce congestion in the area between Braceville and Joliet. The siding track will also improve the efficiency of the railroad by allowing for train meets and sorting of cars for freight trains as well as an area for storing trains during maintenance incidents.

UPRR's Network Operations personnel estimated that there will be a five percent increase in on-time performance to intercity passenger trains due to the implementation of these physical plant improvements. However, freight train speeds on this section of line will not increase as a result of this work and freight trains will continue to operate at 60 mph.

The upgrade to CTC with a PTC overlay in the improvement zone will enhance the safety of train operations through the zone, including those grade crossings within the Project limits. The signal upgrade will also improve operating conditions in the Joliet area, including expediting the hand-off of dispatch control to/from the Canadian

National, on whose tracks the existing "Lincoln Service" and "Texas Eagle" trains run to/from Chicago.

Agency Coordination and Public Involvement

Public involvement was an important component of the IDOT planning process for the Project. In addition to working with the requisite Federal and State agencies, IDOT's efforts for the EA included outreach to a wide variety of stakeholders along the Project corridor, which are documented in the EA. The EA has been available for review on the Illinois High-Speed Rail Project website as part of the HSIPR application to FRA since April 6, 2011. Two public comments have been received on this Project. One comment requested additional information related to the Project and the other expressed concern about the location of the siding track in Braidwood.

Additional public outreach conducted subsequent to the EA included a public information meeting and an elected officials meeting on August 4, 2011. Additional written correspondence with several Federal agencies was also completed as a result of the revisions to the Project (See Appendix A - Agency Correspondence).

Environmental Consequences

As mentioned previously, there have been several minor Project changes subsequent to the preparation of the EA that alter the environmental analysis for several resource areas. These changes are referenced below and more detailed analyses are included in Appendices B and C.

Physical Environment

The analyses for Noise and Vibration and Tree Resources have been updated since the EA and details of this update are included in Appendix B and summarized below. The Project changes do not affect the EA documentation for Air Quality/Energy, Floodplains, Visual Resources, and Agriculture; therefore, assessments of these physical environment resource categories reflect the information presented in the EA.

Air Quality/Energy

The Proposed Action will not result in increased freight and passenger rail operations between Joliet, Illinois and Dwight, Illinois. The UPRR Joliet Intermodal Terminal has been completed; however, the number of freight trains along this section of track remains at the existing five trains per day. As such, there will be no resultant increases in diesel locomotive emissions, idling and moving trains near stations, and train operations and service at maintenance and/or storage facilities.

Under the current schedules, there are about 15 trains per day operating over this section of line, including ten Amtrak trains and five UPRR freight trains (representing a combination of local and through trains). The speed of passenger trains will increase

from 79 mph to 110 mph in the Project corridor. Freight trains on the mainline track will continue to operate at 60 mph. While the Proposed Action may increase diesel locomotive emissions due to speed increase, these increases may be offset by small decreases in the travel times and smaller emissions from the newer locomotives, which will be utilized to provide 110 mph service.

Air quality effects related to Project construction will be limited to short-term increases in fugitive dust and mobile-source emissions. State and local regulations regarding dust control and other air quality emission reduction controls will be followed. If necessary, a permit will be obtained for portable bituminous and concrete plants that may be used during construction. GHG emissions will also be generated during the construction phase of the Project. However, these emissions are likely to be relatively minor given the short duration of the construction activities (less than 6 months).

During construction, additional energy will be expended beyond what will be used for the Project operation. This additional energy will be consumed on a short-term basis by construction of improvements and by construction-related delays to existing rail traffic. However, once the Project is operational, long-term energy savings are expected from significantly improved train operations and reduction of travel time between Joliet and Dwight.

Floodplains

There are ten floodplains within the Project area, primarily near the stream crossings where there are structures located within FEMA-designated floodways. Culvert replacement and bridge replacement and/or widening may cause a temporary impact to these floodplains. Temporarily impacted areas will be restored following construction. Permanent impacts will be mitigated by proper sizing of hydraulic structures and compensatory storage where required. As the proposed Project involves replacement of existing structures on an existing alignment and is subject to individual permits and approvals, implementation of this Project will be undertaken in compliance with Executive Order 11988.

A local stormwater permit will be required for all hydraulic structures installed for the Project. A permit will also be required from the Illinois Department of Natural Resources (IDNR) for the structure replacement/extensions. Individual IDNR permits will be required for the structures located within a FEMA-designated floodway, while the other culverts along the corridor will comply with the non-notification Statewide Permit requirements.

Noise and Vibration

The EA Noise and Vibration assessment was completed consistent with procedures provided by the FRA *High-Speed Ground Transportation Noise and Vibration Impact Assessment* guidance manual (U.S. Department of Transportation (USDOT) Federal

Railroad Administration, October, 2005). The assessment included an evaluation of noise and vibration from train operations, which included both rolling stock noise along the corridor and horn noise at the at-grade crossings. The improvements analyzed in the EA included increasing the passenger train speeds from 79 mph to 110 mph, double tracking portions between Joliet and Elwood (MP 38.50 to MP 45.50), and constructing the Mazonia siding (MP 55.0 to MP 57.13). Passenger train speeds were assumed in the Build scenario analysis to be less than 79 mph.

Based on the general noise assessment in the EA, noise impacts associated with the proposed Project are not anticipated. Generally, the increased passenger train speed increases the rolling stock noise levels by an average 2 weighted decibels (dB(A)). However, the freight train noise is the dominant noise source in the corridor, and therefore, the overall noise levels remain constant as there is no change in freight noise between the existing and build scenarios. Additionally, the increased passenger train speed reduces the overall train horn noise as the duration of the horn noise is shorter at the higher speeds.

The ground-borne vibration analysis done as part of the EA found that vibration impacts are anticipated as part of the proposed Project due to the predicted vibration level exceeding the vibration criteria and also due to the vibration level increasing 3 velocity decibels (VdB) over the existing vibration levels. The vibration impacts are generally associated with the speed increase from 79 mph to 110 mph. There are no ground-borne noise impacts associated with vibration as the ground-borne noise levels are less than the FRA impact criteria. The following maintenance procedures will be used to mitigate vibration impacts:

- Regularly scheduled rail grinding
- Wheel truing programs
- Vehicle reconditioning programs
- Use of wheel-flat detectors

Project changes since the EA required an update of the assessment, which is reported in Appendix B - Physical Environment and summarized as follows. Noise impacts associated with the Dwight Siding changes (new since the EA was prepared) are not anticipated. A detailed noise analysis and a noise abatement evaluation are not warranted since no impacts have been identified. The overall general noise assessment for the remainder of the Project limits has not changed, as there were no noise impacts identified along the corridor. Additionally, there are no sensitive receptors identified within the screening distance, therefore, an additional vibration evaluation is not required for the Dwight Siding.

Visual Resources

Visual and aesthetic quality in the Project area was assessed in accordance with FHWA guidance: *Visual Impact Assessment for Highway Projects* (USDOT 1983). The rail service on existing rail lines was not assessed because it includes no increase in the number of Amtrak or freight trains.

Within the Project corridor, there is one large culvert at MP 38.8 and bridges at MP 42.6 and MP 44.4 where the rail line crosses waterways. These will be modified or replaced with the addition of a second track. Visual impacts are not anticipated because the Project involves replacement of the existing culvert/bridge with a similar structure. The structures were determined to be not eligible for inclusion in the National Register of Historic Places (see SHPO letter dated April 28th, 2010 in EA, Appendix B).

The proposed Mazonia Siding track is located within the city of Braidwood. The siding track provides a location for trains to be stored off of the mainline track so other train traffic can pass by. The siding track will allow for a freight train (slower train traffic) to pull over onto the siding allowing Amtrak traffic to move through the area quickly using the existing mainline track. The proposed siding track will not increase the number of trains through this area; thus, visual effects will not be increased from the existing condition. The temporary storage of trains will be visible from residences located to the west along a portion of this siding, and from the golf course located to the east of the siding.

Agriculture

The Proposed Action will occur primarily within or adjacent to the existing railroad right-of-way where the soils are already disturbed. As such, the proposed action will not have significant impacts to agricultural areas.

Tree Resources

Subsequent to the preparation of the EA, additional areas were investigated for tree resources not previously investigated. Appendix B presents the results of these additional investigations. Tree impacts as a result of the Proposed Action are anticipated to be minimal and will be mitigated by planting trees to compensate for the loss of trees that cannot be avoided and minimizing impacts to the mature forested areas.

Ecological Systems

Subsequent to the preparation of the EA, the assessments for Wetlands and Waters of the U.S., Threatened and Endangered Species, and Special Lands have been updated to reflect changes to the Project. Details on these assessments are included in Appendix C and summarized below. Project changes do not affect the analysis for Water Quality and Water Resources and 4(f) properties; therefore, the information summarized below for these resource categories reflects the information presented in the EA.

Wetlands and Waters of the U.S.

Executive Order 11990, "Protection of Wetlands" requires federal agencies to avoid, to the extent practicable, short and long term impacts associated with the destruction or modification of wetlands. Additional wetland investigations conducted subsequent to the preparation of the EA, which were conducted as a result of Project changes, are reported in Appendix C. The Proposed Action is anticipated to include temporary and permanent impacts to wetlands as wetlands are located within the proposed construction limits for the Project. Any temporary impacts to wetlands will cease immediately after construction is completed, and wetlands will be restored to their previous condition. Permanent impacts to wetlands will result from additional siding track and construction of track embankment. Prior to construction, formal wetland delineations will be performed for Section 404 permitting through the U.S. Army Corps of Engineers (USACE). The formal delineations will determine the locations, boundaries and quality of all wetlands encountered within the work areas. This information is required as part of Section 404 permitting. The amount of impacted areas will be determined upon completion of the formally delineated wetland boundaries and the establishment of the footprint for all construction fill activities. FRA and IDOT are committed to completing the formal wetland delineations prior to the initiation of Section 404 permitting with the USACE.

In accordance with USACE regulations, all conditions and requirements of Nationwide Permit 14 and Regional Permit 3 will be followed. Further, under the Illinois Wetland Protection Act of 1989 (Chapter 415 *Illinois Compiled Statutes* Section 5), IDOT mitigates for both isolated and jurisdictional wetlands. If State or State pass-through funding is utilized, the Project will follow the Illinois Interagency Wetland Policy Act (IWPA), which requires mitigation of all impacts to all wetlands, regardless of size. The amount of wetland area to be mitigated will be determined during the Section 404 permitting process. After mitigation, no significant impacts are anticipated to wetlands or Waters of the U.S.

Water Quality and Water Resources

The Proposed Action is located within three watersheds within Will County, crossing four streams that are all tributaries of the Des Plaines River. The streams are listed in order of crossings, beginning at the north end with the crossing of Hickory Creek in Joliet, Sugar Run Creek in Joliet and Cedar Run Creek in the Village of Elwood.

Some stream substrate may be permanently removed to accommodate the culvert extensions and bridge construction at Sugar Run, Cedar Creek, and Jackson Creek. Temporary impacts due to in-stream and stream-bank work may occur, but will cease immediately after the activity is completed. Appropriate Best Management Practices will be utilized prior to, during, and after construction, as part of the Soil Erosion and Sediment Control Plan for the Project.

To comply with Section 404 of the Clean Water Act, information about waterways within or immediately adjacent to the Project area will be refined when UPRR has completed final design. Final assessment of impacts to waterway(s) will be completed and necessary permits will be obtained from the USACE prior to construction. All attempts will be made to avoid waterways. If avoidance is not possible, impacts will be minimized to the greatest extent possible. In the Chicago District (that oversees the regulatory program in the six-county Chicago metropolitan area including Will County), Regional Permit 3 applies to linear transportation projects. This regional permit requires that cumulative impacts cannot exceed 1.0 acre, and no single crossing may impact more than 0.25 acres. All of the conditions and requirements of Nationwide Permit 14 and Regional Permit 3 will be followed. It is anticipated that a separate Section 401 Water Quality Certification will not be needed. The IEPA has conditional Section 401 Water Quality Certification applicable to Nationwide Permit 14 and Regional Permit 3; however, it is anticipated that a Section 401 Water Quality Certification will not need to be obtained separately for this Project.

There are 14 private well-heads that lie within 200 feet of the three Project sites. This distance is the minimum setback for private water supplies. All of the private wells are outside of the railroad drainage ditch that should act as adequate confinement for any diesel fuel spills along the Project corridor. The Proposed Action will not adversely impact groundwater.

Threatened and Endangered Species

Both Federal and State listed threatened and endangered species are known to occur along the Project corridor in Will, Grundy, and Livingston counties and are described in detail in the EA and EA Appendix C - Ecological Systems. Threatened and endangered species potentially occurring in the Project corridor were identified from information supplied by the IDNR (IDNR, 2011) and the U.S. Fish & Wildlife Service (FWS) Section 7 Consultation (FWS, 2011). Individual species are identified in the EA and were verified in July, 2011 on the FWS database.

Prior to construction, specific information concerning the presence of Federal and state listed species will be obtained. Coordination with FWS and IDNR has been initiated concerning the potential for the Project to affect Federal or State threatened or endangered species. This coordination and consultation will continue as needed to assure that appropriate mitigation measures are incorporated into the Project to minimize or avoid impacts to protected plant and animal species.

A coordination meeting was held with the Chicago Ecological Office of the FWS and the Project team on June 21, 2011 (See Appendix A for meeting minutes and correspondence). FWS determined at this meeting that species specific surveys should be conducted for two of the Federally-listed species since suitable habitat is present

within the Project corridor. Surveys were requested for the eastern prairie fringed orchid (*Platanthera leucophaea,* EPFO) and the leafy prairie clover (*Dalea foliosa*). FRA has committed to completing the surveys for these species prior to any construction activities. The survey for the leafy prairie clover will extend past the issuance of this FONSI. FRA will forward the findings of the plants' surveys that are completed in 2011 upon their completion in late summer 2011. If any Federally-listed species are observed during the surveys, FRA will notify the FWS for compliance with Section 7 consultation.

FRA commits to coordinating with the IDNR concerning the presence or absence of State-listed species. In consultation with the IDNR, a ground survey for the Ear-Leafed Foxglove (*Tomanthera auriculata*) is underway and FRA and IDOT will complete the survey prior to the initiation of Project construction. If any State-listed species are observed during the surveys, FRA and IDOT will notify IDNR for compliance with Illinois State regulations. After mitigation, no significant impacts are anticipated to threatened or endangered species.

Special Lands

The EA summarizes all the special lands located within close proximity to the Proposed Action. Subsequent to the preparation of the EA, it was concluded that the Joliet Army Arsenal (Midewin National Tallgrass Prairie) INAI site will not be impacted since construction activity and land acquisition will not occur within this segment of track. Potential impacts to the Mazon River Bed and the Kankakee River INAI sites will be coordinated with IDNR as plans for the proposed stream crossings are completed. Direct and indirect impacts may occur to the Godfrey Railroad Prairie, Mazonia Railroad Prairie, Braceville Railroad Prairie, and the Hitts Siding Railroad Prairie due to their proximity to the existing railroad right-of-way. Any potential temporary or permanent impacts to these sites will be coordinated directly with the IDNR. The exact boundaries for various special lands have not been provided to determine the potential for impacting these sites. FRA will continue to coordinate with the IDNR concerning impacts to State-listed threatened or endangered species as well as to State-designated special lands.

4(f) Properties

Section 4(f) of the U.S. Department of Transportation Act of 1966 as amended (49 USC § 303) stipulates that the FRA and other U.S. Department of Transportation (USDOT) agencies cannot approve the use of land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any significant historic sites.

An inventory of 4(f) properties within 1,000 feet of the Project corridor was conducted during development of the EA. The Proposed Action will not impact any Section 4(f) properties since Project construction will occur within or adjacent to the existing UPRR right-of-way, where no such properties exist. Therefore, the Project will not use lands subject to the requirements of Section 4(f).

Human Environment

Subsequent to the preparation of the EA, the, Socio-Economic, Land Use and Tribal Consultation documentation has been updated and included below to account for the revised Project information. These Project changes do not affect the documentation presented in the EA for Transportation, Environmental Justice, Public Health and Safety, Hazardous Materials, and Cultural Resources; therefore, assessments of these resource categories reflect the information presented in the EA.

Transportation

There are no changes proposed in the number of Amtrak trains or the speed of trains in the Project corridor. The Proposed Action will provide reliability and shorter trip times, as both alternatives are a continuation of existing Amtrak and freight service.

There are 38 at-grade crossings (including four private grade crossings and three field-to-field crossings) in the Project corridor that will be temporarily disrupted during the track upgrades from 110 mph service as well as by the construction of the second mainline track and crossovers. All public at-grade crossings located within the Project corridor will be upgraded from the existing warning devices to four-quadrant gates with vehicle detection equipment.

In addition to the crossing upgrades, signals along the Project corridor will be upgraded to Centralized Traffic Control (CTC) which will allow for safer train movements through these grade crossings as well as the railroad network.

Due to the more efficient train movements in this area, the grade crossings will not be adversely impacted. These improvements may serve to reduce the traffic delay at these crossings as well as adjacent crossings. Construction-related impacts will be temporary and are considered to be minor.

Construction of the Proposed Action also has the potential to disrupt existing freight service and impede access to UPRR to local customers. The addition of the Second Mainline track and the realignment of the Dwight siding may reduce storage capacity on private tracks that feed into the UPRR mainline. To minimize this impact, additional infrastructure investments may be required to ensure sufficient access is preserved, and will be determined in the final design of the Project. At such time, any improvements requiring a change from the proposed design or need for additional right-of-way will be further evaluated and documented in compliance with NEPA.

Socio-economics and Land Use

The 13.9 acres of property to be acquired for the Project are located at the northern end in Will County between MP 38.14 in the city of Joliet to MP 44.69 in the village of Elwood. The property directly adjoins the existing UPRR right-of-way and is located on the west side for a short distance from MP 38.14 to MP 39.72, and then follows along the

east side of the UPRR right-of-way until MP 44.69. Land use in the area of acquisition consists primarily of vacant or agricultural lands (approximately 10 acres or 72 percent); this also includes paved areas associated with the at-grade crossings. The remaining land cover, approximately 3.9 acres or 28 percent, typically consists of woodlands or wetlands, and includes the crossings of Sugar Run Creek at MP 38.8, Cedar Creek at MP 42.6, and Jackson Creek at MP 44.4. Impacts to land use are anticipated to be minor since the areas to be acquired are narrow in width (typically ranging from 15 to 45 feet) and are directly adjacent to the existing UPRR right-of-way.

Minor disruptions may occur to community services and facilities during Project construction. No impacts are anticipated to demographic characteristics of the affected areas. As with most major transportation investments, economic conditions in the affected areas are expected to benefit from this Project.

Environmental Justice

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (EO 1994), directs federal agencies to "promote nondiscrimination in federal programs substantially affecting human health and the environment, and provide minority and low-income communities access to public information on, and an opportunity for public participation in matters relating to human health or the environment." The EO directs agencies to use existing laws to ensure that when they act:

- They do not discriminate on the basis of race, color, or national origin;
- They identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income communities; and
- They provide opportunities for community input during the NEPA process, including input on potential effects and mitigation measures.

The Health and Human Services 2011 poverty guideline for a family of four is $22,350. Detailed information regarding minority and low-income populations for the Project corridor was compiled from 2010 estimates developed by ESRI based on US Census data. A review of these data within a 1,000-foot buffer along the Project corridor indicates a potential concentration of low income or minority populations in downtown Joliet and the neighborhoods of south Joliet. The Project area between MP 38.8 and MP42.6 has no population or houses near the culvert and bridge extension sites. There are four houses within 500 feet of MP 44.4 and, there are no concentrations of low income or minority populations between MP 55.0 and MP 57.13.

The Proposed Action will not have a disproportionately adverse impact to low-income or minority populations. Improved train service will likely be an overall benefit to the affected communities and to the associated low-income and minority population residing within these communities. The Proposed Action will also result in improved

regional access to major metropolitan areas and will provide an alternative form of transportation to highway or air travel.

It is expected that any changes in vibration levels or in access associated with the Project will be experienced equally among community residents. Further, land uses in the vicinity of the improvements are not residential, and in many cases, are industrial or agricultural. The proposed second track primarily will primarily utilize existing right-of-way and will not result in residential or business displacements.

Public Health and Safety

Fire, police and medical response times will be temporally impacted due to construction of new double-track grade crossings at 38 locations. However, all construction-related impacts will be temporary and are considered minor. Measures will be taken during the construction phase to coordinate with emergency service providers to mitigate any impacts due to temporary road closures.

Hazardous Materials

IDOT guidelines for railroad construction require identification of the locations of nearby contaminated sites in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) compiled by the U.S. Environmental Protection Agency (EPA). Also, Section 22-6.03 of IDOT's "Bureau of Design & Environment Manual – 2002 Edition" states that "prior to acquiring a property interest in a potential hazardous waste or hazardous substance site (whether included on the CERCLIS list or otherwise made known to the district office), the district office should consider the possible risks and liability that may be involved." Therefore, although several segments of the corridor pass through areas that are known or potential contaminated sites, they will have been identified prior to construction activities that could involve the release or transport of contaminated materials, and appropriate measures will be implemented, in accordance with Federal and state requirements.

Potential hazardous material affected sites near the Project corridor were identified. Environmental Data Resources (EDR) performed an electronic search of local, state and federal environmental databases along the corridor and provided an associated report of their findings. The databases and search distances were in accordance with U.S. USEPA's All Appropriate Inquiries (AAI) regulations and American Society for Testing and Materials (ASTM) 1527-05. Numerous sites were identified along the corridor (see Appendix A). Using the information in the EDR report, the sites within critical databases that were proximate to the Project corridor were identified. Sites selected for evaluation primarily focused on those included in the EDR report in Appendix A of the EA.

Cultural Resources

A review of the Project data by the IDOT Cultural Resources Unit led to a determination that no historic properties protected under Section 106 of the National Historic

Preservation Act (NHPA) will be affected by the Proposed Action. The Illinois SHPO reviewed this finding and concurred (August 16, 2011), see Appendix A.

Tribal Consultation

The 1992 National Historic Preservation Act amendments and subsequent revisions to the regulations by the Advisory Council on Historic Preservation (ACHP) incorporate provisions which stipulate that Federal agencies, including the FRA, must consult with Federally-recognized American Indian tribes that attach religious and cultural significance to historic properties that may be affected by an undertaking. A Project Notification System (PNS) has been developed and employed by IDOT, the SHPO, and the U. S. Department of Transportation (with the Federal Highway Administration (FHWA) as the lead agency) to coordinate transportation projects with tribes that have expressed an interest in Illinois (there are no tribal lands or resident tribes within Illinois). Through the electronic PNS, the following tribes have been notified concerning the Project: Potawatomi, Ho Chunk, Sauk, Fox, Kickapoo, and the Miami. No tribes responded with concerns.

Updated Project plans for the Second Mainline Track and the Dwight Siding were transmitted to IDOT and the SHPO for review. It was determined that additional tribal coordination was not required as the initial coordination covered the same areas.

Construction Impacts

Construction of the Proposed Action will not have permanent impacts on environmental resources within the Project area since construction impacts will be localized and temporary, the most noticeable being noise, vibration, dust, and traffic disruptions. These impacts will occur from operation of equipment and short-term closure of cross-streets for installation of additional track, upgrade of crossing surfaces, rehabilitation of existing track, and upgrade/installation of bridges and signal devices at intersections. Normal traffic will be re-routed. Implementation of industry-standard control measures (traffic control, dust, erosion and sedimentation controls, properly fitted emission control devices, mufflers, etc.) will minimize impacts and will cease at each site upon completion of construction.

The Project may require periodic reduction in the operating speed of trains that pass through construction zones. Also, there may be a need to adjust the schedule of rail operations if activities require temporary shutdown of selected track sections. Such schedule and/or operational adjustments will be necessary when there is a potential safety risk from the proximity of moving trains with construction activities that are incompatible with ongoing train traffic.

There also is the potential for temporary construction impacts to floodplains, wetlands, streams, and surrounding streambanks. Where a new second track is added, extension of culvert or bridge structures may be required, with temporary construction impacts

where new bridge structures are installed. However, the contractor will be required to avoid wetlands that may be located within the railroad right-of-way during the establishment of construction staging areas and other construction activities. In addition, erosion, sedimentation and bank stabilization measures will be employed where construction occurs at or near creeks or creek crossings, consistent with the IDOT Bureau of Design and Environment Manual, and the IDOT Standard Specification for Road and Bridge Construction (January 1, 2007). Riprap will be placed along stream banks to provide bank stabilization where bridge widening will take place. Overall, construction impacts will be minimized and mitigated using Best Management Practices.

Erosion and sediment control measures and stormwater pollution prevention measures at stream crossings will be part of the overall Project as required by National Pollutant Discharge Elimination System (NPDES) and Section 404 Permits. Because the proposed Project will potentially disturb one acre, it will be subject to the requirement for an NPDES permit for stormwater discharges from the construction site(s). Permit coverage will be obtained under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. LR10). A Stormwater Pollution Prevention Plan will be prepared and implemented, in accordance with requirements under the NPDES permit(s).

In addition, water withdrawal for construction will be coordinated with IDNR's Office of Water Resources.

Secondary and Cumulative Impacts

Secondary Impacts

The Proposed Action is not anticipated to result in any secondary (indirect) impacts although the improved rail operability could spur future freight related development along the corridor. Local review boards would be responsible for investigating the impacts to water, sewer, traffic and other environmental factors from future development. The second mainline track Project area is already planned for future industrial development as part of the redevelopment of the Joliet Arsenal in Elwood. The area surrounding the Mazonia Siding Project corridor is designated private recreational development and unlikely to change to commercial or industrial uses. Other areas of the Project corridor are unlikely to see development as they are rural agricultural areas and approximately 4.0 miles of the corridor cross the Midewin National Tallgrass Prairie (MNTP, formerly Joliet Arsenal) between Elwood and Wilmington and runs parallel to IL Route 53.

Cumulative Impacts

A minor cumulative loss to wetlands and waters of the U.S. may occur over time in conjunction with this Project, and other development that may occur within the Project area. These impacts, however, are expected to be minimal as these resources are

protected by federal and state regulations, requiring mitigation for any impacts determined to be unavoidable.

The Proposed Action will also have a slight beneficial contribution to cumulative impacts. The improved operability of freight and passenger rail service is expected to provide an overall benefit to air quality. The Project improvements are expected to significantly reduce train idling and to provide faster Amtrak service to motorists who will otherwise travel between Chicago and St. Louis by motor vehicle. The improvements to the grade crossing treatments will benefit the safety of motorists crossing the railroad.

Increases in freight traffic are also reasonably foreseeable in this corridor, given the recent addition of the Joliet Intermodal Terminal. Although freight traffic has not increased to date, there is likely to be an increase in the freight traffic when economic conditions improve.

Commitments and Mitigation Measures

Project commitments and mitigation measures have been identified to further reduce the impacts of the Proposed Action. Additional measures may also be implemented as necessary, and as identified. The following Federal regulations, statutes, and orders apply to this Project:

- National Environmental Policy Act of 1969 (42 USC § 4321 et seq.)
- Federal Railroad Administration Procedures for Considering Environmental Impacts (64 FR 28545)
- Clean Water Act of 1977 (33 USC § 1251-1376)
- Endangered Species Act (50 CFR 17)
- Executive Order 11988, Floodplain Management (42 Federal Register [FR] 26951)
- Executive Order 11990, Protection of Wetland (42 FR 26961)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629)
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (65 FR 50121)
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500–1508)
- Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC § 303)
- Section 6(f) of the Land and Water Conservation Act of 1965 (16 USC § 460)
- Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 USC § 401)

- Section 106 of the National Historic Preservation Act, as amended (16 USC § 470)
- Section 404 of the Federal Water Pollution Control Act (33 USC § 1344)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC § 61)
- Americans with Disabilities Act of 1990 (42 USC Chapter 126, and 47 USC Chapter 5)

Specific mitigation measures related to the Project that are outlined in this document are summarized below.

- Air Quality: State and local regulations regarding dust control and other air quality emission reduction controls will be followed. If necessary, a permit will be obtained for portable bituminous and concrete plants that may be used during construction.
- Floodplains: A local stormwater permit will be required for all hydraulic structures installed for the Project. A permit will also be required from the IDNR for the structure replacement/extensions. Individual IDNR permits will be required for the structures located within a FEMA-designated floodway, while the other culverts along the corridor will comply with the non-notification Statewide Permit requirements.
- Vibration: Maintenance procedures will be used to mitigate vibration impacts. Such procedures include regularly scheduled rail grinding, wheel truing programs, vehicle reconditioning programs, and use of wheel-flat detectors.
- Tree Resources: Tree impacts will be mitigated by planting trees to compensate for loss of trees that cannot be avoided.
- Wetlands and Waters of the U.S.: Prior to construction, formal wetland delineations will be performed for Section 404 permitting through the USACE. In accordance with USACE regulations, all conditions and requirements of Nationwide Permit 14 and Regional Permit 3 will be followed. The Project will also follow the Illinois Interagency Wetland Policy Act (IWPA), which requires mitigation of all impacts to all wetlands, regardless of size. Any temporary impacts to wetlands will cease immediately after construction is complete, and wetlands will be restored to their previous condition.
- Water Quality and Water Resources: Appropriate Best Management Practices will be utilized prior to, during, and after construction as part of the Soil Erosion and Sediment Control Plan for the Project.
- Threatened and Endangered Species: If any Federally-listed species are observed during the surveys, FRA will notify the FWS for compliance with Section 7 consultation. FRA and IDOT commit to continued coordination with the IDNR concerning the presence or absence of the State-listed species, Ear-Leafed

Foxglove (*Tomanthera auriculata*). If this species or any other State-listed species are observed during the surveys, FRA and IDOT will notify IDNR for compliance with Illinois State regulations.

- Special Lands: FRA and IDOT will continue to coordinate with the IDNR concerning impacts to State-designated special lands.
- Transportation: Existing UPRR access and services to freight customers will be preserved.
- Public Health and Safety: All measures will be taken during the construction phase to coordinate with emergency service providers to mitigate any impacts due to temporary road closures.
- Hazardous Materials: Known or potential contaminated sites will be identified prior to construction activities that could involve the release or transport of contaminated materials, and appropriate measures will be implemented, in accordance with State and Federal requirements.
- Construction Impacts: Erosion and sediment control measures and stormwater pollution prevention measures at stream crossings will be part of the overall Project as required by National Pollutant Discharge Elimination System (NPDES) and Section 404 Permits. Because the proposed Project will potentially disturb one acre, it will be subject to the requirement for an NPDES permit for stormwater discharges from the construction site(s). Permit coverage will be obtained under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. LR10). A Stormwater Pollution Prevention Plan will be prepared and implemented, in accordance with requirements under the NPDES permit(s). In addition, water withdrawal for construction will be coordinated with the IDNR's, Office of Water Resources.

Conclusion

FRA finds that the Project, as presented and assessed in the accompanying EA and as supplemented in the analyses included in Appendices B and C, satisfies the requirements of FRA's Procedures for Considering Environmental Impacts, and has determined that this Project, including the mitigation measures outlined within, will have no foreseeable significant impact on the quality of the human environment. This Finding of No Significant Impact is based on the EA and supplemental analyses, which were independently evaluated by FRA and determined to adequately and accurately discuss the need for and environmental impacts of the proposed Project and contain appropriate mitigation measures. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

Joseph C. Szabo, Administrator
Federal Railroad Administration

11/16/11
Date

This document has been prepared in accordance with FRA's Procedures for Considering Environmental Impacts by the Office of Railroad Policy and Development, with assistance from the Office of Chief Counsel. This document was prepared in September/October 2011. For further information regarding this document, contact:

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