

S.0 Summary

S.1 Project Description

The Illiana Corridor has been a component of long-range plans for the bi-state area since the early 1900s, and was first envisioned as a vital link in an outer ring of highways encircling the Chicago vicinity. Conceptual highway corridors linking Illinois and Indiana south of I-80 were also studied by metropolitan planning organizations (MPOs) in the 1960s and 1970s. More recently, feasibility studies for a potential Illiana expressway were completed in 2009 by Indiana Department of Transportation (INDOT) and a supplemental study by Illinois Department of Transportation (IDOT) in 2010.

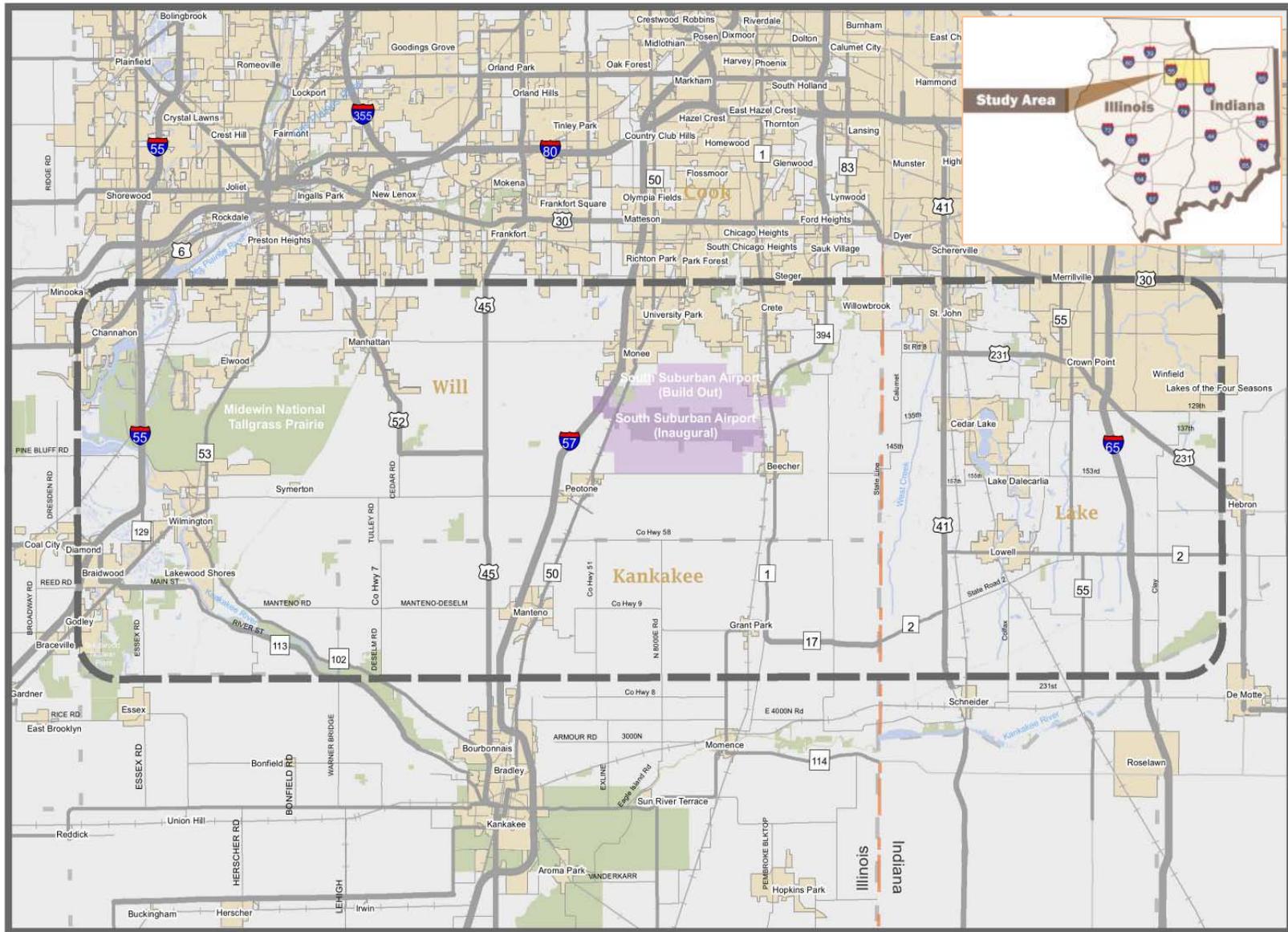
On June 9, 2010, Governors Pat Quinn of Illinois and Mitch Daniels of Indiana moved the Illiana Corridor forward by signing a Memorandum of Agreement (MOA). This MOA outlined a mutual commitment to the project by both states.

The Study Area for the Illiana Corridor is approximately 950 square miles in portions of Will and Kankakee counties in Illinois and Lake County in Indiana. The general location of the Study Area is between I-55 in Illinois on the west, I-65 in Indiana on the east, US 30 to the north, and the southernmost tip of Will County to the south, including the northern portion of Kankakee County in Illinois. The Study Area is shown in Figure S-1.

Transportation improvements were considered only for areas within the Study Area. However, to understand the local and regional impacts of the transportation corridors, analyses considered their effects both inside and outside the Study Area.

The National Environmental Policy Act (NEPA) process for the Illiana Corridor is being conducted in two steps or “tiers” that build upon one another. As a single transportation solution for the Study Area has not been identified with respect to mode (e.g., roadway or transit) and/or location for the Illiana Corridor, the project is proceeding with preparation of a Tier One Environmental Impact Statement (EIS). A Tier One EIS is used to resolve issues regarding the transportation mode, facility type, and general location, typically for projects involving a lengthy corridor or larger land area. The Tier One EIS analysis is providing an evaluation of the transportation problems in the Study Area based on stakeholder input and engineering analysis which forms the basis for the project Purpose and Need and for identifying potential corridors. The Tier One EIS will be completed at a sufficient level of engineering and environmental detail to allow for an informed decision on the issues under consideration in Tier One. For the Illiana Corridor, the Tier One EIS is intended to resolve the mode, facility type (e.g., type of roadway), and corridor location. The No-Action Alternative also will be considered in the Tier One EIS.

Figure S-1. Study Area Map



If the Tier One EIS results in a decision to select a corridor(s), Federal Highway Administration (FHWA) and the states will proceed with Tier Two NEPA studies. In this circumstance, the Tier Two NEPA studies may be conducted for the entire selected corridor(s) or for one or more sections with independent utility. Potential sections of independent utility can be based on factors such as engineering analysis, stakeholder input, funding considerations, and other considerations for the State of Illinois and State of Indiana. During the Tier Two NEPA studies, work will also focus on more detailed design engineering. This will better define elements of the proposed improvement plan including interchanges, structures, drainage requirements, etc. Consequently, environmental impacts will be refined considering these elements and based on the proposed right-of-way needed for the selected transportation system corridor(s), as identified in the Tier One Record of Decision (ROD). Each Tier Two NEPA study would be prepared for a project that has independent utility and would analyze alternative alignments within the selected corridor. For additional information regarding the Tier Two NEPA studies, refer to Section 2.7.

S.2 Purpose of and Need for Action

Existing and future travel demand in the Region is driven by growth in population, employment, and commuter traffic; growth of the intermodal and freight logistics industry, and the growth in the Region's role as a vital national link for transportation and commerce. The ability for the existing transportation network to accommodate these demands is strained as these travel demands increase. The Study Area does not have the required roadway network to accommodate this growth in local Study Area traffic and regional and national east-west traffic in the South Sub-Region.

The purpose of the Illiana Corridor is to provide a transportation solution that would improve regional mobility, address local and parallel corridor travel deficiencies, and provide for efficient movement of freight in the Study Area in a manner that complements regional transportation and economic development goals.

The jurisdictions of three MPOs extend over most of the Study Area: the Chicago Metropolitan Agency for Planning (CMAP), the Northwestern Indiana Regional Planning Commission (NIRPC), and the Kankakee Area Transportation Study (KATS). The Illiana Corridor Study Area is included as an unconstrained (unfunded) project¹ in the current long-range (2040) plans of CMAP, NIRPC, and KATS.

North-south feeder routes to I-80 are congested south of I-80, the Study Area does not have a fully functional road network, and the existing grid network of lower functional class roadways was historically developed primarily to serve its predominantly agricultural land use. Study Area land uses are now transitioning in character from

¹ Under federal regulations that govern metropolitan transportation planning, MPOs are required to comply with a "fiscal constraint" requirement when adopting their long-range transportation plans. Fiscal constraint means that the funds needed to carry out the plan are reasonably anticipated to be available. A long-range plan can include projects for which funding sources have not yet been identified; these unfunded projects are referred to in the MPOs' plans as "unconstrained" or "illustrative" projects.

rural to suburban, especially in the northern portions. For the Study Area to meet the regional, local, and freight demands, a more balanced functional transportation network is needed.

Transportation system improvements are needed in the Study Area to address the following needs:

- Improve Regional Mobility - addresses the need to develop a transportation system improvement that serves the projected growth in east-west traffic in the Study Area.
- Alleviate local system congestion and improve local system mobility - focuses on the need to develop a transportation system improvement that serves the projected growth in local traffic, addresses the lack of continuous higher functional classification east-west routes through the Study Area, and improves travel times/reduces delay.
- Provide for Efficient Movement of Freight - focuses on the need to improve the accessibility of freight movement to and from its distribution points throughout the Region, including providing more efficient freight movement on the roadway network.

S.3 Corridors

S.3.1 No-Action Alternative

The No-Action Alternative consists of transportation improvements to existing transportation facilities in the Study Area that are expected to be constructed by the year 2040 (see S.5 for a list of the proposed transportation improvements). It represents an investment aligned to current program funding levels and does not include the major transportation improvements considered in this study. The proposed roadway improvements identified in the current financially constrained long-range (2040) plans of CMAP, NIRPC, and KATS were the foundations for developing the No-Action Alternative. Committed projects include those programmed projects that are included in the 2040 “financially constrained” networks of the MPOs, those included in the current 5-year Transportation Improvement Program of the various agencies, and other projects with a high probability of implementation by 2040 as identified by IDOT, INDOT, and other county and local transportation agencies.

S.3.2 Congestion Management

Federal transportation planning regulations require that for projects within designated Transportation Management Areas (TMAs), congestion management strategies must be fully considered as an alternative to increasing capacity for single occupancy vehicles (SOV). A large range of congestion management strategies were considered as possible alternatives for addressing the project Purpose and Need. It was shown through the analysis contained in the project Illiana Corridor *Transportation System Performance Report* (TSPR) (April 2012) that rail freight, transit, intercity bus and rail, non-motorized, and air transportation modes do not have the ability to meet the project Purpose and Need as

stand-alone modal alternatives (see Appendix A).² Additional operational and financial strategies may provide or help sustain transportation benefits. These strategies will be considered further as part of the Tier Two NEPA studies. Therefore, it was determined that a stand-alone congestion management alternative would not satisfy the project Purpose and Need and, consequently, adding SOV capacity as part of the Illiana Corridor is warranted.

S.3.3 Corridors

Preliminary transportation improvement corridors were developed on the basis of technical analyses, environmental constraints, and stakeholder input, with the focus being on developing consensus on a preferred corridor to be carried forward into the Tier Two NEPA studies for more detailed analysis, which best satisfies the project's Purpose and Need and minimizes impacts to the environment.

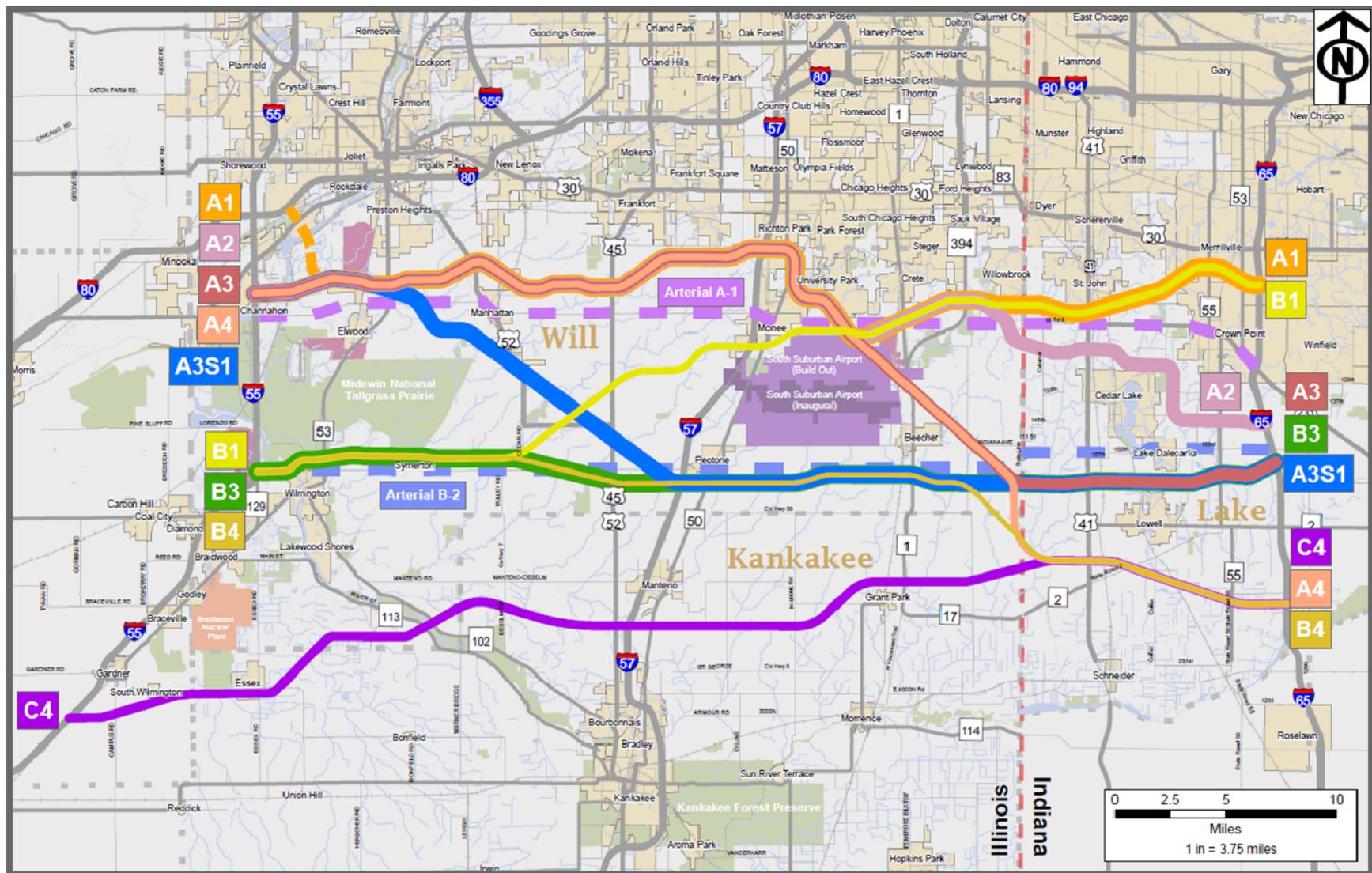
S.3.3.1 Corridor Development

The Tier One corridors were developed to define a broad environmental footprint width that would accommodate the likely improvements needed to address the Purpose and Need and that would be further evaluated to accommodate the likely improvements on a much narrower footprint. The corridors were developed based on a general 2,000 foot width, but were adjusted where necessary to address potential environmental or geometric issues. For limited access corridors, which can include multiple transportation modes, each of the identified corridors included a "working alignment" that was evaluated for socio-economic and environmental impacts based on an assumed 400 foot working alignment width. Arterial corridors are less likely to carry multiple transportation modes and, therefore, these corridors were developed based on a 400 foot corridor width and impacts evaluated within a 200 foot working alignment for the arterial corridors. The working alignments were centered within each corridor to determine potential impacts.

Stakeholders and the public provided suggestions for over 80 initial multi-modal corridors. These initial multi-modal corridors were subsequently evaluated by the study team and grouped into bands with similar location (including starting and ending points), and to avoid areas that would have known severe and unacceptable impacts, or areas that would not be physically feasible for corridor development such as densely populated areas, known sensitive environmental resources, public lands, etc. During this initial evaluation, these corridors were grouped in order to complete full east-west corridors. The grouped corridors were further refined for avoidance and minimization of impacts to the built and natural environment to represent the initial corridors. The initial corridors include eight new facility Corridors (A1, A2, A3, A4, A3S1, B1, B3, and C4) and two arterial Corridors (A-1 and B-2) that would include improvements to existing arterial roadways (Figure S-2).

² Conclusions supporting the claims that the additional modes do not have the ability to meet the project Purpose and Need as standalone alternatives can be found in Sections 4.5, 4.6 and 7.0 of the Illiana Corridor TSPR.

Figure S-2. Initial Corridors Evaluated



First Round Evaluation

The overall corridor evaluation process was a two-stage screening process that included stakeholder input and technical analysis. The initial round of evaluation was performed to compare the initial 11 corridors. It compared the ability of each corridor to meet the project Purpose and Need, compared the transportation performance of each corridor, and compared the overall socioeconomic and environmental impacts of each corridor. The objective of the initial evaluation for the alternative corridors was to identify those with comparatively better performance and lesser impacts to be carried forward for more detailed evaluation.

Overall, the “A” corridors had the best overall travel performance, followed by the “B” corridors. Corridor C4 and the Arterial Corridors A-1 and B-2 had the worst travel performance and were eliminated from further consideration because of their poor travel performance. With regard to socioeconomic and environmental impacts, the “A” corridors and Arterial Corridor A-1 had higher impacts. The “B” corridors had lower socioeconomic and environmental impacts. Corridors A1, A2, A3, A3S1, A4, B1, and B3 were advanced for a more detailed second round of evaluation with respect to potential refinements to minimize impacts.

Second Round Evaluation

The “A” and “B” corridors were advanced as part of a second round of corridor refinement and evaluation. As part of this second round analysis, refinements to the remaining corridors were identified through stakeholder coordination and ongoing technical analysis, and were evaluated to determine if overall and/or specific socioeconomic and environmental impacts could be avoided or minimized. Many of the impacts of greatest concern and potential corridor refinements were identified based on stakeholder coordination. None of the refinements to the corridors changed the travel performance or ability of the corridor to meet the Purpose and Need.

The refined and more detailed second round evaluation led to the conclusion that second round corridors with “A” and/or “1” terminus points (A1, A2, A3, A4, and B1) would have disproportionately higher potential socioeconomic and environmental impacts, and therefore, generally do not have support from project stakeholders. The results of the overall second round corridors evaluation, which included refinements to these corridors where practical and feasible to minimize impacts, shows that the northern corridors would have greater impacts to homes and businesses as well as the natural environment due to higher levels of development and fewer opportunities for locating the route without causing impacts. The second round screening resulted in a finding that Corridor B3 has the best balance of minimizing impact and travel performance and has the highest overall support from project stakeholders.

Additional Evaluation Factors

Potential future multi-purpose corridor use was assessed at the end of the second round evaluation. While multi-purpose use is not part of the Purpose and Need, it was included for informational purposes in response to comments from resource agencies. The flexibility for accommodating potential future multi-purpose uses was assessed based on adjacent

land use constraints; in general, a corridor that is not located adjacent to developed areas would provide greater flexibility for potential future expansion to accommodate other transportation modes, utilities, or other purposes. In regard to the corridors' ability to accommodate multi-purpose uses, including different modes or utilities, Corridor A1 has comparatively "low" flexibility due to the more constrained right-of-way while Corridor B3 has comparatively "high" flexibility with respect to potential multi-purpose uses given its location in the less developed, central portion of the Study Area.

Financial viability was not used as a criterion for deciding which corridors to carry forward for detailed study in this Tier One Draft EIS (DEIS). However, a preliminary assessment of short and long term economic impacts of the no-toll and tolled scenarios is used as part of the more detailed analysis for the corridors carried forward (see Section 3.2.4). More detailed analysis of financial viability will be developed during the Tier Two NEPA studies as the corridor and subsequent working alignment are further developed.

Identification of Additional Corridors

The preliminary recommendation to carry forward Corridor B3 for detailed study in the Tier One DEIS was discussed with project stakeholders during coordination meetings. The coordination meetings provided further opportunity for stakeholders to comment on the overall corridors development and evaluation process, and the recommendation of carrying forward Corridor B3. Based on the feedback received from various stakeholders, including requests for further evaluation of a northern corridor and requests to look at alignments south of Lowell, Indiana, two new corridors were developed.

One new corridor essentially combines Corridor B3 west of the Illinois/Indiana state line, with Corridor C4 east of the state line in order to pass south of Lowell. This corridor is named Corridor B4. A second northern corridor was identified. This corridor is a combination of previously considered Corridors A3S1, B1, and A3 that incorporates a Corridor "A" connection point with I-55, a "3" connection point at I-65, a recommended Corridor A3S1/B1 connection refinement and remains north of the South Suburban Airport (SSA). This corridor is named Corridor A3S2. See Figure S-3 for Corridors A3S2 and B4.

Corridors Carried Forward

Three corridors are being carried forward for evaluation in this Tier One DEIS: Corridors A3S2, B3, and B4. Corridor A3S2 is 51.1 miles long and is also an east-west oriented corridor that generally traverses the north portion of the Study Area in Illinois and transitions to the central portion of the Study Area in Indiana. Corridors B3 and B4 are east-west oriented corridors that generally traverse the central portion of the Study Area. Corridors B3 and B4 follow the same alignment through most of Illinois with Corridor B4 transitioning to the southern portion of the Study Area in Indiana. Corridor B3 is 46.8 miles long and Corridor B4 is 48.8 miles long.

Corridor A3S2 generally connects I-55 near Channahon, Illinois, with I-65 north of Lowell, Indiana. Corridor B3 generally connects I-55 north of Wilmington, Illinois, with I-65 north of Lowell, Indiana. Corridor B4 is identical to Corridor B3 from the I-55 connection point until just west of the Illinois/Indiana state line where Corridor B4 proceeds southeast.

As part of each corridor, primary interchanges are anticipated to be provided at existing Interstate highways and marked state routes. The interchange types are anticipated to vary based on traffic operational needs as well as environmental concerns and land use constraints. Table S-1 summarizes the potential interchange locations and types within each of the corridors. Additional potential interchange locations, if any, will be evaluated as part of Tier Two NEPA studies.

Table S-1. Potential Interchange Locations and Types

| Interstate or State Route | Interchange Type | | |
|---------------------------|--------------------------|-----------------------------------|-----------------------------------|
| | A3S2 Working Alignment | B3 Working Alignment | B4 Working Alignment |
| I-55 | System – Directional | System – Directional ¹ | System – Directional ¹ |
| IL-53 | Local ² | Local ² | Local ² |
| US 52 | Local – Standard Diamond | - | - |
| US 45 | Local – Standard Diamond | Local – Standard Diamond | Local – Standard Diamond |
| I-57 | System – Cloverleaf | System – Cloverleaf | System – Cloverleaf |
| IL-1 | Local – Standard Diamond | Local – Standard Diamond | Local – Standard Diamond |
| US 41 | Local – Standard Diamond | Local – Standard Diamond | Local – Standard Diamond |
| SR 55 | Local – Standard Diamond | Local – Standard Diamond | Local – Standard Diamond |
| I-65 | System – Directional | System – Directional | System – Directional |

¹ The interchange at I-55 would operate as both a system and local road interchange to IL-129.

² Based on coordination with Illinois SHPO, three design concepts will be evaluated due to the historic designation of IL-53 (Alternate Route 66): 1) partial cloverleaf at IL-53; 2) offset interchange east of IL-53; and 3) no interchange. Detailed evaluations of interchange locations and potential design concepts will be done as part of the Tier Two NEPA studies.

Additionally, each working alignment includes design concepts in the vicinity of IL-53 in order to show avoidance options for the historic and Section 4(f) resource Alternate Route 66, Wilmington to Joliet (IL-53). The design concepts for each working alignment are described below:

- Working alignment within Corridor A3S2 includes eight potential interchanges at the following locations: I-55, US 45, US 52, I-57, IL-1, SR 41, SR 55, and I-65. In

addition, there are three design concepts for an additional interchange in the vicinity of IL-53. Design Concept 1 is a direct interchange connection from Corridor A3S2 to IL-53. Design Concept 2 is a conventional diamond interchange located at South Rowell Avenue approximately 1 mile east of IL-53. The third concept, Design Concept 3, is no interchange at IL-53.

- Working alignment within Corridors B3 and B4 include seven potential interchanges at the following locations: I-55, US 45, I-57, IL-1, SR 41, SR 55, and I-65. In addition to the seven potential interchanges, there are three design concepts for an additional interchange in the vicinity of IL-53 common to both corridors. Design Concept 1 is a direct interchange connection from the working alignment within Corridor B3 or B4 to IL-53. Design Concept 2 is a conventional diamond interchange located approximately 2.5 miles east of IL-53 connecting the working alignment within Corridor B3 or B4 to South Arsenal Road to the north and Peotone Road to the south. Design Concept 3 is no interchange at IL-53.

The US Environmental Protection Agency (USEPA), US Army Corp of Engineers (USACE), and the US Fish and Wildlife Service (USFWS) concurred on the project Purpose and Need in June 2012. The resource agencies also provided their concurrence on the Alternatives to be Carried Forward into this DEIS in June 2012.

S.4 Environmental Resources, Impacts, and Mitigation

For this Tier One DEIS, corridors typically 2,000 feet in width were established to frame the analysis of potential transportation improvements. Within the context of the larger Study Area, these corridors provide the focus for discussing the existing conditions for all social, economic, and environmental resources that may be affected by the project.

Within each of the three corridors, more specific working alignments were identified to represent the location of the potential transportation improvements. These working alignments generally follow the centerline of the corridors and provide a functional alignment to be used to determine potential impacts associated with a transportation improvement in each corridor. The analysis of impacts for each corridor is based on a working alignment that is on average 400 feet wide, but expands in several locations to accommodate potential interchange improvements.

The No-Action Alternative is being carried forward as a baseline for comparison against the working alignments within the corridors carried forward. The transportation conditions that would exist under the No-Action Alternative are described in Section 1.0. The environmental conditions that would exist under the No-Action Alternative are generally consistent with the “existing conditions” as described in Section 3.0, except to the extent that those existing conditions would be affected by other actions (e.g., other transportation or development projects) identified in the current financially constrained long-range (2040) plans of CMAP, NIRPC, and KATS). The effects of reasonably foreseeable other actions that may occur under the No-Action Alternative are described in Section 3.19 Indirect and Cumulative Impacts.

The working alignments within each corridor are being used in this Tier One DEIS to assess the potential impacts to the social, economic, and environmental resources. The Tier One DEIS is intended to provide the basis for deciding whether to proceed with a transportation improvement and, if so, to select a corridor(s) that would be advanced for detailed evaluation and refinement in the Tier Two NEPA studies.

If the Tier One DEIS results in the selection of a corridor(s), additional studies will be undertaken during Tier Two NEPA studies to further define and evaluate the corridor(s) that was selected in the Tier One ROD. The Tier Two NEPA studies would include: 1) continued analysis and definition of the selected and supporting transportation modes; 2) further development of engineering plans; 3) completion of more detailed environmental investigations, including field studies; 4) corresponding updates to impacts to social, economic, and environmental resources; and 5) identification of mitigation measures for those impacts found to be unavoidable. It is possible that refinements to the working alignment outside of the selected corridor may be required as part of the Tier Two NEPA studies in order to avoid significant impacts that become apparent as part of the Tier Two environmental field surveys. For additional information regarding the Tier Two NEPA studies, refer to Section 2.7.

The Tier One evaluation of impacts associated with the three corridors carried forward for detailed comparison, which are referred to as Corridors A3S2, B3, and B4, is based on existing and available data used in conjunction with a geographic information system (GIS). The determination of impacts for the various resources was produced by overlaying the working alignment within each corridor, including potential interchanges and design concepts, located within the corridors, on existing conditions for each resource in GIS and quantifying those resources within the footprint of the working alignment. For some resource topics, impacts are described as “potential” (e.g., archaeological, historical, threatened and endangered species) pending field investigations to be completed as part of the Tier Two NEPA studies.

Within this document the corridors are being used to report existing conditions, while impacts are being reported on a more focused level based on the working alignment footprint within the corridors. The use of the term “working alignment” refers to the impacts that occur along the 400 foot wide working alignment, including areas of expansion to accommodate potential interchange improvements, within the respective Corridors A3S2, B3 and B4. Additionally, each working alignment includes interchange design concepts in the vicinity of IL-53, to provide avoidance alternatives for the National Register of Historic Places (NRHP) listed Alternate Route 66, Wilmington to Joliet (IL-53).

A summary of impacts to social and environmental resources for the working alignments within Corridors A3S2, B3, and B4 is provided below, while Table S-2 provides a general comparison of key impacts between the three working alignments. Where provided, the ranges account for the range in impacts associated with the three design concepts.

Table S-2. Summary of Key Environmental Impacts¹

| Resource | A3S2 Working Alignment | B3 Working Alignment | B4 Working Alignment |
|--|----------------------------------|--------------------------------|---|
| Social and Economic | | | |
| Residential Displacements (number) | 81 - 83 | 22 | 12 |
| Non-Agricultural Business Displacements (number) | 10 | 9 | 9 |
| Agricultural Business Displacements (number) | 1 | 1 | 2 |
| Agricultural | | | |
| Farm Parcels (number) | 322 - 325 | 359 - 363 | 344 - 348 |
| Farmstead Relocations (number) | 27 - 30 | 28 - 29 | 24 - 25 |
| Agricultural Land Diagonal Parcel Severances (number) | 81 | 0 | 83 |
| Farmland (acres) | 2,453 - 2,483 | 2,667 - 2,725 | 2,768 - 2,827 |
| Cultural Resources² | | | |
| Archaeological Resources (previously identified sites within APE) | 3 | 5 | 2 |
| Historic Resources (previously identified resources within APE) | 8 | 9 | 6 |
| Noise | | | |
| Sensitive Land Use Activity Categories (acres per category) ³ | B = 2,775 C = 362 E = 7 | B = 1,751 C = 367 E = 7 | B = 883 C = 6 E = 13 |
| Natural Resources | | | |
| Forested Communities Greater than 20 Acres (acres) | 112.7 | 65.3 | 17.0 |
| Wildlife Resources (acres of DPSFWA and INAI sites crossed) | 10.3 and crosses Manhattan Creek | 2.9 and crosses Kankakee River | Same as B3 |
| Water Resources/Quality, Floodplains, and Wetlands | | | |
| Stream Crossings (number) | 26 | 33 | 53 |
| Total Watershed Disturbance (acres) | 3,232 | 3,103 | 3,192 |
| Groundwater | None | None | One Lowell, Indiana, municipal well impacted; indirect impacts to three municipal wells |

Table S-2. Summary of Key Environmental Impacts¹ (continued)

| Resource | A3S2 Working Alignment | B3 Working Alignment | B4 Working Alignment |
|--|---|---|---|
| Floodplain Fill Volume (acre-feet) | 52.7 | 45.7 | 108.0 |
| Wetlands (number) | 46 | 29 | 17 |
| Wetlands (acres) | 75.8 | 34.4 – 34.6 | 15.2 – 15.4 |
| Special Waste/Hazardous Waste | | | |
| Potentially Impacting Sites (number) | 4 | 2 | 2 |
| Section 4(f)⁴ | | | |
| Wauponsee Glacial Trail | 405 feet of the southern 19.5-mile multi-use limestone portion of the trail | 483 feet of the southern 19.5-mile multi-use limestone portion of trail | Same as B3 |
| Alternate Route 66, Wilmington to Joliet | New 400-foot wide interchange with IL-53 in Design Concept 1 | Same as A3S2 | Same as A3S2 |
| Mineral Resources | | | |
| Limestone (linear miles crossed) | 48.9 | 39.0 | 42.4 |
| Sand and Gravel (linear miles crossed) | 0 | 2.3 | 7.8 |
| Indirect and Cumulative | | | |
| 2040 Population Change (Will and Kankakee counties, IL; Lake County, IN) | 21,391 (1.0%) increase over No-Action Alternative | 11,180 (0.9%) increase over No-Action Alternative | 11,746 (0.9%) increase over No-Action Alternative |
| 2040 Employment Change (Will and Kankakee counties, IL; Lake County, IN) | 13,241 (1.0%) increase over No-Action Alternative | 7,660 (0.7%) increase over No-Action Alternative | Same as B3 |
| Land Area in Study Area Needed to Accommodate Indirect Growth (acres) | 4,929 | 2,699 | 2,771 |

¹ Where provided, the ranges account for the range in impacts associated with the three design concepts.

² All of the working alignments have the potential to affect previously identified cultural resources. Additional archeological and historic properties may be identified through field work in the Tier Two NEPA studies.

³ Land Use Activity Categories:

B = Residential

C = Includes hospitals, libraries, parks, and recreation areas

E = Includes hotels, offices, and restaurants

⁴ Additional Section 4(f) protected historic properties may be identified through field work in Tier Two NEPA studies.

Social/Economic Impacts

Each of the corridors traverses an area that is largely undeveloped and as a result, housing related impacts from the proposed project are expected to be minimal; however, some neighborhood impacts and residential relocations are anticipated. The working alignment within Corridor A3S2 would result in 81-83 residential relocations and six commercial displacements. The working alignment within Corridor B3 would result in 28-29 residential relocations and three commercial displacements. The working alignment within Corridor B4 would result in 12-13 residential relocations and two commercial displacements. Efforts will be made to mitigate potential neighborhood impacts as they arise. The specific design and location of the transportation system improvements will be addressed as part of the Tier Two NEPA studies.

An evaluation of environmental justice (EJ) included an assessment of minority and low-income populations within the Study Area consistent with Executive Order 12898. Based on the US Census Bureau's 2010 census of race, ethnic, and poverty level data and location of the corridors in relation to these populations, there would be no direct impacts to EJ populations. Based on the location of the EJ communities within the Study Area, Corridor A3S2 has a greater potential to indirectly affect EJ communities compared to Corridors B3 and B4. The Corridor brought forward to the Tier Two NEPA studies will further consider whether or not these groups will bear more than their "fair share" of impact in accordance with FHWA guidance.

Compatibility with local land use plans will vary by corridor and by jurisdiction. Overall, the existing community plans complement the proposed Illiana Corridor. Most communities have not specifically included the proposed transportation improvements in their local planning efforts, with the exception of Manhattan, Illinois, and Cedar Lake, Indiana). Most communities intend to incorporate the proposed project in their plans as it becomes more defined, as indicated by their responses in the context audit completed as part of the stakeholder involvement process for the project.

In addition to municipal level planning efforts, the Midewin National Tallgrass Prairie is also a local planning stakeholder. The US Department of Agriculture (USDA) has undertaken planning efforts for the area that outline a vision for a major regional destination attracting over one million visitors per year. Plans for the Midewin National Tallgrass Prairie include fostering an enhanced economic relationship with surrounding communities of Elwood, Manhattan, and Wilmington, Illinois.

While none of the corridors considered would have direct impacts to the Midewin National Tallgrass Prairie, Corridors B3 and B4 are adjacent to its southern boundary. This has the potential to interfere with accessibility between the Midewin National Tallgrass Prairie and the adjacent communities, and could conflict with the local planning efforts for the area, including the concept of non-motorized access between the Midewin National Tallgrass Prairie and Wilmington.

The transportation system within the Illiana Corridor Study Area is experiencing tremendous growth in intermodal freight traffic. Travel demand modeling has

projected that an additional 47,000 truck trips per day would be added to the Study Area by 2040. These trips are expected to be broadly dispersed around the Study Area, so the impact of increased trucks would be system wide, resulting in a mismatch of vehicle trips and trip types using the lower functional classification roads. This would create a number of travel performance deficiencies impacting regional and local travel, as well as impeding the efficient movement of freight. Travel demand modeling has projected that congestion on arterial roads could increase by five times throughout the Study Area; and that hours of travel on arterials would double by 2040 without the proposed project (see Appendix A, Illiana Corridor TSPR). Each of the corridors would develop a functional network of transportation improvements that would meet the transportation needs of the Study Area as it transitions from rural to suburban.

In addition to providing additional capacity to address the projected increase in traffic and congestion, benefits of the proposed project include providing better access to jobs throughout the Study Area and better access for properties that could be commercially developed.

Agriculture Impacts

Depending on the design concept, the working alignment within Corridor A3S2 would impact between 322 and 325 farm parcels (totaling 2,453 to 2,483 acres of farmland), the working alignment within Corridor B3 would impact between 359 and 363 farm parcels (totaling 2,667 to 2,725 acres of farmland), and the working alignment within Corridor B4 would impact between 344 and 348 farm parcels (2,768 to 2,827 acres of farmland). The number of farmsteads anticipated to be relocated is 50 to 51 for the working alignment within Corridor A3S2, 45 to 51 for the working alignment within Corridor B3, and 30 to 36 for the working alignment within Corridor B4. Relocated farmsteads include groups of buildings that may or may not include residences. The number of agricultural land diagonal parcel severances for Corridor A3S2 are 81, zero for Corridor B3, and 83 for Corridor B4. The working alignments would impact prime farmland and farmland of statewide importance and would directly impact farmland production with the conversion of farmland to transportation right-of-way.

Cultural Resources Impacts

The Illiana Corridor has the potential to affect three previously identified archaeological sites documented in Corridor A3S2, five archaeological sites (including two possibly prehistoric mound sites) documented in Corridor B3, and two archaeological sites documented in Corridor B4. Additional unknown prehistoric archaeological resources may also be located in the three corridors.

For above-ground historic resources, which includes NRHP-listed, NRHP-eligible, and previously identified built resources, eight historic resources were identified in the Corridor A3S2 Area of Potential Effects (APE), nine historic resources were identified in the Corridor B3 APE, and six historic resources were identified in the Corridor B4 APE. One of the NRHP-listed resources that all three corridors cross and have the potential to cause adverse effects to Alternate Route 66, Wilmington to Joliet (also known as IL-53) through the introduce visual elements that diminish the integrity of the property's

significant historic features, which may change the character of the property's setting that contributes to its historic significance.

The proposed project's potential to adversely affect NRHP-listed and NRHP-eligible cultural resources, and any other cultural resources that have not yet been identified, will be further assessed during intensive-level study in the Tier Two NEPA studies.

Noise Impacts

For Corridor A3S2, there are 2,775 acres under Land Use Activity Category B (residential land uses), 362 acres under Land Use Activity Category C (includes hospitals, libraries, parks, and recreation areas), and 7 acres under Land Use Category E (includes hotels, offices, and restaurants). For Corridor B3, there are 1,751 acres under Land Use Activity Category B, 367 acres under Land Use Activity Category C, and 7 acres under Land Use Category E. For Corridor B4, there are 883 acres under Land Use Activity Category B, 6 acres under Land Use Activity Category C, and 13 acres under Land Use Category E. The Tier Two NEPA studies will predict and identify noise impacts, conduct a feasibility and reasonableness evaluation for noise abatement, and propose noise abatement, as necessary.

Natural Resources Impacts

Forest impacts would be greater with the working alignment within Corridor A3S2, which would affect 112.7 acres of forested communities. The working alignment within Corridor B3 would affect 65.3 acres of forested communities and the working alignment within Corridor B4 would affect 17 acres of forested communities. Potential project impacts to wildlife resources include 10.3 acres of Des Plaines State Fish and Wildlife Area (DPSFWA) and one Illinois Natural Areas Inventory (INAI) site (Manhattan Creek) crossed by the working alignment within Corridor A3S2, and 2.9 acres of DPSFWA and one INAI site (Kankakee River) crossed by the working alignments within Corridors B3 and B4. The working alignments would not impact known federal threatened or endangered species locations; however, federal listed threatened and endangered species may be present within the corridors. Several Illinois –state-listed threatened and endangered species and are known to occur within corridors. No known Indiana state-listed endangered, threatened, or rare species are known to occur within the corridors. Surveys will be conducted during the Tier Two NEPA studies to determine whether any of these species occur within the corridor(s) carried into Tier Two.

Water Resources/Quality

Surface water impacts would be associated with both construction and operation of the proposed project. Within existing watersheds, undeveloped land would be disturbed and converted to impervious surfaces. In addition, stormwater detention ponds would be constructed to control the volume of stormwater runoff associated with the additional disturbed land and impervious area within the project right-of-way. Working alignment within Corridor A3S2 would have 26 stream crossings and 3,232 acres of total watershed disturbance. Working alignment within Corridor B3 would have 33 stream crossings and 3,103 acres of total watershed disturbance. Working alignment within Corridor B4 would have 53 stream crossings and 3,192 acres of total watershed disturbance. Erosion

control measures will be implemented during construction to limit the effects to the streams. No groundwater wells would be impacted under the working alignments within Corridors A3S2 and B3. Under working alignment within Corridor B4, one Lowell, Indiana, municipal well would be impacted and three municipal wells would be indirectly impacted.

Floodplains Impacts

The working alignment within Corridor A3S2 would add 52.8 acre-feet of floodplain fill volume. The working alignment within Corridor B3 would add 45.9 acre-feet of floodplain fill volume. The working alignment within Corridor B4 would add 108 acre-feet of floodplain fill volume. Compensation for fill in the floodplain/floodway will be based on IDOT, INDOT, Illinois Department of Natural Resources (Illinois DNR), and Indiana Department of Natural Resources (Indiana DNR) criteria. Detention storage will be used both to mitigate this impact and to compensate for the additional impervious area created with the proposed project.

Wetland Impacts

The assessment of potential wetland impacts is based upon direct impacts related to construction and the placement of fill material to construct the roadways, ramps, and grading for drainage/stormwater management facilities. In addition to the potential direct loss of wetland acreage associated with a working alignment, wetland functions and values may also be impacted.

The working alignment within Corridor A3S2 would affect 46 known wetlands totaling 75.8 acres. The working alignment within Corridor B3 would affect 29 known wetlands impacting between 34.4 to 34.6 acres. The working alignment within Corridor B4 would affect 17 known wetlands impacting between 15.2 to 15.4 acres.

Special Waste/Hazardous Waste Impacts

The US Environmental Protection Agency (USEPA) listing of potential, suspected, and known hazardous waste or hazardous substance sites in Illinois and Indiana has been reviewed to ascertain whether the proposed project would involve any listed sites. As a result of the review, it has been determined that four sites may pose a risk to the working alignment within Corridor A3S2 and two sites may pose a risk to the working alignments within Corridor B3 and B4. Contaminated soils or groundwater could potentially be encountered during demolition, construction, or earthwork; resulting in the release of contamination into the air, soil, or water. Exposure to environmental contamination can adversely impact construction workers and public safety and lead to diminished quality of natural resources. Encountering such contamination without prior knowledge can also result in increased project costs and project delays to properly manage the resulting wastes. To more fully characterize the possibility of encountering special or hazardous wastes a more detailed assessment will be completed during the Tier Two NEPA studies, with appropriate mitigation and avoidance measures, if any, developed based on the findings of those studies.

Section 4(f)

The working alignment within Corridor A3S2 crosses 405 feet of the 19.5 mile southern limestone section of the Wauponsee Glacial Trail, which would be temporarily impacted with the construction of the proposed project due to crossing of the trail. The working alignments within Corridors B3 and B4 would also have an impact on the Wauponsee Glacial Trail. The portion of the Wauponsee Glacial Trail within the working alignments within Corridors B3 and B4 is 483 feet of the 19.5 mile southern limestone section of the trail. It is anticipated that any disruption to the Wauponsee Glacial Trail would be less than the time needed to construct the project. A temporary trail could be constructed during construction of the proposed project so that the trail could remain open. Trail continuity could also be maintained by bridging the proposed project over the trail. The temporary trail and bridge option will be further evaluated during Tier Two NEPA studies. There would be no change in ownership of the trail. Coordination during Tier Two NEPA studies will determine the actual disruption to the trail.

All of the working alignments have the potential to affect Alternate Route 66 by crossing over the resource. One design concept for all working alignments would include interchange ramps that intersect with Alternate Route 66. Two of the design concepts for all working alignments would not have a direct impact on Alternate Route 66, although the proposed project may introduce visual elements that diminish the integrity of the property's significant historic features and may change the character of the property's setting that contributes to its historic significance. Through the Section 106 process, a determination of effect as a result of the project will be made and an analysis of Section 4(f) use, if any, will be completed.

All of the working alignments have the potential to affect additional Section 4(f) protected historic properties, which may be identified through field work in the Tier Two NEPA studies.

Mineral and Geologic Resources

The working alignment within Corridor A3S2 would not cross any mapped sand and gravel resources and, therefore, would not be expected to impact any current or future planned exploitation of sand and gravel resources. The working alignment within Corridor B3 would cross approximately 2.3 miles of sand and gravel resources, while the working alignment within Corridor B4 would cross approximately 7.8 miles of these resources. While there is no active or inactive sand and gravel mining in these areas, future access to these resources within the limits of either the working alignments within Corridors B3 or B4 would be eliminated with their implementation.

Limestone resources occur as the uppermost bedrock unit within each of the corridors. These resources are present throughout 97 percent of Corridor A3S2, 84 percent of Corridor B3, and approximately 87 percent of Corridor B4. There are no inactive or active limestone/dolomite quarries within the corridors and future exploitation of these resources would generally be limited to those localized areas along the corridors where the bedrock is shallow. Since these resources are recovered through surface mining,

future access to these resources within the limits of the corridors would be eliminated with construction of the proposed project due to land use incompatibility.

Extensive areas of peat and muck are known to exist particularly throughout the Indiana portion of the Study Area; therefore, each of the working alignments may be expected to encounter expansive and weak/compressible soils.

Visual Resources

Implementation of a new transportation facility along any of the corridors would result in changes to the existing visual setting. Impacts would result from changes to the terrain, and natural and/or cultural features that would have a long-term impact on the visual environment.

Indirect and Cumulative Impacts

The indirect impacts of the Illiana Corridor would be associated with induced land development resulting from improved accessibility and mobility provided by the project. Cumulative impacts could result from the project, induced development, and other reasonably foreseeable development that would occur with or without the project.

The Study Area forecasted population and employment growth with the No-Action Alternative is substantial and would convert a great deal of farmland into urban development. Population and employment change projections for the year 2040 indicate that under Corridor A3S2, the counties of Will, Kankakee and Lake would grow by an additional 21,391 people (1.0 percent increase) and 13,241 jobs (1.0 percent increase); under Corridor B3, the counties would grow by an additional 11,180 people (0.9 percent increase) and 7,660 jobs (0.7 percent increase), and under Corridor B4, the counties would grow by an additional 11,746 people (0.9 percent increase) and 7,660 jobs (0.7 percent increase). The above forecasts for population and employment were derived by interpolating and/or extrapolating the build socio-economic forecasts for the Northern and Southern Alignments (identified in the *Historic and Forecasted Growth of Employment and Population – Market Driven Forecasts 2010-2040*” (ACG: The al Chalabi Group, Ltd., 2011), see Appendix E. These latter forecasts were generated reflecting the changes in accessibility resulting from building along these alignments and using the same methodology as that used for similar EIS studies.

To accommodate residential and commercial/industrial development, the projected population and employment growth in the three counties would require an additional 4,929 acres of land with Corridor A3S2, 2,699 acres of land with Corridor B3, and 2,771 acres of land with Corridor B4.

The corridors are expected to shift some of the projected population and employment growth in the Study Area toward the proposed project’s interchanges with US and state highways because of the increased accessibility to undeveloped land areas near them.

The Study Area forecasted population and employment growth with the No-Action Alternative is substantial and would convert a great deal of farmland into urban

development. The Illiana Corridor would have a 1 percent or less additional indirect and cumulative impact on the main resource of the Study Area, i.e., farmland, in comparison with the amount of farmland converted with the No-Action Alternative. (For example, the No-Action Alternative would increase population by 66 percent and employment by 49 percent between 2010 and 2040. In comparison, any of the corridors studied would have incremental increases of only approximately 1 percent or less in either population or employment.) Of the three most prevalent resources (farmland, forest and wetlands) within 5 miles of each interchange (i.e., the indirect impact area) farmland is the most likely resource to be impacted. Likewise, the combined impact of indirect and cumulative effects on wetlands, forests, and prairies in the corridors would be relatively small.

A summary of potential avoidance, minimization, and mitigation measures that could be implemented to compensate for unavoidable impacts associated with implementation of a working alignment are presented.

Potential Mitigation

The main objective of mitigation is to compensate for the potential impacts to sensitive resources that cannot be avoided or minimized. The measures presented in this Tier One DEIS are preliminary concepts designed to mitigate the loss of resources or manage the short and long-term impacts of the proposed project. Detailed mitigation strategies will be developed during Tier Two NEPA studies in accordance with policies and procedures of IDOT and INDOT. In addition, technical analyses and development of detailed mitigation strategies will be coordinated with federal and state resource agencies, as appropriate. Some of the general conceptual mitigation strategies identified for this Tier One DEIS include:

- Provide relocation assistance and just compensation to any residence or business displaced in accordance with applicable federal and state regulations, and agency guidelines.
- Facilitate land use coordination within the corridor with the various regional and local jurisdictions.
- Prepare a traffic management plan to detail strategies of how traffic flow will be maintained and reliable access and emergency vehicle service will be provided during construction to local roads, residences, businesses, and community services and facilities during construction.
- Coordinate with the Natural Resources Conservation Service (NRCS), the Illinois Department of Agriculture (DOA), and the Indiana DOA during the Tier Two NEPA studies to determine measures or actions to avoid and minimize impacts or disruption to agricultural operations.
- Coordinate with the Illinois and Indiana State Historic Preservation Officers (SHPO), Indian Tribes, and other consulting parties to develop appropriate mitigation measures for impacts to historic and archaeological resources.
- Evaluate noise walls where determined feasible and reasonable.

- Complete detailed pre-construction surveys as appropriate and identify best management practices (BMPs) to protect habitats of threatened and endangered species to the greatest extent possible.
- Provide forest mitigation by conducting or participating in the purchase of vacant land and planting trees to replace forested areas removed by construction.
- Implement appropriate IDOT and INDOT construction and design guidance and BMPs as dictated by required permits and approvals to minimization groundwater impacts, soil erosion, and streamside and riparian vegetation disturbance.
- For project-related fill placed in waters of the US, consideration will be given to on-site stream restoration, preservation of sites adjacent to impact areas, and the purchase of credits in a US Army Corps of Engineers (USACE) approved mitigation bank or at an off-site location.
- Create compensatory storage volume through excavation of an area that creates an equivalent volume of storage to offset the loss of existing flood storage.
- Mitigate wetland loss following appropriate guidelines and state compensatory mitigation ratios.
- Explore options for bridging a working alignment over the existing Wauponsee Glacial Trail or provide a replacement trail during construction and reroute a section of the trail.
- Implement planned design elements, including the use of context sensitive solutions (CSS).

S.5 Other Proposed Actions

Additional proposed roadway improvements have been identified in the current financially constrained long-range (2040) plans of CMAP, NIRPC, and KATS. These committed highway improvement projects in the Study Area were assumed in the future 2040 highway network as shown in Table S-3.

The proposed SSA is located within the Study Area east of I-57 and IL-50 and west of IL-394/1. The initial phase of airport development, known as the Inaugural Airport Program, is designated on approximately 5,200 acres, but the Ultimate Acquisition Area is over 20,000 acres, most of which occurs in unincorporated Will County. For purposes of this study, an Inaugural Airport configuration of one commercial and one general aviation runway, with a four-gate terminal for passenger service, was assumed for all 2040 build and No-Action Alternative scenarios.

Table S-3. Programmed and Planned Roadway Improvements Within or Near the Study Area

| Route | Description | Location |
|--------------------------|------------------------------------|--|
| Will County | | |
| I-80 | Add lanes | From US 45 in Frankfort to US 30 in New Lenox (C) |
| I-80 | Add lanes | From US 30 in New Lenox to Ridge Road in Minooka (I) |
| US 30 | Add Lanes | From IL-43 in Frankfort to Williams St. in New Lenox (M) |
| IL-394 | Upgrade to Limited Access | From IL-1 in Crete to Sauk Trail in Sauk Village (I) |
| I-57 | New Interchange | At Stuenkel Road in University Park (M) |
| I-57 | New Interchange and Connector Road | At SSA in Monee (I) |
| Baseline Road | New Road | From Arsenal Road to Schweitzer Road in Elwood (I) |
| I-55 | Add Lanes | From IL-113 to I-80 (I) |
| Kankakee County | | |
| I-57 | New Interchange at 6000 N Road | Bourbonnais (M) |
| US 45/52 | Add Lanes | From Kathy Drive in Bourbonnais to Manteno Road in Manteno (I) |
| Lake County | | |
| I-65 | New Interchange | 109 th Avenue in Crown Point (M) ¹ |
| Mississippi Street | New Road | From US 30 to 61 st Avenue in Merrillville (N) |
| 101 st Avenue | Add Lanes | Merrillville (N) |
| SR 2 | Add Lanes, Interchange Improvement | I-65 east of Lowell (N) |
| Kennedy Avenue | Add Lanes | Schererville (N) |

¹. The interchange has been built and is open to traffic but is left in the table since the projects presented represent those committed projects beyond the RTP and TIP projects.

Source: (C) CMAP; (I) interview with state, county, and local transportation officials; (M) inclusion in state multi-year construction program or recent construction; (N) NIRPC.

S.6 Public Involvement Process

Three rounds of public meetings have been held to date for the Illiana Corridor in June and December of 2011, and February 2012. An open house public meeting was held in the City of Wilmington in March 2012. Stakeholders and the public have had the opportunity to provide comments on the development of corridors and express concerns about impacts to communities and environmental resources by the project.

Support for the project has generally been strong by local communities, and at all public and stakeholder meetings; however common concerns have been raised throughout the process. The areas that have received the most attention throughout the public involvement process include: environmental concerns; concerns over how the project would be funded; concerns over how the project would impact local communities, including property takes within the corridor; and concerns about and refinements to corridor options.

S.7 Major Unresolved Issues with Other Agencies

There are no unresolved issues at this time.

S.8 Other Federal Actions Required for the Proposed Action

At this time, no other federal actions are required for the Illiana Corridor Tier One DEIS process, but additional federal actions are anticipated during the Tier Two NEPA studies. The Selected Alternative that will be identified in Tier Two must comply with USEPA Transportation Conformity Rule and be included in the financially constrained long-range (2040) plans of CMAP and NIRPC. Additional federal actions will be required for project permits, including the Clean Water Act (CWA) Section 404 and 401 permits and change in access to the Interstate approvals from FHWA.