

Executive Summary

Introduction

The Illinois Department of Transportation (IDOT), in cooperation with the Federal Highway Administration (FHWA), the Federal Aviation Administration (FAA), and the Illinois State Toll Highway Authority (Illinois Tollway) have jointly served as lead agencies in the evaluation of the proposed Elgin O'Hare - West Bypass (EO-WB) project. The EO-WB project was advanced as a tiered Environmental Impact Statement (EIS) process. The use of the tiered process was tailored to the study needs because it allowed Tier One of the process to focus on the "big picture" questions, which included "where is it," and "what is it." Tier One concluded with a signed Record of Decision (ROD) in June 2010, and approved the selection of the preferred type of improvement (a set of roadway, transit, and bicycle/pedestrian improvements) and a preferred corridor (location). Tier Two expands on Tier One with detailed engineering and environmental studies that refine the project features in the selected corridor. During the Tier Two EIS process, Governor Pat Quinn's EO-WB Advisory Council completed a report, *Elgin O'Hare - West Bypass Advisory Council: Final Report to Governor Pat Quinn*, that recommended the Illinois Tollway as the implementing agency (see Appendix A).

The Tier Two Draft EIS for the EO-WB project was published on March 30, 2012 and made available for agency and public comment. A Public Hearing was held for this project on April 18, 2012, and the close of the comment period was May 14, 2012. This Tier Two Final EIS is an important milestone in a tiered EIS process that commenced in 2007. The objective of this Tier Two Final EIS is to provide the public and decisionmakers with the appropriate and relevant information to make an informed decision on the Preferred Alternative to select for implementation.

Upon review of the agency and public comments received on the Tier Two Draft EIS for the project, the lead agencies agreed that a traditional Final EIS will be prepared for the EO-WB project. Although, the comments received do not materially change the content, quality of the analyses, nor the scope of the project or its alternatives, the comments have resulted in refinements to design features of the project. The refinements have required minor changes to the project footprint and right-of-way requirements. This Tier Two Final EIS updates those sections of the Tier Two Draft EIS by responding to public and agency comments, and describing the project refinements (e.g., changes in factual data about impacts to wetlands, waters of the U.S., floodplains, displacements, etc.).

This Tier Two Final EIS consists of an executive summary that highlights project refinements, decisions, actions since the distribution of the Tier Two Draft EIS, and updates to the sections of the Tier Two Draft EIS. A detailed discussion of these updates is provided in the Alternatives/Preferred Alternative section (Section 2); the Environmental Resources, Impacts, and Mitigation section (Section 3); and the Agency Coordination and Public Involvement section (Section 4). All public and agency comments received during the Tier Two Draft EIS comment period have been included in the document along with responses.

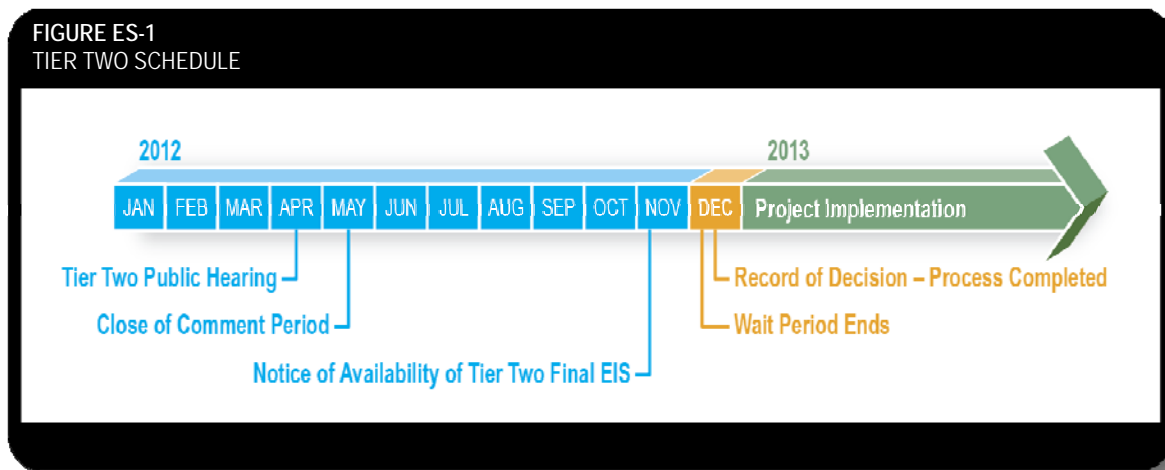
In addition, this Tier Two Final EIS identifies the lead agencies' (FHWA, FAA, IDOT, and Illinois Tollway) Preferred Alternative. At the conclusion of the Tier Two Draft EIS, three decisions remained open including the Preferred Alternative (Build Alternative versus No-Build Alternative) and the preferred alternates at an intersection and interchange location.

The document has been distributed to those listed in Section 7. Further, the document has been placed in public places for those not receiving a copy directly (see Section 7 for a list of those locations).

A request for an electronic copy of this Tier Two Final EIS may be submitted in writing to the mailing address or email address provided below:

Mr. Ron Krall
 Illinois Department of Transportation
 201 West Center Court
 Schaumburg, Illinois 60196
 Email: Ronald.Krall@illinois.gov

No sooner than 30 days from the date of publication of the Final EIS in the Federal Register, the Federal lead agencies (FHWA and FAA) will issue a ROD that finalizes its decision with respect to the Selected Alternative. With the release of the ROD, the planning process is complete, and if the Build Alternative is selected, the final design, right-of-way acquisition, and construction of the Selected Alternative may begin (see Figure ES-1). As the design and construction progresses, the implementing agency (Illinois Tollway) will continue to provide various avenues and opportunities for public involvement including a local advisory committee, individual stakeholder meetings, newsletters, and others.



The Proposed Project

Together, the IDOT, FHWA, FAA, and the Illinois Tollway have been evaluating transportation improvements in the vicinity of O'Hare International Airport (O'Hare Airport) in the Chicagoland area. The proposed action, known as the EO-WB project, is included and conformed in the Chicago Metropolitan Agency for Planning (CMAP) regional transportation plan, *GO TO 2040 Comprehensive Regional Plan* (CMAP, 2010), and the IDOT

State Transportation Improvement Program (STIP) (IDOT, 2011a). The proposed action is comprised of three elements that include roadway, transit, and bicycle/pedestrian improvements. Illinois Tollway would be the implementing agency for construction of the proposed roadway improvements. Transit improvements would be constructed along the roadway corridor by a local transit provider, and the implementation of these transit improvements would be dependent on future funding from the transit provider. Similarly, the roadway improvements have been planned so as not to preclude construction of bicycle and pedestrian facilities; however, local cost-sharing is anticipated for construction of new bicycle and pedestrian facilities and their long-term maintenance. Existing facilities impacted by construction would be replaced in-kind.

The roadway improvements would be developed as a toll road that is comprised of almost 25 miles of mainline improvements, including 14 miles on existing roadways and 11 miles on new alignment. The roadway improvements include four system interchanges, 16 service interchanges, and arterial improvements (totaling 16 miles) at service interchanges to accommodate traffic movement to and from the mainline.

Transit and bicycle/pedestrian improvements are planned in some sections of the roadway corridor. The roadway corridors reserve space for transit in the median of the Elgin O'Hare corridor, and along the north leg of the West Bypass corridor space is also reserved for bicycle and pedestrian facilities within, adjacent, or crossing selected sections of the roadway improvements.

The improvements respond to the needs of the area that are uniquely characterized as an important transportation node in the metropolitan area of Cook and DuPage counties, the center of many interstate highways, railroads, and a world class airport with 18 percent of all vehicular travel in the region. The area is further defined by extensive commercial and industrial development along with O'Hare Airport. The major development in the area is dependent upon reliable travel efficiency and access to maintain and improve the competitive position of the region. Based on the needs of the area, as defined by input of stakeholders and the findings of the travel performance study of existing conditions, the purpose of the proposed project includes:

- Improve regional and local travel.
- Improve overall travel efficiency.
- Improve western access to O'Hare Airport.
- Improve modal options and connectivity.

The purpose and need of the project is available for review in Section 1 of this Tier Two Final EIS. The purpose and need was concurred by the National Environmental Protection Act (NEPA)/404 merger group in Illinois on September 8, 2011.

In September 2011, the Illinois Tollway Board of Directors enacted a systemwide toll increase that would finance a 15-year capital improvement program, *Move Illinois: The Illinois Tollway Driving the Future*, which includes the EO-WB project (Illinois Tollway, 2011). Governor Quinn's EO-WB Advisory Council developed a strategy for the implementation of the project. Their findings recommended the Illinois Tollway as the implementing agency.

Tier Two Draft Environmental Impact Statement and Public Hearing Comments

The Tier Two Draft EIS was published in March 2012 and distributed to community leaders, stakeholders, regulatory resource agencies, and the general public. The Notice of Availability was published in the Federal Register, and the public comment period began on March 30, 2012. The comment period ended on May 14, 2012.

Comments were received from regulatory agencies, interest groups, special districts, municipalities, and the general public, as summarized below (see Section 4 for a description of comments received).

The regulatory agency (U.S. Army Corps of Engineers [USACE], U.S. Fish and Wildlife Service [USFWS], U.S. Environmental Protection Agency [USEPA], Illinois Environmental Protection Agency [IEPA], Illinois Department of Natural Resources [IDNR], Illinois Department of Agriculture [IDOA]) comments stressed the importance of implementing effective best management practices for reducing impacts to water quality and wetlands while honoring the FAA's requirements for reducing the wildlife attractants near airports. Other agency comments included consideration of fish and wildlife passage at greenways/stream crossings, and an interest in wetland and waters mitigation.

Interest groups/authorities (DuPage River Salt Creek Water Group, Metropolitan Water Reclamation District of Greater Chicago [MWRDGC], Maywood Sportsmen's Club, Active Transportation Alliance, Roselle Fire Department) commented on a variety of issues including: potential chloride pollution and practices to reduce chloride impact to receiving waters, bicycle and pedestrian compliance with IDOT's "Complete Street's Policy" (IDOT, 2011b), concerns about an exit ramp location on I-294 that would impact the Maywood Sportsmen's Club, preserving fire department access to hydrants, providing emergency vehicle turn-a-rounds, and impacts to the Touhy Flood Control Reservoirs and approval of a construction sequencing plan by the owning agency.

The general public comments were specific to private property impacts, noise barrier locations, design issues, and requests for information (e.g., maps).

The municipalities have been engaged in the project throughout the development process, and have contributed to a solution that is compatible with their individual needs and the needs of the project as a whole. Since the publication of the Tier Two Draft EIS, the communities were asked to review the proposed improvements for those portions of the project that affect their community. Most of the communities offered suggested design changes that would affect details of the project, but did not materially impact the scope of the Preferred Alternative. Among the comments received were shifting the location of an off-ramp along I-294, provision of a continuous frontage road between IL 83 and York Road, an improved circulation pattern in the Hamilton Lakes' Development, and further refinements of the intersection options at IL 72 and Elmhurst Road.

Each of the comments received during the comment period were reviewed. While some of the comments resulted in changes to the project design features, other comments warranted further explanation or clarification, or additional information in the form of maps, aerial mapping, and plan sheets for specific areas. Detailed responses have been written and sent

to everyone that commented during the Tier Two Draft EIS comment period. Appendix B contains a copy of the comment letters, comment sheets, etc., and the responses that were prepared by IDOT. The scope of the comments has been helpful in providing further refinements to the proposed project that bring added value.

Project Refinements since the Tier Two Draft Environmental Impact Statement

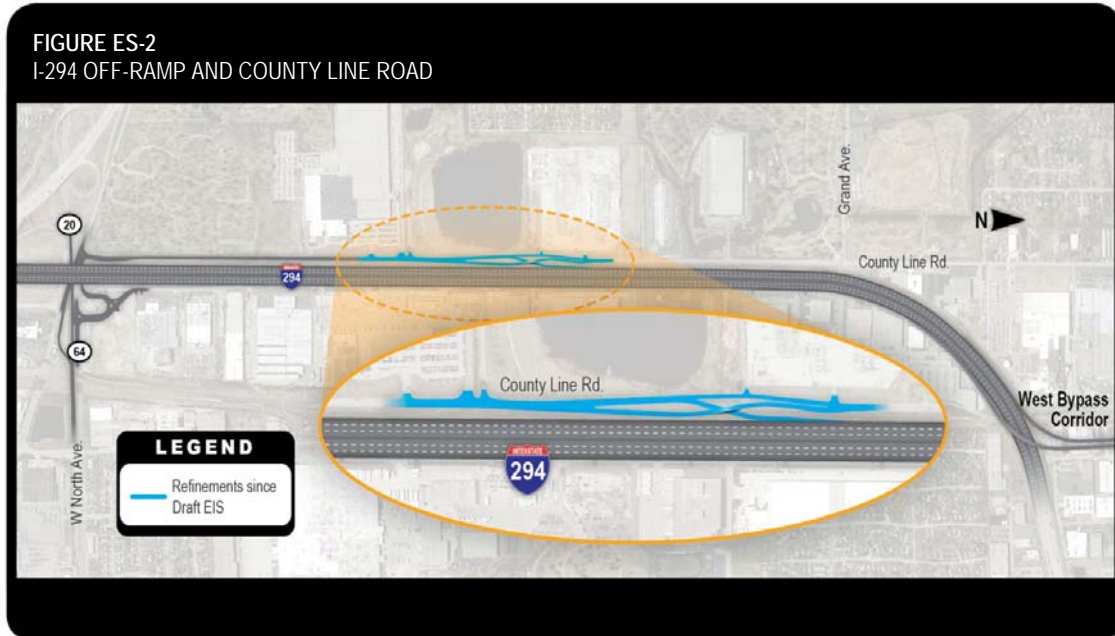
The comments received on the Tier Two Draft EIS have caused several design features to be revisited. In several cases, the comments were determined to warrant changes to the engineering plans (see Appendix B for additional details regarding comment letters and IDOT responses). Each of the design features that were re-evaluated is briefly discussed in the following subsections.

I-294 Off-Ramp Location to County Line Road

The Maywood Sportsmen's Club provided a comment letter to IDOT and suggested that the off-ramp from I-294 to County Line Road be relocated to avoid issues that include: conflicts between vehicles to and from their facility and ramp traffic, water quality concerns, displacement of club facilities, and lighting issues both from their facility and oncoming vehicle headlights. These concerns were resolved through a series of seven meetings with the Maywood Sportsmen's Club, City of Elmhurst, City of Northlake, Illinois Tollway, and others to find an acceptable solution. Five alternates were developed during the course of these discussions that would address the concerns of the Maywood Sportsmen's Club. The placement of the ramp had to be sensitive to maintaining acceptable travel performance on the mainline of I-294. Movement of the ramp exit too far north would result in a poor weaving section between the connection of the West Bypass corridor with I-294 near Grand Avenue, and the off-ramp from I-294 to County Line Road. A poor weaving section would generate traffic turbulence resulting in slower mainline speeds and congestion and operational issues. The objective in this analysis was to avoid proposing a new ramp location with unacceptable design conditions, maintain safe ingress and egress to the Maywood Sportsmen's Club, manage stormwater runoff to avoid lake contamination, and to provide access to the second largest employer (McMaster-Carr) in Elmhurst from the ramp.

In the review of the alternates by the stakeholders, it was agreed that Alternate B would best meet the objectives outlined above (see Figure ES-2). In order to shield ramp traffic from glare from the club activities, a sight screen or wall along the property line facing County Line Road was recommended. The preferred arrangement for the ramp has been relocated approximately 700 feet to the north to reduce the concerns of the Maywood Sportsmen's Club and includes the sight screen. The sight screen is approximately 1,100 feet in length, and will likely be a post and panel construction. Drainage located along the Maywood Sportsmen's Club property will be a closed system comprised of a piped system that would drain to open channels and conveyed to nearby streams. The closed drainage system (stormwater pipe system) would be extended beyond the south end of the sight screen to the entrance of the club. This feature would capture roadway runoff that would otherwise drain to the lake. With the planned drainage system, all roadway runoff would be directed away from the Maywood Sportsmen's Club lake. In a meeting on June 19, 2012, the

stakeholders acknowledged agreement with the ramp arrangement shown in Figure ES-2. The final arrangement for the ramp would have no impact to wetlands, waters, threatened or endangered species, or cultural resources. Some additional land acquisition (0.65 acre) and tree displacements are required.



Frontage Road Design between IL 83 and York Road

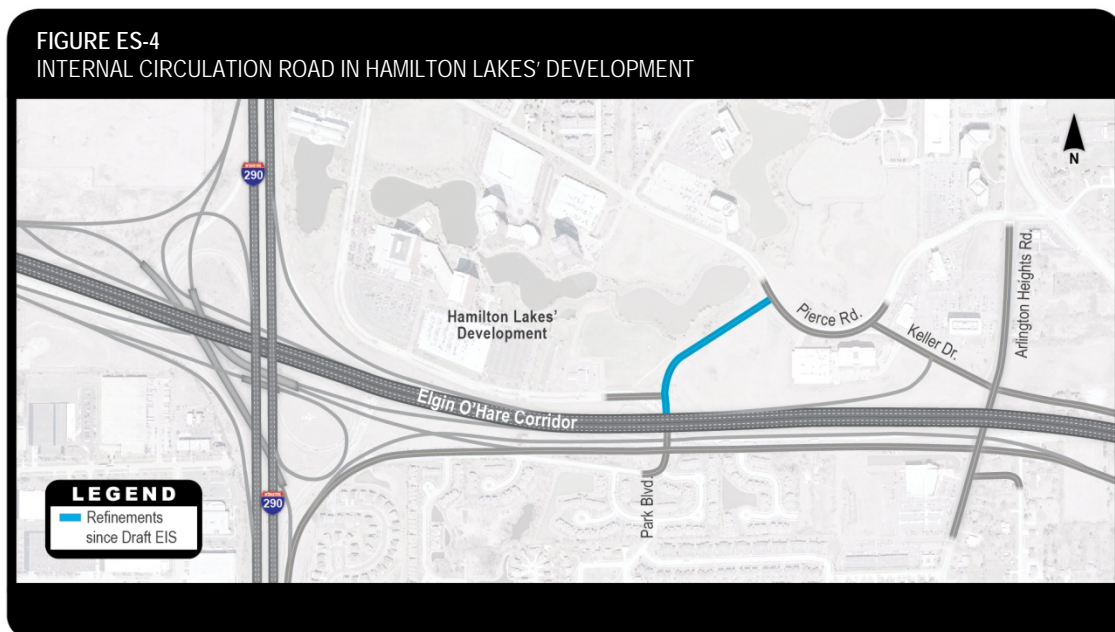
Both the Village of Bensenville and Elk Grove Village suggested that the frontage road system between IL 83 and York Road be revised (see Figure ES-3). They indicated that the proposed arrangement was circuitous, added to driver confusion, and impaired access to industrial and commercial development in the vicinity. The primary issue was the frontage road cross-over from the south side of the mainline to the north side at Supreme Drive. After further review of the arrangement, the frontage road was extended to IL 83 on the south side of the mainline. The extended frontage road from Supreme Drive to IL 83 would be one-way in the eastbound direction. The arrangement still requires the cross-over for



westbound travel on the frontage road for connection with IL 83. However, the extension provides greatly improved access to properties between IL 83 and Supreme Drive on the south side of the mainline. The revised frontage road system remains in the original footprint of the project. Therefore, no additional right-of-way is needed, no environmental resources are impacted, and no additional displacements of residential or commercial properties are required.

Internal Circulation Road in Hamilton Lakes' Development

The Village of Itasca and Hamilton Lakes' Development have been involved in the proposed EO-WB project from its inception. They have commented frequently on design aspects and, in particular, access to and from the community and a major development (Hamilton Lakes' Development) near the I-290 and Elgin-O'Hare Expressway interchange. During the Tier Two process, many access refinements have been considered for properties near the I-290 and Elgin O'Hare corridor interchange. During the review of the 2040 roadway plans, the Village of Itasca and Hamilton Lakes' Development requested an additional design refinement that would improve traffic circulation and connectivity to the Elgin O'Hare corridor with the addition of a roadway section connecting Park Boulevard to Pierce Road (see Figure ES-4). This new roadway section would ensure that traffic will flow efficiently through the Park Boulevard interchange and preserve mainline operations, and would improve the existing traffic distribution into and through the development. The traffic movement at the intersection of Park Boulevard and Pierce Road along with the new extension would warrant a traffic signal. The added roadway would not impact any natural resources nor displace any residential or commercial structures.



Intersection Design at IL 72 and Elmhurst Road

The intersection at IL 72 (Higgins Road/Touhy Avenue) and Elmhurst Road would be impacted by EO-WB project phasing-related traffic and requires improvements. As shown

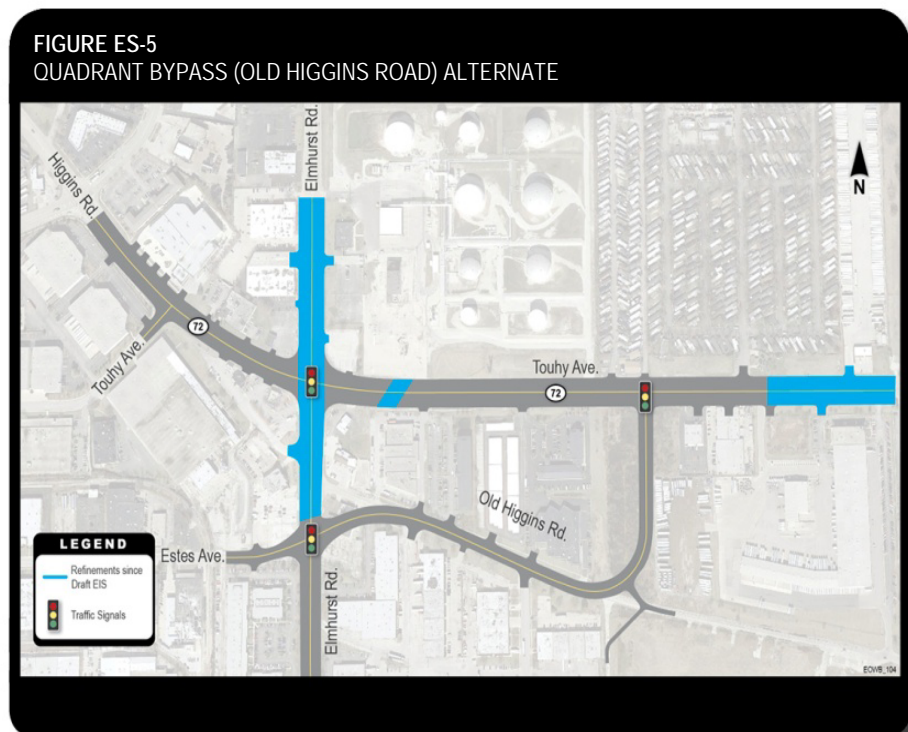
in the Tier Two Draft EIS, four design alternates were considered to improve future conditions including:

- Intersection Widening Alternate
- Continuous Flow Intersection (CFI) Alternate
- Quadrant Bypass (Old Higgins Road) Alternate
- Quadrant Bypass (Greenleaf Avenue) Alternate

Although some preliminary conclusions were reached in the Tier Two Draft EIS, additional study has been advanced since the publication of the Draft EIS to refine the intersection design. These additional studies, prompted by community comments, caused two alternates to be dismissed, and further modification of the other two alternates. A modified intersection improvement concept was developed that combines design features of the Intersection Widening Alternate and the Quadrant Bypass (Old Higgins Road) Alternate. Also, the Quadrant Bypass (Greenleaf Avenue) Alternate was refined to address design and environmental issues identified by community input during the public comment period.

The Quadrant Bypass (Old Higgins Road) Alternate includes several new features (see Figure ES-5). First, the configuration of the existing IL 72 and Elmhurst Road intersection would be generally maintained; however, four travel lanes are provided for northbound travel, adding to the efficiency of this travel movement. Additionally, Old Higgins Road would be realigned at the connection with Elmhurst Road. These

modifications would eliminate one turn phase at the existing IL 72 and Elmhurst Road intersection and provide more green time to critical movements. In addition, the realignment of Old Higgins Road provides added spacing between the intersections of IL 72 and Elmhurst Road and Old Higgins Road and Elmhurst Road with the objective to reduce northbound intersection queues from spilling through the Old Higgins Road and Elmhurst Road intersection.



The Quadrant Bypass (Greenleaf Avenue) Alternative intersection design has some important improvements including realignment of the bypass to avoid displacement of the Rogers property, and reduction of the width of Greenleaf Avenue near the connection with Elmhurst Road (see Figure ES-6). These



modifications avoid the displacement of six businesses, and further reduce business impacts at the intersection of Greenleaf Avenue and Elmhurst Road. The narrowed right-of-way avoids impact to internal traffic circulation and parking of adjacent properties. Although, the displacement of the Rogers property is avoided, some of the tenant parking would be impacted. Adjacent undeveloped properties would be purchased for replacement parking. This concept would also require the closure of several driveways near the Greenleaf Avenue and Elmhurst Road intersection. Impacts to natural resources would consist of 0.25 acre of low quality wetland.

The evaluation of the two remaining intersection alternates concluded that the Quadrant Bypass (Old Higgins Road) Alternate is the recommended preferred alternate. This alternate provides an overall reduction in traffic delay at the IL 72 and Elmhurst Road intersection. This alternate would displace one unoccupied building, but, overall, has less environmental resource impacts, less right-of-way requirements, and less business impacts in terms of parking loss, and impaired access to adjacent business properties. Unlike the Quadrant Bypass (Greenleaf Avenue) Alternate, the preferred alternate avoids encroachment on the Runway 9L-29R runway protection zone (RPZ).

Presently, the interchange improvement at Elmhurst Road and I-90 is planned early in the phasing, and the north leg of the West Bypass corridor is planned late in the phasing. This sequence causes traffic impacts to occur at the intersection of IL 72 and Elmhurst Road that require improvements to be operational by 2022. The construction phasing for the overall project is continually being refined and should adjustments in phasing occur, further discussions regarding the scope of the intersection improvement may be initiated.

Updates to Environmental Impacts

The environmental and socioeconomic impacts of the proposed project have been updated since the preparation of the Tier Two Draft EIS to reflect the design modifications (described in Section 2 of this report), and numerous smaller adjustments in the project’s footprint and other engineering refinements (e.g., drainage plans). Continuation of the highway development process has helped to further avoid or minimize impacts to resources. The impact updates are aligned with the major decisions described in the following subsection. An overall summary table shows the impact of the proposed project (see Table ES-1), and additional tables show the impacts for interchange design alternates at I-90 and Elmhurst Road and intersection alternates at IL 72 and Elmhurst Road (see Tables ES-2 and ES-3). Table ES-1 also shows, that in some cases, the amount of impact has been further reduced from those shown in the Tier Two Draft EIS. For example, wetland impacts have decreased from 24.4 acres to 22.8 acres of impact. Another example includes business displacements being reduced from 52 to 46.

TABLE ES-1 Summary of Environmental Consequences of the Build Alternative	
Resource	Impact
Socioeconomics	
Residential displacements (#)	7
Businesses displaced (employees displaced) (#)	46 (1,332)
Other business impacts (#) ^a	13
Proposed right-of-way required (acre)	595
- Business (acre)	375
- Public (acre)	199
- Residential (acre)	21
- Religious Institutions (acre)	0.02
Tax revenue loss (\$/%) ^b	\$4.5 M/0.13%
Job creation per year during construction period (# employees)	2,000–3,000 ^c
Job creation (permanent number of employees in project area)	41,000
Total economic output during construction period (\$)	\$6 B
Total federal tax revenue accrued during construction period (\$)	\$517 M
Total state tax revenue accrued during construction period (\$)	\$213 M
Annual local tax revenue added (related to new development that would be induced by the project) (\$)	\$16 M
Potential redevelopment of land (acre)	4,700 ^d

TABLE ES-1
Summary of Environmental Consequences of the Build Alternative

Resource	Impact
Cultural Resources	
Cultural resources impacted (#)	0
Noise	
Common Noise Environments impacted (#)	24 ^e
Natural Resources	
Stream crossings (total #)	10 ^f
Surface waters impacts (acre)	2.45
Floodplain encroachments (normal to 10 years/10 years to 100 years) (acre-feet)	22.3/35.8
Floodway encroachments (normal to 10 years/10 years to 100 years) (acre-feet)	12.1/15.7
Floodplain encroachments (#transverse/#longitudinal)	12/4
Floodway encroachments (#transverse/#longitudinal)	8/2
Wetland impacts (acre)	23.0
Trees	25,570 ^g
Threatened and endangered species (#)	0
Section 4(f) Resource Involvement	
Section 4(f) resources involved/adversely affected (#) ^h	4/0
Note: NA= Not applicable	
^a Represents parking removal and access rerouting.	
^b The tax revenue loss is related to displaced properties removed from the tax base.	
^c Range represents the differing number of employees required in a given year during the construction period. There would be over 40,500 full-time job equivalents created by 2040. These numbers were determined using the IMPLAN model.	
^d The amount of potential redevelopment (4,700 acres) is attributed to the combined development of the EO-WB project, O'Hare Modernization Program (OMP), and I-90 reconstruction. The EO-WB project by itself would cause about the same amount of acreage to redevelop, however, at a different density in some locations.	
^e There is a total of 44 Common Noise Environments.	
^f The Build Alternative will cross the project corridor waterways at 13 general locations. Impacts are proposed at up to 10 of these locations.	
^g Estimated from transect/sub-sample methodology, and includes impacts to trees within closed woodland, scrub-shrub woodland, wooded fencerows, and landscape areas.	
^h Involvement with all four Section 4(f) resources qualifies as temporary occupancy under 23 CFR 774.13(d), and therefore, do not qualify as adverse effects on the resources.	

TABLE ES-2
Comparison of Interchange Alternates at Elmhurst Road and I-90

	Alternate 3 (Traditional Diamond)	Alternate 4 (Diverging Diamond)
Wetland Impacts (acre)	0.0	0.01
Impact to Higgins Creek (acre)	0.03	0.11

TABLE ES-2
Comparison of Interchange Alternates at Elmhurst Road and I-90

	Alternate 3 (Traditional Diamond)	Alternate 4 (Diverging Diamond)
Impact to Higgins Creek Tributary A (acre)	0.07	0.07
100-year Floodplain Impacts (acre-feet)	13.5	14.2
Regulatory Floodway Impacts (acre-feet)	6.1	7.0
Tree Impacts (number)	124	124

TABLE ES-3
Comparison of Intersection Alternates at IL 72 and Elmhurst Road

	Quadrant Bypass (Old Higgins Road) Alternate	Quadrant Bypass (Greenleaf Avenue) Alternate
Business Displacements (number)	1 ^a	0
Residential Displacements (number)	0	0
Wetland Impacts (acres)	0.26	0.26
Tree Impacts (number)	112	120

^a Building is vacant.

Major Decisions and Alternatives

The Tier Two Draft EIS comparatively evaluated the project alternatives carried forward in the process (NEPA/404 Merger Group concurrence reached in October 2011), and numerous design alternates for various aspects of the projects. Whereas, Tier One selected the type and location of the transportation improvement, Tier Two would focus on the design details that would be located in the selected corridor. During Tier Two, many design alternates for interchange types, drainage features, transit requirements, and others were examined. For example, at each interchange location, up to seven alternates were examined based on operational characteristics, environmental effects, cost, and constructability. At all locations but one where further evaluation was warranted, a preferred design alternate was identified with extensive input from the stakeholders and communities. The consideration of alternates was applied to each of the design features of the project, and led to a single build alternative that represented the optimum combination of design elements that provided the best performance, reduced environmental impact, and was cost effective.

The Tier Two Draft EIS concluded with three decisions to be finalized in this Tier Two Final EIS, which include:

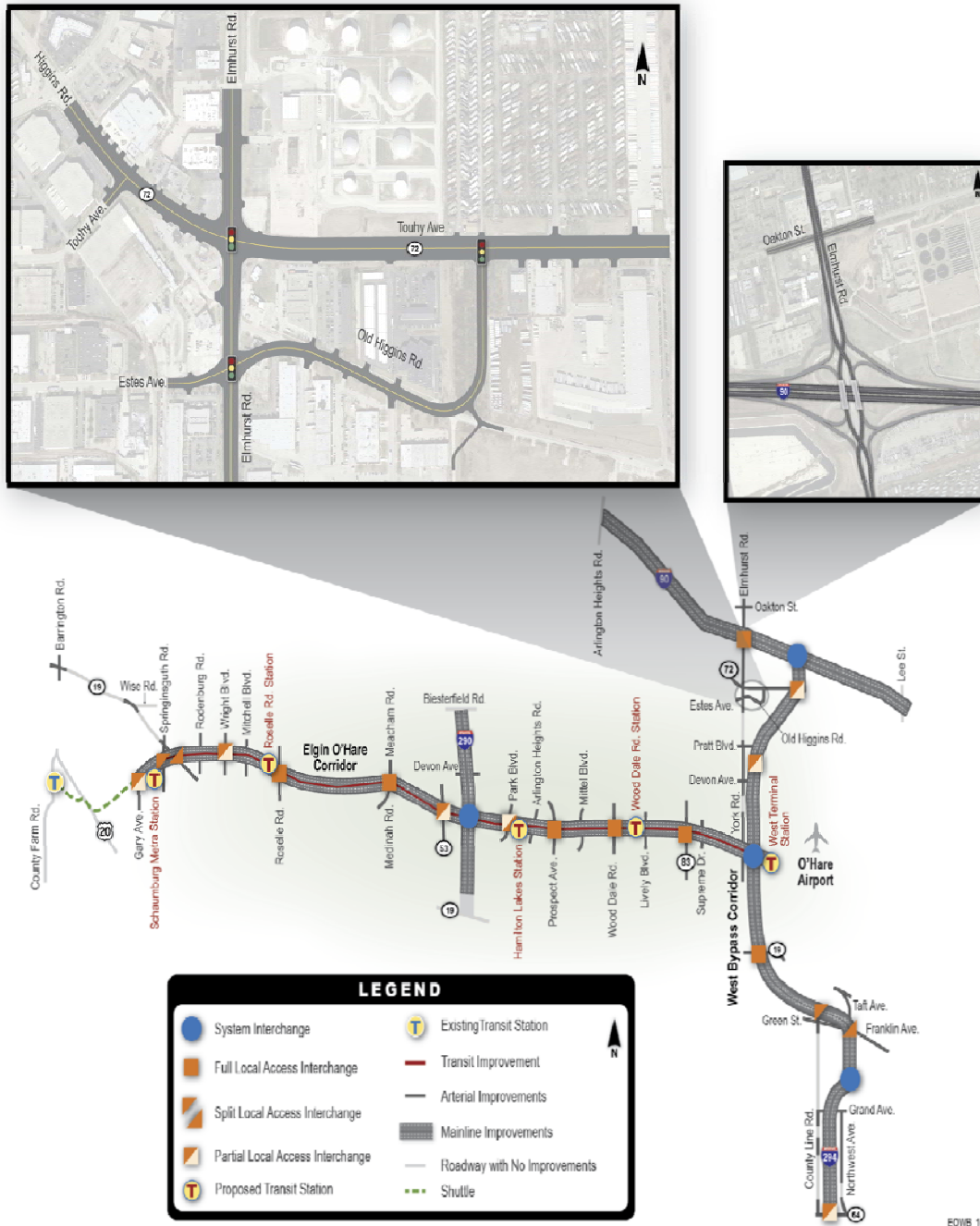
- Identification of the Preferred Alternative – Build versus No-Build Alternative.
- Identification of the preferred interchange design alternate at Elmhurst Road and I-90.
- Identification of the preferred intersection design alternate at IL 72 and Elmhurst Road.

This Tier Two Final EIS revisits each of the decisions that remain open and identifies the Preferred Alternative or alternate in each case. A summary of the Preferred Alternative and alternates, and a detailed analysis is included in Section 2.

The Build Alternative compared to the No-Build Alternative satisfies the project's Purpose and Need. The Build Alternative provides the needed efficiencies and improved operational characteristics that would maintain and enhance transportation in an area known as a regional transportation hub and its role as an economic center in the region. While enhancing mobility in the project area, the Build Alternative has been developed to be sensitive and compatible with the local community values and land use patterns of the surrounding communities. The final set of design features that comprise the Build Alternative were determined through a deliberate process of evaluating many design alternates against evaluation criteria that included environmental considerations, travel and operational performance, constructability, and cost considerations. Through this process, the Build Alternative achieves improved travel, while minimizing impacts to the important natural resources in the area. It has also been determined that the investment in the Build Alternative would provide extraordinary benefit to the local economy both during the period of construction, and in the long-term with the redevelopment opportunities that would be attracted to the area. The combined attributes of the Build Alternative make it the Preferred Alternative supported by the lead agencies (see Figure ES-7). This alternative received concurrence by the NEPA/404 Merger Group on September 6, 2012.

The lead agencies have concluded that the preferred alternates at Elmhurst Road and I-90, and IL 72 and Elmhurst Road are the diverging diamond (Alternate 4) and the Quadrant Bypass (Old Higgins Road) Alternate, respectively (see insets in Figure ES-7). These alternates received concurrence by the NEPA/404 Merger Group on September 6, 2012. Each provides the requisite operational performance required at these locations, and stakeholder involvement has been supportive of each decision. While performance has been achieved with both, the environmental impact of each has been reduced to fractional impacts, and impacts on adjacent businesses and residences are minor.

FIGURE ES-7
PREFERRED ALTERNATIVE



EOWB_104

Environmental Commitments and Mitigation

Mitigation is required for impacts to natural and human resources that are unavoidable. The project does not impact cultural, historical, or threatened and endangered species; therefore, no mitigation is required for those resources. For resource impacts that require mitigation, the project will adhere to all applicable federal, state, and local laws and regulations. A brief description of the primary mitigation measures and commitments are presented here (see subsection 3.21 for an expanded discussion).

- Impacted waters of the U.S., including wetlands, will be mitigated by the Illinois Tollway at determined ratios at off-site locations (within the Des Plaines River drainage basin) that are agreeable to federal and state resource agencies.
- The wetland/waters mitigation sites under consideration have been selected based upon the site's potential to satisfy the project's mitigation requirements and provide for sustainable improvement to the Des Plaines River drainage basin. A final decision regarding wetland mitigation approach and site selection will be completed during the Section 404 permitting process and Interagency Wetland Policy Act (IWPA) review.
- Acquisition of wetland/waters mitigation sites will be accomplished by one of two methods: 1) an intergovernmental agreement (IGA) between the Illinois Tollway and land steward that specifies a partnership, wherein the build out of mitigation and acquisition of land is accomplished; and 2) the Illinois Tollway both acquires and develops the property and conveys to the long-term property steward.
- Stormwater management strategies that benefit both the roadway and community needs (e.g., Village of Franklin Park) will be considered. Roadway stormwater runoff will be managed to avoid/minimize local flooding, degradation of water quality in nearby water resources, and wildlife hazard safety issues for nearby airports. Stormwater volume will be managed by a system of conveyance, detention, and infiltration basins in accordance with Illinois Tollway and IDOT requirements and while incorporating county requirements to the greatest extent practicable. Best management practices will be implemented in conjunction with the project's drainage conveyance and detention system to minimize the transport of sediment, heavy metals, and other pollutants to surface waters. Additional stormwater best management practices (e.g., best management practice swales and infiltration basins/trenches) will be installed where necessary to protect wetlands and surface waters.
- A suite of chloride water quality best management practices will be implemented to reduce potential impacts to receiving waters. Strategies to reduce chloride loads include: weather-related data sharing, coordination with local municipalities, review of current de-icing practices, and operator training where necessary.
- The proposed improvements will comply with FAA Advisory Circular (AC) No. 150/5200-33B, *Hazardous Wildlife Attractants on or near Airports* (dated August 28, 2007). Specific requirements pertaining to stormwater management facilities, wetland mitigation, and landscaping are being coordinated with and confirmed by FAA and the U.S. Department of Agriculture - Animal and Plant Health Inspection Service (USDA-APHIS). The principal criteria include no new wildlife attractants (e.g., open water,

wetlands, or vegetation attractive to wildlife) within five miles of O'Hare Airport and 10,000 feet of Schaumburg Airport. Engineering plans will be submitted to the FAA/USDA-APHIS for review and approval of the new design features within the limits prescribed by the advisory circular.

- Tree and vegetation replacement will be guided by IDOT and Illinois Tollway manuals. Planting replacement trees will take into account FAA's concern for aircraft safety pertaining to birds and other wildlife.
- The bottom of new culverts greater than 48 inches in diameter or height associated with waters of the U.S. will be buried below streambed elevations to maintain a more natural condition, when feasible. Bottomless culverts will be considered in final design, when feasible, based on size of the span, geometry, skew, potential environmental impact associated with its installation, and cost. It is important to note that if a culvert is less than 48 inches in diameter, it is very difficult to place riverbed material within the entirety of the pipe.
- Compliance with soil erosion and sediment control requirements will consider the use of the Kane-DuPage and North Cook County Soil and Water Conservation Districts' personnel (SWCD) (via agreements) for soil erosion and sediment control plan review and site inspection during construction.
- Traffic and access management will be accomplished with a variety of measures. Traffic access will be enhanced by a frontage road system along the east-west corridor at locations noted in the preliminary plans to maintain local access. Maintenance of traffic plans will be developed to sustain traffic flow during construction. Plans will be developed to ensure safe travels and quick response for school system buses and emergency services.
- Special waste encountered during construction will be managed to avoid unintended migration of contaminants and protect against potential worker exposures. Impacted material will be screened and characterized on a case-by-case basis and remediation methods determined. To the extent possible, on-site management is proposed. If necessary, unsuitable materials will be disposed at a licensed facility.
- The control of air pollution during construction will be compliant with the Illinois Tollway's Supplemental Specifications (Sections 107.36 and 107.37).
- The determination of proposed noise barriers has been in compliance with FHWA and IDOT guidance on selecting feasible and reasonable locations for barriers. During the Tier Two Draft EIS comment period and after, the benefited receptors from proposed barriers were sent a postcard requesting their vote as to whether or not they want barriers implemented. For all barriers except one, there was unanimous agreement that barriers should be implemented. Noise barriers that will be implemented include B2, C1, C2, C3, C4, D1, D3, E1, E2, E3, and E6. Based on the voting by benefited receptors, barrier E4 has been dismissed from further consideration. The implementation of the noise barriers will be carried forward into future phases of the project. The final design aspects of the barriers, including length, height, types of materials, etc., will be determined in final design. Public involvement venues will be used to update the public on final design details for the noise barriers and the schedule of implementation.

- Relocation of businesses and residences will be performed in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and IDOT's *Land Acquisition Policies and Procedures Manual* (IDOT, 2011c), and the Illinois Tollway's land acquisition policies, as applicable, to all residents and businesses displaced by the proposed improvements.
- The FAA has performed 7460 feasibility studies in both Tier One and Tier Two. The findings of this early work are guiding the preliminary design of the proposed roadway improvements to avoid airspace and navigational aid conflicts. The FAA's full 7460 (airspace compliance) analysis will be performed at the completion of the 60 percent engineering plans for roadway improvements that are located near or on airport property. A 7460 submittal will be prepared for FAA review and evaluation as final design is phased in the vicinity of the airport. Based on the recommendations from those reviews, aspects of the improvements will be adjusted to maintain compliance with airspace regulations.
- Glideslope antenna analyses will be used to determine any potential conflicts with signal transmission from the antenna to arriving aircraft. Based on the recommendation of the analysis, roadway design features may be adjusted to avoid signal conflicts.
- The EO-WB roadway improvements have been planned with due consideration for future transit improvements to be provided by others along the Elgin O'Hare corridor, north leg of the West Bypass corridor, and the I-90 corridor.
- Space is reserved for bicycle and pedestrian facilities within, adjacent, or crossing select sections of planned roadway improvements. In most cases, routes would be parallel to the frontage road system along the Elgin O'Hare corridor and would provide connections to north-south regional trails. Existing paths impacted by the construction of the proposed improvements would be replaced in-kind. Where existing bicycle and pedestrian trails and state highway routes cross the proposed roadway improvement, bicycle and pedestrian facilities would be incorporated into the design to provide restoration of the existing trails and in compliance with IDOT's "Complete Street's Policy" at state routes. Local cost-sharing is anticipated for construction of new bicycle and pedestrian facilities and their long-term maintenance.
- Sustainable practices and principles will be applied to the EO-WB project that align with the objectives of the Illinois Tollway.
- The aesthetic design guidelines developed by the Corridor Aesthetics Advisory Team (CAAT) will be used to guide further associated design efforts.

Implementation

In October 2010, Illinois's Governor Quinn formed the EO-WB Advisory Council to develop a strategy for the implementation of the EO-WB project. Their work spanned over eight months and concluded with a consensus opinion that a financially achievable project would be attained with the Illinois Tollway as the preferred implementing agency (see Appendix A). In September 2011, the Illinois Tollway Board enacted a system toll increase that would

finance a 15-year capital improvement program, *Move Illinois: The Illinois Tollway Driving the Future*, which includes the EO-WB project (Illinois Tollway, 2011).

A phased approach is recommended for the implementation of the EO-WB project. The Build Alternative, as identified in this Tier Two Final EIS, is designed to accommodate long-term (year 2040) travel demand. While the overall Build Alternative addresses long-term travel needs in the area, it comes at a relatively high cost. Therefore, an Initial Construction Plan (ICP) was developed with the goal of being a more financially attainable first phase of the project. The ICP maintains the integrity of the full project and serves the area's sizable travel needs through an interim design period of 2030. The ICP would include improvements along all sections of the project but with fewer initial travel lanes, fewer interchanges, and in some cases, new interchanges that would accommodate fewer movements. The remaining added travel lanes and interchange improvements included in the Build Alternative would be considered as travel demand and future funding becomes available.

In accordance with the FHWA requirements for major projects such as the EO-WB project, an independent Cost Estimate Review (CER) for the ICP was conducted in May 2012 to verify the accuracy of and reasonableness of the total estimated cost. The total project costs are estimated to range from \$3.1 billion to \$3.6 billion, in year of expenditure dollars, escalated to the midpoint of construction. The Illinois Tollway has programmed 90 percent of the funding, and an additional \$300 million to be contributed by others, or in-kind contributions.

The EO-WB project was proposed as a multimodal solution, and as such, the responsibility for the implementation will involve others. While, the Illinois Tollway will be mainly responsible for the implementation of the roadway improvements, transit providers will be responsible for implementing the transit infrastructure (i.e., pavement, track, stations, signage/signals, and station parking). Additionally, some arterial improvements would be provided by others. Bicycle and pedestrian facilities are planned in some sections of the roadway corridor, and local cost-sharing is anticipated for the construction of new bicycle and pedestrian facilities and their long-term maintenance.

The schedule of implementation for the ICP, as shown in the Illinois Tollway's capital improvement program, *Move Illinois: The Illinois Tollway Driving the Future*, would span approximately 12 years (2013-2025). The phased sections of the ICP include:

- West Section – Mainline widening (to the inside) and reconstruction from IL 19 to Meacham Road/Medinah Road; interchange improvements at IL 19 and Roselle Road.
- Central Section – Mainline widening and resurfacing from Meacham Road/Medinah Road to IL 53 and new mainline construction from IL 53 to Salt Creek; interchange improvements/construction at Meacham Road/Medinah Road, IL 53, I-290, Park Boulevard, and Arlington Heights Road/Prospect Avenue; improvements to connecting roadways.
- East Section – New mainline construction from Salt Creek to O'Hare Airport and portion of south leg of the West Bypass through IL 19; interchange construction at Wood Dale Road, IL 83, Elgin O'Hare/West Bypass, and IL 19; improvements to connecting roadways.

- South Section – New mainline construction from IL 19 to I-294 and mainline improvements along I-294; interchange construction at Franklin Avenue/Green Street and I-294; new interchange access at I-294/IL 64; improvements to connecting roadways and construction of Taft Avenue connector.
- North Section – New mainline construction from O’Hare Airport to I-90 and mainline improvements along I-90 approximately one mile west of Elmhurst Road to approximately a half mile east of the West Bypass/I-90 interchange; new interchange access at Elmhurst Road/I-90; improvements to connecting roadways (i.e., Elmhurst Road, Touhy Avenue, etc.).

The ICP meets the FHWA measures of operational independence. The ICP represents a functionally complete project that addresses diverse travel needs in the study area, and the ICP design provides a project with logical improvement limits (project termini). Further, the ICP includes design features that will provide acceptable traffic operations in the 2030 ICP design year, including required improvements to adjacent highways (freeways, toll roads, arterials, secondary roadways), thus, demonstrating its operational independence.