• Additional economic benefits from construction of the EO-WB project combined with the other improvements would result in \$10.6 billion in construction costs over the 13-year period from 2013 through 2025. Annual construction costs would range from \$181 million to over \$1.3 billion. Total value added for the project would be an estimated \$11.6 billion over the construction period, while total sales volume (as measured by total output), would be \$21 billion. Between 2013 and 2025, approximately 8,000 to 13,700 jobs would be created annually; and only in the last year, as construction is completed, would jobs decrease to less than 3,000.

The Build Alternative is based on comprehensive transportation planning that considers the need for present and future traffic movement within the context of existing and future land use development and the environment. Therefore, the short-term impacts and use of resources by the proposed action is consistent with the maintenance and enhancement of long-term productivity.

3.19 Irreversible and Irretrievable Commitment of Resources

The Build Alternative would involve committing a range of natural, physical, human, and fiscal resources. Land acquired for constructing the proposed project is considered an irreversible commitment during the period the land is used for highway purposes. Right-of-way requirements would convert land from residential, commercial, and natural resource uses to transportation use. The Build Alternative is generally compatible with land use patterns within the project area, and adjacent land uses would remain consistent.

Fossil fuel, labor, and highway construction materials, such as steel, cement, aggregate, and asphalt, would be required during construction. Considerable labor and natural resources would be used in construction. Those resources generally are irretrievable (although they can be recycled somewhat), but their use overall would not adversely affect continued availability.

The Build Alternative would require irretrievable federal, state, and local funding. Land converted from private to public uses would reduce local tax revenues.

Resources are committed based on the concept that residents in the project area, the region, and the state benefit from the improvements brought about by the proposed project. Improved access to commercial and industrial areas, reduced travel times, and increased economic development are expected to outweigh the commitment of resources in the long term.

3.20 Permits and Approvals

Implementation of the EO-WB project would require regulatory permits and approvals. The primary federal and state permits and approvals are listed below and briefly described in the following subsections.

- Section 404 of the CWA permit from USACE.
- Section 401 of the CWA water quality certification from IEPA.

- Confirmation that the soil erosion and sediment control plan meets technical standards from the North Cook County and/or Kane/DuPage County SWCD.
- Section 402 of the CWA NPDES construction permit from IEPA.
- Section 402 of the CWA general NPDES permit for pesticide application point source discharges from IEPA.
- Construction in floodplains and floodways of rivers, lakes, and streams permits from IDNR-OWR.
- IWPA approval from IDNR.
- Land or Land Use Release approval from FAA.
- Amended O'Hare ALP approval from FAA.
- 7460 review and approval from FAA.
- Section 129 compliance approval from FHWA.
- Access Justification Report approval from FHWA.

3.20.1 Section 404 of the Clean Water Act

The Build Alternative would have impacts on surface waters (e.g., creeks) and wetlands (see subsections 3.10 and 3.13, respectively). The discharge of dredge or fill materials into jurisdictional waters of the U.S., including wetlands, is subject to the requirements of Section 404 of the CWA. The permitting process for the Build Alternative would vary, depending upon implementation as a single project or a phased project. If the Build Alternative is implemented as a single project, an individual permit most likely would be required from USACE–Chicago District for all impacts on jurisdictional wetlands and waters of the U.S. that are associated with the project. For the scope of the proposed EO-WB project improvements, federal jurisdiction under Section 404 of the CWA would be assumed for all of the project corridor wetlands.¹⁰⁴ If the preferred alternative is phased or implemented over time as several projects, the likely regulatory scenario would be Section 404 permits for each stand-alone improvement. For some projects, however, impacts on wetlands and waters of the U.S. may be minimal and would qualify for the Regional Permit Program.

3.20.2 Section 401 of the Clean Water Act

The Section 404 CWA permit is contingent upon receipt of Section 401 (CWA) water quality certification. States are granted authority to review activities in wetlands and waters of the U.S. and to issue Section 401 water quality certification that the activity is not likely to violate state Water Quality Standards. In Illinois, IEPA issues Section 401 water quality certification. IEPA has granted Section 401 water quality certification for projects that qualify for the USACE Regional Permit Program.¹⁰⁵ Individual water quality certification is

¹⁰⁴ The USACE acknowledged this approach at the NEPA/404 merger meeting on February 15, 2011.

¹⁰⁵ On January 31, 2007, IEPA granted Section 401 water quality certification (with conditions) for all Regional Permits, except for activities in certain waterways as noted in Regional Permits 4 and 8. These waterways do not include the creeks that pass through the project corridor.

required for projects that are reviewed as individual Section 404 CWA permits. Individual water quality certification requires an anti-degradation review, which is subject to public review. A project description and results of the anti-degradation review would be posted on the IEPA website for comment.

3.20.3 Soil and Water Conservation District Review of Erosion and Sedimentation Control Plans

A cooperative agreement between the USACE and the local SWCDs requires a detailed review of erosion and sediment control in conjunction with Section 404 permitting. In North Cook County, review would be conducted by the North Cook County SWCD; whereas, in DuPage County, the review would be conducted by the Kane-DuPage County SWCD. During Section 404 permitting, a soil erosion and sediment control plan for the Build Alternative would be prepared and submitted to the appropriate SWCD office for confirmation that the plan meets technical standards. The soil erosion and sediment control plan would require installation, maintenance, repair, and inspection of soil erosion and sediment control best management practices throughout the construction process.

3.20.4 National Pollutant Discharge Elimination System Construction Permit

This project is anticipated to result in the disturbance of one or more acres of total land area. Accordingly, the project is subject to the requirement for an NPDES permit for stormwater discharges from the construction sites. Permit coverage for the project would be obtained either under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit Number ILR10) or under an individual NPDES permit. Requirements applicable to such a permit would be followed, including the preparation of a SWPPP. Such a plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. The SWPPP also shall describe and ensure the implementation of practices that would be used to reduce the pollutants in discharges associated with construction site activity and to assure compliance with the terms of the permit. Potential impacts to surface waters as a result of construction activities and measures to minimize harm are discussed in subsection 3.10.

3.20.5 General National Pollutant Discharge Elimination System Permit for Pesticide Application Point Source Discharges

Routine vegetative maintenance (e.g., mowing and/or the use of herbicides) within highway rights-of-way is necessary to preserve motorist visibility (line of sight), prevent sign and signal obstruction, control invasive species, and to avoid other types of vegetation-related travel interference. A General NPDES Permit (NPDES Permit Number ILG87) from IEPA is required for pesticide application point source discharges to waters of the state, including the application of herbicides (that leave a residue) in (or over) the water or at a water's edge. The permit requires the use of pest management measures to minimize pesticide discharge to surface waters, visual monitoring, and record-keeping/reporting.¹⁰⁶ IDOT and/or the Illinois Tollway will obtain permit coverage prior to herbicide application activities near surface waters, as necessary.

¹⁰⁶ The permit also requires preparation and submittal (to IEPA) of a Pesticide Discharge Management Plan, if the permittee exceeds annual treatment area thresholds.

3.20.6 Floodway and Floodplain Construction Permits

The IDNR-OWR issues construction permits for work within regulatory floodways and for the encroachment of regulatory floodplains serving a tributary area of 640 acres or more in an urban area, and a tributary area of 6400 acres or more in a rural area. The purpose of 17 Illinois Administrative Code 3708 is to provide rules governing construction and filling in the regulatory floodway of rivers, lakes, and streams of Cook, DuPage, Kane, Lake, McHenry, and Will Counties, excluding the City of Chicago. The 17 Illinois Administrative Code 3700 applies to all rivers, lakes, and streams under IDNR jurisdiction, except those defined by 17 Illinois Administrative Code 3708. The Build Alternative would require issuance of these permits. Potential floodplain and floodway impacts are described under subsection 3.12.2.

3.20.7 Interagency Wetland Policy Act-Related Approval

Additional state agency requirements are established under the Illinois IWPA of 1989, so that there is no overall net loss of the state's existing wetland acres or their functional value. The act pertains to state activities (or activities accomplished with state funds) that impact wetlands. For this project, authorization under the IWPA would be sought from IDNR. See subsection 3.13 for a discussion of the project corridor wetlands, their functions, and potential impacts associated with the proposed project.

3.20.8 Federal Aviation Administration Concurrent Land Use Approval

Utilization of airport property for the West Bypass corridor is subject to FAA's land use policy. The FAA would only agree to approve airport property for non-aeronautical uses (e.g., roadway uses) if it can be demonstrated that such use is not imperative to the core function of the airfield, and would serve a defined benefit. In general, the analysis has to demonstrate that approving the land for non-aviation uses would result in equal or greater benefit to the airport. The FAA has determined that where the roadway is located in an RPZ, the underlying property would be retained by the City of Chicago ownership. In these cases, the Federal action would be a concurrent land use approval, and compensation for its use will be negotiated between the City of Chicago and the Illinois Tollway. Since 40 percent of the highway corridor on airport property would be in an RPZ, the City of Chicago would grant a permanent easement for the entirety of the EO-WB project that is located on airport property to the Illinois Tollway. The process requires that submittal of the concurrent land use request originate from the land owner (i.e., CDA).

3.20.9 O'Hare Airport Layout Plan Update

Companion to the concurrent land use request would be a request to update the airport's ALP with the inclusion of the proposed West Bypass improvement. The update would include an illustration showing the footprint of the highway corridor on the ALP. The ALP update would be a City of Chicago-generated document and would accompany the request for concurrent land use to the FAA.

3.20.10 Federal Aviation Administration 7460 Review

The FAA regulates airspace and obstacle clearance requirements near airport operations. Obstacle clearance requirements control the height of structures or objects in aircraft operating areas. As such, FAA requires a 7460 review of the proposed transportation improvements and their possible conflicts with controlled air space. Because of the magnitude of this project, FAA has agreed to conduct early review with the objective of achieving a project design that is compatible with airspace and airfield operations. See subsection 3.4.1.3 for a discussion of the results of FAA's airspace review.

3.20.11 Federal Highway Administration Section 129 Compliance and Approval

The Build Alternative proposes that the new Elgin O'Hare and West Bypass corridors be constructed and operated as tolled facilities, and that the existing Elgin-O'Hare Expressway section between US 20 and Meacham Road be widened and subsequently converted to a tolled facility. If federal-aid funds are used for construction of or improvements to a toll facility, or if a state plans to reconstruct and convert a free highway previously constructed with federal-aid funds to a toll facility, a toll agreement between FHWA, IDOT, and the Illinois Tollway under Section 129(a)(3) must be executed. A Section 129 toll agreement would be required since federal-aid funds have been used for several activities, including construction of the existing Elgin-O'Hare Expressway, as well as for the ongoing preliminary engineering and advance right-of-way acquisition activities. The agreement would stipulate requirements for use of toll revenues along the EO-WB corridors related to prior and ongoing federal funding investments.

3.20.12 Federal Highway Administration Access Justification Report

The Build Alternative requires modifications in access at I-290, a federal-aid interstate highway. Title 23, United States Code, Highways Section 111 (23 U.S.C. 111) stipulates that the Secretary of the U.S. Department of Transportation shall approve plans for access modifications along the Interstate System. The Secretary has delegated the authority to administer 23 U.S.C. 111 to the Federal Highway Administrator pursuant to 49 CFR 1.48(b)(10). The FHWA's decision to approve new or revised access points to the Interstate System should be supported by substantiated information justifying and documenting that decision in the form of an Access Justification Report. Proposals to modify interstate highway access must:

- Consider the planning, environmental, design, safety and operational effects of the proposed change.
- Support the intended purpose of the Interstate System.
- Avoid adverse impacts on safety and operations on of the Interstate System and connecting transportation system.
- Be designed to acceptable standards.

A Final Access Justification Report documenting proposed access modifications at I-290 will be prepared and processed for FHWA approval after the Tier Two ROD is signed.

3.21 Environmental Commitments

This subsection summarizes the many mitigation measures and commitments that have been identified during development of the project. More detailed descriptions of each are contained in their respective discipline discussions in this document. In general, the project will adhere to all federal, state, and local laws and regulations that pertain to the varied