TIGER Discretionary Grant

Project Narrative

Elgin O'Hare West Bypass

Lead Applicant

DuPage County

Joint Lead Agencies

Illinois Department of Transportation Illinois State Toll Highway Authority

Elgin O'Hare West Bypass Project Narrative

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I. Project Description

The EOWB is a project of national, statewide, and regional significance. Located west of O'Hare International Airport (O'Hare), the 120 square mile project area serves as a major transportation hub in the region. In addition to O'Hare, the area includes major freight rail corridors and intermodal facilities, transit services, and major interstate highways. It also contains the second largest employment base in the Chicago metropolitan area, with more than 500,000 jobs. With the extension of the Elgin-O'Hare Expressway, the creation of a Western Bypass along the west side of O'Hare that connects I-90 and I-294, and space to accommodate mass transit, the EOWB will sustain the area's global competitiveness, promote business retention and attraction, and create new jobs.

The EOWB study area is bounded roughly by I-90 on the north, I-294 on the east, I-290 on the south, and the Elgin O'Hare Expressway on the west. This area is characterized as a transportation crossroads that includes O'Hare International Airport, a network of freeways and tollways, transit facilities (including Metra rail lines and Pace bus service), freight rail service, and multimodal transfer facilities. Given its geographic position as a transportation and employment hub, 18 percent of all vehicle trips in the region occur in the EOWB study area. This sizeable travel demand, however, has been outpacing the capacity of the transportation infrastructure resulting in severe traffic congestion, traffic delays, and reduced travel efficiency.



The EOWB was designated as a project of regional and national significance, one of only a dozen such projects in the nation, by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The Chicago Metropolitan Agency for Planning's (CMAP) *GO TO 2040 Comprehensive Regional Plan* identified EOWB as one of the top major capital projects that would provide congestion relief and enhanced accessibility to the area surrounding O'Hare, a major economic driver in the region. The Urban Land Institute Chicago also named the EOWB as on one of the major infrastructure —game changers needed to maintain the region's competitive edge, as well as foster equitable growth and increase connectivity.

Highway transportation planning has long focused on providing travel mobility in the study area. The Elgin O'Hare Corridor was first introduced as a proposed highway facility in 1967. Following environmental studies and engineering plans by IDOT in the late 1980's and 1990's, the first phase of the Elgin-O'Hare Expressway between Hanover Park and Itasca was completed in 1993. The Illinois State Toll Highway Authority (ISTHA) first studied the O'Hare West Bypass in 1987, and again in 1996. More recently, a proposal for western access to the O'Hare International Airport was adopted as part of O'Hare's Future Airport Layout Plan in 2005. In conjunction with the airport's plan, DuPage County prepared a long-term vision study for the West O'Hare Corridor examining both land development potential and transportation needs including the extension of the Elgin O'Hare Expressway and the development of the O'Hare West Bypass.

FHWA and IDOT are currently advancing this project using the tiered process. Tier One involved an examination of the overall transportation system needs, a study of alternative improvements to satisfy them, and consideration of the environmental and social impacts of the reasonable alternatives. The Tier One analysis was completed at a sufficient level of engineering and environmental detail to assist decision makers in selecting the modes, type and location of transportation improvements that address the project's purpose and need, as well as allow for advanced acquisition. The record of Decision (ROD) was issued June 17, 2010, and is included as an attachment for reference.

The Selected Alternative will be advanced into Tier Two, where detailed engineering and environmental studies will focus on refinement of the planned improvements and the corridor footprint. The outcome of Tier Two will be preliminary roadway geometry; defined right-of-way requirements; environmental documentation including Draft and Final Environmental Impact Statements (EIS) and a Record of Decision; commitments for the mitigation of impacts to environmental and social resources; a financing plan that identifies the sources of funding and the timing of their availability; and a management plan that lays out the time phased development of the project. The conclusion of Tier Two will set the stage for developing the final design drawings, construction documents and acquisition of all needed property.

The Federal Highway Administration (FHWA) and the Illinois Department of Transportation (IDOT) determined through the Tier One Study that the Selected Alternative best accomplishes the project's purpose and need, which is as follows:

- Improve regional and local travel by reducing congestion
- Improve travel efficiency
- Improve access to O'Hare Airport from the west
- Improve modal opportunities and connections

The Selected Alternative consists of upgrading and extending the Elgin O'Hare Expressway between IL 19/Gary Avenue to the O'Hare West Bypass for about 10 miles. Between IL 19/Gary Avenue and I-290, the expressway would be widened and upgraded along the existing alignment. East of I-290, extending to the West Bypass and the proposed O'Hare West Terminal, Thorndale Road would be upgraded to a new full-access control freeway. The mainline facility would be three to four basic lanes in each direction, with additional auxiliary lanes between high volume interchanges. A 70-foot median would accommodate potential dedicated transit service in the future. To accommodate



local traffic circulation, frontage roads would be provided extensively throughout the corridor. Service interchanges would provide access at IL 19, Springinsguth Road, Wright Boulevard, Roselle Road, Meacham Road, Rohlwing Road, Park Boulevard, Arlington Heights Road/Prospect Avenue, Wood Dale Road, and IL 83. Access to other intersecting roadways would be provided by a frontage road system. A full-access system interchange would be provided at I-290. In many cases, crossroad improvements at interchange locations would extend several hundred feet north and south to accommodate increased traffic movements.

The Selected Alternative also includes the O'Hare West Bypass, a freeway section that would extend from I-90 at the current location of the Des Plaines Oasis, south along the western edge of O'Hare Airport to the Bensenville Yard. The bypass would then tunnel under and extend east along the north side of Green Street/Franklin Avenue before turning south to connect with I-294. South Bypass Connection Option D was identified as the preferred alignment for connecting to I-294 beginning at the tunnel under the Bensenville Yard. The freeway generally would extend southeast along the north edge of Green Street, then cross the Union Pacific Railroad (UPRR) and proceed south, paralleling the east side of the railroad, to a new system connection with I-294 near Grand Avenue. A new bridge that reconnects Taft Road across the Bensenville Yard, linking Franklin Avenue and IL 19 would be constructed, and a full access system interchange would be provided at I-294. Part of I-294, extending roughly from Grand Avenue south to North Avenue, would be improved to accommodate system ramp connections and lane balance requirements. The overall length of the O'Hare West Bypass is 6.2 miles. The freeway would consist of four basic lanes in each direction with additional auxiliary lanes at interchanges, and a 70-foot median would accommodate transit service north of Thorndale Avenue. System interchanges are proposed at I-90, the Elgin O'Hare Expressway, and I-294. Service interchanges are proposed at IL 72, Devon/Pratt, the proposed O'Hare West Terminal, IL 19, and Green Street/Franklin Street.

II. Project Parties

DuPage County is taking the lead role for this TIGER application to pursue gap funding for the full construction of the EOWB. The next section identifies in more detail the breakdown of costs and the funding commitment that has been made by the Illinois State Toll Highway Authority through a recently approved Capital Program.

Going forward the Illinois Tollway has committed to constructing the EOWB including the widening and rehabilitation of the existing Elgin O'Hare Expressway, the east extension of the Elgin O'Hare, and the West Bypass between I-90 and I-294.

As part of the Tier One Process a Stakeholder Involvement Plan (SIP) was developed to provide a guide for implementing stakeholder involvement for the EOWB. The goal of the SIP is to actively seek the participation of communities, agencies, individual interest groups, and the general public throughout the project development process. The SIP provides the framework for achieving consensus and communicating the decision-making process between the general public, public agencies, and governmental officials to identify transportation solutions for the project. The SIP:

- Identifies stakeholders,
- Identifies the roles and responsibilities of the joint lead agencies,
- Identifies the cooperating agencies (CAs) and participating agencies (PAs) to be involved in agency coordination,
- Establishes the timing and type of involvement activities with all stakeholders, and
- Establishes stakeholder requirements for providing timely input to the project development process.

Further details of the agency and stakeholder involvement are provided in Section D – Partnership. The SIP document has been included as an attachment for reference.

III. Grant Funds and Sources/uses of Project Funds

As mentioned earlier, funding was included in the 2005 SAFETEA-LU for this project to initiate project development. IDOT's Highway Improvement Program for fiscal years 2010 to 2015 reflects allocations for planning, engineering and land acquisition monies to support the development of the EOWB. The breakdown for this initial funding was \$140 million in Federal dollars with \$35 million in State matching funds.

The Illinois Tollway has developed a comprehensive 15-year capital program to complete the rebuilding of the 52-year-old system and commit nearly \$12 billion in transportation funding to improve mobility, relieve congestion, reduce pollution and link economies across Northern Illinois. Move Illinois: *The Illinois Tollway Driving the Future*, maps out the Illinois Tollway's next capital program for 2012 - 2026. The new capital program for the Illinois Tollway will create jobs, stimulate local economies and provide the congestion relief customers want and need. The Illinois Tollway is committed to ensuring that this region remains competitive with other major cities in the U.S. and around the world and unlocking the economic potential of the region for years to come.

The Tollway's capital program includes rebuilding the Jane Addams Memorial Tollway (I-90) as a 21st century, state-of-the-art corridor linking Rockford to O'Hare Airport, a new interchange to connect I-294 to I-57 – one of only two places in the nation where interstates cross but do not connect – and a **new all-electronic Elgin O'Hare West Bypass that can provide western access to one of the nation's busiest airports**. In addition, the program addresses the remaining Tollway system needs.

The capital program is financed by bonds backed by a toll increase effective January 1, 2012, for passenger vehicles and a previously approved commercial toll rate increase beginning in 2015. I-PASS customers would see a toll rate increase of 35 cents at a typical mainline toll plaza, with cash-paying passenger vehicles continuing to pay double the I-PASS rate.

Project	Today's Dollars	Actual Dollars*	Tollway Commitment
Existing System's Needs	\$6.1 Billion	\$8.5 Billion	\$8.3 Billion
I-294/I-57 Interchange**	\$570 Million	\$887 Million	\$604 Million
Elgin O'Hare West Bypass***	\$2.2-\$3.6 Billion	\$3.4 - \$5.8 Billion	\$3.1 Billion
Planning for Illinois Route 53 North Extension and the Illiana Expressway	\$100 Million	\$126 Million	\$126 Million
Total	\$9.0-\$10.4 Billion	\$12.9-\$15.3 Billion	\$12.1 Billion

* Actual dollars escalated through 2006

** Partially funded by IDOT

*** \$300 Million funding gap – paid by federal, local contribution or other funding source Source: Move Illinois: *The Illinois Tollway Driving the Future*, Capital Program Summary August 2011

Elgin O'Ha	are West Bypass					
Need	Project Type	Project Limits	Length (Miles)	Construction Period	Project Cost Present Value (Millions)	Project Cost Escalated* (Millions)
Regional Gro	wth					
	Rehabilitate 4 Lanes/ Add 2 Lanes	Existing Elgin O'Hare Expressway US Route 20 to Rohlwing Road	6.0	2013	\$48.0	\$53.0
System Expansion	Construct 4 New Lanes	Elgin O'Hare Expansion Rohwling Road to York Road via Thorndale Avenue	4.8	2014-2017	\$725.0	\$881.0
		South Leg of West Bypass Thorndale Avenue to I-294 via York Road	3.0	2018-2022	\$674.0	\$1,046.0
		North Leg of West Bypass Thorndale Avenue to I-90 via York Road	3.2	2023-2025	\$453.0	\$854.0
	Toll Collection Infrastructure	US Route 20 to West Bypass I-294 to I-290	n/a	2013-2025	\$165.0	\$265.0
Elgin O'Hare West Bypass Total				\$2,065.0	\$3,099.0	

Source: Move Illinois: The Illinois Tollway Driving the Future, Capital Program Summary August 2011

For this TIGER Discretionary Grant, DuPage County is pursuing funding in the amount of \$50 million to help reduce the \$300 million funding gap identified in the table above. The breakdown of funding and percentage of shares for all parties providing funds is represented below:

Source	Amount	Percentage Share
Illinois State Toll Highway Authority	\$3.1B	86.7%
SAFETEA-LU Federal Earmark	\$140M	3.9%
TIGER Request	\$50M	1.4%
State Match (to-date)	\$35M	1.0%
Local Contribution (TBD)	\$250M	7.0%
Totals	\$3.575B	100%

The total Federal share for the implementation of this project would be only 5.3% under this scenario.

IV. Selection Criteria

a. Long-Term Outcomes

i. State of Good Repair

The Selected Alternative is comprised of both roadway and multimodal elements.

Elgin O'Hare Expressway

The highway improvements consist of upgrading and extending the Elgin O'Hare Expressway between IL 19/Gary Avenue to the O'Hare West Bypass for about 10 miles. Between IL 19/Gary Avenue and I-290, the expressway would be widened and upgraded along the existing alignment. East of I-290, extending to the West Bypass and the proposed O'Hare West Terminal, Thorndale Road would be upgraded to a new full-access control expressway. The mainline facility would be three to four basic lanes in each direction, with additional auxiliary lanes between high volume interchanges. A 70-foot median would accommodate potential dedicated transit service in the future. To accommodate local traffic circulation, frontage roads would be provided extensively throughout the corridor. Service interchanges would provide access at IL 19, Springinsguth Road, Wright Boulevard, Roselle Road, Meacham Road, Rohlwing Road, Park Boulevard, Arlington Heights Road/Prospect Avenue, Wood Dale Road, and IL 83. Access to other intersecting roadways would be provided by a frontage road system. A full-access system interchange would be provided at I-290.





O'Hare West Bypass

The Selected Alternative also includes the O'Hare West Bypass, a freeway section that would extend from I-90 at the current location of the Des Plaines Oasis to I-294, about 6.2 miles along the western edge of O'Hare Airport. The expressway generally would extend southeast along the north edge of Green Street, then cross the Union Pacific Railroad and proceed south, paralleling the east side of the railroad, to a new system connection with I-294 near Grand Avenue. A new bridge that reconnects Taft Road across the Bensenville Yard, linking Franklin Avenue and IL 19 would be constructed, and a full-access system interchange would be provided at I-294. Part of I-294, extending roughly from Grand Avenue south to North Avenue, would be improved to accommodate system ramp connections and lane balance requirements.

The expressway would consist of four basic lanes in each direction with additional auxiliary lanes at interchanges, and a 70-foot median would accommodate transit service north of Thorndale Avenue. System interchanges are proposed at I-90, the Elgin O'Hare Expressway, and I-294. Service interchanges are proposed at IL 72, Devon/Pratt, the proposed O'Hare West Terminal, IL 19, and Green Street/Franklin Street.

The Selected Alternative would be supported by crossroad improvements needed to manage efficient traffic circulation to and from the mainline improvements. In some cases, the crossroad improvements would extend several hundred feet from the mainline intersections, and in other situations, more extensive capacity improvements are needed for adjacent roadways.

Transit

The set of proposed transit improvements has 16 elements. These elements consist of corridors providing commuter rail service, rail or bus rapid transit (BRT), express bus, local bus, and shuttles (to be built by others). Other facets include new stations, intermodal facilities or transit centers, and park and ride facilities. Improvements include a transit corridor along the J-Line west corridor from the proposed O'Hare West Terminal station to the Schaumburg Metra Milwaukee District West station. This transit improvement would be either BRT or commuter rail, and would be located in the median of the proposed roadway improvement. This particular improvement would link residents to jobs in the study area and to downtown Chicago.

Another aspect of the Selected Alternative transit improvement is an extension of the J-Line northwest from the Elgin O'Hare corridor north along IL 53 to the Woodfield Mall area. An element of the J-Line would be an express bus service extending south along IL 83 and then in a westerly direction to a terminus at the proposed STAR Line station in Aurora. Other elements of the transit plan include extending the Chicago Transit Authority Blue Line service from O'Hare's terminal core to the proposed O'Hare West Terminal, and the STAR Line rail service from the O'Hare West Terminal to the I-90 corridor where the service would be extended west. Express bus service is proposed on I-355, Golf Road, Dempster Street, Irving Park Road, and Mannheim Road. Shuttle bus service is proposed between the Schaumburg Metra Station and the Hanover Park Metra Station. Extending the J-Line as a higher capacity transit service to the Hanover Park Metra Station will be evaluated in Tier Two. Circulator bus routes and shuttles are planned to develop better connections to stations and employment and activity centers. Rail and BRT stations have been added at key locations, as well as park and ride facilities to provide convenience and improve system ridership. The sum of these improvements is aimed at providing an alternative to the automobile for area residents and workers.



The Preferred Alternative would improve travel in and through the study area in terms of improving regional travel, decreasing congestion on secondary roads, improving average speed throughout the system, and improving travel times to freeway connections and various destinations.

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Systemwide Travel Performance		
Percent Increase in Regional Travel Efficiency in Study Area	10%	Manages a higher number of vehicles more efficiently on the system
Percent Decrease in Congested VMT on Secondary Roadways (P.M. Peak)	15.2%	Keeps longer trips on major roads, thus relieves minor roads
Percent Increase in Network Speeds on Principal Arterials (P.M. Peak)	8%	Improves efficiency of local travel
Improve O'Hare West Access—Travel Time Savings from the Study Area West to O'Hare	49%	Enhances access to planned O'Hare West Terminal
Improve Accessibility—Percent Increase in Trips within Five Minutes to Interstate/Freeway facilities	50%	Improves access to freeway connection
Percent Increase in Transit Trips	37%	Addresses top stakeholder priority of increasing public transit facilities

This Final EIS identifies the Preferred Alternative that is the outcome of Tier One of the EOWB study. The selection of Alternative 203 with South Connection Option D was based upon a rigorous evaluation of many alternatives considering travel performance and cost, impacts and benefits to environmental and social resources, and considerable public input. The Preferred Alternative best suits the needs of the communities and stakeholders most affected by the proposed action as demonstrated by its ability to:

- Best satisfy the objectives of the project's purpose and need.
- Limit impacts on natural and social resources in the area.
- Provide improved travel efficiency for local and long distance trips in ways that are most compatible with existing and planned community land use patterns.

ii. Economic Competitiveness

The EOWB, complemented by O'Hare's Western Terminal, would create a fundamental shift in the competitive position of the project area. These transportation improvements will bring with them a more modern, diverse, and higher value economic base that is more closely aligned with long-term economic trends. The Advisory Council agrees that major infrastructure investments in the area will bring the biggest return to the State of Illinois. The investment in the EOWB will not only improve the transportation system, it will allow the area to achieve new economic highs, create thousands of jobs, and enhance the overall livability in the region.

Since 2007, employment in the project area has declined by nearly 66,000 jobs, about 14 percent. Loss of employment has been seen across the country, but the 14 percent decrease within the project area is above the national average and higher than the Chicago metro area average of 7 percent for the same period. The predominance of manufacturing businesses contributes to the higher than average loss, because the manufacturing sector has low long-term growth prospects and high potential employment declines in recessionary periods. Without the proposed highway and the Western Terminal, the prospect of achieving the pre-recession highs in employment within the project area is unlikely. The projections show that without the proposed improvements, employment in the area would grow by only 39,000 jobs over existing levels by 2040 and there would still be 27,000 fewer jobs than in 2007. In addition, most of the projected growth is likely to occur along I-90 and in the area east of the O'Hare, leaving the area west of O'Hare in a state of stagnation.

The scenario with the proposed highway and the western terminal, however, shows tremendous ability to attract new development, resulting in increases in employment of 104,000 over current levels. The combination of the new transportation facilities and the Western Terminal would facilitate a fundamental shift in the competitive position of the project area and allow it to achieve a more modern and diverse economic base more nearly aligned with long-term economic trends and to provide more fiscal stability to the local municipalities. The improvements likely will lead to short term development opportunities and further provide the area with competitive advantages needed to sustain long-term growth. By 2040, the infrastructure proposed for the EOWB and the Western Terminal would contribute to a significant permanent job impact of 65,000 net new jobs within the project area.

iii. Livability

The Chicago region has the nation's worst road congestion, costing the Chicago area between \$4 billion and \$7 billion annually. Increased capacity and new access from projects in Move Illinois: *The Illinois Tollway Driving the Future*, will provide drivers with options and opportunities to save time and money over the next decade and beyond.

Key Benefits

The proposed \$12 billion capital plan for Move Illinois: *The Illinois Tollway Driving the Future*, will create jobs, stimulate the economy, provide better travel conditions and relieve congestion. The Tollway's new capital plan will ensure that the Chicago area remains competitive with other major cities in the U.S. and around the world.

Congestion Relief

- Offers customers opportunities to reduce costs time and fuel
- Roadway improvements offer drivers time savings
 - Jane Addams Memorial Tollway (I-90) improvements projected to save
 25 minutes on the average trip from Elgin to the Kennedy Expressway
 - Elgin O'Hare West Bypass projected to save 13 minutes on the five-mile trip from I-290 to York Road

Economic Benefits

- Adds \$21 billion to the regional economy
- Stimulates regional economic development and growth
- Supports quick and efficient transport of goods, services and workers

Jobs

- Creates more than 120,000 direct jobs
- Ensures \$1 billion of annual construction
 - Creates more than 13,000 construction-related jobs annually
 - o Sustains those jobs for the next decade
- Elgin O'Hare West Bypass creates opportunities for an estimated 65,000 jobs

Mobility

- Includes three capital projects endorsed by the Chicago Metropolitan Agency for Planning's (CMAP) GO TO 2040 Plan to enhance regional mobility
- Provides opportunity for transit and the creation of innovative and environmentally sound solutions to combat regional congestion

Clean and Green

- Minimizes the environmental impact of new roadway construction by reducing, recycling and reusing materials
- Commits to incorporating renewable energy products including solar panels, wind turbines and geothermal systems
- New and existing infrastructure projects including maintenance site reconstruction will seek a recognized green project standards and certification for Leadership in Energy and Environmental Design (LEED)

New Roadways Will Reduce Travel Times The Chicago Metropolitan Agency for Planning projects that—collectively—these three major projects will reduce vehicle miles traveled in congestion by 1 million miles daily, resulting in savings of more than \$775 million annually due to reduced congestion and delays.

- Jane Addams Memorial Tollway (I-90) Reconstruction
 - Will save drivers 25 minutes traveling between Elgin and the Kennedy Expressway
 - Will accommodate up to 30,000 more vehicles per day
 - Will save drivers \$440 million annually in fuel and productivity costs

• Tri-State Tollway (I-294)/I-57 Interchange

- Will accommodate 76,000 vehicles per day
- Will save drivers \$4 million annually in fuel consumption
- Tri-State Tollway commuters using I-80 to I-57 will save 25 hours per year

• Elgin O'Hare West Bypass

- Reduce traffic volume on local roads by 17 percent during rush hour about 10 minutes per one hour trip
- Will accommodate three times as many vehicles per day as local roads carry now
- Will save drivers 13 minutes on a five-mile trip from I-290 to York Road ·

iv. Environmental Sustainability

The Illinois Tollway's "Building Green" efforts have proven that it is possible to minimize the environmental impact of new roadway construction by reducing, recycling and reusing materials.

In the new capital program, all existing concrete and asphalt pavement will be reused as the base under new roadways and incorporated into materials used to build new shoulders and backfill. Recycling the existing road materials, coupled with the commitment to use reclaimed materials, not only saves the cost of purchasing new materials, but also eliminates the cost of hauling the old materials from the work site and disposal in landfills.

In addition, the capital program maximizes the use of warm-mix asphalt in place of hot-mix asphalt for all shoulders and roadway resurfacing projects, reducing CO2 emissions and energy consumption by about 20 percent during asphalt production.

The Illinois Tollway is committed to incorporating renewable energy such as solar panels, wind turbines and geothermal systems into the new capital program projects. Through the integration of renewable energy and conservation strategies the Tollway will reduce energy use and costs.

The Tollway will minimize environmental impacts by adopting mitigation and landscaping projects that have regional benefits and plan research initiatives, including monitoring and best management practices to improve nearby wetlands and waterways. In addition, the Tollway will develop construction plans for maintenance facilities and other buildings that meet standards for Leadership in Energy and Environmental Design (LEED) and other green certifications.

Move Illinois: *The Illinois Tollway Driving the Future*, will minimize the environmental impact of new roadway construction by reducing, recycling and reusing materials. The Illinois Tollway is committed to using renewable energy and green technology, as well as adopting research initiatives and best management practices to reduce energy use and costs.

Natural Environment and Resource Protection

Minimize environmental impacts by adopting mitigation and landscaping projects with local and regional benefits, and adopt best management practices to improve nearby wetlands and waterways.

- Wetland mitigation For every acre impacted, a minimum of 1.5 acres will be restored or created.
- **Native vegetation** Use native and adaptive vegetation to reduce maintenance and mowing costs.
- **Stormwater management** Continue and expand surface and groundwater monitoring research; use results to guide future work.

Waste Reduction and Recycling

Increase the use of recycled, reused and reclaimed materials. New programs and tracking mechanisms will quantify resources preserved and materials recycled, as well as eliminate landfill waste.

- **Waste-reduction work zone** Develop a pilot project to eliminate construction waste that is traditionally sent to landfills for disposal.
- **100 percent recycled materials** Recycled concrete, asphalt and other materials, including roof shingles and tires, will be used as base materials, backfill and in new pavements.

Renewable Energy and Energy Conservation

Incorporate renewable energy sources and conservation strategies proven to provide operational and maintenance benefits to conserve energy and reduce costs.

- **Renewable energy** Install solar, wind and geothermal systems.
- Warm-mix asphalt Maximize use in place of hot-mix asphalt on all program projects, reducing CO2 emissions and energy consumption by about 20 percent during asphalt production.

Efforts have been made to avoid and minimize adverse effects on the environmental and socioeconomic resources throughout the process by eliminating alternatives with disproportionate impacts and incorporating design measures that limit impacts to unavoidable resources. Measures to further minimize impact were developed at a conceptual level during Tier One with a commitment to explore their applicability in detail in Tier Two. Per IDNR's comment on the Draft EIS, the "avoidance and minimization" concept will be applied to impacts to natural resources during Tier Two. The table that follows identifies resources potentially impacted by proposed improvements and conceptual impact minimization measures recommended for further investigation in Tier Two. Commitment to specific minimization measures will be defined and identified in the Tier Two documents.

Tier One Minimization Measures

Resource	Minimization Measure
Traffic	A traffic management plan will be required during the construction period to maintain traffic flow and reliable access to residences, businesses, community facilities and services, and local roads during construction. There would be coordination with fire, police, and emergency services to minimize delays and response times during construction.
Land Use	Coordination will continue with communities to identify design considerations that minimize impacts to adjacent land uses, such as landscaping, buffer areas, and sensitive roadway lighting.
Relocations	IDOT will offer relocation assistance, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and IDOT's Land Acquisition Procedures Manual, to all occupants of buildings they would purchase and remove. Those policies provide for relocation assistance services to homeowners, renters, and businesses. Participation under the state and federal policies is without discrimination. IDOT will pay property owners the fair market value for all private property purchased and relocation assistance.
Water Quality and Hydrology	Best management practices would be implemented that minimize the volume of stormwater runoff discharge and result in physical, chemical, or biological pollutant load reduction, increased infiltration, and evapotranspiration. Soil erosion and sediment control measures, consistent with Section 404 Clean Water Act permits and IDOT policy, would be implemented to minimize erosion and sedimentation for any build alternative in coordination with the local Soil & Water Conservation District. Disturbance of streamside and riparian vegetation would be kept to a minimum. In-stream construction and soil disturbing activities near streams would be conducted during low or normal flow periods. Discharge points would be protected with rock (or an alternative measure) to minimize scour and erosion. Perimeter sediment control devices would be installed before commencing soil disturbing activities, as necessary.

Wetlands	 Shifting roadway alignments and using narrower roadway cross sections to minimize impacts to wetlands will be investigated. Roadway cross sections can be narrowed by incorporating the following into the design: Narrower center median Narrower shoulder Retaining walls Steeper roadway embankments Enclosed drainage systems Bridging critical wetland resources
Floodplains	Floodplain impact minimization measures could include shifting roadway alignments, minimizing the number of piers required within a floodplain, using retaining walls and other measures to minimize encroachment of needed right-of-way into floodplains.
Biological Resources	In areas where large numbers of wildlife are present, such as forest preserves, fencing and other roadside barriers would be limited to areas necessary for public safety. For project sections that are new roadways or alignments, and features to facilitate wildlife movement and reduce vehicle/wildlife collisions would be incorporated into the plans where possible. For sensitive wildlife areas, such as forest preserves and critical wetlands, large box culverts can be installed where practical to serve as avenues for wildlife movement. Efforts to minimize traffic noise impacts on wildlife will be explored with USFWS
Special Lands	Minimization measures for impacting special lands include potentially shifting the roadway alignment and narrowing the cross section by incorporating such design measures as narrow center medians, narrow shoulders, retaining walls, steeper roadway embankments, and enclosed drainage systems.
Visual Resources	Consideration will be given to design elements to minimize impacts to the visual environment by making them more aesthetically pleasing or better incorporating them into the surrounding environment. Such elements include grading, noise barriers, retaining walls, stormwater management facilities, street lighting, and bridges. Where possible, removal of native vegetation will be minimized, obstructions near natural resources will be minimized to enhance their visibility to motorists, and tree plantings will occur in clusters where they will enhance the viewshed.
Air Quality	Construction will be required to comply with applicable state and local air quality regulations.

Noise	All construction equipment will be required to have mufflers constructed in accordance with the manufacturers' specifications. Mufflers and exhausts must be maintained in good working order. Daily operating hours for construction would coincide with the construction schedule needs, unless otherwise specified.
	Noise abatement measures for reducing traffic noise levels to residential and other properties will be evaluated for reasonableness and feasibility, and follow the guidance provided by the FHWA policies and procedures, 23 CFR 772; IDOT's Bureau of Design and Environment Manual Section 26-6 (2002a); and IDOT's Highway Traffic Noise Assessment Manual (2007a).
	Measures to reduce traffic noise, including traffic management measures, shifting the roadway location, and noise barriers will be examined during the Tier Two environmental studies.
Special Waste	Areas of contamination would be managed in accordance with federal and state laws and regulations and in a manner that would protect human health and the environment.

v. <u>Safety</u>

The configuration of the existing Elgin O'Hare expressway begins at U.S. Route 20 and terminates into Thorndale Avenue. Ending an expressway in this manner is undesirable from an operations and safety perspective, since it forces freeway traffic to transition abruptly onto a roadway with limited access control and lower travel speeds.

The Selected Alternative will extend the Elgin O'Hare Expressway to the West Bypass and the proposed O'Hare West Terminal, Thorndale Road would be upgraded to a new full-access control expressway. The mainline facility would be three to four basic lanes in each direction, with additional auxiliary lanes between high volume interchanges. A 70-foot median would accommodate potential dedicated transit service in the future. To accommodate local traffic circulation, frontage roads would be provided extensively throughout the corridor.

Other supporting transportation improvements were considered in the development of a comprehensive transportation solution for the study area. In particular, non-motorized transportation is an important aspect of the plan that would benefit home to work trips, recreational opportunities, and linkages to transit facilities, activity centers, and employment centers. Each of these improvements would be common to the Preferred Alternative. The types of recommended strategies include bicycle and pedestrian improvements, including new bicycle trails and pedestrian paths that would provide better connections to transit stations, transportation centers, park and ride facilities, community activity centers, regional trail systems, and employment areas.

b. Job Creation & Near-Term Economic Benefit

The dollars expended to construct the transportation improvements would lead to short-term economic benefits during the construction period, including job creation (direct, indirect, and induced jobs), added federal and state tax revenue (business profit, indirect business, personal income, social insurance taxes), value added (the difference between the sale price of a product and the cost of its inputs), and economic output (the measure of total goods and services used and produced). The spending and respending of construction dollars in the area/region is expected to lead to increased income and, hence, increased consumer spending.

The economic effects of the investment in infrastructure were estimated using the economic model —IMPLAN PRO. The model estimates the economic impacts of construction on the economy by tracing spending and consumption among various economic sectors, including businesses, households, government, and —foreign economies in the form of exports and imports. IMPLAN estimates economic impacts in terms of four components: value added, employment, increased tax revenues, and economic output.

For this analysis the following assumptions were used:

- A cost of \$3 billion (2009 dollars) for construction and \$550 million for right-of-way.
- It was assumed the construction costs would be evenly spread over a 3-year period.

The IMPLAN model generates annual outputs. For this analysis, the annual outputs were summed when appropriate for the 3-year construction period. An exception to totaling for the construction period was the number of jobs created, which is presented as an annual number.

Construction of the proposed roadway elements would result in creation of 13,450 jobs per year over the construction period. Of those, 7,430 would be direct jobs in the highway industry (those created as part of roadway construction) and 6,020 would be indirect and induced jobs. (Indirect jobs are those held by employees working for producers of material, equipment, and services used on the construction project. Induced jobs are those created by wages spent on consumer goods and services.)

	Roadway	Transit		
Construction costs	\$3 billion			
Total jobs created (per year)	13,450	1,355		
Total value added	\$3.3 billion	\$330 million		
Added federal tax revenue	\$522 million	\$54 million		
Added state tax revenue\$225 million\$22.5 million				
Economic output	\$6 billion	\$600 million		
<i>Note:</i> Economic benefits assume a 3-year construction period and are for the area including Cook, DuPage, Kane, Lake, McHenry, and Will counties, Illinois; and Kenosha County, Wisconsin.				

Economic Impacts from Construction

Value added: The value of commodities produced by the industries in the region over and above the cost of commodities used from the previous stage of production—would be an estimated \$3.3 billion over the 3-year construction period.

- Construction of the EOWB would generate an estimated \$522 million in federal income taxes over the 3-year construction period (\$174 million per year), and an estimated \$225 million in state and local taxes (\$75 million per year).
- Economic output: The measure of total goods and services used and produced by the industries in the region—would be \$6 billion over the 3-year construction period (or \$2 billion per year).

The economic impact of constructing the transit element of the project was evaluated separately because of uncertainty surrounding the timing of its implementation. Economic impacts have been estimated for transit service in the east-west corridor of the EOWB. Whereas the roadway component will provide a reservation for transit in the east-west corridor only, the economic impacts are based on transit costs associated with the construction of dedicated travel lanes for bus rapid transit or rail for the light rail option, as well as stations, parking, station access, and other appurtenances required for operation. That analysis of the economic benefit from an expenditure of the \$325 million result in creation of 1,355 jobs per year during the 3 years of construction. Value added would be an estimated \$330 million over the 3-year construction period (\$110 million per year). The transit component would also would generate an estimated \$54 million over the construction period in federal income taxes (\$18 million per year), and an estimated \$22.5 million in state and local taxes (\$7.5 million per year). Finally, economic output would be \$600 million over the construction period (or \$200 million per year).

The potential for induced economic effects from the proposed build alternative is substantial for the region, and is more prominent when considering the combined, or cumulative, effects of the other reasonably foreseeable local actions. Cumulative economic effects were estimated using IMPLAN PRO and included the following projects, to be constructed between 2014 and 2019:

- The O'Hare Modernization Plan (OMP) improvements (completing runway 10-C and constructing runway 10-R and other enabling projects), which began in 2011 and will continue through 2015
- Interim transit improvements along the Elgin-O'Hare Expressway (express bus service routed in mixed traffic, using strengthened shoulders where needed) planned for 2018
- I-90 resurfacing between the Elgin Plaza and the Kennedy Expressway, slated for 2015
- The York Road/Irving Park Road grade-separated intersection, to be constructed between 2012 and 2014
- I-90 reconstruction and lane addition project, between IL 53 and the Kennedy Expressway, to occur between 2016 and 2018

Cumulative economic impact from construction of the EOWB combined with the other improvements would result in \$4.3 billion in construction costs over the 5½-half year period of

2014 to 2019. Annual construction costs would range from \$27 million in 2019 to \$86 million in 2015.

The cumulative total number of jobs created (including direct, indirect, and induced) range from 3,668 jobs created in 2019 to 11,471 jobs in 2015. Between 2014 and 2018, more than 10,000 jobs would be created annually, and only in the last year, as construction is completed, would jobs decrease to 3,000. Other cumulative effects include total value added as \$4.63 billion and total output as \$8.55 billion

The project would provide marked improvement in travel performance throughout the roadway system in the project area. The reduction in delays resulting from the transportation improvements would result in a large cost savings for travelers. The cost savings were estimated by applying an hourly value of time to the motorist and an hourly operating cost of the vehicle of \$43/hour in 2010 and \$90/hour in 2040 dollars. The project's travel model generated the total annual hours of eliminated delays. The EOWB project would produce an annual cost savings of about \$400 per motorist in the project area, or \$145 million for all motorists in the project area.

c. Innovation

The Illinois Tollway's system of four roadways is the heart of a larger transportation network that connects roadways, rail, ports and airports. Together they make up one of the most dynamic transportation networks in the nation. Building a 21st century system of roadways will ensure that the region retains the competitive advantage it has over other major cities in the U.S. and around the world. Without an innovative, multi-modal transportation system capable of handling increased travel demand, our regional economy will suffer. Taking advantage of existing and new infrastructure – roads, transit, utilities and fiber - will help create and enhance an interconnected, globally-competitive economy.

The new capital program provides us the opportunity to "think bigger" and consider what the Tollway and the region's transportation system will look like 10 and 20 years from now. The program focuses on all-electronic toll collection, ensuring that the Tollway remains a leader in technology and innovation. It is clear - the Tollway cannot build its way out of congestion. Now is the time for the Illinois Tollway to step beyond its traditional role as a roadway agency and take the lead as a transportation agency supporting short- and long-term options for roads, transit and rail.

Investing in Technology

Incorporate new and innovative technologies to reduce maintenance and operating costs without sacrificing quality and effectiveness.

• LEED-certified buildings – Develop construction plans for maintenance facilities and other buildings that meet standards for Leadership in Energy and Environmental Design (LEED) and other green certification standards.

Intelligent Transportation Systems - Installation and use of dynamic message signs, portable changeable message signs, cameras and other technologies to enhance safety and reduce delays; every minute of delay can result in four to nine minutes of congestion.

d. Partnership

As mentioned earlier, a Stakeholder Involvement Plan (SIP) was developed as part of the Tier One EIS which identified stakeholders in three categories: Lead Agencies, Cooperating Agencies, and Participating Agencies. The following tables represent roles and responsibilities for each stakeholder group. For further details, the SIP document is attached for reference. In addition, more than 80 local government organizations, public agencies, business groups, professional associations, labor unions, and environmental program advocates have expressed support for the Move Illinois Plan. A listing of supporters is included as an attachment.

Lead Agencies

Federal Highway Administration Illinois Department of Transportation Illinois State Toll Highway Authority

<u>Cooperating Agencies</u> Illinois Department of Resources Transportation Security Administration

Participating Agencies

Advisory Council on Historic Preservation	City of Chicago	City of Rolling Meadows
Illinois Historic Preservation Agency	City of Des Plaines	Village of Schaumburg
Chicago Metropolitan Agency for Planning	Elk Grove Village	Federal Aviation Administration
DuPage County	City of Elmhurst	Federal Emergency Management Agency
DuPage Forest Preserve District	Village of Hillside	Federal Railroad Administration
Metra	Village of Itasca	Federal Transit Administration
Pace Suburban Bus Service	Village of Hanover Park	U.S. Army Corps of Engineers, Chicago District
Village of Addison	Village of Hoffman Estates	U.S. Environmental Protection Agency
Village of Arlington Heights	Village of Mount Prospect	U.S. Fish and Wildlife Service
Bloomingdale Township	City of Northlake	

e. Results of Benefit-Cost Analysis

The economic future for the area is complemented by a perspective that the EOWB will be a "Corridor of the Future," one that is an appropriate solution for a project of regional and national significance. The perspective on this theme is that building a 21st century corridor will raise the profile of the area and attract next generation businesses. The concept for the "Corridor of the Future" is one that provides for transit and bike and pedestrian travel, incorporates sustainable practices, fits into the community surroundings, incorporates the latest technology for efficient travel, and provides a sense of place by serving as a gateway to the communities that it passes through and to O'Hare.

The results of the economic benefits of the EOWB are compelling, even more so with the development of O'Hare's Western Terminal. It is estimated that almost 10 million square feet of new office, retail, and industrial space, and almost 7,000 hotel rooms would be developed with the improvements. The increase in new development corresponds to 65,000 more jobs with the improvements by 2040. Of the 65,000 new jobs, 46,000 are attributable to the road improvements and 19,000 to the Western Terminal. The communities that gain the most employment with the improvements are those west of O'Hare, with almost 70 percent of the new jobs located in those communities. Growth there would be attributable directly to the greater visibility of properties in those areas from the new roadway and collateral development would occur there because of the new Western Terminal.

Other community benefits with the new development would be an estimated \$29 million annually by 2040 in new tax revenue. In addition to the permanent jobs created by new development, construction of the project would have a sizable impact on job creation, estimated to be more than 13,000 jobs annually for the period of construction. The other benefits of construction yield an estimated \$750 million in federal and state tax revenue and a total regional output of \$6 billion. One other economic benefit is the cost savings associated with more efficient travel with the EOWB, estimated to be \$145 million annually by the 2040. Further information is provided as an attachment in the *Final Report to Governor Pat Quinn*, by the Elgin-O'Hare West Bypass Advisory Council, June 30, 2010.

In assessing the economic impact of the project, the conclusion is that together the EOWB and the Western Terminal would facilitate a fundamental shift in the competitive position of the project area. It allows for the transformation to a more modern, diverse, and higher value economic base that is more closely aligned with long-term economic trends and provides more fiscal stability to the local municipalities. Major infrastructure investments in the area will bring the biggest return to Illinois. The investment in the EOWB and O'Hare's Western Terminal, and the attributes already present in the project area, together will create diversity in development that will achieve new economic highs.

V. Project Readiness and NEPA

IDOT and FHWA began the Elgin O'Hare – West Bypass project in 2007 to study transportation issues in a 127-square mile project area west of O'Hare Airport. The study is a densely developed mix of residential, commercial and industrial development and is a major transportation and employment center.

The EOWB is being advanced in two parts or "tiers." "Tiering" refers specifically to transportation projects that are advanced in two phases that build upon one with the other. Tier One addresses the "big picture" issues focusing on the needed improvements and their location. Tier One concluded with a preferred multi-modal alternative consisting of new expressway, arterial, transit, and bicycle/pedestrian improvements.

The Tier One received Federal approval on June 17, 2010, six months ahead of the original project schedule. The extraordinary level of stakeholder involvement was a major factor in accelerating the project, and the project team extends our sincere thanks to everyone who participated in the planning process.

Tier One the process used technical analyses and stakeholder input to evaluate transportation problems, alternative solutions, and identify the preferred transportation system alternative at a conceptual level of detail. The preferred alternative defines the types of improvement, their location (project corridor) and is a basis for hardship or protective right-of-way (ROW) acquisition.

Tier Two is currently underway and builds on Tier One with detailed engineering and environmental studies to refine design within the preferred corridor. These details are necessary to better determine the extent of the project footprint, and measures to avoid, minimize or mitigate environmental effects. Project documentation from Tier Two will include the Tier Two Draft and Final Environmental Impact Statement (EIS), Preliminary Geometry, Design Report, Drainage Report, Financial Plan, Project Management Plan and continued stakeholder involvement. These documents will provide the basis for contract plan preparation and full ROW acquisition to advance construction. The Tier Two Schedule has been accelerated by 1 year

VI. Federal Wage Rate Certification

For any work undertaken by DuPage County, the County will comply with the requirements of subchapter IV of chapter 31 of title 40, United States Code (Federal wage rate requirements), as required by the FY2011 Continuing Appropriations Act. As such, all laborers and mechanics employed by contractors and subcontractors on this project, funded by TIGER grant funds, shall be paid wages at rates not less than those prevailing on projects of a similar character.

Signed:

VII. Changes to the Pre-Application Form

Not applicable.