

SECTION 1

Purpose of and Need for Improvements

Since the publication of the Tier Two Draft EIS on March 30, 2012, there has not been any public comments nor new information received that would alter the Purpose and Need. The Tier Two Purpose and Need received concurrence from the NEPA/404 Merger group in Illinois on September 8, 2011.

The study process for the Elgin O'Hare - West Bypass involved a thorough evaluation of the transportation system needs in an area just west of O'Hare Airport in the Chicagoland area by the joint lead agencies. The transportation system needs were determined through technical study and stakeholder involvement early in the process. The findings of those studies have been retained through the preparation of this Tier Two Final EIS. Evolving from the needs analysis, the project Purpose and Need statements have guided lead agencies and stakeholders to the Preferred Alternative.

The proposed project will require federal actions or approvals; therefore, full compliance with NEPA has been implemented as part of this process. Actions by the FHWA include the use of federal funding, and an interchange access approval at I-290. The proposed project also requires federal approvals from FAA, which may include the approval of concurrent use of land on O'Hare Airport for use as the West Bypass corridor, an airspace determination, an obstruction determination, and an unconditional approval of the revised Airport Layout Plan depicting the proposed location of the highway.

1.1 Background

The project area encompasses the northwest edge of Chicago, the entirety of O'Hare Airport, 26 suburban communities, and two counties (DuPage and Cook Counties) (see Exhibit 1-1). The project area contains critical local, regional, and national transportation facilities with more than 18 percent of all trips in the six-county region occurring in the study area. In 2010, mobility was adversely affected by severe congestion on 86 percent of the interstate and primary roads in the study area. Because of severely impaired mobility for this important regional transportation hub, the EO-WB project was identified as a project of regional and national significance in Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation, which requires a multimodal transportation solution to help address major congestion and mobility problems in the study area.

The project has been advanced in two parts or tiers; the second tier builds upon the first tier. The Tier One ROD, via unprecedented consensus, selected the type of improvement concepts (roadway, transit, bicycle/pedestrian), identified the project corridor (location), and provided the opportunity for early acquisition of needed right-of-way (FHWA, 2010). Tier Two expanded on Tier One with detailed engineering and environmental analysis that refine the project features, impacts, and right-of-way footprint within the preferred corridor.

The Tier Two Purpose and Need was updated from Tier One by extending the planning period from 2030 to the year 2040 to be consistent with the region's recently adopted *GO TO*

2040 *Comprehensive Regional Plan* (adopted in October 2010 and developed by the Metropolitan Planning Organization [MPO] for the area, CMAP). The update included development of the 2040 No-Build Alternative travel forecasts, an analysis of system travel performance using the 2040 No-Build forecasts, and a revision to the scope of the improvements in the No-Build Alternative to be representative of reasonably anticipated agency program investment levels. Based on the updated analysis, the Tier Two Purpose and Need continues to preserve the Purpose and Need statements presented in Tier One, and the re-analysis of travel performance supports the need for the proposed transportation improvements in the area.

1.2 Transportation Purpose and Need

A transportation needs analysis was conducted to evaluate the range of transportation issues and problems for the existing roadway and transit systems, as well as bicycle and pedestrian accommodations in the study area. The evaluation involved a detailed technical analysis and extensive outreach to stakeholders (transportation agencies, regulatory agencies, elected officials, and the public) to obtain their perspective on transportation issues in the study area. See the *Transportation System Performance Report* (FHWA and IDOT, 2009) and *Stakeholder Problem Definition* (FHWA and IDOT, 2008) for details. The technical analysis and the stakeholder outreach approached the identification of issues and problems differently, but the findings have many similarities. The project needs have evolved as major themes from the technical analysis and stakeholder problem identification (see Table 1-1).

Project Needs	Technical Analysis Findings	Stakeholder Problem Statements
Improve local and regional travel	86 percent of the area's roadways will be congested in the peak periods by 2040. Congestion on major roads will spill over to secondary roads. Congestion on arterial and collector streets will grow from 86 percent in 2010 to 88 percent by 2040.	Congestion on major routes. Reduced truck/freight mobility.
Improve travel efficiency	40 percent of the study area has the longest travel times to interstate connections. Lack of local access interchanges along interstate highways results in poor access and inadequate connections with major regional corridors. System interchanges operate inefficiently because of traffic volumes exceeding capacity, lack of all movements, and short weaving sections that reduce speed. Freight rail traffic impedes the movement of vehicle traffic in the study area, with 120 at-grade crossings, 15 on major routes.	Poor access and connectivity in the study area. Travel delays caused by at-grade railroad crossings. Travel management strategies that could improve travel efficiency are minimally applied in the study area.

