



## Transportation

### Client

Illinois Department of Transportation

### Location

Chicago, Illinois

## Elgin O'Hare-West Bypass Project

The Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA) initiated the Elgin O'Hare-West Bypass project to consider transportation solutions for a 127-square-mile area bordered roughly by I-90 (north), I-294 (east), I-290 (south), and the Elgin-O'Hare Expressway (west). CH2M HILL served as prime consultant for the Tier One studies (complete) as well as the ongoing Tier Two studies.

The Elgin O'Hare-West Bypass project has been advanced as a tiered 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 those aspects that were "ripe" for a decision, which initially were "where is it," and "what is it." The Tier One process was completed 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 bike/pedestrian), the preferred corridor (location), and enabled the acquisition of needed right-of-way. Tier One features:

- ◆ First use of a tiered environmental process on an IDOT highway project
- ◆ Integrated transportation systems planning effort that yielded a comprehensive, multi-modal transportation system improvement plan
- ◆ Application of IDOT's Context Sensitive Solutions policy, which resulted in consensus on a Preferred Alternative in 2 years – 6 months ahead of schedule

CH2M HILL led a range of challenging tasks including the evaluation of existing travel conditions, alternatives development, public and agency involvement, environmental studies and documentation, and engineering documentation. CH2M HILL also developed the planned improvements to a conceptual level of detail (~5 percent design) for both roadway, transit, and bicycle/pedestrian improvements. The extent of the project includes 15 miles of new tollway/freeway, 12 miles of improvements to existing tollways, almost 30 miles of arterial improvements, and provisions for future transit facilities. The mainline roadway improvements extend from the current western terminus of the Elgin-O'Hare Expressway to the west side of O'Hare as well as a proposed western bypass of O'Hare connecting I-90 and I-294.

The Elgin O'Hare-West Bypass project was marked with many challenges, involving a large urbanized area that includes five interstate highways, O'Hare Airport, and major freight rail facilities, which required the consideration of:

- ◆ Airspace requirements—proximity to the O'Hare Airport required extensive coordination with agencies to locate ground transportation facilities that would not violate air space regulations.
- ◆ Railroad requirements—West Bypass crosses a major railroad intermodal yard, and required extensive coordination with the railroad to avoid impacting the operation of the yard.
- ◆ Metropolitan Water Reclamation District (MWRD) ponds—West Bypass crosses large flood control reservoirs operated by the MWRD, and solutions must maintain the operation and engineering integrity of the basin.

- ◆ O'Hare Modernization Program (OMP)—the project provides access to a proposed western terminal at O'Hare, and includes a multimodal transit center requiring coordination with not only O'Hare officials, but transit providers and communities as well. The project team worked with the OMP to affect engineering changes in the early elements of the airport program that would satisfy the eventual needs of the project, thereby reducing future costs for project implementation.

CH2M HILL determined that a unique planning process was required to address these challenges and to bring together multiple and sometimes conflicting interests. The process involved a tiered EIS for the first time on a highway project to define a planning-level decision that would be supported by stakeholders. The Tier One process provided the means to address stakeholder concerns for the overall transportation solution. Since the process had never been applied to an Illinois highway project, the process required both flexibility and constant communication with stakeholders and agencies to ensure agreement on the level of engineering and environmental detail.

During the Tier One process more than 150 meetings were held with project stakeholders to identify transportation issues, sensitive community resources that should be avoided, community values, project purpose and need, and input to the preferred alternative. This engagement of stakeholders exemplified the full intent of Context Sensitive Solutions, because the final solution balanced transportation performance, community values, and resources.

Elements of the stakeholder involvement program included a project website, newsletters, media outreach, community and stakeholder meetings, Corridor Planning Group and Task Force meetings, Speakers Bureau, and public meetings. Given the frequency of meetings, it was determined that it was critical to engage the stakeholders in more than the traditional, "come and listen to us report to you," style of stakeholder involvement. For this reason, CH2M HILL employed a six-workshop strategy using small working groups to engage stakeholders and get input on key elements of the project and gain consensus on the Tier One Preferred Alternative.

The overall plan is \$3.6 billion, with almost 60 miles of roadway improvements that would benefit regional travel, decrease congestion on secondary roads, enhance modal travel options, and improve access to current and planned development.

While the project began amid some unrelated controversy from another project that had deeply fractured relationships between communities, CH2M HILL's application of IDOT's Context Sensitive Solutions policy turned community opposition into overwhelming support. One community ultimately delivered 38,000 letters to IDOT at a public meeting—via wheelbarrow—in support of the eventual Tier One Preferred Alternative.

The Tier One Record of Decision was complete in late spring 2010. Tier Two is now addressing the detailed engineering layout, environmental mitigation requirements, construction sequencing, and financing strategies – and in keeping with the theme of the planning process, stakeholders continue to be engaged at every step of the project. Tier Two will be largely completed by the end of 2012, and will set the stage for the preparation of the final design and construction

## About CH2M HILL

Headquartered near Denver, Colorado, USA, employee-owned CH2M HILL is a global leader in consulting, design, design-build, operations, and program management for government, civil, industrial and energy clients. The firm's work is concentrated in the areas of water, transportation, environmental, energy, facilities and resources. With US\$6.3 billion in revenue and 23,000 employees, CH2M HILL is an industry-leading program management, construction management and design firm, as ranked by Engineering News-Record and named a leader in sustainable engineering by Verdantix. The firm has been named a FORTUNE 100 Best Companies to Work for five times. Visit us at [www.ch2mhill.com](http://www.ch2mhill.com), [twitter.com/ch2mhill](https://twitter.com/ch2mhill) and [facebook.com/ch2mhill](https://facebook.com/ch2mhill).