Planning and Building Or Rehabilitating Highways

Each year, the Illinois Department of Transportation (IDOT) develops a multi-year highway program which the governor presents to the General Assembly for approval. The program specifies improvements IDOT intends to make on the state highway system over a six-year period. The complexity and funding of individual improvements will determine the amount of time a project remains "in the stream" from conceptualization to the beginning of construction.

The funded highway project process can involve as many as 55 steps and take many years to finish. A major construction project involving a new highway, for instance, can take from five to 20 years to complete all the steps. (See example at right.) Rehabilitating a highway may take up to five years, or more. Completion of a project is dependent upon reviews by various federal, state and local governmental agencies, as well as public and private organizations, with which IDOT cooperates to complete various work phases.

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The example on the other side of this brochure illustrates the process for completing a major highway rehabilitation project. Engineering work is produced by IDOT engineers or outside consultants. Actual construction is carried out by private construction companies, with oversight by IDOT engineers or consultants.

The publication of the highway program provides the public and media with the opportunity to review and respond to the listed projects. Illinois citizens can express their opinion about construction projects at public meetings and hearings or by submitting comments at other times to state officials. All public comments are taken into consideration and balanced with the need to improve safety, reduce congestion, support economic development and minimize adverse social, environmental and economic impacts.

TIME TO REHABILITATE OR BUILD AN ILLINOIS HIGHWAY *From Funding to Completion**



* Simplified time frame. Actual completion time varies from project to project.

A FOUR-LANE HIGHWAY: NEW CONSTRUCTION EXAMPLE From Funding to Completion*

MAJOR PHASES	YEAR	1	2	3	4	5	6	7	8	9	10
ENGINEERING PHASE 1 including Environmental Impact S	tatement										
ENGINEERING PHASE 2 includes plan preparation											
LAND ACQUISITION											
ENVIRONMENTAL MITIGAT archaeology, natural resources, hazardous waste	ION (IF NE	EDED))								
UTILITY RELOCATIONS											
BRIDGE WORK											
GRADING AND PAVING											
LIGHTING AND SIGNING											

* This is typical of new highway construction from the start of engineering to the completion of work. However, before engineering can even begin, new projects have to be proposed and a feasibility study completed. That pre-engineering process can take from two to five years – or even more if funding is unavailable.

Facts and Figures

Illinois' 145,000-mile network of state and local roads is the third largest in the nation. The state also has the third largest interstate highway system, including three of the nation's five transcontinental routes that carry the most commercial vehicles.

The Illinois Department of Transportation is responsible for 16,000 miles of roads. The state also has over 26,000 bridges, and IDOT is responsible for nearly 8,000 of them. Although IDOT is responsible for 11 percent of the total highways and 29 percent of the bridges, those roads and bridges carry over 55 percent of the state's traffic.

Contacting IDOT District Offices

For information on specific highway construction projects, call the IDOT district where the project is located:



www.dot.state.il.us Printed by authority of the State of Illinois, 0348-14, 12/13, 500 (IEC)





HIGHWAY CONSTRUCTION From Start to Finish



llinois' 145,000 mile network of state and local roads is the third largest in the nation.





THE HIGHWAY REHABILITATION PLANNING PROCESS IN ILLINOIS

YEAR 1

PRELIMINARY

- Establish need
- Scoping Survey

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- Estimate project's initial cost
- · Submit project as candidate for multiyear highway program



PHASE I: ENGINEER STUDY, ENVIRONMENTAL STUDY AND PUBLIC COORDINATION (may take 1-3 years for completion)

Phase I Engineering

- Conduct survey of existing conditions • Develop a "Purpose and Need" for the improvement
- Initiate early coordination with stakeholders and expand on the project scope

YEAR 2

- Work with the public and private agencies to create alternatives
- Conduct engineering studies in conjunction with environmental studies
- Identify applicable criteria (e.g., new construction, reconstruction, or resurfacing/ restoration/rehabilitation (3R))
- In conjunction with stakeholders, identify a single alternative
- Create preliminary Phase I plans for review
- Prepare traffic control plans
- Determine right-of-way needs
- Resubmit Phase I plans for approval Phase I Environmental
- Conduct field inventories to identify social, environmental and economic resources such as schools, parks, wetlands, animals, plants, historic sites, water quality, and agricultural land
- Determine impacts of alternatives on social, environmental, and economic resources
- Coordinate with the following: **STATE AGENCIES**

Natural Resources - for endangered species, wetlands, nature preserves, natural areas, wildlife habitats

Environmental Protection Agency – for air quality, contaminated properties, leaking underground tanks, National Pollutant Discharge Elimination System Permits

Agriculture – for farmland preservation *Historic Preservation Agency* – for historic structures, archaeological sites FEDERAL AGENCIES

Fish and Wildlife Service – for endangered species, wildlife habitats, and wetlands *Corps of Engineers* – for stream permits and navigable rivers

National Park Service - for park land conversion

Agriculture – for farmland preservation Environmental Protection Agency - for wetlands, stream permits, Environmental Impact Statement reviews

YEAR 3

Advisory Council on Historic Preservation for historic structures, archaeological sites *Coast Guard* – for navigable rivers, bridge permits

Federal Aviation Administration – Coordinate with FAA if building within a mile of an airport to check if structures interfere with airplane glide paths

OTHER ENTITIES —

Native American Tribes (federally recognized) - for Native American sites and burials *Local Agencies* – coordinate scope of work

Phase I Public Coordination

- Create community working groups made of local officials and the general public with which to coordinate
- Hold regularly scheduled coordination meetings with the working groups, other stakeholders, resource agencies, and public officials
- Contact property owners who may have property impacted by the project
- Conduct informational and public hearings to give the general public knowledge of the project and allow the general public opportunity to offer feedback

Compilation of Information and Approval of Phase I Report and Environmental Document

- With single alternative determined, draft and submit preliminary Phase I plans and report
- Prepare environmental impact documents • Present preliminary Phase I plans and environmental documents at a public
- hearing for comments • Assess and address comments from the
- public hearing • Adjust alternative to minimize impacts,
- if necessary • Submit final Phase I plans and environmental
- documents and report to Federal Highway Administration for approval

YEAR 4

PHASE II: DEVELOPMENT OF FINAL PLAN

- Prepare a job site construction plan and develop construction material requirements used to prepare final contract to be bid on by contractors
- Begin preliminary contract plans
- Conduct geotechnical investigation
- Complete all bridge and pavement reconstruction reports
- LAND ACQUISITION
- Conduct land surveys, appraise property, negotiate with land owners, notify Attorney General to appoint private attorney if court settlement is needed, relocation
- Complete preliminary contract plans • Complete land acquisition

UTILITY RELOCATIONS

- Prepare agreements with *local agencies*
- Complete final review of project's plans
- · Complete utility agreements with local agencies or private entities
- LOCAL AGENCY AGREEMENTS
- Determine limits of local participation
- Prepare agreements with local agencies
- Make final construction plans
- Complete agreements with local agencies
- Complete PHASE II engineering
- If federally funded, Federal Highway Administration authorizes federal funds

KEY

Agency or entity with which IDOT works

State agency Federal agency **Public** or private entities







Typical funded project: pavement reconstruction with bridge replacement

YEAR 6+

CONSTRUCTION CONTINUES

PHASE III: CONSTRUCTION

YEAR 5

CONTRACT PROPOSAL AND ADVERTISING FOR BIDS

Conduct bid letting

CONTRACT AWARD

 Conduct pre-construction meeting • Implement traffic control measures

CONSTRUCTION BEGINS • Complete utility relocations