

# It Takes Time...

## HIGHWAY CONSTRUCTION From Start to Finish



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### Facts and Figures

Illinois' 139,000-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.

IDOT is responsible for nearly 17,000 miles of roads. The state also has 26,000 bridges, and IDOT is responsible for 8,000 of them.

Although IDOT is responsible for 12.5 percent of the total highways and 30 percent of the bridges, those roads and bridges carry two-thirds of the state's traffic.

### Contacting IDOT District Offices

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

**Region 1**  
Diane M. O'Keefe  
DISTRICT 1  
201 WEST CENTER COURT  
SCHALMBURG, ILLINOIS 60196-1096  
PHONE: 815/705-4000

**Region 2**  
George F. Ryan  
DISTRICT 2  
819 DEPOT AVENUE  
DIXON, ILLINOIS 61021-3545  
PHONE: 815/284-2271

**Region 3**  
Joseph E. Crowe  
DISTRICT 3  
700 EAST NORRIS DRIVE  
OTTAWA, ILLINOIS 61350-1628  
PHONE: 815/434-6131

**Region 4**  
Roger L. Driskell  
DISTRICT 4  
401 MAIN STREET  
PEORIA, ILLINOIS 61602-1111  
PHONE: 309/671-3333

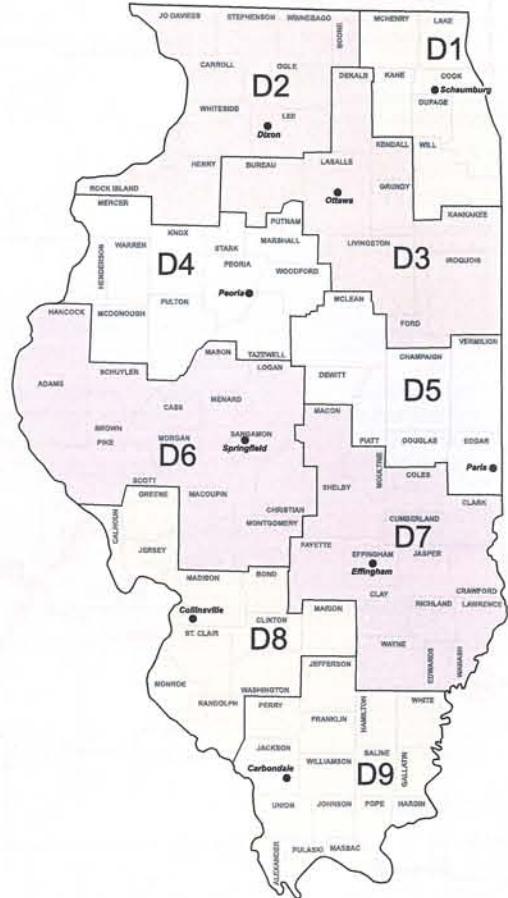
**Region 5**  
Mary C. Larnie  
DISTRICT 5  
13473 IL Hwy. 133  
P.O. BOX 610  
PARIS, ILLINOIS 61944-0610  
PHONE: 217/465-4181

**Region 6**  
DISTRICT 6  
126 EAST ASH STREET  
SPRINGFIELD, ILLINOIS 62704-4792  
PHONE: 217/782-7301

**Region 7**  
DISTRICT 7  
400 WEST WABASH  
EFFINGHAM, ILLINOIS 62401-2699  
PHONE: 217/342-3951

**Region 8**  
DISTRICT 8  
1102 EASTPORT PLAZA DRIVE  
COLLINSVILLE, ILLINOIS 62234-6198  
PHONE: 618/346-3100

**Region 9**  
DISTRICT 9  
STATE TRANSPORTATION BUILDING  
P.O. BOX 100  
CARBONDALE, ILLINOIS 62903-0100  
PHONE: 618/549-2171



### TIME TO REHABILITATE OR BUILD AN ILLINOIS HIGHWAY

From Funding to Completion\*

MAJOR PHASES	YEARS	1	2	3	4	5	6	7	8	9	10
PREVENTATIVE MAINTENANCE		■									
REPAIR, REPAVE, RECONSTRUCT (no bridges)		■	■	■							
REPAIR, REPAVE, RECONSTRUCT (with bridges)		■	■	■	■	■					
NEW CONSTRUCTION		■	■	■	■	■	■	■	■	■	+

\* 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 incl. Environmental Impact Statement		■	■	■							
ENGINEERING PHASE 2 includes plan preparation			■	■	■	■					
LAND ACQUISITION					■	■	■				
UTILITY RELOCATIONS						■	■				
ENVIRONMENTAL MITIGATION archaeology, natural resources, hazardous waste						■	■				
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.

### 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 five-year period. The complexity 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.

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.

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 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 and support economic development.

# THE HIGHWAY REHABILITATION PLANNING PROCESS IN ILLINOIS

Typical funded project:  
pavement reconstruction  
with bridge replacement

YEAR 1

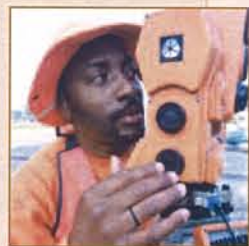
## FEASIBILITY STUDY

- Develop purpose and need for project
- Estimate project's initial cost

### KEY

Agency or entity with which IDOT works

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



YEAR 2

## PHASE 1 ENGINEERING — may take 1–3 years for completion

- Conduct “scoping” (Inviting public and private agencies to identify alternatives, impact and issues)
- Conduct location studies (in conjunction with environmental studies)
  - Complete bridge inspection report
  - Finish bridge hydraulic survey, analysis
  - Review accident records
  - Review maintenance records, old plans
  - Identify applicable policies (e.g., new construction or resurfacing, restoration or rehabilitation—“3R”)
  - Develop alternative alignments as applicable, avoiding and minimizing impact if feasible and practicable
  - Identify potential right-of-way requirements for each alternative
- Conduct environmental impact studies (in conjunction with location studies)
  - Identify alternatives
  - Conduct field inventories to identify protected, endangered and otherwise important resources
  - Identify and evaluate impact of each alternative on the natural and social environment, including wetlands, plants, animals, air and water quality, archaeological and historic sites, agriculture and communities
  - 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

YEAR 3

### 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

*Advisory Council on Historic Preservation* – for historic structures, archaeological sites

*Coast Guard* – for navigable rivers, bridge permits

### OTHER ENTITIES —

*Native American tribes* – for Native American lands, artifacts, remains, burials

- Adjust alternatives to minimize impacts
- Develop mitigation plan for impacts
- Draft environmental impact documents

### PUBLIC HEARINGS

- Conduct hearings or informational meetings and circulate reports for:

- *General public*
- *Local officials*
- *Affected property owners*
- *Special interest groups*

- Complete PHASE 1 ENGINEERING and environmental analysis; finalize reports

- If federally funded, *Federal Highway Administration* approves final reports



YEAR 4

## PHASE 2 ENGINEERING

- Prepare a job site construction plan and develop construction material requirements used in preparing final contract to be bid on by contractors
- *Federal Aviation Administration* – Coordinate with FAA if building within a mile of an airport to check if structures interfere with airplane glide paths
- Begin preliminary contract plans
- For bridge construction, make structure borings
- 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*
- Prepare traffic control plans
- Complete final review of project's plans
- Complete utility relocations
- Complete agreements with *local agencies or private entities*

### LOCAL AGENCY AGREEMENTS

- Coordinate with *local agencies* on scope of work
- Determine limits of *local participation*
- Prepare agreements with *local agencies*
- Make final construction plans
- Complete agreements with *local agencies*
- Complete PHASE 2 ENGINEERING
- If federally funded, *Federal Highway Administration* authorizes federal funds



YEAR 5

## CONTRACT PROPOSAL AND ADVERTISING FOR BIDS

- Conduct bid letting

## CONTRACT AWARD

- Conduct pre-construction meeting
- Implement traffic control measures

## CONSTRUCTION BEGINS

YEAR 6+

## CONSTRUCTION CONTINUES

