

ILLINOIS STATEWIDE CONGESTION ANALYSIS STUDY - FREIGHT PERFORMANCE



CLIENT:
Illinois Department of Transportation

CONTACT:
Karen Shoup, AIA, LEED AP
Bureau Chief, Urban Program Planning

CONTRACT:
PTB 168, Item 29 - \$1.49 million

- PROJECT PURPOSE:**
- Identify Use and Application of Freight Performance Measures
 - Assess Use and Application of Performance Measures by Freight Carriers
 - Evaluate Multi-Year Trends in Freight Across Multiple Modes
 - Evaluate Travel Time Impacts of NHS Intermodal Connector Designation
 - Identify Opportunities to Improve Freight Performance Using Travel Time Data
 - Identify Opportunities to Reduce Delays at Highway/Rail Grade Crossings

During its work on the Illinois Statewide Congestion Analysis Study, DAMA Consultants, Inc., conducted surveys of freight carriers and port authorities and identified multi-year trends in freight modal choice, the types of goods and commodities carried to, from, and through the state, and developed methods to evaluate freight routes and the impacts of train traffic on roadways.

The surveys were directed towards understanding carrier priorities and how the needs of facility operators aligned with the state DOT. DAMA used the FHWA National Performance Management Research Data Set (NPMRDS) / GPS roadway speed data base to determine roadway speeds along NHS Intermodal Connectors leading to and from truck-rail intermodal container terminals, large port facilities, and transit facilities. The DAMA team compared these speed patterns with roadways with similar characteristics and identified how the NHS Intermodal Connectors differed from similar roadways. DAMA also used data from the NPMRDS to evaluate highway/rail grade crossings impacted roadways leading across the tracks and roadways surrounding the crossings. The study developed methods to select locations for potential grade separations as well as less costly opportunities to reduce delays.

DAMA evaluated multi-year trends across several freight modes including air, rail, inland waterways, trucks, and pipelines and trends affecting both the volume of goods and commodities carried across Illinois as well as the origins and destinations of these goods and commodities. The study used sources including the Freight Analysis Framework (FAF), STB Waybill Sample, FAA T-100 Flight Details, and US Army Corps of Engineers freight Volumes to identify how the state could direct future investments to meet emerging needs.

