

DATA BANK MANAGEMENT CONSULTANT FOR THE ILLINOIS HIGHWAY INFORMATION SYSTEM (IHIS) - PAVEMENT PROJECTS SELECTION AND PRIORITIZATION

CLIENT:
Illinois Department of Transportation

CONTACT:
Jean Totten
Transportation Data Bank Manager
847-705-4565

CONTRACT:
Illinois Department of Transportation

PROJECT PURPOSE:

- Conduct Field Collection of Roadways, Structures, Signals, and Other Conditions
- Update and Verify Data in the Illinois Highway Information System (IHIS)
- Assess and Submit Functional Classification Changes to District 1 Roadways
- Develop Methodologies to Evaluate, Prioritize, and Select Pavement Projects
- Identify Candidates for New Types of Materials and Construction Materials
- Identify, Acquire, and Interpret Archived Roadway Plans

DAMA Consultants, Inc., is the Prime Consultant for IDOT Roadway Data Bank Management Consultant (DBMC) - Illinois Highway Information System (IHIS) for IDOT District 1. DAMA evaluates and interprets roadway conditions, signage and traffic control signals, structures, pavement materials, route and corridor changes, jurisdictional changes, and other changes and to identify how those changes affect existing roadway records and existing systems. DAMA evaluated roadways using video capture and LiDAR pavement condition sensing data to identify different fault conditions and calculate overall condition rating survey (CRS) scores.

DAMA developed methods and processes to use IHIS and CRS sources to evaluate and prioritize IDOT pavement preservation projects. These methods used IHIS and CRS systems and PPS programming records to identify locations to apply different pavement preservation and resurfacing treatments and materials. The methods excluded locations that overlapped with on-going pavement projects and locations that did not meet project length and CRS scoring criteria. The methods also applied IDOT pavement preservation evaluation methods to identify locations that met the selection criteria for different preservation treatments. DAMA prioritized projects using cost, traffic volumes, and eligible treatments.

During four cycles of project selections, DAMA identified, selected, and prioritized over \$555 million of projects affecting 1,105 route miles of IDOT District 1 roadways. DAMA submitted these project locations for the IDOT Multi-Year Programs (MYP) and Illinois State Capital Program.

According to feedback from IDOT Programming, DAMA increased project throughput by 7-8x compared to previous cycles.

