

# ILLINOIS STATEWIDE CONGESTION ANALYSIS STUDY - PROJECT PRIORITIZATION



**CLIENT:**  
Illinois Department of Transportation

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

**PROJECT PURPOSE:**

- Develop an Assessment Tool to Prioritize Project Decisions
- Improve Information Available to Manage Multi-Modal Transportation Investments
- Estimate Impacts of Project Decisions and Funding Constraints
- Incorporate Performance and Policy Factors to Assess Tradeoffs

DAMA Consultants, Inc., developed a multi-modal project selection and prioritization tool during its work on the Illinois Statewide Congestion Analysis Study. The tool uses agency priorities and project attributes to select among multiple types of projects across different modes. Agency priorities determine the attributes to give the highest weights and the overall improvement areas that the agency is seeking to optimize.

The tool produces lists of project selections that meet agency priorities and constraints and that are able to align with available funding sources. The tool also provides charts that indicate the overall project categories and the funding split between different bureaus and modes within the agency.

The tool estimates the impacts of project selection on overall agency goals and how additional resources and funding could advance agency goals.

The tool uses spreadsheet inputs and runs on MS-Excel VBA.

| Project Information |  |              | Scenario |         |           |
|---------------------|--|--------------|----------|---------|-----------|
| ProjectName         | Description  | Cost         | BottomUp | TopDown | Min Score |
| I-50                | Add Truck lane, Ramp metering                      | \$60,000,000 | No       | No      | No        |
| I-80                | Add General lane, Ramp metering, ITS Technology    | \$12,000,000 | No       | No      | No        |
| I-80                | Ramp Metering Control/ITS Technology               | \$ 4,500,000 | No       | No      | Yes       |
| I-80                | Add Toll Truck lane, Ramp metering, ITS Technology | \$ 2,000,000 | Yes      | Yes     | Yes       |
| I-39                | Ramp Metering & ITS Technology                     | \$ 800,000   | Yes      | Yes     | No        |
| I-39                | Add A lane with ITS Technology                     | \$17,000,000 | No       | No      | No        |
| I-55                | ITS Technology                                     | \$ 1,000,000 | No       | No      | Yes       |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 1,000,000 | Yes      | Yes     | Yes       |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 750,000   | No       | No      | Yes       |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 750,000   | No       | No      | Yes       |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | No       | No      | No        |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | No       | Yes     | No        |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | No       | No      | No        |

| Project Information |  |              | Multimodal Performance Measures |                         |                               |
|---------------------|--|--------------|---------------------------------|-------------------------|-------------------------------|
| ProjectName         | Description  | Cost         | Bus Improvement (TPI)           | Truck Improvement (TTI) | All Vehicle Improvement (TTI) |
| I-80                | Add Truck lane, Ramp metering                      | \$60,000,000 | 0                               | 6.22                    | 11.22                         |
| I-80                | Add General lane, Ramp metering, ITS Technology    | \$12,000,000 | 0                               | 5                       | 10.22                         |
| I-80                | Ramp Metering Control/ITS Technology               | \$ 4,500,000 | 0                               | 1                       | -1                            |
| I-80                | Add Toll Truck lane, Ramp metering, ITS Technology | \$ 2,000,000 | 0                               | 7.22                    | 12.22                         |
| I-39                | Ramp Metering & ITS Technology                     | \$ 800,000   | 0                               | 1.9                     | 1.79                          |
| I-39                | Add A lane with ITS Technology                     | \$17,000,000 | 0                               | 6                       | 6                             |
| I-55                | ITS Technology                                     | \$ 1,000,000 | 0                               | 0                       | 0                             |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 1,000,000 | 5                               | 0                       | 0                             |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 750,000   | 2                               | 0                       | 0                             |
| IMC_Transit         | ITS Deployment and access treatment                | \$ 750,000   | 2                               | 0                       | 0                             |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | 0                               | 3                       | 2                             |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | 0                               | 2                       | 1                             |
| IMC_Freight         | ITS Technology for Freight Connector               | \$ 750,000   | 0                               | 2                       | 1                             |

