Minnesota Department of Transportation

Vision
Minnesota’s multimodal transportation system maximizes the health of people, the environment and our economy.

Mission
Plan, build, operate and maintain a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world.

Core Values
Safety, Excellence, Service, Integrity, Accountability, Diversity and Inclusion

Sample of Topics Researched by MnDOT Library Staff

MnDOT Library exists to support MnDOT’s mission, vision, and values by providing research assistance to all offices and meeting the information needs of every employee. Our research topics cover a wide variety of questions, from multimodal transportation, safety, finance, environmental sustainability, to diversity, leadership and others.

The following topics are a small sample of customer requests over the last few years for research assistance. The research topics relate to MnDOT functions, programs and research projects.

- Do rumble strips really improve safety?
- How do we make quieter rumble strips?

For more information about the 2013 MnDOT Library Valuation/ROI Study Findings, please see http://www.mndot.gov/library/Library-ROI-Study.html.
• I am looking for information on pedestrian survivability rates when struck by a vehicle based on vehicle speeds (i.e., chance of fatality when struck by vehicle traveling 20, 25, 30,...50 mph).

• How do other state DOTs and metro planning organizations organize their pedestrian plans?

• I need to know about pedestrian safety including statistics and how to improve safety.
• How can we safely accommodate bicycle transportation?

Bicyclists in marked bike lane

• Safety treatments for at-grade railway crossings

Railroad crossing sign
• How do we improve work zone safety?

[Image: Work zone]


[Image: Cable median barrier]
I need information on the safety aspects of extra tall concrete median barriers.
• What do we need to know about ADA compliance?

• What impact does ramp metering have on safety and congestion?
• We need to know about the roundabouts and how they impact safety and congestion. Video - http://youtu.be/FxuNIhJG4MM

• What are the impacts of HOV (high occupancy vehicle) lanes?

• We need information on the impacts of high occupancy toll lanes. (In Minnesota, this later became known as MnPASS.)
• What is the economic value of barge traffic to Minnesota?

• What are other states doing to develop their “adopt-a-highway” like programs?
• Automated Deicing of Bridges; safety, effectiveness, cost.

[Image: Spray head in bridge deck]


[Image: Weigh in motion device on road]
• We need to learn about the traffic impacts and cost/benefit of managed lanes/smart lanes. Video - http://youtu.be/2E7G7YHd-Bk

• We need to know about light rail (LRT) systems; cost, effectiveness, safety, planning, etc.
• What are the safety and traffic impacts of changeable/variable message signs?

• What are the cost/benefits of super single truck tires?
• How can we do a better job of routing snow plows?

Video - http://youtu.be/eybnVOMEX6w

• What are the best practices for “complete streets?”
  Video - http://youtu.be/eybnVOMEX6w
- Can we use ground penetrating radar to measure variations in overlay thickness?

- What are the impacts of bus only shoulders on traffic congestion and safety?
• We need information on commuter rail programs at other states.

• I need to know more about travel patterns and behavior of visually impaired travelers. (ADA)
• We need information on the design and construction of noise walls.

• We need information on the environmental impact of treated lumber used in Noise walls on the environment.

• I need to know about using plants as snow fences; living snow fences.
• Plant toxins of poison ivy and Grecian Foxglove carried through the smoke of prescribed burns

• We need to know about ombudsman programs at other organizations.

• What do we need to consider when formulating a policy on the use of social media in the workplace?

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