

The Role of Big Data in Winter Maintenance

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Freezing rain, blowing and drifting snow, and black ice are common occurrences in Iowa's winter season. Iowa Department of Transportation is responsible for snow removal on Iowa's state and federally-funded highways, amounting to 24,200 lane-miles of roadway. Keeping these roads safe and efficient is no small task, especially when it is necessary to also keep a close eye on budgets and environmental stewardship. Iowa DOT has built a solid reputation for working smarter – employing innovation to make each plow pass and grain of salt work to its optimum and to ensure that each road is kept to its level of service standard. Learn about data systems that estimate salt use based on weather and traffic patterns and help maintenance supervisors manage salt application rates. See how the agency uses automatic plow data to log salt and resource use, communicate with the public, and inform law enforcement and other agencies. Hear how Iowa DOT is working with their university and National Weather Service partners to fully understand their salting and plowing practices and how they relate to overall traffic mobility and safety.