☐ Mn/ROAD is the largest and most heavily instrumented pavement testing facility in the world.



Minnesota Road Research Facility Opens

Governor Arne H. Carlson and Transportation Commissioner James N. Denn announced the completion of construction on the world's largest and most technologically advanced roadway test and research facility. A grand opening celebration was held at the Minnesota Road Research Test Project (Mn/ROAD) site on in August.

The purpose of Mn/ROAD, located on Interstate 94 about 40 miles (64.4 km) northwest of the Twin Cities, is to provide highway engineers with new research to help transportation organizations design longer lasting, more cost-effective roads.

Governor Carlson notes, "Once again Minnesota is on the cutting edge of research and innovation. Efforts such as Mn/ROAD highlight the commitment this state has to creating more efficient systems-in this case transportation-to maintain and increase our quality of life."

The majority of present road designs are based on testing completed 30 to 40 years ago. "The research conducted at Mn/ROAD will help us learn how to extend the life of roads. That information will result in less maintenance, reduced construction costs, greater mobility-in effect, better service for motorists," says Denn.

Every year, billions of dollars of taxpayers' money is spent for road construction and maintenance. Minnesota alone spends over \$300 million a year on its state highway construction program. The \$25 million cost of Mn/ROAD is a wise investment according to Commissioner Denn, "We are building a foundation for the future; the investment in Mn/ROAD today will result in significant savings on road maintenance and construction for years to come, not just for Minnesota, but for all cold weather states and countries."

With construction completed, 75 Mn/ROAD research projects will be conducted. The research projects will collect a variety of data used to verify existing pavement design models, analyze various factors that affect pavement performance, evaluate Mn/ROAD's sensor network and data collection system, and develop new pavement design standards.

There are 5.5 miles (8.8 km) of testing roadway at Mn/ROAD. Forty different pavement test sections, with over 4,500 electronic sensors installed in the sections, will be monitored to collect data ranging from strain to temperature to vehicle weights and speeds. Information collected at Mn/ROAD will benefit all types of roads from interstate highways to gravel township roads.

Mn/ROAD is unique not only for the major research that will take place, but also for the partnerships that made the project a reality. Partners include: The Minnesota Asphalt Pavement Association, the Concrete Paving Association of Minnesota, Minnesota Local Road Research Board, University of Minnesota, U.S. Army Corps of Engineers, Federal Aviation Administration (FAA), Federal Highway Administration (FHWA) and the Finnish National Road Administration (FinnRa).

Mn/ROAD is expected to conduct research for the next 20 years and beyond. The project will be administered by Mn/DOT in cooperation with the University of Minnesota Institute of Technology and other partners.

