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**Cover:** A cartographic image (scale 1:250,000) depicts the State Trunk Highway System throughout 12 northeastern Wisconsin counties. Pavement Distress Index (PDI), a measurement of pavement condition, is indicated by color. Each color represents a level of distress, with magenta (red-purple) indicating the most distress.

PDI is one of the primary inputs within the Wisconsin Department of Transportation's Pavement Management Decision Support System (PMDSS). The system provides an easy-to-use interface consisting of pull-down menus and various options for user enhancements. Data integration, user interfaces, and spatial display and hardcopies for PMDSS were designed and implemented by two full-time staff in less than six months using GIS technology. For more about the Wisconsin Department of Transportation's use of GIS, see p. 59. (Cover map courtesy of WisDOT Geographic Information Services Section.)