Scratching your head about management systems?

Small counties considering implementing pavement or bridge management systems may be concerned about start-up time and expense compared to potential benefits. Indeed, even Iowa counties firmly committed to implementing such systems may find it challenging to get up to speed.

Jim George, Dallas County engineer, says, “We believe in the process. We have been working with CTRE to get all the pieces in place for implementing a pavement management system. But so far we haven’t had time to really use the system and experience the potential benefits.”

If you’re wondering if the start-up effort would pay off for you, consider the experience of Jackson County in Missouri. Jackson County, a small rural area, has been using a pavement management system for a while now and believes it has saved the county both time and money.

Saving time and effort
According to Dr. Ali Roohanirad, Jackson County chief engineer, its pavement management system has helped the agency better organize asset data and processes. He uses the system to help prepare budgets, select projects, evaluate pavements, plan maintenance, and evaluate performance.

Using the system, according to Roohanirad, has facilitated access to information and coordination among all agency divisions.

Using money wisely
Another benefit of using a pavement or bridge management system is the potential for stretching tight budget dollars. Such a system can help agencies prioritize projects so they can perform the most appropriate and economical routine maintenance procedures first.

Roohanirad believes Jackson County’s system generates more precise cost estimates and eliminates duplication of effort.

Managing Iowa’s infrastructure
Iowa counties can participate in the Iowa Pavement Management Program (IPMP) and the Iowa Bridge Management System (BMS) to manage their pavement and bridge infrastructure more efficiently.

The IPMP provides Iowa counties with pavement management data (condition, inventory, and history information), information tools (geographic information systems, or GIS), and decision support tools (pavement management software). And training is part of the package.

The IPMP covers all federal-aid eligible paved county roads, with the option for counties to work through CTRE to add the rest of their paved roads. So far, 35 Iowa counties are in some stage of implementing a pavement management system for all their paved roads.

For help with bridge management, CTRE and the Iowa DOT are developing and implementing a PONTIS-based bridge management system (BMS). PONTIS, a software tool supported by AASHTO, is used by most transportation agencies in the country. Thirty Iowa counties are collecting PONTIS bridge data.

Not a cure-all
Pavement and bridge management systems won’t solve all your management headaches. And, frankly, they’ll provide some challenges of their own, especially in the early stages of development and implementation. Every agency needs to weigh the benefits and costs of implementing any or all of the spectrum of tools that make up such a system (e.g., pavement condition data, GIS, management software).

For more information
Direct your questions about the IPMP or Iowa’s Bridge Management System to Omar Smadi, CTRE’s pavement management specialist, 515-294-7110, smadi@iastate.edu.

An update on IPMP data collection will be included in the May–June 2002 issue of Technology News. •

Editor’s note: Some information in this article was adapted from an article in the June 2001 issue of Better Roads, “Small Counties Can Prioritize Too,” by Dr. Ali Roohanirad. Used with permission.