ERIS: Improving agency communications with emergency response providers

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In Iowa, local communities assume most responsibilities for maintaining efficient emergency response services. Without joint planning and open communication between communities and transportation agencies, state highway projects, road closings, and other incidents outside community control can interfere with emergency response decision making.

The objective in developing Iowa's Emergency Response Information System (ERIS) is to improve communications between Iowa DOT planners and operations personnel and local emergency response services, thereby helping to improve emergency response time and the survival rate of crash victims on highways.

The concept for an emergency response information system began with a case study evaluation of the effect of the relocation of Highway 218 on local communities' response capabilities in Washington, Henry, and Lee counties. In cooperation with the Iowa DOT's Office of Traffic and Safety, and using GIS-ALAS, a geographic information systems version of the Accident Location and Analysis System, response boundaries and fire district names in the three counties were added to detailed maps of the townships, cities, and transportation systems in the three counties.

The Iowa Safety Management System Coordinating Committee (SMS) provided seed money to expand this preliminary mapping work. Maps of emergency response districts were layered with the location of emergency response stations, vehicles, and equipment, and ERIS was created.

By including attributes such as level of emergency response capability, number and availability of personnel, hospital locations, vehicles, equipment, population, etc., a powerful tool is being developed for both state and local organizations.

Now with information for 10 Iowa counties, ERIS provides a system of easily retrievable information to help Iowa DOT planners and operations personnel communicate with emergency response services before and during construction, emergency conditions, weather events, temporary road closings, and similar events in those counties.

On the local level, ERIS is an effective assessment and planning tool for local emergency response providers. In addition, ERIS will create an important component in the education of emergency response personnel and their communities in the importance of traffic safety and the benefits of strong ties to Iowa's transportation agencies.

By January 2002, ERIS will be up and running with data from 17 counties chosen as pilot regions. For most counties, however, fire and emergency response boundaries are still being hand-mapped by local officials and are not accessible on a state level.

The Iowa DOT is one of the few state agencies with the technological resources to conduct a statewide mapping of Iowa's fire/EMS districts. It is important for future road safety that this mapping project be completed on a statewide basis.

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