

ITS expected to help move area traffic

Lincoln is working with 13 counties to set up an 'intelligent transportation system.'

BY ALGIS J. LAUKAITIS
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Ever sat in traffic for 30 minutes because of an accident up the road and wished somebody would have alerted you so you could have taken another route?

Well, help is on the way.

Lincoln is working with 13 counties in Southeast Nebraska to develop an "intelligent transportation system," or ITS, to ease traffic congestion, improve safety and increase the effectiveness of surface transportation systems.

"Those delays do have a monetary cost," Allan Abbott, director of public works and utilities, said in a news release. "For example, if about 20,000 motorists are delayed 30 minutes each, the cost is estimated at \$140,000."

The system would use advanced computers, electronics and communication technologies, some of which is already in place, said Virendra Singh, manager of long-term planning for the city Public Works and Utilities Department.

Some of the possible uses include:

- Notifying public schools and law enforcement automatically if a school bus is off its normal schedule or route.
- Deploying snowplows to urban and rural areas that need more attention.
- Adjusting traffic signals automatically based on current conditions.
- Improve communication in all geographic areas between dispatchers and emergency service providers in the event of a local or regional disaster.

Lincoln's current traffic management system includes about 375 centrally controlled traffic signals, 130 railroad and fire pre-emption units that allow emergency vehicles to change lights, 90 miles of fiber optic and copper communication lines, 25 portable message signs, 53 radio communication units, 255 video detection cameras, 4,000 induction loops used to control traffic flow, 13 video cameras with pan and zoom capabilities, and six pavement weather stations.

Singh said the system would be enhanced once the framework is completed and adopted by the Federal Highway Administration. The deadline is April 2005.

After that date, Singh said, the city and other government agencies can begin applying for federal funds. The city is the lead agency on the project, which also is sponsored by the Federal Highway Administration, the Nebraska Department of Roads and Lancaster County.

A workshop will be held Nov. 4 at the Walt Branch Library, 6701 S. 14th St., to explain the regional system. Area transportation officials, office holders, law enforcement personnel, emergency services providers and representatives of other public and private agencies are encouraged to attend the meeting from 2 to 4:30 p.m.

The meeting is open to the public but is geared toward government

Intelligent transportation

A framework is being developed for a 13-county area to improve travel safety and efficiency on Nebraska roads. Estimated cost of the project is \$270,000 to be funded by federal, state, county and city sources. The completion deadline is April 2005. The goals of the Southeast Nebraska Regional ITS Architecture Project are:

- Provide enhanced and timely traveler information, whether you're in David City or Lincoln.
- Enhance services, such as transit and emergency response. Imagine being told through a PDA that your bus will be here in five minutes.
- Increase the ability of different agencies to work together. Re-routing traffic and coordinating emergency response for natural disasters like the Hallam tornado, is one example.
- Provide travelers with reliable and accurate weather roadway information.

On the Web

www.iteris.com/senearch

officials and agencies in the 13 counties, Singh said.

Counties involved in the project are Lancaster, Butler, Cass, Gage, Jefferson, Johnson, Nemaha, Otoe, Pawnee, Richardson, Saline, Saunders and Seward.

The regional system will be part of a nationwide network that will use ITS technologies.

"The whole idea is so all these systems can work together," said Duane Eitel, transportation team leader with Olsson Associates, a Lincoln firm working with Iteris Inc. as a consultant on the project. Iteris is a global provider of systems and sensors for surface transportation.

Eitel said some newer car models already have devices that are tied into traffic radio. Major cities also have kiosks that allow you to plan your route home from work, so you can avoid traffic snarls.

He said many more innovations were coming but it was necessary to get the framework in place now.

"Your imagination is the limit of what this could be sometime in the future," Eitel said.

As Lincoln grows, there will be a greater demand to deploy this technology, as well as improve the roadway systems, Singh said. As technologies update, the public will be informed with education programs, he said.

The state Roads Department already has done the framework for areas outside Lincoln, Omaha and Sioux City.

Singh said using intelligent transportation system technologies was the solution for the future.

"There will be a point in time when we can only build so many roads," he said. "This will help us move traffic in the future instead of adding lanes."

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