



kansas intelligent transportation systems

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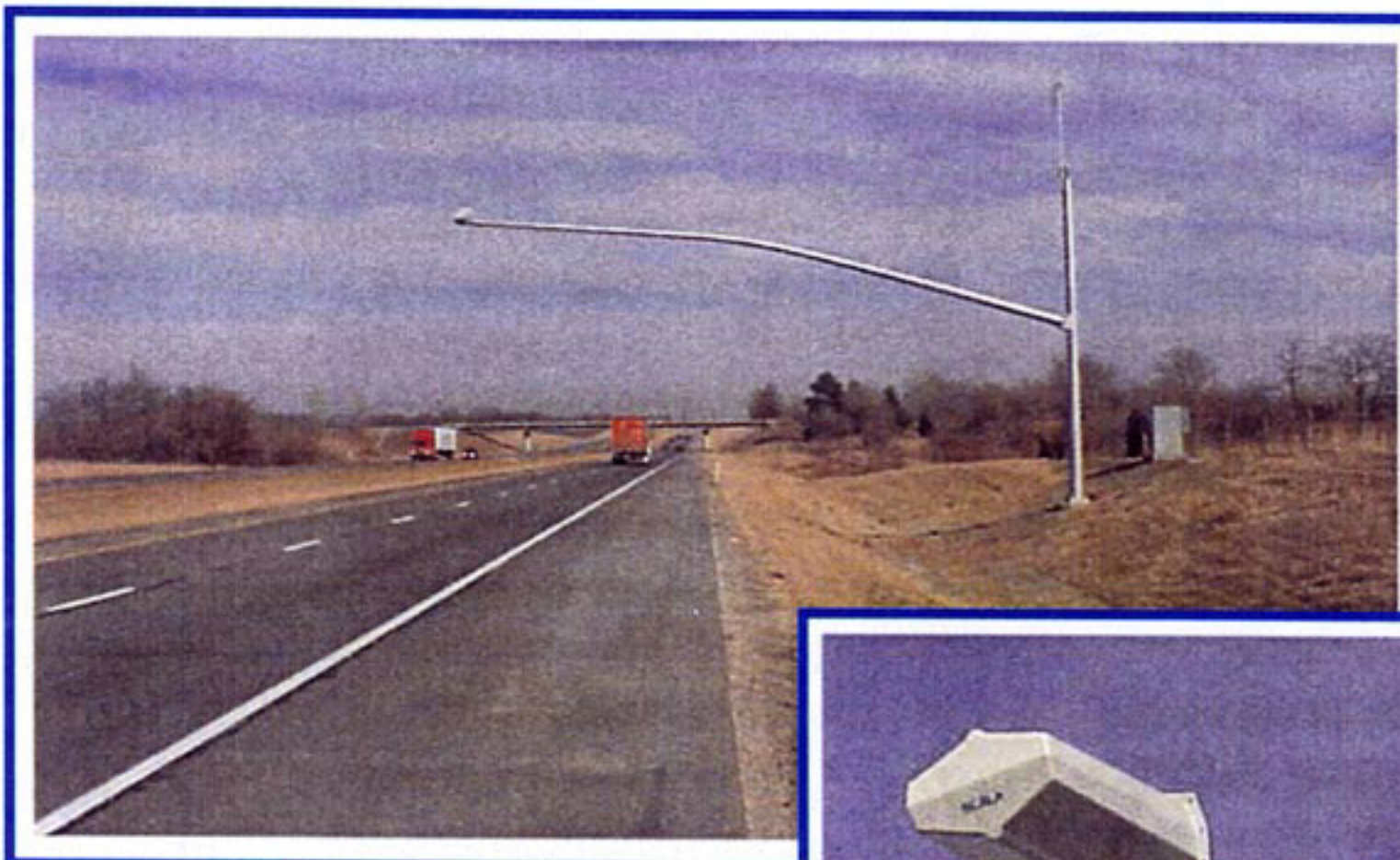
Quarterly

Electronic Screening at Interstate Weigh Stations

Drivers on I-35 and I-70 may have noticed devices that look like video cameras mounted on long arms over the roadway. The device is not a camera, and it will not gauge drivers' speeds. It is a component of PrePass, a

national system for bypassing motor carrier inspection stations, using radio frequency technology similar to the Kansas Turnpike's K-TAG electronic toll collection system. Since the beginning of November, some Kansas motor carrier inspection stations have allowed qualified motor carriers to pass by at highway speed as their safety ratings and credentials are read and approved electronically.

As a qualified carrier's commercial vehicle approaches a PrePass-equipped station, the device over the road reads carrier information from a transponder in the truck's cab. If the credentials and safety rating meet or exceed the standard established by the state, a green light and audible signal from the transponder direct the driver to bypass the inspection station at highway speed. If there is a problem with the credentials, a red light and audible signal will instruct the driver to pull into the station. Trucks also randomly receive red lights to double-check the system and the carrier's credentials.



There are six PrePass stations across Kansas; (INSET) over the road devices read data from a transponder in a truck's cab



Colonel Don Brownlee, Superintendent of the Kansas Highway Patrol, said, "This system should allow our Motor Carrier Inspectors to focus on carriers that do not have superior safety ratings. In turn, we hope these carriers will strive to improve their safety ratings in order to take advantage of the program's efficiency."

There are six PrePass stations across the state: the north and southbound Olathe stations on I-35 in Johnson County, the northbound South Haven station on I-35 in Sumner County, the east and westbound Wabaunsee stations on I-70 in Wabaunsee

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2002 Conference in Iowa

Winter 2002



511: America's Travel Information Number

by Barb Blue, ATIS Coordinator

With the age of technology, our culture has become increasingly information oriented. Travelers place great value on access to information that helps them better cope with the stress associated with their daily travel.

511 is the new, easy-to-remember telephone number for traveler information. With 511, travelers will be able to access, at a minimum, accurate, real time information about weather and road conditions, anytime and anywhere. While the content of each 511 system in the nation will be a little different in order to best provide important, local information, 511 information will be focused on weather and road conditions, road closures and delays, traffic updates (in metropolitan areas), and other local public transportation information (e.g. bus, transit service, etc), as appropriate.

511 offers the transportation community a valuable opportunity to better serve its customers. Traveler information systems help balance demand on today's transportation systems. By providing accurate, up-to-the minute information, travelers can save time, reduce stress and increase safety during their travel. By providing information about traffic, accidents, and detours that enables travelers to select alternative travel routes, emergency, construction and maintenance personnel will also benefit from 511 by reduced traffic congestion and increased access.

The Kansas Department of Transportation (KDOT) has begun the process of implementing 511 in Kansas. Initially, plans call for the Kansas 511 system to replace our current Road Condition Hotline, and provide increased, automated road and weather condition information for all Kansas highways. Key accomplishments to date include:

- *September 2000:* A 511 Steering Committee was established to investigate the issues surrounding the implementation of 511 in Kansas.
- *April 2001:* KDOT began a study to investigate the feasibility of using the Meridian traveler information system (#SAFE) for providing weather and road condition information to Kansas travelers for 511 service and 1-800 hotline service. Research and final report information from the study will be utilized to make final decisions regarding 511 system implementation.
- *September 2001:* Barb Blue joined KDOT as the Advanced Traveler Information System (ATIS) Coordinator, with responsibility for overseeing 511 implementation.
- *December 2001:* Governor Bill Graves signed a letter designating KDOT as the lead agency in providing leadership and coordination for 511 implementation in Kansas.

On a national level, Kansas is one of the earlier states to begin 511 implementation. To date, Minnesota, Nebraska, Utah and the Cincinnati/Northern Kentucky area have active 511 systems. Besides Kansas, seven to ten other states are known to be in the process of 511 system implementation.

Kansas City Scout Project in the Midst of Construction

The KDOT-MoDOT Freeway Management System began construction last fall. Capital Electric has overseen the installation of 100,000 linear feet of conduit for the fiber optic backbone spine on the Missouri side. This work extends along I-435, and I-470 to I-70. Phase A work in Kansas includes short lengths of conduit along I-435. Motorists may spot the conduit ends projecting out of the ground along the roadside. Construction has started on the pull boxes and splice vaults. The remodeling work for the Traffic Operations Center theater is nearly complete. Carpet, glass, consoles, monitors and plasma screens are scheduled for installation before the end of February.

Electronic Screening at Interstate Weight Stations

Continued from front page

County, and the eastbound Kanorado station on I-70 in Sherman County. The South Haven station and southbound Olathe station also employ high-speed weigh-in-motion scales to electronically screen vehicles for possible overweight violations while the overhead scanner verifies credentials.

According to Kansas Motor Carrier Association Executive Director Tom Whitaker, "PrePass will bring Kansas trucking companies and shippers improved efficiency, while simultaneously enhancing highway safety for all motorists." It could improve safety by reducing back-ups on highways and the number of times trucks must slow down and change lanes.

Delegates from the Kansas Highway Patrol, Kansas Turnpike Authority, Kansas Department of Transportation, Department of Revenue, Kansas Motor Carriers Association and Kansas Corporation Commission make up a steering committee that regulates how the system will be used in Kansas. However, applications for a transponder should be made through PrePass, not through these agencies. Motor carriers interested in the system should contact PrePass at 1-800-PRE-PASS or www.prepass.com

**Information for this article provided by Second Lieutenant John A. Eichkorn, Kansas Highway Patrol.*

ITS Calendar

January 24	#SAFE/511 Tour, Lincoln, NE
January 31	New Rule Presentation FHWA, Bruce Baldwin 9 a.m.- <i>Docking State Office Bldg. Topeka</i>
February 20	Joint IMSA/KAUTC Meeting <i>Topeka</i>
March 11-12	TCIP Standards Course, <i>Wichita</i>
March 26-28	ITS Heartland Annual Meeting, <i>West Des Moines, Iowa</i>
April 16-17	Transportation Conference <i>Manhattan</i>
April 26	Set-Aside Proposals due
April 29	ITS America,
-May 2	<i>Long Beach, California</i>



2002 ITS Heartland Chapter Conference will be in Iowa

ITS Heartland Chapter of ITS America will hold their annual conference at the University Park Holiday Inn located near I-35 and I-80 in West Des Moines from March 26-28.

This will be the third annual conference sponsored by Iowa, Nebraska, Missouri and Kansas. ITS policy makers, engineers, technicians, local governmental employees, academicians and anyone involved in ITS is encouraged to attend.

The conference offers the opportunity to share ideas and experiences with people from four states. There will also be 35 vendors to display their latest technologies and consultants to introduce services they have to offer.

There will be presentations related to I-235 reconstruction, deployment of transit management technologies, 511 traveler information systems, incident management, and commercial vehicle initiatives.

Organizations and individuals interested in joining the ITS Heartland Chapter and/or attending the annual conference can contact Kathy Glenn at (402)472-6363 or

kglenn2@unl.edu

Registration material and other information can also be found at

<http://www.itsheartland.org>

All participants are requested to register by March 13. Vendors should register by February 28. Hotel rooms should be reserved by March 4th.

ITS Set-Aside Making an Impact

The ITS Set-Aside Program is making a technological impact on Kansas highways. The Set-Aside Program has been in existence since July 1999. The Program is intended for projects that apply technology such as advanced sensors, computers, electronics, and communications and management strategies to increase safety and efficiency of the transportation system. The funding was available for state agencies in FY 2000 and for state and local agencies thereafter.

The Program, through FY 2003, has currently funded 39 projects with funding requirements of approximately \$6.3 million. The projects that have been selected range from simple to very complex. Examples of the simple projects include purchasing portable equipment to assist with incident management in the metropolitan areas and maintenance activities in the rural areas to performing studies such as the feasibility of Ramp Metering in Wichita. The complex projects include fully integrated Advanced Traffic Management Systems (ATMS) for Wichita. These examples show the wide variety of projects that can be selected by the ITS Steering Committee. Other examples include Variable Message Signs for I-70 in District II & III to assist with traveler information, online permitting for commercial vehicles, Kansas Speedway Traffic Control, Advanced Notification and Video Verification of Railroads, and funding to assist with the deployment of Topeka and Olathe ATMS.

The next round of solicitations was mailed on January 11, 2002 for FY 2004 and FY 2005 with a budget of \$4.0 million. The project proposals will be due on April 26, 2002. ITS Steering Committee will have the project selections complete by June 21, 2002. The committee would like projects that are innovative and can save lives, time, and money.



VMS (Variable Message Sign) in District 3 along I-70.

Wichita Ramp Metering Study

Several years ago, Benny Tarverdi, Metro Engineer, brought up the subject of ramp metering on US-54 in Wichita. His concern was the amount of congestion in the peak hours and the number of incidents. The Bureau of Traffic Engineering agreed this was something we should consider.

You may have seen ramp meters in Denver, Chicago, Minneapolis or other larger cities. A traffic signal is placed toward the bottom of the ramp. The signal can be set to allow one or two vehicles to proceed on each green light. By controlling the flow of the traffic from the ramp onto the freeway, the overall flow on the mainline is improved as well as the safety.

It was decided that since ramp metering had never been used in Kansas, we should investigate the need and feasibility in the Wichita area prior to moving forward. With the use of ITS Set-Aside funds, we selected National Engineering Technology (NET) Corporation to review the situation. NET is a consulting firm from Chicago that specializes in ITS and ramp metering. They reviewed US-54 from Oliver Street to Ridge Road.

NET's study recommended that we install ramp metering at four ramps in the near future. These ramps were selected based on ramp volumes, mainline volumes, crash history, US-54 speed, and geometrics. If funding allows, NET will begin work on plans and we hope to have the meters installed in 2003. The four ramps that will receive meters are:

- Westbound US-54 to Washington
- Eastbound US-54 to Washington
- Westbound US-54 to Seneca
- Eastbound US-54 to Meridian

Based on projected traffic growth, NET also found that all of US-54 eastbound would merit ramp meters within five years and most of westbound in ten years due to capacity concerns in the peak hours. Should funding be approved, NET will also look at other ramps along US-54 to determine the geometric changes that would be required to implement corridor wide metering.

**Information provided by Linda Voss, State Traffic Engineer, KDOT*



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