# 511: Today and Tomorrow

Volume 1, Issue 1

### 511 Travel Info Live in Kansas By Barb Blue

The Kansas Department of Transportation (KDOT) launched its 511 system on January 15, 2004—the fifth state system constructed by Meridian Environmental Technology, Inc., and the seventeenth statewide system nationally.

511 in Kansas provides fully automated, near real-time, route specific weather (both current and forecasted) conditions, road condition information, and road construction, closure and detour information for the entire Kansas State Highway System and the Kansas Turnpike. Since 511 is a national travel information number, road condition information for Nebraska (which has already launched 511) is accessible from the Kansas system. As other surrounding states deploy 511, access to their information will also be provided.

KDOT's goal has been to convert its cur-

rent Road Condition Hotline to 511, while improving the travel information provided to its customers, including commercial, leisure and local travelers. Planning, designing and building the 511 system has been a team effort, drawing on expertise from KDOT, and other partnering agencies, such as KTA, KHP, FHWA, and Meridian working together to meet the goal. As Missouri crafts its 511, KDOT will work cooperatively with MoDOT to provide seamless service/ information for travelers moving across the state line in the Kansas City metropolitan area.

According to Barb Blue, KDOT's 511 Project Manager, KDOT did extensive research and planning for its 511 system. With several early deployment states willing to share their experience and

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## 511 Notes from Nebraska By Jaimie Huber

A recent major winter storm reinforced what Northerners know to be true-in this part of the country, we make travel decisions based upon the weather. Very little stops the determined traveler when the conditions are warm and dry; but let Mother Nature throw a blizzard at us and we sit up and take notice. Our lives literally depend upon it. Daily call volumes for Nebraska's 511 System habitually increase a hundred fold as major precipitation starts to fall and temperatures plummet.

With increasing budget woes and de-

creasing labor resources, State governments are forced to do more with less. In Nebraska, like many states, road condition data is provided to 511 by Nebraska Department of Roads field maintenance staff. These are the same people who ensure that the roadways are maintained in a safe condition for the rest of us. We ask a lot of these folks and they come through for us, despite work overload and some of the slowest internet connections known to mankind. The least we can do is offer them the tools they need *Nebraska (Continued on page 4)*  Winter Edition, 2004



#### NORTH DAKOTA ISSUES NATION'S FIRST STATEWIDE 511 AMBER ALERT

The nation's first statewide Amber Alert via 511 was issued in North Dakota on March 6, 2004, with the abduction of a teenager from Rolette. ND. Reviews by the North Dakota Highway Patrol and Department of Transportation after the initial posting of the Amber Alert were extremely positive, a DOT representative said, stating the "recording on 511 was clear and easily understandable. The Highway Patrol had nothing but praise for the system." As a result, NDDOT has decided future Dynamic Message Signs across the state will be posted with a statement similar to "Amber Alert: call 511 for details."

A regional radio station received several complaints that the Emergency Alert System recording was too poor for the public to understand, so the radio station recorded the alert from 511 and replayed it over the radio. This new 511 Alert System also provides officials the ability to process Homeland Security and General Transportation Alerts on demand statewide.

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'lessons learned,' KDOT was able to make some strategic decisions about its system. "Since we had determined exactly what kind of system we wanted, Meridian was a vital partner in constructing the system we needed," Blue stated.

Two challenges were identified early in the planning for 511 in Kansas. First was finding a source for telephony. Second, KDOT needed to find a cost-effective solution for providing an adequate number of phone ports to accommodate peak call volumes, while fulfilling management's expectation of no dropped calls. "Meridian rose to the challenge for both," Blue said. "Not only did they make the telephony available, but throughout the negotiation process, we were able to finalize a shared telephony infrastructure that benefited not only Kansas, but also all other states serviced by Meridian." she added.

Meridian also became a very effective partner in assisting with a third chal-

lenge, finding voice technology that would allow KDOT to deliver at least the same level of functionality as the current road condition hotline while accommodating the structure and information planned for 511. "Meridian became a critical resource in assisting us with finding a source for the voice technology, testing it, re-testing it, and

"We are excited about the improved information and service 511 will provide..." adapting the system to be as user friendly as possible. It the was greatest chalsince lenge there was no 'off-the-shelf' product that

would meet our requirements, and ours was the first system that Meridian completed with voice technology," said Blue.

"Meridian's innovative approach to problem solving and focus on public service was a perfect fit with this team of professionals at KDOT. It was evident from the start that their focus and concern for public safety and better customer service was their driving force," said Mark Owens, VP, Meridian Environmental Technology, Inc.

Since new, emerging voice technology was utilized in the system, KDOT decided to offer voice response or touchtone options for users to request route specific travel information.

With the new voice technology in particular, KDOT knows that the 511 system can continue to be improved, but KDOT feels this is the most progressive system it can provide at this time that will also provide a good foundation for the future.

"We are excited about the improved information and service 511 will provide over our current Road Condition Hotline and so are many callers who have provided comments so far," Blue said. "In the short time our system has been live, we have received many positive comments about it," she added.

## North Dakota 511 hopes "Voyage of Discovery" will help motorists discover 511 By Paul Braun

North Dakota 511 is using the Lewis and Clark Voyage of Discovery bicentennial celebration to draw awareness to the state's 511 service. The current 511 media campaign features a picture of Lewis and Clark, with Clark holding a telephone, and the caption: "If only they'd had 511." The image can be seen in major arenas across the state, including the Ralph Engelstad Arena in Grand Forks, The Fargodome in

Fargo, and the Bismarck Civic Center. In addition to arenas, the image has been placed in rest areas and visitor centers across the state, in restrooms of business establishments frequented by travelers, and on the back of the North Dakota Lions High School Basketball Tournament programs.

In addition, North Dakota 511 has produced a television public service announcement that features

two actors portraying Lewis and Clark standing along the Missouri River. In the ad. Clark asks Lewis how they can be sure of what awaits them up the river. Lewis asks Clark to call 511 to get information on weather and road conditions, road construction. and seasonal load restrictions. When Clark yells out "511!", Lewis says "William, use a telephone." The ad was pro-NDDOT (Continued on page 4)



Public Service advertisement promoting 511 in North Dakota.

## Unique Partnerships Aid in Montana's 511

#### System Deployment By Brandi Tesch

Montana Department of Transportation (MDT) deployed their 511 system in January 2003 and project manager, Brandi Tesch, states "We've had more than half a million calls providing route-specific construction, road condition, and weather forecast information." Montana is one of the six states utilizing Meridian Environmental Technology, Inc. weather forecasting information and one of the five states using Meridian as their 511 vendor. Currently there are 21 active

> 511 systems nationwide,

Montana was

the 9th full

state deploy-

14th system deployment,

statewide.

metro area.

and

ment



A billboard along Montana's highways promoting 511.

and corridor deployments.

Montana's 511 implementation and

deployment is also a task in a larger project, GYRTWIS - Greater Yellowstone Regional Traveler Weather Information System. MDT partnered with Western Transportation Institute (WTI) at Montana State University-Bozeman to accomplish this project. The GYRTWIS project is funded through a congressional earmark and involves a pavement thermal model. short-term needs assessment to determine potential Intelligent Transportation System (ITS) locations, project architecture, and 511 implementation, deployment, and evaluation.

The uniqueness of partnering with a university transportation research center (WTI) aided MDT in the success of the project by offering additional work-

MDT (Continued on page 5)

#### Making 511 Information Fast and Accurate

#### In South Dakota By Dave Huft

Since South Dakota established its 511 Traveler Information Service in November 2002. travelers have placed more than 430,000 calls for information on winter road conditions, construction and maintenance activities, and incidents that might affect their travel. As travelers' reliance on 511 has increased, so have their expectations for quality and timeliness of information.

To meet travelers' need for up-todate, reliable information, SDDOT is automating its input of road condition information to 511 and other traveler information services. Until now, maintenance staff has reported road conditions verbally, using the state's radio communications sys-

tem. The process of transcribing these spoken messages, summarizing them, preparing regional road reports, and feeding information into 511 has required considerable manual effort, and as much as one to two hours to complete.

To speed this process, SDDOT and the University of North Dakota's Aerospace Foundation have developed a desktop computer application that enters road conditions into a database directly linked to 511 and other travel information services. Using a map display of the state's highway network, authorized maintenance and engineering staff can "click" to select individual road segments, Maintenance Shops, Maintenance Units (a group of shops), or entire Areas (one-twelfth of the state). For whatever roads are selected, staff can assign standard condition descriptions for pavement surface conditions, visibility, and movement restrictionssuch as "no travel advised." Entry takes only a few seconds, and as soon as the information is entered. it is available to 511.

By winter's end, statewide testing will be complete and the Road Condition Reporting System will be fully operational. In addition to winter conditions, the RCRS will be able to identify construction and maintenance activities, traffic incidents, and other emergencies that might affect travelers. RCRS will

SDDOT (Continued on page 5)

#### Nebraska (Continued from page 1)

to get the job done. As managers, this is our responsibility and Nebraska is in the early stages of investigating alternate methods of field data entry.

Why go backward when AVR is the cutting

edge approach? Because we listen to our

customers and strive to improve service.

Background noise, especially during cell

phone calls, can be problematic. We hope

that by providing AVR as an option, our

customers can make choices based upon

Hovering on the horizon for Nebraska is the

addition of three new 511 alerts-Amber,

Homeland Security, and General Transpor-

tation. These alerts were placed into ser-

vice in February of 2004, and will be valu-

What does your local State Patrol think of

able additions to Nebraska's 511 arsenal.

their individual circumstances.

In mid-September, 2003, the Nebraska 511 System activated Automatic Voice Recognition (AVR). On January 29, 2004, we reverted back to standard keypunch entry with the option to turn on AVR with the \* key. "You have made our jobs easier and are saving us time."

tem management fall to the Department of Roads. It wasn't always this way. Until October of 2001, most public travel information was provided by the Nebraska State Patrol. A recent telephone call from State Patrol

511? In Nebraska, we share operating costs

with the State Patrol but data entry and sys-

Troop Headquarters in Grand Island, Nebraska, said it all: "Thank you for taking that burden off us. With the old 800

number we simply didn't have time to update the conditions as often as we wished. You have made our jobs easier and are saving us time." That's what it's all boutmaking lives better through information sharing.

Travel safe; travel smart. Dial 511.



#### **Publishers Corner**

Chief Editor, John Osborne KDOT, Barb Blue MDT, Brandi Tesch NDOR, Jaimie Huber NDDOT, Ed Ryen -Oversight, Paul Braun -Editor SDDOT, Dave Huft

Welcome to the first edition of **511**: **Today and Tomorrow**. This newsletter is being created and distributed by Meridian Environmental Technology for the 511 states using the #SAFE technology. The partnering states and Meridian desire to share the activities within their 511 services with the transportation industry, state and federal government officials, and the traveling public. All these states have a common goal – traveler safety by providing timely and accurate information.

Let us know how you liked the inaugural edition of **511: Today and Tomorrow.** This can be achieved by sending an email message to <u>mediainfo@meridian-enviro.com</u> or by mailing your comments to Meridian Environmental Technology, PO Box 14178, Grand Forks, ND 58208-4178.

#### NDDOT (Continued from page 2)

duced by the North Dakota Department of Trans-

portation's Multi Media division, and has been praised for its humor and timeliness with the Lewis and Clark expedition. The ad will air on TV stations across the state throughout the coming Lewis and Clark bicentennial season.

North Dakota 511 service began on February 10, 2003. At that time, the North Dakota Department of Transportation developed a nearly \$75,000 media campaign to get the word out about 511. North Dakota 511 sponsored every television weather broadcast in the state during the month of February, and an aggressive radio, news paper, and brochure campaign accompanied the television ads.

North Dakota 511 was also a major sponsor for West Dakota Fox TV's coverage of the 2003 WDA "Slightly more than one year has passed since going on line, and over 290,000 calls have been made by motorists seeking road and travel information in North Dakota..."

Boys High School Hockey Tournament, NFL football on

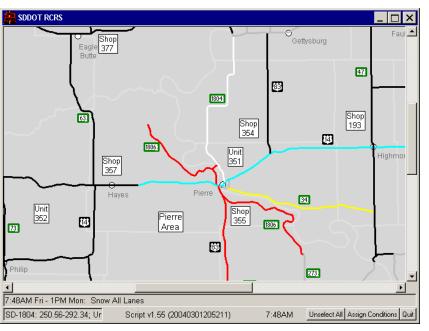
KFYR radio, Trip on a Tank Full on KXJB TV in Fargo, the Fargo Blues Fest, Bismarck Bobcats hockey, and the Potato Bowl in Grand Forks. North Dakota 511 radio ads were also heard during the broadcast of the final UND/NDSU football game. North Dakota 511 also had display booths at last year's North Dakota Winter Show in Valley City, The KFYR Agri-International in Bismarck, as well as the North Dakota State Fair and the Norsk Hostfest in Minot.

Slightly more than one year has passed since going on line, and over 290,000 calls have been made by motorists seeking road and travel information in North Dakota, thanks in part to the aggressive media campaign developed by the North Dakota Department of Transportation.

#### SDDOT (Continued from page 3)

also feed the Department's travel information web pages and supply information on road restrictions to the state's commercial vehicle permitting system.

Plans for the 2004-2005 winter season are to make RCRS mobile, so staff can enter road conditions directly from maintenance vehicles. The mobile system might use the state radio system's data capability, voice recognition via phone, data entry through satellite phone service, or some combination depending on geographic location.



Road Condition Reporting System (RCRS) Graphical User Interface

#### MDT (Continued from page 3)

force, creativity, evaluation opportunities, and potential funding

sources. In fact, the success of this collaboration has created a liaison position to further facilitate communication and project coordination between the two state agencies.

The success of 511 in Montana has been evident with more than a three-fold increase in call volumes from the previous traveler information system. When asked just how big that change has been, Brandi said "Our average call vol-

umes on the old system were about 150,000 annually, and on the new system from January 8, 2003 to pre-

sent we have had 678,408 *total* calls. I think that is a great way to judge the success of this system." The

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current system provides more than 8,000 miles of road condition information and twenty-four hours a day, seven days a week operation. Given the success of the past year, MDT is now working on short-term system enhancements, including regional reports, full corridor (entire route) summary, incident reports, National Park information, and an alert system for children abductions (AMBER), Homeland Security, and general transportation noti-

fications.

The invaluable relationship between

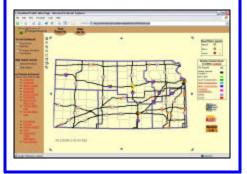


SafeTraveIUSA.com

Developed as a portal site for 511 users to quickly and efficiently access the various states cooperating in the # S A F E 5 1 1 program, http://www.SafeTraveIUSA.com/ opens the door for 511 information from the telephone to the World Wide Web.

In partnership with Kansas Department of Transportation, SafeTrave-IUSA provides the doorway to the KDOT road information site, http://www.kanroad.org/

KanRoad.org

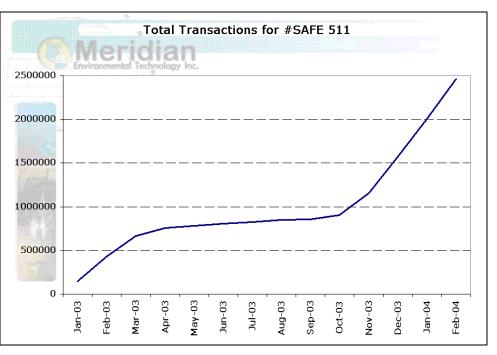


WTI and MDT has only created additional opportunities for growth within this project as well as many others such as AMBER Alert and evaluation of the wildlife crossing structures on the US 93 corridor.

## **#SAFE 511 at a Glance**

On November 15, 2003, the 511 Traveler Information System received it's 1,000,000<sup>th</sup> processed request, showing the robustness of the system in the large volume of traveler information provided in less than one full year of operations for the first four states. By the end of 2003, 511 had served out over 1.5 million information requests. With the recent welcome addition of Kansas to the 511 community, the level of information provided only increases, as the first three weeks of official use by the Kansas public has managed to provide just short of 75,000 requests for information.

As winter hit the Midwest states, the importance of traveler information could be seen by the consistently high traffic to the 511 system during times of inclement weather. In January 2004 alone, the five 511 states managed to accommodate over 430,000 information requests, with January 27th seeing the 2,000,000<sup>th</sup> request.





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