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Message from the President

Welcome to our latest newsletter. The theme of this newsletter is communications. My weathered Oxford American Dictionary defines communication as, “the imparting or exchanging of information or news.” It further defines communication to be, “a means of connection between people and places,” particularly in regard to sending and receiving information using various technological tools. What more can I say, communication defines who we are, the things we are able to accomplish and the success of our efforts. In our industry, the challenge is twofold; first we must clearly and effectively communicate the scope of our challenges and our proposed solutions; second, we must define, design and implement the tools, networks, systems and infrastructure that become the focus of evaluating our success. Experienced practitioners know the level of effort it takes to effectively communicate about building effective communications. Now that you’ve stopped chuckling (and groaning), remember that the safety and security of everyone in our transportation systems is entirely dependent on the communications infrastructure. No small challenge.



This round we have two articles that focus on better utilizing existing services and infrastructure and building for the future. If you have been following the industry news, you’ll know that next generation 911 is on the development track. This effort will continue to bring together wide-ranging groups of shareholders in an effort to efficiently and effectively improve the provision of emergency services across the nation. The 911 Re-envisioned article beginning on page 7 will give you a rundown of current activities. This UDOT article explores the value of collaboration in developing communication infrastructure. It just makes sense for agencies and communities to find a way to make better use of existing facilities where every partner has something to gain.



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University of Utah, Traffic Lab
University of Wyoming
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Utah Department of Transportation
Utah Transit Authority
Western Transportation Institute
Wyoming Dept. of Transportation

The Annual Denver Spring Transportation Symposium hosted in part by ITE, WTS and ITS Rocky Mountain was held Friday, April 13, 2007 at the Sheraton Hotel in Lakewood, Colorado. The event was a huge success and brought together a wonderful group of professionals for a day of learning and networking.

Finally, we would like all members to become involved in the chapter and help get the word out about the quality of work being done in our region. The mission of the Rocky Mountain Chapter is to “develop partners for the effective deployment of ITS across all surface transportation modes, thus providing a viable and sustainable system for the Rocky Mountain Region that will benefit all users.” Please phone or email any comments, suggestions and opportunities to me at rmhodges@rmhodges.com or to our Chapter website at www.itsrm.org.

- Richard Hodges, Chapter President

Submit an Article...

You can submit an article for publication in the ITS Rocky Mountain Newsletter! Articles must be no more than 3 pages in length and must contain contact information for the author. While any article may be submitted, publication priority will be given to articles that match the respective Newsletter's theme. Graphics and photos are welcome!

2007 submission deadlines are as follows:

July/August/September 2007 - July 20th.

Theme: Incident Management and Homeland Security

October/November/December 2007 - October 19th.

Theme pending...

Job Announcements

If you would like an ad placed in the ITS Rocky Mountain Newsletter and/or the ITS Rocky Mountain website please email employment@itsrm.org.

Leveraging Collaborative Communication Systems



Lynne Yocom
ITS Fiber Optics Manager
UDOT - Traffic Operations Center

The Utah Department of Transportation (UDOT) uses fiber optics to manage a majority of the ATMS and ITS devices for the roads. Currently there is over 700 miles of fiber that help create the traffic management system network. This is a closed network used only for road traffic data. Fiber is what makes it possible to create this closed separate and secure network. Installing and managing this amount of fiber can get very costly. To help lessen these costs UDOT has started to build collaborative relationships with other government agencies and communication entities. This type of collaboration will allow UDOT to provide better services to its customers by leveraging existing assets.

Right-of-way is a good place to start. The State of Utah revised Utah Administrative Code 72-7-108 (Longitudinal telecommunication access in the interstate highway system) to allow for this type of collaboration. In section (3)(c)(i) it states that, "The compensation charged may be cash, in-kind compensation, or a combination of cash and in-kind compensation." (Complete administrative code at: http://le.utah.gov/~code/TITLE72/htm/72_07009.htm.)



In-kind compensation allows us to work with communication companies that ask for right of way permissions to get additional dark fibers for the ATMS system. This type of savings can far out weigh the cost of installing a separate system. For example company ACME could pay \$30,000 per year for 60 miles of right of way in trade if that fee is waived and a buffer tube of 12 fibers could be assigned to the DOT for their use with the traffic management system. Arrangements are with ACME so they are responsible for all the maintenance and locating of the fiber and conduit facilities. The DOT has just expanded their traffic management abilities with very little cost to the tax payers. It would have taken at least 30 years (at yesterday's construction costs) of right of way payments to reclaim the construction costs alone; continued maintenance is another added expense not calculated. ACME is grateful because it does not have to pay an annual or lump sum fee for the usage of that right-of-way. Both entities receive equitable compensation and they are better off by collaboration that they would have been if they had not.

A DOT should not limit itself to only communication companies. Another valuable source is other government agencies like cities, counties, public safety and state government. These agencies will usually have some fiber structure installed to handle communications related to their services. DOT's can extend their structure



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UDOT crew inspects a fiber optic installation.



through equitable trades. UDOT has done this type of trade very successfully. In November of 2005, UDOT agreed to trade conduit for conduit and fiber mile for fiber mile with American Fork City. This allowed UDOT a direct fiber connection to Utah County. It extended the fiber network an additional 40 miles and the conduit network and additional 65 miles. Within the space of two years UDOT became directly connected to two largest cities in Utah County and was able to begin cooperative traffic management that tied these cities directly back the Traffic Operations Center in Salt Lake City. The savings at a very, very conservative estimate were around \$3,500,000 million. This savings allowed funding to be directed at other projects such as additional cameras or connecting additional communities.

**"...for the true discoverers
are among them, as comets
amongst the stars."**

- Linnaeus 1707

It is not always easy to find ways to collaborate within government. It is in the best interest of our customers, the taxpayers, that we do our best to try. Just because it has never been done does not mean that it cannot. Communications is more than just bits and bytes that are being transmitted; it is people finding new ways to make things better; it is collaboration.

Quote: "...for the true discoverers are among them, as comets amongst the stars." - Linnaeus 1707 ■

MSU Student Chapter Tours Vegas



Susan Gallagher
Western Transportation Institute
Montana State University

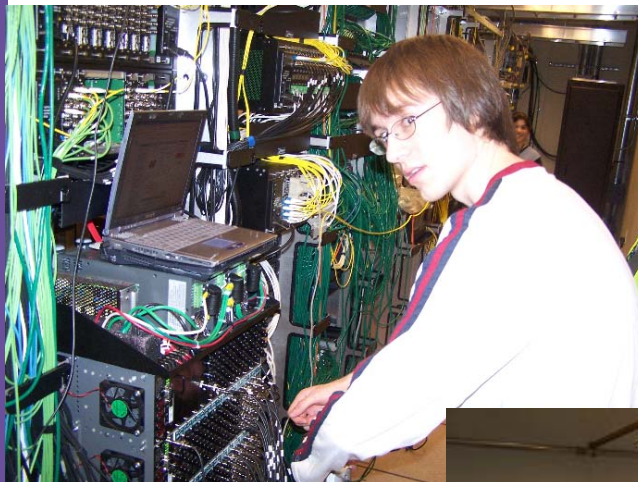
What do civil engineering students, electrical engineering students, and computer science students have in common? Potentially, future careers in the transportation field.

Seventeen students from Montana State University learned why during a recent field trip to Las Vegas, Nevada. The trip was the first official activity of the newly formed MSU Intelligent Transportation Society – Rocky Mountain Student Chapter (ITS-RM). The ITS-RM Chapter was formed as an interdisciplinary student organization with the goal of providing students with information about

transportation career opportunities within the various engineering fields. The ITS-RM Chapter partners with existing student chapters such as the Association for Computing Machinery (ACM), the Institute of Electrical and Electronics Engineers

(IEEE), and the Institute of Transportation Engineers (ITE). Las Vegas trip participants represented electrical engineering, civil engineering, and computer science majors.

More than ever before, the transportation industry relies on advanced technologies to manage infrastructure that is falling under



Montana State University students tour the FAST Traffic Management Center in Las Vegas.



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increasing user demand. Students toured the Las Vegas monorail operations center and the Traffic Management Center and had the opportunity to see firsthand how the different disciplines are essential to creating an efficient transportation system in one of the fastest growing counties in the United States. "The technical tours on the ITS-RM trip gave me insight into how both Computer Science and Electrical Engineering can be directly applied to large-scale transportation systems. We also saw how these systems can have a positive impact on people's everyday lives," said trip participant Jeff Sharkey, a graduate student in Computer Science.

In addition to technical tours, students also visited four different engineering consulting firms that provided the students with overviews of their current projects as well as office and laboratory tours. Nicholas Trimble, a graduate student in Civil Engineering, felt the Las Vegas trip provided a valuable professional networking opportunity. "It was great to see what exciting projects real world engineers are working on. I've already been contacted by potential employers."

The five-day ITS-RM field trip to Las Vegas was sponsored by the Western Transportation Institute (WTI). WTI offers a variety of student employment, fellowship, and research opportunities in the transportation arena and regularly hires students from all fields of engineering. Additional trip support was provided by the MSU College of Engineering. ■



take me there... to Traverse City

Opportunity to Attend 2007 NRITS - FREE!

If you are a member or advisor of an ITS Rocky Mountain student chapter you may want to write this on your calendar! ITS Rocky Mountain is offering a limited number of travel stipends to each student chapter for one or two students and their advisor to travel to the *2007 National Rural ITS Conference* to be held in Traverse City, Michigan October 7-10th. These stipends would cover hotel and airline costs as well as conference registration.

To participate, you must submit the following via email to studentinfo@itsrm.org: student name(s), advisor name, Chapter name, and a brief (1-2 paragraph) reason why you would like to attend the meeting. All submissions must be received no later than **Friday, August 10th**. We will notify you of acceptance the following week (by Friday, August 17th). Travel stipends will be awarded, in part, based on fund availability. As such, it would be wise to submit your inquiry early to ensure your space. Questions can also be directed to studentinfo@itsrm.org.

DOT Envisions New 911 System



Linda D. Dodge, Utah Department of Transportation [Linda is the public-safety coordinator for the ITS program in USDOT's research and innovative technology administration, the sponsor of the NG 9-1-1 initiative.]

The 9-1-1 system has been an unqualified success story for more than 30 years, speeding emergency services in times of personal, regional and national need. Today, however, changes in the public's use of technology, the saturation of the mobile market, and the spread of VoIP telephony contribute to greater expectations for 9-1-1 — expectations that the current system can't meet. Text, data, images, and video are more common in personal communications and are critical to future transportation safety and mobility advances. Text messages, photos taken by cell phones, and automatic crash notification (ACN) are just a few kinds of data that would expedite emergency response and reduce crash clearance time. As time goes on, the 9-1-1 system will be expected to accommodate highly mobile, dynamic communications modes for which the current system is neither designed nor equipped.

The 9-1-1 system of the 1970s was created to transmit voice media only. Consequently, the current multimedia, wireless, mobile society presents both opportunities and challenges for the 9-1-1 system. Opportunities include harnessing new technologies that provide instant, accurate location information and incorporating new media, such as video, into the system. These technologies also increase capabilities to share and coordinate critical information and data within the emergency response community. For example, exact location data could be transmitted from a crashed vehicle to a Public Safety Answering Point (PSAP) and emergency responders to reduce the time it takes to find the crash, especially in rural areas. Challenges include developing universal interfaces that extract the necessary data from mobile and IP-based calls and delivering that information to PSAPs — not all of which are equipped with the latest communications technology.



Traveler's using camera phones.

As a result, a nationwide vision for a 9-1-1 system for the 21st century — one that builds on and respects current planning — is needed. This vision must give government and industry a means to move from a parochial perspective to a more comprehensive and nationwide vision for the next-generation 9-1-1 (NG 9-1-1) system. To guide and foster that vision, the U.S. Department of Transportation (USDOT) is leading research and development (R&D) efforts among a community of diverse stakeholders to bring about a new, more capable system surrounding emergency call delivery and response. When implemented, the envisioned system will enable:

- Quick and accurate information delivery to responders;
- Better and more useful forms of information (real-time location, text, images, video, and other data) than currently available;
- Flexible, secure, and robust PSAP operations; and
- Low public capital and operating costs for emergency communication services.

Images obtained from Flickr.com.

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Building on Past Success

For the past 30 years, pre-hospital EMS providers have relied on USDOT for national leadership. Through the Office of Emergency Medical Services at the National Highway Traffic Safety Administration (NHTSA), USDOT leads development of national consensus standards for emergency medical technicians (EMTs), emergency vehicle operators, medical directors, and emergency medical dispatchers. Similarly, USDOT has long been involved with 9-1-1 as an advocate and supporter of a universal emergency number in state highway safety funding policies, in requiring that the universal emergency number should be 9-1-1 and in providing model legislation to help states build 9-1-1 systems.

In recent years, NHTSA and the USDOT's Intelligent Transportation Systems (ITS) program have worked with the National Emergency Number Association (NENA) and other partners in the public safety community to support implementation of wireless enhanced 9-1-1 (E9-1-1). The NG 9-1-1 initiative funded by USDOT's ITS public-safety program will help define a system architecture and develop a transition plan to the NG 9-1-1 system. The transition plan will consider responsibilities, costs, schedules, and benefits for deploying IP-based emergency services across the nation. In addition to leveraging USDOT's earlier wireless E9-1-1 initiative, the NG 9-1-1 initiative builds on IP-based 9-1-1 work already under way within a variety of related efforts. These include, but are not limited to, the FCC Network Reliability and Interoperability Council (NRIC), NENA, the Internet Engineering Task Force, and the Alliance for Telecommunications Industry Solutions (ATIS) Emergency Services Interconnection Forum. USDOT expects that the products of these consensus efforts will form the foundation for the NG 9-1-1 initiative R&D project.



A primary goal of the USDOT's NG 9-1-1 initiative is to demonstrate a proof of concept (POC) to serve as the foundation for public emergency communications in a wireless environment and enable an E9-1-1 system that works with any communications device. A recommended architecture will be chosen as the most effective alternative to expand and improve the capabilities of PSAPs through internet working technologies. From this demonstration and other project activities, additional development is expected to be undertaken in the public and private sectors to enable the transmission of voice, data, or video from different types of communication devices to PSAPs and on to emergency-responder networks.

Right the First Time

In principle, the NG 9-1-1 initiative has gained broad support; however, achieving consensus on the finer details of the architecture will be challenging and complex. Technical and organizational aspects of NG 9-1-1 require sustained commitment from key people and organizations, investment of resources, and changes in the way work is currently done in both the public and private sectors. Underlying the concept of integrating infrastructures among members of the emergency-responder commu-

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nity is a complex array of overlapping technological, institutional, deployment, and management issues. Within this context, the NG 9-1-1's R&D process is being built on a foundation of consensus development and open communication among public and private sector stakeholders.

In tackling these complexities, the USDOT has recognized that a solid set of engineering and governance processes and procedures will be needed. These will support the analysis, design, development, and refinement of a future operational and technical architecture necessary to provide increased integration, responsiveness, flexibility, efficiency, and relevance to the NG 9-1-1 stakeholder community. Toward that end, the USDOT recently selected Booz Allen Hamilton, along with its partners, NENA, L. Robert Kimball & Associates, and the Texas A&M Research Consortium, as the integrated project team that will help execute and meet the goals and objectives of the NG 9-1-1 initiative. The contract to complete the national architecture and transition plan worth is \$4.4 million.

The Booz Allen project team is leveraging a systems engineering methodology known as mission engineering (ME). The creation of ME will bridge the gap between business and engineering by addressing each dimension of a requirement from both a user and developer perspective. ME focuses on "getting it right the first time." It provides a unified framework to assemble a detailed description of critical operational processes mapped to system functions and data flow.

Completion of the system requirements and design will set in motion the execution of a POC demonstration in early 2008. The objective of the POC testing is to provide sufficient information to government and industry stakeholders about the viability of the NG 9-1-1-network architecture to support a nationwide deployment of its underlying technologies. The focus of the POC isn't to deliver production-ready systems, software, processes, or component designs. Rather, because of time and funding limitations, this POC will provide a preliminary, but representative, showcase of the performance, functionality, and value of core NG 9-1-1 technologies to key decision makers.

The POC testing is expected to be conducted in a complex developmental test environment (DTE) that has been designed, evaluated, and implemented to satisfy the critical requirements necessary to support system-level verification. Currently, the Texas A&M Consortium is implementing a prototype NG 9-1-1 solution using various vendors' media convergence server systems in a pure IP environment. If additional funding becomes available, a test bed based on a configuration of this prototype could be used as an established NG 9-1-1 test bed for the functionality testing of IP-enabled PSAPs. Once the POC integration and test activities conclude in 2008, the NG 9-1-1 DTE could remain operational and be made available to developers of NG 9-1-1 products and those private and public-sector stakeholders who desire to demonstrate and evaluate NG 9-1-1 system performance. As a comprehensive hardware and software environment, an NG 9-1-1 DTE — whether within or independent of the NG 9-1-1 initiative — would enable product developers to simplify and speed their development process, and support more efficient delivery of new functionality to PSAPs.

Nationwide Action Blueprint

From a purely engineering perspective, most agree that much of the initial functionality of the envisioned NG 9-1-1 system is technically feasible. There are, however, a large number of operational, economic, political, and institutional issues that must be addressed and reconciled if the NG 9-1-1 system is going to be implemented successfully across the nation. Implementing NG 9-1-1 will likely be a complicated process that requires the effective, timely, and willing cooperation of an array of stakeholders. For example, the dispatch, fire, law enforcement, and EMS communities must be involved long before technology is introduced to the marketplace to assure its seamless integration into the existing 9-1-1 and emergency response systems. Achieving the NG 9-1-1 vision will require upgrades in network infrastructure, new equipment and software, and training programs.

To address these nontechnical issues, the NG 9-1-1 initiative includes the development of a nationwide transition plan or roadmap for success that will help frame how the government and industry view the deployment of NG 9-1-1. Just as we use roadmaps to plan trips or map our individual futures, both government and industry will need to develop roadmaps to help determine possible routes and decide when and where to stop, partner, or go around problems. The NG 9-1-1-transition plan must target a workable approach, include appropriate stakeholder input, and provide a specific level of detail. Because budgets and development times are finite and limited, the NG 9-1-1 transition plan will be a valuable tool to plot both public and private-sector directions, alongside the public's priorities and needs.

Drawing on the lessons learned from the POC, the nationwide transition plan will serve as the capstone to the NG 9-1-1 initiative by examining location-determination issues, organizational implications of proposed NG 9-1-1 capabilities, security and assurance issues, and reliability implications of an IP-based system. Additional transition issues, such as privacy, economic, operational, and funding mechanisms, as well as political implications, will also be explored in depth — including the examination of resource-sharing opportunities across the country, which may reduce cost and enhance service, operations, and data and information sharing.

Through this nationwide transition plan, a wide variety of stakeholders— regulators, elected and appointed officials, budgeting staff, emergency-management directors, the vendor community, and the public— will have an unbiased, common picture of the key activities that are needed to deploy NG 9-1-1.

At the conclusion of the NG 9-1-1 project, scheduled for the end of 2008, a comprehensive report will be developed that documents the performance and functionality of NG 9-1-1 components and architecture. Based on the outcome of this report and the nationwide transition plan, decisions about how to proceed with the development of the NG 9-1-1 concept will be made with input from all stakeholders. In the meantime, a key challenge during the next two years will be to manage expectations of the public, government, and industry. Outreach and communications efforts are well under way at USDOT, and its ongoing dialogue with stakeholders will continue as NG 9-1-1 moves closer to becoming a reality. ■

5th Annual Spring Symposium Highlights



Robert A. Kocheyar, City and County of Denver
Greg Mackinnon, Denver Regional Council of Governments

The Rocky Mountain Chapter of ITS America, Colorado-Wyoming Section of ITE, and Colorado Chapter of WTS presented the *5th Annual Spring Transportation Symposium* on April 13th at the Sheraton Hotel in Lakewood, CO.

Nearly 150 professionals attended a half day program that highlighted current and future transportation challenges. A panel session opened the program by discussing "Transportation in the New Energy Future." Panel members from oil and gas, pipeline, geology, and renewable energy sectors participated in the discussion.

Later that morning, three concurrent sessions were convened and presentations were made on the following topics: Smart Growth; Construction Management; and Congestion Management.

The Congestion Management session was entitled: "Combating Colorado Congestion with the Four T's", and was moderated by Greg Mackinnon, a RMITS representative. Borrowing from concepts established in the USDOT Congestion Initiative announced in May 2006, the theme of this session was to illustrate how Colorado is using technology as part of their effort to reduce congestion.

Specifically, this session had representation from each of the Four Ts: tolling, transit, telecommuting, and technology & operations.

Peggy Catlin, Deputy Executive Director of the Colorado Department of Transportation (CDOT) and Acting Executive Director of the Colorado Statewide Tolling Enterprise, gave a presentation on the North I-25 Express Lanes – one of five high occupancy toll facilities in the United States. The presentation covered the conversion history including the agreements required for operation, maintenance, incident management and enforcement. The presentation also highlighted the success of the project with a summary of the facility performance and revenue, which have greatly exceeded original estimates.

Jeremy Klop of Fehr & Peers presented a summary of the Denver Regional Transit Signal Priority study. Looking at several candidate corridors in the region, the study investigated the implementation of transit signal priority on a regional basis considering such factors as technology, transit operation, and signal operations across the jurisdictions. The result of the study is the definition of a proposed concept of operations and the identification of several corridors to be used as pilot implementations.

Jim Flint, Director of Information Technology at Swanson Rink, a Denver based consulting engineering firm, reviewed the benefits of telecommuting to Swanson Rink and their employees. He discussed some of the barriers to implementing a telecommuting program and some options used to overcome those barriers. Since implementing the program, Swanson Rink has seen productivity increase 20% and absenteeism decline 2 to 4 days per year.

Ken DePinto, CDOT ITS Branch Manager, and Scott Thomas, Principal at Apex Design, presented two new functions to combat congestion that CDOT ITS Division

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is deploying that integrates several ITS elements. The first function is real-time travel time data collection and distribution (via both DMS and the web). The second function, using the same data, performs incident detection, which is currently being deployed as part of an incident management plan on the US 6 corridor.

ITS America was also part of the program as the “Mobility Showcase VII in a Suitcase” demonstration was presented by Econolite. This was a demonstration of vehicle-to-vehicle and vehicle-to-infrastructure communication that described deployed and marketable ITS technologies in North America.



Econolite representatives present ITSA “VII Demo in a Suitcase”.

The Symposium program was concluded with post-luncheon remarks by Carla Perez, Senior Policy Analyst for transportation in Governor Bill Ritter’s Office of Policy and Initiatives. Ms. Perez described the expected outcomes of the blue ribbon transportation panel established by the Governor to identify future funding opportunities for statewide transportation initiatives.

Net proceeds from the 5th Annual Spring Transportation Symposium will be shared by the scholarship funds of the three sponsoring groups: ITE-Colorado Wyoming; the Colorado Chapter of WTS; and Rocky Mountain ITS. ■



News from around the region...

Wi-Fi Enhanced for Commuters

Mike Curran, Government Technology Online

COLORADO. Commuters on the Front Range Express (FREX) bus heading from Colorado Springs, Colorado, to Denver are seeing constant improvements to its Wi-Fi service. "We've proven that it will work," said Brian Giernacky, information systems analyst for the Colorado Springs Transit Services Division. "There is a huge demand for it — I mean the riders are just ecstatic when it works."

Now the service is based on cellular communications, and Giernacky pointed out that cellular coverage along the bus route is choppy. In addition, the cellular pipe's limited capacity is strained as more passengers log on, some of whom seek to establish bandwidth-heavy, virtual private networks to remotely access desktop computers. "We're trying to come up with a better, more stable solution that will be faster for one, because the cellular isn't very fast," he said, "and two, be more stable."

Pioneer Offering. Giernacky said he believes that Colorado Springs Transit Services Division was the first agency in the country to offer Wi-Fi on a local commuter bus system — the FREX service and its Wi-Fi offering launched in October 2004. Depending on where and when customers board, the trip on FREX can take as long as two and a half hours, and more than half of FREX customers use the service five days a week. "When you're stuck on a bus that long," Giernacky said, "[Wi-Fi access] is a great feature to have that might entice people to ride instead of drive." Bus riders with Wi-Fi-enabled laptop computers can access the Internet for free, and the transit services division is not incurring any additional expense to provide the service. It piggybacks on an existing automatic vehicle location (AVL) system. "Surf as you ride. Why wait to check your e-mail from home or the office? FREX is a mobile hotspot," the agency says in their promotional material. Since FREX began, ridership has increased steadily to an average of 625 trips per day, and FREX is now transitioning from a demonstration project to a permanent service.

An Evolving Service. The agency originally created the Wi-Fi capability by placing a laptop and a wireless router on each FREX bus. The laptops were outfitted with AT&T Wireless Edge modem cards and used Windows 2000 Internet Connection Sharing to access and distribute the Internet connection. The agency used low-speed computers that a local utility company was disposing of, purchased wireless routers for about \$75 apiece, and paid about \$50 per month for the data service. But the system required bus drivers to turn the laptops on every morning as part of their pretrip routine. "This was becoming more of a hassle than it was worth," Giernacky said.

In January 2005, the agency switched to a system that is integrated with the AVL system installed on the FREX fleet by VeroTrak in Colorado Springs. Each bus carries a vehicle tracking unit, which is an embedded Linux box with a global positioning system receiver and a wireless Sprint cellular modem for data communications. The vehicle tracking unit is now connected to a wireless access point (WAP) that shares an Internet connection with bus riders. Bus drivers no longer have to turn on the Wi-Fi system. The AVL system is hard-wired into the bus' electrical system, and when that is turned on, the AVL and the Wi-Fi capability are both activated.

James Bentley, a software architect for VeroTrak, said the AVL tracking data comes out at a considerable rate, but is so low-bandwidth that they had plenty of access to provide Internet service to bus riders. Giernacky noted that the setup didn't cost the agency anything additional on top of the original AVL system. The WAP units cost about \$75 apiece, which he said is "a very miniscule amount of money when you look at the big picture."

Satellite Option VeroTrak and the Transit Services Division are now looking to improve the AVL

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and Wi-Fi service by using satellite communications, possibly with cellular backup, and VeroTrak software that will maintain link integrity in a mobile environment. "If we can find a viable solution that is affordable, then hopefully by the end of this year we can get something in place," Giernacky said, adding that he doesn't have a cost estimate for migration to a new technology at this time. Once the Wi-Fi service is more reliable, Giernacky said the Colorado Springs Transit Services Division might add it to express routes as an additional amenity to "enhance the commute."

New I-70 Traffic Channel Launched

Lory Pounder for the Aspen Times Weekly

COLORADO. Instead of sitting in hours of traffic, drivers headed to Denver can now avoid the headaches and hang out while the weather and cars clear. Friday, officials launched SCTV-22, a Comcast cable channel dedicated to road, traffic and weather conditions along Interstate 70 from Vail to Denver.

"Travelers will get real-time information about what's happening on I-70 before they even leave the driveway," Tim Gagen, Summit County Telecommunications Consortium (SCTC) president and Breckenridge Town Manager, said in a press release. "With this new channel, no one will have to be caught by surprise in a sea of taillights crawling toward the Eisenhower/Johnson Tunnels."

Some of the programming will include the following: Live feeds from the Colorado Department of Transportation's (CDOT) I-70 corridor cameras 24 hours a day, seven days a week, detailed daily weather forecasts and three-day forecasts from the Colorado Avalanche Information Center and National Weather Service, outdoor temperature (measured in downtown Breckenridge) and Mountain Standard Time. Local news-and-events crawl at the bottom of the screen.

And, coming soon, estimated travel times and satellite and radar maps every 30 minutes at the top and bottom of each hour. SCTC member and Frisco Town Manager Michael Penny said in the press release, "We're really proud and excited to offer this service to all our visitors and locals. When they're planning their drives, they'll have all the information they need at the touch of a remote-control button."

Montana Driver and Vehicle Records Available Online

Mark McGrath, State Attorney General

MONTANA. Officials with the state's Motor Vehicle Division (MVD) announced two online search services that give Montanans access to vehicle and driver history information online. With the Driver History Records Service, people can search information recorded with the MVD to get individual driver history record information, including:

- any driving restrictions placed on the driver license like corrective lenses or driving at night;
- all reported vehicle accidents including date and time of the accident and the number of reported injuries due to the accident; and
- some personal information including legal name, date-of-birth and type of driver license, including commercial licenses.

"This online search is much more convenient for Montanans," said Motor Vehicle Division Administrator Dean Roberts. "Prior to the public having access to this online service, the process took several days." The Vehicle Search Service allows people to research the history of a pre-owned vehicle and get immediate results before purchasing the vehicle. Searchers can verify the legal owner, title history and registration information on each vehicle. Right now, the vehicle search is only available to registered users of Montana e-government services. Registered users pay an annual fee to have round-the-clock access to online services.

"This is a valuable service for buyers of used cars," Roberts said. "We believe it results in a more informed buyer, and it may protect the buyer from scams, like unknowingly buying a stolen vehicle. Previously, this service was only available to authorized users like vehicle dealerships, insurance

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companies and banks.”

Roberts said both search services are secure, and do not include sensitive information like a home address, Social Security number or previous driver license number. Prior to starting an online search, users will be asked to certify that they have a valid reason to request the information. Each search costs \$7. There is no fee for registered users of Montana e-government services. Users can access both searches at www.doj.mt.gov/driving, under “online services.”

Montana Leads Revolt Against Real ID

Erik Kelderman, Stateline.org Staff Writer

MONTANA. Montana and Washington state defied the U.S. government this week, enacting the first state laws to reject the 2005 federal Real ID Act and ratcheting up pressure on Congress to amend or repeal national standards for driver’s licenses.

Montana Gov. Brian Schweitzer (D) signed legislation Tuesday (April 17) that bans the state’s Motor Vehicle Division from enforcing the national rules, which set uniform security features for driver’s licenses and require states to verify the identity of all driver’s license applicants. Washington Gov. Christine Gregoire (D) signed a bill Wednesday (April 18) barring that state from complying unless the federal government comes up with an extra \$250 million to cover the state’s expenses. The law also gives Washington’s attorney general the right to challenge Real ID in court.

Montana’s Schweitzer complained that the Real ID law is another way for the federal government to stomp on residents’ personal privacy. “Montanans don’t want the federal agents listening to their phone conversations, rifling through their papers, checking on what books they read and monitoring where they go and when. We think they ought to mind their own business,” he said in a written statement. Gregoire, in a statement, said the Real ID Act “is another unfunded mandate from the federal government and, even worse, it doesn’t protect the privacy of the citizens of Washington.”

In all, 30 states have passed or are considering proposals condemning the license standards. State lawmakers have railed at the costs and deadlines imposed on states, at federal intrusion into what had been a state responsibility and the specter of a national ID card. But the Montana and Washington actions stand out as the first statutes to bar state agencies from participating in Real ID, which passed Congress without floor debate, attached to a 2005 bill funding the war in Iraq and international aid after the Asian tsunami.

Legislatures in Idaho and Maine have passed nonbinding measures protesting the 2005 act. Arkansas lawmakers have approved one resolution calling for Congress to repeal the act and another that asks for civil-liberty protections and full funding to meet the estimated \$14 billion cost to states. None of those measures carries the weight of law or required a governor’s signature.

“When a state like Montana tells the federal government to take a hike, it brings down the whole house of cards. If there was ever any question that Congress would be forced to revisit this misguided law, there is no more,” Barry Steinhardt of the American Civil Liberties Union said in a statement.

Real ID requires that all new and existing driver’s license applicants present and states verify: a form of photo identification, a document showing date of birth, proof of a Social Security number and a document with the name and address of the applicant. All state-issued driver’s licenses must include an individual’s name, address, date of birth, gender, signature, driver’s license number, a digital photograph and several features to prevent counterfeiting. Driver’s license bureaus would feed information into databases to verify applicants’ identity, leading critics to worry about invasions of privacy and identify theft.

Cost also is a primary concern. State officials decry the act as a giant unfunded mandate. Congress has appropriated just \$40 million for states to begin verifying and reissuing an estimated 245 million driver’s licenses and identification cards. U.S. Homeland Security Secretary Michael Chertoff in March

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said states could use 20 percent of their federal homeland security grants to help meet costs. But those amounts are just a fraction of the total \$14.6 billion that the department estimates the law will cost states. In addition, the law will impose \$7.9 billion in costs on individuals and \$617 million on the federal government, according to homeland security figures.

Time is another problem, say states. The initial deadline to begin issuing compliant licenses is May 11, 2008, although states can apply for an extension until Dec. 31, 2009. That won't help, state officials counter, because all existing licenses still have to be reissued by 2013, so states that delay actually have a smaller window to meet the law.

Montana state Rep. Brady Wiseman (D), a sponsor of his state's legislation, said his colleagues were most concerned about privacy issues and Real ID's requirement to digitally store personal information and make that information available to other states. "We just didn't see the benefit here from going through all that rigmarole," said Wiseman, whose bill passed the Republican-controlled state House and Democratic-controlled Senate with unanimous support.

"The states reserve the right to choose not to comply with Real ID," said Russ Knocke, a spokesman for the U.S. Department of Homeland Security. But he noted that citizens in states without compliant licenses will not be able to use their licenses to board commercial flights or enter federal buildings.

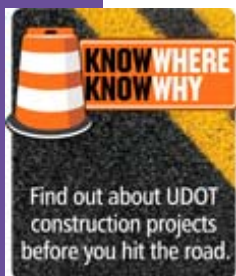
UDOT Launches New Construction Information Campaign

Jared Page for Desnews.com

UTAH. The Utah Department of Transportation is rolling out an information campaign to go along with all those orange barrels for road construction.

Deseret Morning News Graphic "Know Where, Know Why" is UDOT's game plan for making motorists aware of construction projects throughout the state that may slow down their daily commute or hinder their summer travel plans.

Of the 194 construction projects under way in Utah, UDOT is highlighting the 21 most likely to cause problems for motorists. "What we're trying to get across (to the public) is that there is a reason behind all these projects," said John Njord, UDOT executive director: "If you know where they are and what we're trying to accomplish, hopefully it can minimize the impact on your daily commute or when you're traveling around the state."



As part of the "Know Where, Know Why" campaign, UDOT will sponsor radio ads throughout the construction season, providing up-to-date information on major projects, as well as travel tips for holiday and peak-travel weekends. Fliers titled "UDOT's Guide to 2007 Road Construction," featuring a map of construction areas and expected duration of the projects, will be available at hotels and visitor-information centers throughout the state. The construction guides also will be available at all Subway restaurants in Utah.

To assist motorists visiting or traveling through the state, UDOT will be distributing weekly traffic information via e-mail and fax to front-desk personnel of Utah hotels and lodging properties. "We want that person at the front desk to be the most knowledgeable person about traffic in their part of the state," Njord said.

Finally, UDOT has revamped its Web site, www.udot.utah.gov, to include an interactive map of the 21 construction sites. When visitors scroll their mouse over each project area, the latest information on the project will appear, UDOT officials said.

Cost for the construction projects to mitigate congestion and preserve existing infrastructure statewide this year is estimated at \$1.4 million. "As long as our state keeps growing, we'll keep having more and more projects," said Nile Easton, UDOT spokesman. "This year is a big year, and next year looks even bigger."



Upcoming Events...

The affairs and business of the ITS Rocky Mountain Chapter are managed and controlled by its Board of Directors. This Board, made up of representatives or Senators from each of the six member states, delegates to the Chapter Officers the necessary powers to conduct Chapter business.

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ITS America Annual Meeting and Exposition

With expanded networking opportunities, a focused educational program and a grand-scale exhibition, ITS America's 2007 Annual Meeting and Exposition, **June 4-6, 2007** promises to be one of their best events ever! Held in Palm Springs, California the meeting will be the major gathering of transportation and technology professionals.

The educational program will be focused around six topics of interest for urban and rural ITS: Vehicle Safety and Consumer Electronics, Transportation Management and Operation, Travel Information, Incident and Emergency Management, Technology Development, and Specialty Sessions.

Visit www.itsa.org/annualmeeting.html to register online or to download the registration form.

ITS America Presents Systems Engineering Workshop on New FHWA Systems Engineering Guide

Professionals involved in ITS at any level are invited to attend a Systems Engineering Workshop from 8:30 a.m. to 5 p.m. on Sunday, June 3, 2007 in Palm Springs, California. Presented by ITS America the day before its 2007 Annual Meeting & Exposition kicks off, this one-day workshop is designed to provide guidance on the new FHWA Systems Engineering Guide. This is an opportunity to enhance your knowledge of the systems engineering process required for ITS projects. The fee for this workshop is \$60.00 and includes continental breakfast and lunch.

To register online, visit <https://www.one-stop-registration.com/itsa/OSR.Index> or download the form at <http://www.itsa.org/itsa/files/pdf/ITSA07RegistrationForm.pdf>. For more information on this workshop, visit www.itsa.org/seworkshop.html.

2007 National Rural ITS Conference Info Available

On the shores of Michigan's Golf Coast, the 2007 National Rural ITS Conference will provide opportunities for transportation professionals to share information and ideas on current rural transportation issues at an unparalleled destination resort. Held **October 7-10th**, participants will have the opportunity for networking while visiting the many scenic areas surrounding the city of Traverse City and Sleeping Dunes National Park. From the endless outdoor opportunities, including boating, winery tours, world-class golf, balloon flights, and horseback riding, to the unique museum and historic venues, or the casino and downtown nightlife, take a look, and you will say "Take Me There" to the casual and stimulating lifestyle of Northern Michigan.

More information can be found online at www.NRITSconference.org. Interested individuals can check for lodging information, vendor/sponsor opportunities, and activity offerings all from the comfort of their computer.