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[Link to Florida's Statewide ITS General Consultant](#)

Vehicle Infrastructure Integration Update

The Vehicle Infrastructure Integration (VII) Coalition held its First Public Meeting on February 9-10, 2005, in San Francisco, California, to report on the progress of this initiative. The VII Coalition is composed of the U.S. DOT, American Association of State Highway and Transportation Officials (AASHTO), ten state DOTs including Florida, and most automobile manufacturers. Creating an enabling communications infrastructure between vehicles and roadways, the VII promotes the establishment of vehicle-to-vehicle and vehicle-to-roadside communications capability nationwide.

The objective of the VII initiative is “to determine if the investment necessary to equip new vehicles and the roadway infrastructure with communications is warranted and can be synchronized.”

Randell Iwasaki from California DOT spoke about California’s progress in this effort. California is planning to have a 10 mile test bed ready in time for the 12th ITS World Congress to be held in San Francisco on November 6-11, 2005. They are also considering the possibility of other test beds in Los Angeles.

Jeff Paniati from the FHWA gave a presentation titled “What is VII?” which explained the major reasons—safety and mobility—behind the initiative. Every year, approximately 42,000 people die on our roadways. Safety initiatives, such as increased seat belt usage, drunk driver enforcement, and child restraints, have helped reduce fatalities. However, our ability to further reduce fatalities has diminished as our ability to affect these key safety factors diminishes.



Regarding mobility, vehicle miles of travel continue to outpace the addition of capacity to our roadways. If we want better results, we will need to find a different way of addressing this problem.

Tony Kane from AASHTO gave a presentation from the state’s perspective.

Coordinating this new initiative in 52 states, 3,066 counties, and countless local municipalities will be challenging, to say the least.

The vehicle manufacturers also gave their perspective followed by discussions of potential applications of this technology. Technical and institutional issues were discussed with privacy issues being of particular interest to the public.

FDOT is pleased to be a key player in this new initiative. Stay tuned for additional updates. For more information on the VII initiative, visit http://www.itsa.org/vii_meeting.html.

This article was provided by Elizabeth Birriel, FDOT Traffic Engineering and Operations Office. For information, please contact Ms. Birriel at (850) 410-5600 or email to Elizabeth.Birriel@dot.state.fl.us.

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Florida's Statewide Standards and Specifications Update

After more than two years of development work by Florida ITS professionals at all levels, the FDOT is preparing to finalize standards and specifications for 15 different devices that form the basis for interoperable ITS deployments throughout the state.

The FDOT ITS Section launched the initiative to develop statewide standards and specifications for ITS devices in October 2002. The project also produced two additional specifications, one for ITS device operator training and another for operational testing of equipment that must communicate with a transportation management center (TMC) once installed.

As envisioned, the goal of the project was to prepare basic equipment standards and specifications for the most common ITS devices utilized in today's deployments. These also included the network communication components that enable a TMC to collect video and traffic data from the field, assimilate it, and report that information back to motorists and incident response personnel. It was the intent of the FDOT ITS Section that the requirements reflect the latest technology while emphasizing product reliability, ease of maintenance, and overall performance.

An additional goal was interoperability among ITS deployments. By having Florida's ITS deployments developed from a common set of device requirements, the TMCs would be better able to share traffic information and operate freeway management systems seamlessly across jurisdictional lines because their equipment would be more likely to be compatible.

Many Players Involved

The statewide ITS standards and specifications development process has been conducted in accordance to the systems engineering management process. The project has relied upon the skill and knowledge of numerous stakeholders who have played an important role in making the standards and specifications relevant to current needs. Given that the deployment of a significant number of ITS field devices by the FDOT Districts was the driving force behind the development process, a specifications review and acceptance steering committee was formed. It consists of the FDOT ITS Section staff, the FDOT Districts' ITS engineers, and traffic operations personnel, who worked together to identify the desired functional requirements for each ITS device. Additional input came from the FDOT State

Devices Included in the Standards and Specifications Development Project

- Acoustic Vehicle Detection Systems
- Central Video Displays
- CCTV Systems
- Device Servers
- Digital Video Encoders and Decoders
- Dynamic Message Signs
- Equipment Shelters
- Fiber Optic Communications Systems
- Grounding and Transient Surge Protection Systems
- Highway Advisory Radio
- Managed Field Ethernet Switches
- Microwave Vehicle Detection Systems
- Noninvasive Magnetic Traffic Detection Systems
- Road Weather Information Systems
- Video Image Detection Systems

Specifications Office, the Traffic Engineering Research Laboratory (TERL), and various equipment manufacturers.

The steering committee reviewed the existing standards and specifications that FDOT Districts had been using, plus others developed by TERL and the transportation agencies in other states. From this information, draft ITS specifications were prepared beginning in 2003, followed by a thorough review for content, technical accuracy, adherence to industry standards, and applicability to environmental conditions that are typical of Florida. The draft specifications were then released to the Districts, Florida's Turnpike Enterprise, device contractors, manufacturers, and others, for their scrutiny, comments, and additional input. The comments received from these stakeholders were logged in a database, along with notes on the FDOT action taken in response.

Due to the large number of comments received during the initial review of the standards and specifications, the Districts requested that the FDOT ITS Section implement a last review process before finalization of the standards and specifications. This final review-and-revision process began in August 2004, and is continuing, with each final draft and its comment report now being submitted to FDOT ITS Section managers for resolution of comments. The dynamic message sign (DMS) specification was recently completed and will eventually replace the existing TERL DMS specification for limited-access facilities. Other specifications will follow in the coming months. Each specification will be posted at the FDOT's Standards, Specifications, and Estimates Processor (SSEP) (www.floridait.com/ssep), a Web site that features the various elements necessary to prepare ITS project documents for issuing requests for proposal (RFPs). The SSEP has been a critical part of the standards and specifications development process and has given FDOT the ability to disseminate information on the specifications and related documents during the comment phase of the work. The SSEP will continue to be an active Web site throughout the standards and specification development process to facilitate the review of the standards and specifications.

The original concept of the SSEP was that it would be the official repository of the FDOT's ITS standards and specifications. However, after discussions with representatives of the Specifications, Construction, and Design Offices, as well as the Districts' preference to go through FDOT's specification development process, the repository of the standards and specifications will be in the appropriate FDOT publications.

Looking Ahead

The final phase of this project is the acceptance and mainstreaming of the ITS device standards and specifications by the FDOT Specifications Office, which will prepare the standards and specifications for publication in the Standard Specifications for Road and Bridge Construction, the Plans Preparation Manual, and the Design Standards. In this manner, ITS devices will take their place in the official FDOT handbooks that give important project requirements. Each ITS specification will be divided into its component parts to be inserted in these FDOT manuals. The FDOT ITS Section will be responsible for tracking the use of the ITS specifications and for addressing any changes required, based on field deployments. All information, comments, and feedback from users will be documented and addressed, as appropriate.

As the ITS specification project winds down, look for final drafts to be posted at the SSEP and ultimately published in the FDOT specification and design manuals. We extend a sincere

thank you to everyone in the Districts, FTE, the Central Office, and private sector who spent considerable time and effort preparing and reviewing the ITS specifications. We consider this ongoing endeavor a major success, thanks to all the people who conceptualized, documented, reviewed, and edited the specification documents. It has been gratifying to have such a large stakeholder group working together for a single cause in such a focused, orderly fashion.

This article was provided by Gene Glotzbach, FDOT Traffic Engineering and Operations Office, ITS Section. For more information, contact Mr. Glotzbach at (850) 410-5616 or email to Gene.Glotzbach@dot.state.fl.us.

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FDOT-TERL Expanding Their ITS Effort

Since 1997 the FDOT's Traffic Engineering and Operations Office has relied upon the Traffic Engineering Research Laboratory (TERL), located in Tallahassee, Florida, to perform tests and evaluation on various traffic control devices included on FDOT's Approved Product List (APL). Other activities performed by the TERL include qualification testing of dynamic message signs and evaluations on APL vendor quality control programs, along with various other research and development efforts. Currently, FDOT, university, and consultant staff work together at the TERL to accomplish these activities.



The Expansion

The TERL's current objective is to support the development of transportation equipment standards, testing procedures, and testing implementation. In support of ITS deployment, the TERL is currently developing plans to expand its ITS role. The objective of this expansion will be for development of an ITS device SunGuideSM Software test area, an ITS communications test area, and a transportation management center (TMC) test area.

The proposed new test areas will provide the capability to pre-test ITS software and hardware and confirm operation of the various ITS communications links. This up-front testing will improve the operational and material quality of ITS-related equipment and communications, along with improving specification compliance which will ensure that ITS software meets user requirements, and reduce problems encountered after the ITS is deployed.

A major cause of hardware/software failure in the field is the unpredictability of the real world environment. Once the hardware/software has been proven to work with every type of ITS device that it is expected to interface with, in a controlled, but real world test environment, the success rate of actual ITS implementations will be improved.

The new test areas will provide the resources to allow SunGuide Software integration and acceptance testing in an environment that closely replicates real-world TMC interfaces. This testing process is expected to reveal and eliminate software problems; verify that the software meets its requirements and is stable before being released for operation at the TMCs; and, possibly, certify the software before distribution within the state.

The new test areas will also provide a platform to test ITS hardware to verify compliance to ITS standards and specifications already developed, monitor microwave and data network operations, and perform center-to-center and center-to-field communications testing.

The types of hardware included in the expanded testing activities will be all of the ITS devices currently under the software's scope, and FDOT's microwave system and center-to-center network.

This expansion was suggested by FDOT District ITS Engineers during negotiation with the statewide TMC developers. FDOT's Traffic Engineering and Operations Office followed through with this suggestion by expanding the current activities conducted at the TERL to include additional ITS testing. A work program budget of \$400,000 has been tentatively allocated to accomplish this expansion. The expansion will help to ensure that the \$550 million ITS deployment and \$142 million ITS operations and maintenance programs meet FDOT's requirements, goals, and objectives.

Additional benefits of the expansion include the ability to train District personnel on the use of TMC software and TMC operation, and to assist with center-to-center network operation issues or troubleshooting. An investigation is currently taking place to discover any additional areas that the lab can assist District staff concerning ITS deployments.

Timeline

SunGuide Software Release 1 is scheduled to be deployed in District 4 in April 2005, and Release 2 is scheduled to be deployed in District 6 in August 2005. ITS device specifications are currently being developed and should be ready in late 2005. Device test procedures and testable central-to-field specific requirements (MIBs) will also be developed and completed after finalization of the ITS device specifications. The TERL's current facility is being updated and will include the new testing areas. It is anticipated that the renovation will be complete and the lab will be operational in late summer 2005.

Additional information about the TERL can be found at <http://potentia.eng.fsu.edu/terl/index.htm>.

This article was provided by Jeff Morgan, FDOT Traffic Engineering and Operations Office. For more information, contact Mr. Morgan at (850) 410-5579 or email to Jeffrey.Morgan@dot.state.fl.us.

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FDOT Equipment Certification

The FDOT Traffic Engineering and Operations Office, through the Traffic Engineering Research Laboratory (TERL), is responsible for approving all traffic control signal devices. Approved devices are kept on the FDOT Approved Products List (APL), a listing of devices that may be relied upon as meeting FDOT specifications, standards, or other criteria.

The APL is a means for the FDOT to meet *Florida Statute 316.0745, Uniform Signals and Devices*, which states, “All official traffic control signals or official traffic control devices purchased and installed in this state by any public body or official shall conform with the manual and specifications published by the Department of Transportation pursuant to subsection (2).”

More information on the FDOT APL may be viewed at www.dot.state.fl.us/TrafficOperations/TERL/APL.htm. Specific approved products in the FDOT APL may be searched at rite.eng.fsu.edu/iapl/page1.php.

For more information, please contact Carl Morse, FDOT Traffic Engineering and Operations Office, at (850) 414-4863 or email Carl.Morse@dot.state.fl.us.

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ITS America's Best of ITS Awards

ITS America honors the highest achievers in the transportation industry every year at their annual meeting. Award winners for this year will be announced and honored at the ITS America 15th Annual Meeting and Exposition in Phoenix, Arizona, during the Opening Session on May 2, 2005.

The Best of ITS honors the most innovative, effective, and influential projects and programs in the transportation industry. Awards are open to both public and private sector members of ITS America. Last year, the Florida Department of Transportation (FDOT), submitted their Successful ITS Working Group Meeting for an award under the Marketing/Outreach category. The ITS Working Group Meeting was subsequently judged by the blue ribbon panel of judges as being the best in America for educating and influencing an audience regarding ITS-related products, technology, and services.

Spurred by last year's success, the FDOT has opted to submit more proposals for this year's awards program. FDOT submitted eight award proposals that fall in six of the ten possible categories. The following indicates the award category and the proposals submitted by FDOT.

Partnership Deployment (Public Sector-only Partnership)

The Traffic Engineering and Operations Office submitted the Jacksonville to Orlando Center-to-Center (C2C) Pilot Project for an award under this category. The ITS Section of the Traffic Engineering and Operations Office designed the C2C network and is deploying software that

will enable various specific partners to connect to each other to share traffic-related data and roadside video streams, along with camera and dynamic message sign control over the network. The C2C Pilot Project is utilizing the FDOT's microwave system as the communications medium. The project will demonstrate the benefit of the FDOT's statewide microwave system in regards to ITS deployments in the state.

Partnership Deployment (Public-Private Partnerships and Private-Private Sector Partnerships)

The FDOT submitted two initiatives under this award category.

- The first initiative is the Lodestar Tower Lease and Operating Agreement for Commercial Wireless Communications. Loadstar (now SpectraSite) enters into subleases with wireless providers and provides FDOT with a percentage of the gross receipts derived from the subleases. Aside from gaining revenue, FDOT has the option of substituting services for cash. Services obtained from Lodestar have gone to support FDOT's ITS Program.
- The second initiative submitted under this category is District Seven's arrangement to utilize data collected by Mobility Technologies through the Federal Intelligent Transportation Infrastructure Program (ITIP). Information collected through the ITIP is provided to the District's Advanced Traveler Information System (ATIS) and made available to the public through the use of the 511 phone number and Web site. The information provides for a significant enhancement of the ATIS.

Marketing/Outreach (Public Sector only)

District Six submitted their SunGuideSM Transportation Management Center (TMC) Marketing Video for an award under this category. The video was developed as a tool to provide information to the public regarding the role played by the TMC in managing traffic; how the TMC accomplishes its mission; and why the TMC was constructed. The video shows how the operators coordinate with the Florida Highway Patrol (FHP) and Road Rangers to identify and safely clear incidents from the roadway.

Public Safety

The FDOT submitted two initiatives under this award category.

- The first initiative was submitted by FDOT for the Statewide Incident Management Program. This program started in 2000 and has grown rapidly in the years since inception. Sixteen Traffic Incident Management Teams have been established throughout the state and form the cornerstone of the Statewide Incident Management Program. Two of the most notable successes of this program are the promotion of the Road Rangers and the Open Roads Policy signed by FDOT and the FHP. Florida is one of a few states that have implemented an Open Roads Policy. The policy sets a goal for clearing incidents in 90 minutes or less.
- The second initiative was submitted on behalf of Florida's Turnpike Enterprise (FTE) and is for the Turnpike's Rapid Incident Scene Clearance (RISC) Program. The RISC Program is an innovative program to help meet the goal of clearing major incidents and truck crashes in 90 minutes or less. The RISC program assures that only highly-trained, certified wrecker and heavy-recovery equipment operators respond to incidents. To reinforce FTE's commitment of achieving the 90 minutes clearance goal, the FTE

provides a monetary incentive for those contracted, heavy-recovery companies who remove incidents in under the 90 minute goal.

Return on Investment

The Traffic Engineering and Operations Office submitted their achievement of securing funding for TMC Operations and ITS Field Equipment Replacement under this category. FDOT's Ten-Year ITS Cost Feasible Plan (CFP) provided \$496 million for capital costs to deploy ITS through the year 2012. However, it did not address operations and equipment replacement costs. The achievement of securing additional funding for operations and equipment replacement fills a void not covered by the CFP.

Best New Product, Service, or Application

Florida's Turnpike Enterprise submitted its first-of-its-kind traffic management vehicle (TMV) for an award under this award category. The TMV is a full-size van that can be dispatched to an incident to assist the Turnpike's TMC operators with monitoring and managing the incident. The van is equipped with a pan-tilt-zoom closed-circuit television on a retractable 45-foot mast allowing the vehicle to send, via satellite communications, live video to the Turnpike's TMC operators. In its first three months, the TMV was successfully dispatched to more than 20 major incidents along the Turnpike's mainline.

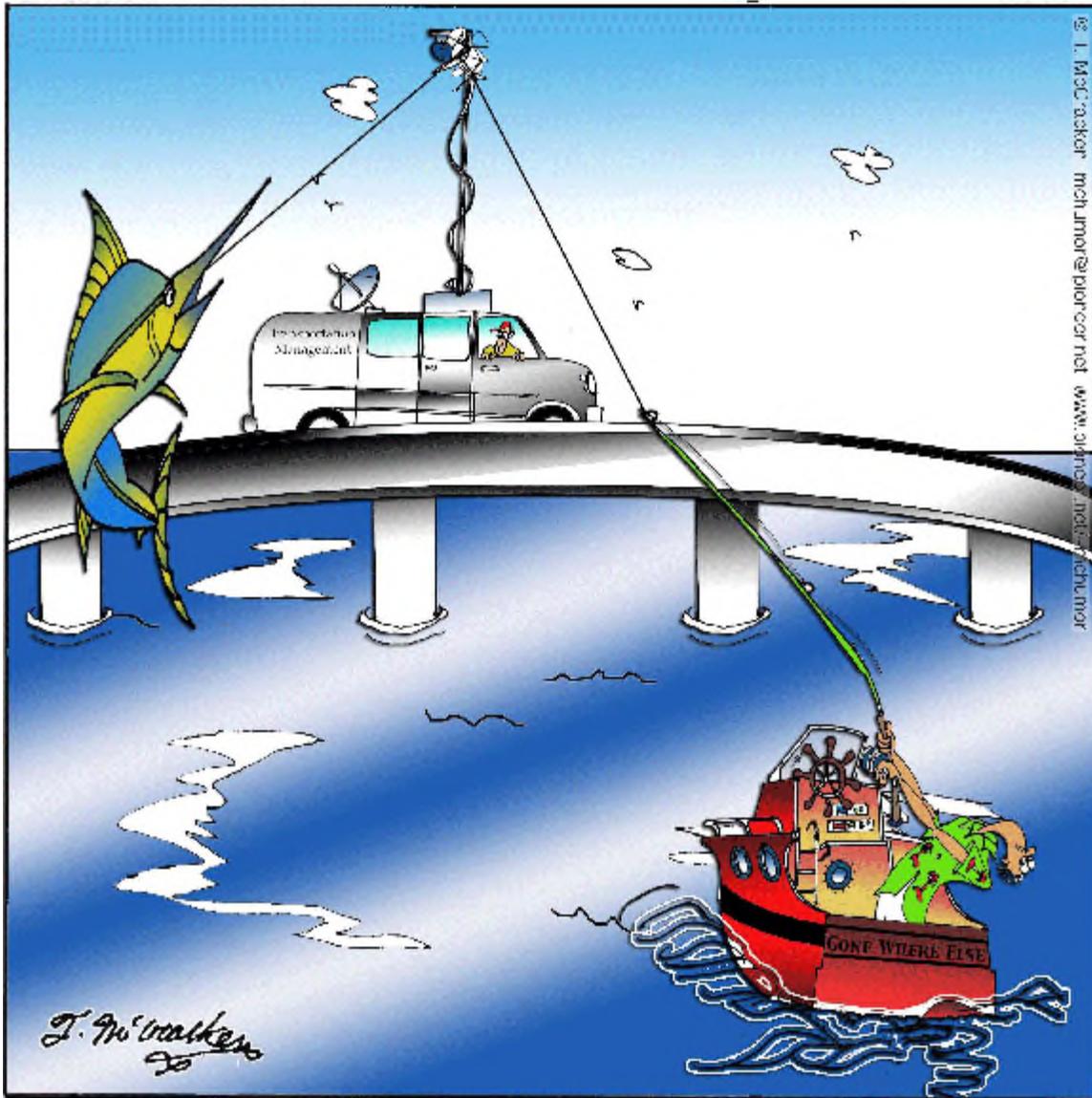
Of course, there is no guarantee that any of the eight submissions will be selected for an award, but the FDOT is optimistic that these projects will be in the fray for another award.

This article was provided by Gene Glotzbach, FDOT Traffic Engineering and Operations Office. For more information, contact Mr. Glotzbach at (850) 410-5616 or email to Gene.Glotzbach@dot.state.fl.us.

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Moment of Humor!



Uh... does the Turnpike have a fishing license?

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"New Technologies" For Increasing Freight Security

It has been over three years since the unfortunate events of September 11th that changed our country forever. Since that time, many Federal agencies have spent considerable resources studying all facets of transportation in the United States with the goal of finding areas

vulnerable to terrorist attacks and limiting those vulnerabilities to the greatest extent practicable. One of those areas identified as vulnerable to attack or commandeering is the movement of freight, be it on an airplane, truck, railcar, or ship. Shipments of both hazardous and non-hazardous materials are at risk for many reasons. In the interest of brevity, only shipments via trucks will be discussed in this article.

Given the rate at which technology progresses in the world today, one would think that in three years we would have seen the development of a plethora of new technologies which could be utilized to increase the security of freight transportation in the U.S. This, however, has not been the case. At the Transportation Research Board (TRB) 84th Annual Meeting, held in Washington, DC in January 2005, there was very little, if anything, “new” with regard to technologies which would solve the problem of freight security.

What was “new” was not necessarily information on any one technology, but rather there was new information presented on combinations of technologies, cost/benefit analysis of technologies (none of which were new) designed to enhance freight security, information gleaned from the transportation community on where they felt the security vulnerabilities lie, and information on what steps certain segments of the transportation community have taken to increase security. All of these presentations and/or papers contained valuable information which could be of interest to both product developers and freight operators; however none of them purported to have *the* answer for addressing freight security.

The common themes that emerged for increasing freight security were:

- Increasing fleet visibility increases security,
- Positive authentication of persons (or vehicles) having access to vulnerable areas of the transportation system enhances security, and
- The best proven technologies are of no use if companies cannot afford to implement them, or have no confidence in their necessity.

How Does Increasing Fleet Visibility Increase Security?

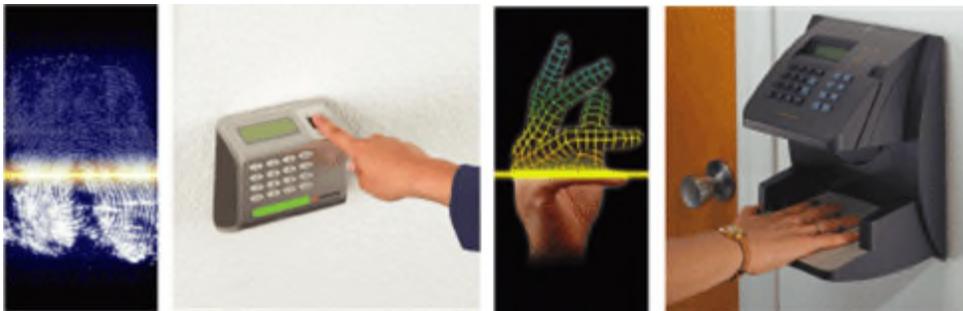
According to the recent case study, *Improved Chassis Routing via Use of Tracking Technology and Optimization: A Case Study*, F. J. Srour, D Newton, and M. Jensen, “a combined real-time transport asset/cargo tracking and security monitoring system has been continually acknowledged as being an integral part of homeland security for the United States.” In theory, this is accomplished in a couple of ways. If the location of a vehicle is known at all times, this will serve as a deterrent to individuals intent on taking possession of the vehicle for harmful purposes. If the deterrent factor doesn’t work and the vehicle is hijacked or stolen, then the ‘visibility’ of the vehicle will aid dispatch in determining next steps. If the vehicle’s physical location is known, dispatch would be aware of any significant deviations from the planned route. Dispatch could then notify law enforcement of the situation and provide them with the vehicle’s location and a window of opportunity in which to intercept the vehicle before any harm can be done.

What types of technology have been or are being deployed to increase freight security through increased fleet visibility? As previously stated, none of these are new. A combination of the following technologies has been used: Global Positioning Systems (GPS); onboard sensors, which can determine if a load is present and whether or not it is tethered to a tractor; onboard personal computers (or central processing units) to time/date stamp information being collected; cellular communication systems to relay information from the vehicle regarding its

condition and location; and, of course, the requisite power source. Although this system does show potential for increasing freight security, there are still issues with presenting all of the onboard data to the customer in a meaningful format.

What Technologies Are Currently Being Utilized/Evaluated For Authentication of People and/or Vehicles?

Again, as with fleet visibility, nothing is new here—these technologies have been around for some time now. For authentication of people, biometrics (finger print, iris or facial recognition, and hand geometry) and “Smart Identification Cards,” such as the Transportation Worker Identification Credential (TWIC), seem to be the most popular. For vehicle authentication, technologies such as license plate recognition, radio frequency identification (RFID) via transponders, electronic license plates or microchips manufactured into the vehicle, wireless communications combined with GPS, or electronic seals have been proposed. Although several of these technologies have been successfully deployed for access control at highly secure government facilities or military installations, their use in the commercial transportation system is relatively new. Because of the broader application to a larger segment of the population, another issue that impacts deployment of these technologies is that of individual privacy. The privacy issue as well as the technologies’ accuracy and their return on investment are currently being evaluated.



What Has the Trucking Community Done, or Willing to Do, to Address Freight Security?

How does the trucking community weigh in on freight security issues? Where do they see the security vulnerabilities? The results of a recent survey of agriculture/food transporters in the U.S., performed by the American Transportation Research Institute, provide insight into the answers. One of the primary concerns expressed by the survey respondents was that the burden placed on drivers to comply with new security regulations could result in a large number of drivers leaving the industry. It was also reported that 56 percent of the respondents indicated the most likely security threat (rated moderate to high) is associated with rest stops and overnight parking (*Identifying Vulnerabilities and Security Management Practices in Agricultural & Food Commodity Transportation*, R. Brewster and R. LeVert).

With regard to the question of what the industry has done, or is willing to do, to address freight security, almost two-thirds of the respondents reported that they initiated new security programs or activities after September 11, 2001. When looking at the results by carrier size, 86 percent of the large carriers reported new security programs, while only 42 percent of very small carriers reported same. With regard to implementation of specific technologies, large carriers were much more likely to install wireless tracking systems than small carriers; just as long-range carriers’ use of this technology was five times greater than local carriers. Less than

3 percent of the respondents reported initiating new security measures using RFID tags, smart cards, or E-seals.

Successful implementation of technology to improve freight security movement is not just a technological issue; financial aspects are just as important. The reality is that trucking operations run on very thin margins, typically around 5 percent. In order for a company to invest in new technologies, they must have a significant positive effect on the bottom line. Security for security's sake cannot keep a company in business.

It was very interesting to note that, of the presentations and papers presented at TRB this year, the economic aspect of technology deployment was an integral part of the discussion. The authors understood and acknowledged that technology for technology's sake is not practical. Only those technologies that solve the security issues and have the highest returns on investment have a chance of widespread adoption by the freight industry.

What will it take to get widespread adoption of technology that enhances the security of freight shipments? Many people might think the answer is for the Federal government to "make" companies implement these types of technology. The reality is that this is not going to happen. Our government goes to great lengths to avoid enacting laws that would put a large number of businesses 'out of business.' The best hope is that the vendor can develop a technology that addresses not only the security issue but also the financial realities of the freight transportation industry. The technology that increases security and either saves the operator money or increases his profits has the best potential for success.

This article was provided by Richard Easley and Sharon Easley, E-Squared Engineering. For more information, please contact Mr. Easley at (706) 858-5588 or email REasley@e-squared.org.

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We invite you to have some fun and complete the *SunGuide Disseminator* Word Challenge!

Unscramble the letters to complete the word for the clue found under the boxes.

Use the letters in the red circles to complete the final puzzle.

An answer guide follows the Announcements.

Enjoy and Good Luck!



R E T U F S I T N R A R C U

An "I" in VII.

S P O O R N E A D

Policy setting 90 minute incident clearance goal.

C A F I E N S T O P I C S I

The SSEP features these.

X E I P N O H

Location of ITS America's 15th Annual Meeting and Exposition.

S T I G E N T

TERL performs this on traffic control devices.

can handle this!

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Editorial Corner—Everyone Could Use Some Timely Information

It has been repeated many times that ITS saves lives, time, and money. From an incident management point of view, the ability to detect, verify, respond, and clear an incident quicker reduces the possibility of secondary incidents, reduces the much dreaded queue formed after incidents which, in turn, reduces the economic impact caused by delays.

Dynamic message signs (DMSs), an integral part of our ITS deployments, also have the capability to help motorists save time and money. Providing real-time travel times on DMSs ahead of decision points gives motorists valuable information, enabling them to make more informed travel decisions regarding alternate routes.

Areas already displaying travel times on DMSs include Atlanta, Georgia; Portland, Oregon; Milwaukee, Wisconsin; and, most recently, Salt Lake City, Utah and Minnesota. Both Salt Lake City and Minnesota are experimenting with pilot projects that will be expanded if successful.

Florida has traditionally been recognized as a leader in ITS. Displaying travel times on DMSs on a statewide basis solidifies our desire to be a national leader. It also makes use of expensive and sometimes under utilized infrastructure while making information available to travelers. I firmly believe we owe it to all our road users to make the best use of the technology we have to make their drive as safe, quick, and reliable as possible. Posting travel times on DMSs will help make this a reality.



FHWA has established recommended practices regarding the use of DMSs to display real-time traffic. Seeking feedback from and educating the public before starting to post real-time traffic messages is important. New types of messages often cause motorists to slow down, so any efforts to reduce surprise effects will help motorists to more easily adapt to the new messages. Also key, is the fact that real-time travel messages may not be appropriate for all DMSs or for every hour of the day. Several states only post real-time travel messages during morning and afternoon peak hours.

While the infrastructure needed to display real-time travel messages on DMSs has not been deployed in some areas of our state, it will be in place in the next years allowing us to provide real-time travel information to our traveling public on a statewide basis in the near future.

Within the next few months, the ITS Program will be developing guidelines for DMS usage and the posting of messages. These guidelines will address use of DMSs for emergency and real-time travel messages, and will also incorporate the existing Amber Alert protocol.

Stay tuned, timely information coming to a DMS near you.

This editorial was provided by Elizabeth Birriel, FDOT Traffic Engineering and Operations Office. For information, please contact Ms. Birriel at (850) 410-5600 or email to Elizabeth.Birriel@dot.state.fl.us.

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ITS Florida—Yesterday, Today, and Tomorrow

Each year the incoming president of ITS Florida is invited to write an article for the SunGuide Disseminator. Thinking about what I would write, it occurred to me that we have many new and not-so-new members, but there are just a relative few of the original group still active (wow, that makes me feel old!), so having been here in the beginning, I thought a quick history of our founding might be of, at least, historical value.

Our Roots

I'm sure I'm not the lone ranger in this idea, but I did act on it and eventually got results. What we now called "ITS" (intelligent transportation systems) had its roots in a series of two meetings instigated by a small group of U.S.DOT, key industry, and academic leaders, who saw the rapidly emerging technologies in the vehicle and traffic management and information systems as a potential "new era" in transportation. They recognized the need to marshal the forces necessary to focus on ITS development as a viable part of transportation. After a series of meetings in several locations, during which the group named itself "Mobility 2000," a more widely attended meeting was held in San Antonio in February 1989. If you could see the list of these pioneers, you would recognize that these were the "giants" of our industry. I won't attempt to list them, for surely some would be omitted, but I can assure you that Dr. Bill Spreitzer, General Motors, retired, knows them all. I didn't attend that first meeting, but my University of Florida colleague, Ken Courage, did and told me this was something that we had to get involved with.

So, in March 1990 outside of Dallas, the second Mobility 2000 meeting was held. I went and came out with the same conclusion. It was really exciting being present at the conception of a new movement. We invented a whole list of new acronyms (for which we've been condemned ever since), like ATMS, ADIS (later ATIS), CVO, APTS, and, the mother of them all, IVHS (intelligent vehicle-highway systems)—thanks to Drs. Kan Chen and Bob Ervin, then of the University of Michigan. The key recommendation of this meeting was that there needed to be a national, non-governmental organization to ride herd on this new “industry.” Shortly thereafter, the American Association of State Highway and Transportation Officials (AASHTO) and the Highway Users' Federation for Safety and Mobility (HUFSA) teamed up to create the Intelligent Vehicle-Highway Society of America, or IVHS America.

In 1990, IVHS America was incorporated and began business; soon negotiating an on-going arrangement with the U.S.DOT to be a scientific and educational resource as well as a “Federally Utilized Advisor” to the U.S.DOT—in other words, a closely joined association. I was privileged to be at the first and all subsequent meetings of IVHS (and then in 1994, ITS) America until 2002 (this was the only meeting I missed). But that's not the story. After the first IVHA America meeting in Reston, Virginia, in 1990, I concluded that this was indeed the “real deal” and we needed a counterpart organization in Florida. (...and other states as well—but they could take care of themselves, and several were. In fact, the race was on, although we didn't know it at the time.)

Accordingly, on June 4, 1991, while still the Director of the Transportation Research Center at University of Florida, I wrote to then FDOT Secretary of Transportation, Ben Watts, proposing formation of a state-level organization to promote and facilitate IVHS information exchange. I didn't hear back for a year or so and later learned that Secretary Watts, who was a charter member of the IVHS America Board of Directors, was concerned about competition with the national organization. (This indeed became an issue in several of the fledgling state organizations.) In September 1991, I sent a follow-up letter clarifying the competition issue and assuring that was not the intent. Still no response.

But FDOT wasn't blind about IVHS. On April 13, 1992, FDOT established its first formal policy on IVHS Concepts and Technologies, declaring it FDOT policy to consider IVHS in any major transportation improvement. Meanwhile, the first major IVHS demonstration project, TravTech, was getting cranked up in the Orlando area.

Then on May 19, 1992, an informal meeting of FDOT (Frank Carlile, then Assistant Secretary), FHWA Florida Division (Jim Skinner, Division Administrator), Florida Section Institute of Transportation Engineers (FSITE) (Jack Freeman), University of South Florida (Mike Pietrzyk), and University of Florida (yours truly) met at the 2nd IVHS America Annual Meeting in Newport Beach, California. Standing around a luncheon table in a hallway, munching sandwiches, we discussed and quickly agreed, in principle, to pursue “IVHS Florida.” Frank Carlile invited us to meet at the FDOT office in Tallahassee, and, on June 5, we met in the Secretary's conference room and, in effect, founded IVHS Florida. While Frank Carlile was out of the room to take a call, the rest of us named him president and chairman of the board. We were giddy with power!

I was charged with drafting a Memorandum of Understanding (MOU) for IVHS Florida and Mike Pietrzyk with organizing the first “IVHS Florida Forum.” Several drafts of the MOU were distributed in the subsequent months, and then, on November 4, 1992, the first IVHS Florida Forum, co-sponsored with FSITE, was held in Orlando. Dr. James Costantino,

Executive Director of IVHS America, was the keynote speaker and announced that, if we signed the MOU ASAP, we would be the first “state chapter.” Four of us signed that day. Then days later (after a legal review) on November 10, 1992, Secretary Watts added the final signature to the IVHS Florida Charter to officially create the organization. I’m told that we beat Texas by about a week.

In 1994, we renamed the organization to “ITS Florida,” following ITS America’s lead. I might add that I was one of two dissenting votes at the ITSA ATMS Committee meeting—the largest by far—feeling that “IVHS” was unique, whereas “ITS” had established research and other centers around the country. And worse of all, it would likely be mistaken as “its”—as has often been the case. Well, you can’t win them all, but I have an IVHS story I’ll be happy to share if you’re interested, which, in the end, might have justified the change. ITS Florida also became an official charter-affiliated chapter of ITS America (1995), got incorporated as a 501(c)(3) in Florida, and joined the ranks of real-world associations.

(This article will be concluded in the April 2005 issue of the SunGuide Disseminator.)

This article was provided by Charles Wallace, ITS Florida. For more information, please contact Mr. Wallace at (352) 374-6635 or email Charlie.Wallace@cox.net.

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For more information on ITS Florida, please check the ITS Florida Web site at www.itsflorida.org or contact Diana Carsey, Executive Director, at (727) 409-5415 or email CarseyD@verizon.net.

If you wish to contribute an article to the *SunGuide Disseminator* on behalf of ITS Florida, please contact Erika Ridlehoover at (813) 376-0036, or email Erika.Ridlehoover@transcore.com.

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Announcements

ITS America's 15th Annual Meeting and Exposition

FDOT will once again team up with ITS Florida to exhibit at ITS America’s 15th Annual Meeting and Exposition in Phoenix, Arizona, from May 2-6, 2005.

FDOT and ITS Florida’s exhibit will center around Florida’s successes in ITS deployments and ITS Florida members, and it will provide an opportunity for visitors to speak with attending FDOT ITS representatives.

Stop by and visit—FDOT will be at Booth 413. For more information, please contact Pamela Haynes, FDOT ITS Section, at (850) 410-5632 or email Pamela.Haynes@dot.state.fl.us.

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ITS Canada's 8th Annual Conference

ITS Canada's 8th Annual Conference and General Meeting will be held on May 15-17, 2005, at the Loews Le Concorde Hotel in historic Quebec City, Quebec, Canada.

The general theme for the upcoming conference is "Time for Integration!" The state of Florida and the Government of Quebec signed a Memorandum of Understanding last year to pursue and enhance cooperation in the areas of Transportation, Science and Technology, Economic Development, and Tourism and Education. As part of this MOU, Florida and Quebec will share information on ITS issues. Elizabeth Birriel, ITS Program Manager, will be presenting the Florida ITS Program's achievements and future plans at this conference.

Stay tuned for more details!

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...And a Hearty Welcome

The FDOT Traffic Engineering and Operations Office in Tallahassee is pleased to announce and welcome **Arlene Kern** as the new Highway Signing Program Manager. Arlene transferred from the District Five Traffic Operations Office where she worked in the highway signing area. Her knowledge about highway signing on a District and local level will be very helpful in her new position.

We are also happy to announce the addition of **Steven J. Bentz** as a new addition to FDOT's ITS Section as an ITS Analyst for the FDOT ITS General Consultant, PBS&J. Steve will be assigned full time to the TERL providing support for the product certification program.

Steve has a varied background, beginning as a naval aviator and moving into management, both in military and civilian jobs. He comes to us from the FSU Comptroller Office where he administered the FSU property inventory program.

Along the way Steve earned a Master's of Science degree in Industrial Engineering from FSU, plus a Master of Business Administration from Texas A&M on top of his Bachelor of Science in Mathematics from the State University of New York.

Finally, **Ronald G. Meyer** also recently joined PBS&J and assumed his duties in the FDOT ITS Section as an ITS Specialist II.

After receiving his Bachelor of Science from FSU, Ron spent the first few years of his career in television production studios before migrating into traffic systems in 1995, when he joined Peek Traffic Systems in their manufacturing and development center in Tallahassee. Ron served as the Technical Lead and Product Support Manger for the Machine Vision Group. During these six years he had a major role in development of Peeks' research, development, system testing, and marketing of a video-based vehicle detection system.

Ron comes to his new position after a stint with a traffic controls vendor. As an ITS Manager his duties included, in addition to business development, working with traffic engineers in system design, technical sales, and integration support for ITS market products and services.

Please join us in welcoming these people to our group.

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Word Challenge Answers

S U N G U I D E

T E S T I N G

S T I G E N T

P H O E N I X

X E I P N O H

S P E C I F I C A T I O N S

C A F I E N S T O P I C S I

O P E N R O A D S

S P O O R N E A D

I N F R A S T R U C T U R E

R E T U F S I T N R A R C U

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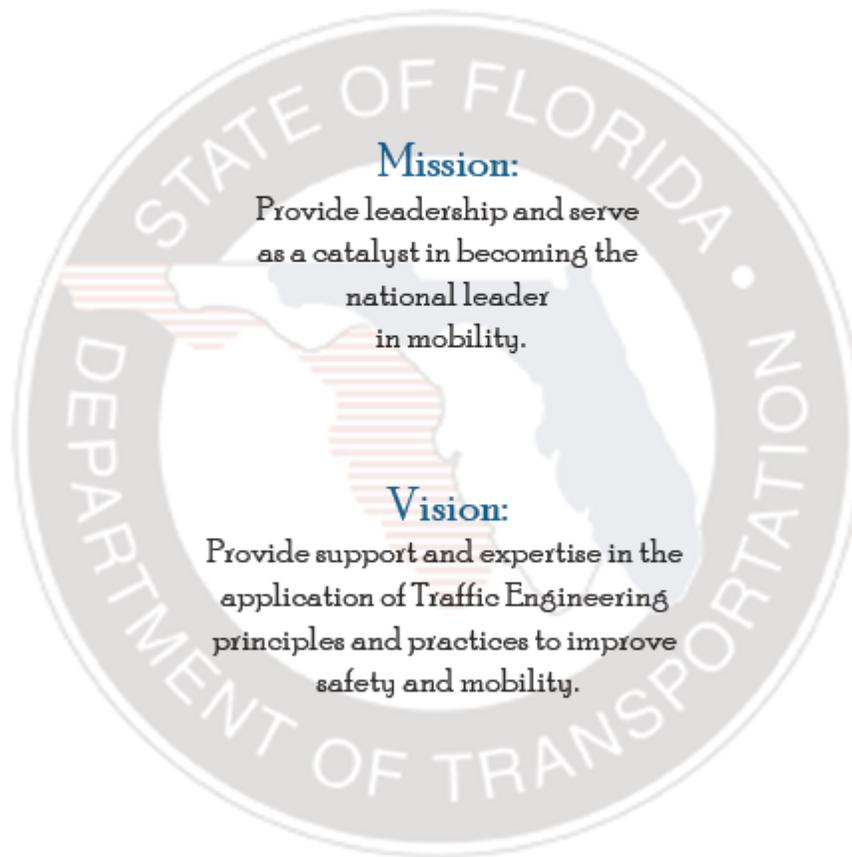
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