Expanded CVISN
Roadside Identification Ad Hoc Team
October 10, 2006
Conference Call Notes

Participants

Mike Anderson, Valerie Barnes, Mark Bell, Roan Bennett, Gene Bergoffen, Vince Brown, Jim Bunch, Thomas Caves, Dan Cline, Joe Crabtree, Tammy Duncan, Michael Filiaggi, Joe Foster, Thad Hoffmann, Jack Horne, Paul Hurd, Mark Jones, Keith Kennedy, Joe LoVecchio, Rick McDonough, Bob Kreeb, Cathy Krupa, Nancy Magnusson, Tom McKay, Manoj Pansare, Mary Stuart, C. T. Wicker

Welcome and Introduction

Val Barnes welcomed all of the participants. Val said that very soon all announcements pertaining to this ad hoc team will be posted on the CVISN Collaboration SharePoint Site and you will need to subscribe to alerts so that you will receive announcements from the system. Please contact Val if you have not already received an invitation to join the site.

Two files are referenced in these minutes:

- "FMCSA WRI Program 2006-07-25 R1.doc" that describes the FMCSA Wireless Roadside Inspection Program; and
- "Industry Perception Task_Summary.ppt" that presents summarized findings from three industry workshops held to solicit motor carrier feedback regarding roadside identification technologies and information sharing.

The files can be found on the CVISN Collaboration SharePoint site at https://partners.jhuapl.edu/BA/hp/cvisn/RI-AHT/2006-10-10/default.aspx. The files also are posted to the "roadside_ identification" folder of the FTP site at ftp://cvisn:seevison@ftp.camsys.com/clientsupport/expanded_CVISN_ad-hoc_teams/. The files are in the "2006-10-10" subfolder.

Status of Outstanding Action Items

Cathy Krupa reviewed the action items identified during the ad hoc team's conference call on August 1, 2006. Items were reported as follows:

- Warren Dunham is the point person for advising the team when the final version of Kansas' best practices study of virtual weigh stations nationwide is available. **Status:** As this item has been in waiting for almost a year, Val Barnes suggested that Warren advise the team when he receives the study in lieu of retaining the action item.

- Jeff Loftus is the point person for informing the team when Oak Ridge's technology scan of roadside identification technologies is issued. **Status:** Jeff was not on the call, but Val Barnes will ask Jeff to check on the status of the technology scan as there is substantial interest in the findings from team members.

- Jeff Loftus provided information on the FMCSA Wireless Roadside Inspection Program in advance of the last conference call in August ("FMCSA WRI Program 2006-07-25 R1.doc"). On that call, the team was asked to review the document for discussion during the October team call. **Status:** Val Barnes gave an overview of the program. The program will demonstrate the potential benefits of using new technologies to collect data and increase assessments of drivers and vehicles. This would be accomplished by wireless communications of a safety data message set (SDMS) from the vehicle. The goal is to produce a "go/no go" decision for nationwide deployment. Val summarized the three phases of the program: technical concept (prototype), pilot testing, and field operational testing. In the final, field operational testing phase, data from the SDMS will be integrated with other data to facilitate routine enforcement strategies and update safety scores. Data will be collected for one year, and after that time FMCSA will decide if the program will be deployed nationwide.

  Joe Crabtree asked if this program is the same as the I-95 Volvo and North Carolina State Highway Patrol demonstration project (I-95 Corridor Coalition vehicle to roadside communications project). Thomas Caves, who is the project manager for the initial phase of the I-95/Volvo/NCHP project, stated that the projects are not the same, nor is there any formal relationship between the two projects. However, the project principals stay in touch with each other.

- Mary Stuart, who in August informed the team that the Volpe Transportation Center is amenable to generating monthly reports about records stored in SAFER to enable states to verify that their own data are available and that they are downloading all the data needed from other states, will report the results of the discussion of this item by the Data Integrity Focus Group. A CVISN Architecture Configuration Control Board (ACCB) focus group was to have discussed the SAFER Change Request that will be required to support development of the standard report. **Status:** Mary reported that Bill Goforth of Washington State put together a draft of what should be in the change request. Volpe has received it. Mary will discuss details of the structure of the report during the next ACCB meeting. Mary clarified that the ACCB will submit the change request on behalf of the states.

- On the last conference call, the team was asked to review the original e-screening model documentation (*CVISN Guide to Electronic Screening*) in the context of roadside models and program goals. Val Barnes will lead a discussion in this month's call. **Status:** This item was discussed at the end of the call (see notes on page 6).

- Thomas Caves, who in August reported on the I-95 Corridor Coalition project to develop and test communications from the vehicle to the roadside for enforcement purposes, will provide an update to the team based on the I-95 CVO Committee meeting and project demonstration held in September. **Status:** Thomas provided an update immediately following the roll call of outstanding action items (see notes on page 3).

- Cambridge Systematics, which in August reported on the results of the first industry meeting on data sharing and vehicle and driver identification at the roadside, will report on the results

of the second and third meetings held in August. **Status:** Roan Bennett reported the findings later in the call (see notes on page 4).

- Joe Crabtree, who in August reported early results of Kentucky's Integrated Security and Safety Enforcement System (ISSES) featuring deployment of license plate readers and U.S. DOT numbers capture, will report on the deployment of two additional installations on I-75 South and I-65 North. **Status:** Joe reported on the additional deployments later in the call (see notes on page 5).

I-95 Corridor Coalition Project/Enforcement Application of Vehicle to Roadside Communications - Update

Thomas Caves reported good attendance at the I-95 CVO Committee meeting on September 12 – 13, 2006 at the Volvo Trucks North America facility in Greensboro, NC, that featured a technology demonstration of the transmission of various inspection components through a wireless application to a nearby weigh station. This demonstration concluded phase one of the project to demonstrate the feasibility of wireless inspections. Phase one lead organizations included the North Carolina State Highway Patrol, Institute for Transportation Research and Education (ITRE) at North Carolina State University, and Volvo Trucks North America.

Earlier, in February 2006, a workshop was held in Greensboro to support the requirements analysis component of phase one and prepare for this test. Workshop attendees (26 representatives of State and Federal agencies, academia, the Commercial Vehicle Safety Alliance, the I-95 Corridor Coalition, and the co-lead organizations named above) worked in groups to answer key questions, including what does enforcement want to see at the side of the road to support their inspections and what keeps you up at night? Based on the workshop results and available funding, the project would prototype communication about driver identity and the vehicle braking system.

In the demonstration, the test truck traveled at highway speeds on the interstate highway. Information on the driver and the braking system were transmitted to the weigh station that is equipped with a wireless application (Wi-Fi) with a "souped-up antenna." This allows communication with a vehicle traveling at highway speeds up to a mile away.

Transmitting driver identification to enforcement personnel at the station was a key objective. Installed in the vehicle is a hand-sized device that has a card with a chip with a fingerprint. The driver fingerprint is sent to the weigh station where the fingerprint reader matches the fingerprint with the driver's fingerprint on their Transportation Worker Identification Credential (TWIC). Vehicle braking system information also was sent to the weigh station. All trucks have a data bus that logs fault codes so that the vehicle knows that something is wrong (with the vehicle). The braking system fault codes are sent to the weigh station as the vehicle is traveling, in time for the operator to analyze the information before the vehicle arrives.

The demonstration successfully transmitted the driver data to the weigh station and retrieved the vehicle data in the same transmission. Note that the vehicle and driver data are coming from different sources. Upon receiving the alert or pass signal, the system communicated the appropriate message to the driver. Thomas reported that "everything went smoothly."

(Background information was added to the actual discussion based on the Enforcement Workshop minutes, February 9, 2006, Greensboro, NC.)

Thomas stated that a new phase of the project will begin soon. This phase will be led by the Commercial Vehicle Safety Alliance (CVSA) with funding provided by the Transportation Security Administration (TSA). The objective is to demonstrate the feasibility of transmitting information to/from a mobile platform (rather than a fixed facility). The results of the initial phase were very encouraging. Dr. Ron Hughes of ITRE will conduct the evaluation at the end of the year. Demonstration results will be available soon.

Val Barnes asked about the sources of the data. Thomas will refer the question to Johan Hultin and Conal Deedy of Volvo. Val added that the team has strong interest in mobile to mobile communication. Thomas said that the phase two concept will be developed by CVSA (not Volvo) but that he will check with Steve Keppler of CVSA and update the team on the phase two design and timeline.

Industry Perception Task – Update

Roan Bennett, Cambridge Systematics (CS), reported the findings of the three industry workshops held as part of the industry perception study funded by FMCSA, which is to document motor carrier industry input regarding the use of roadside technologies to electronically identify commercial vehicles and the sharing of commercial driver data. The three industry meetings were held in July and August in Albany, NY; Denver, CO; and Columbia, SC.

Roan reported from an updated version of the summary presentation, "Industry Perception Task_Summary.ppt," distributed in advance of the present call. The updated presentation has been posted to the CVISN Collaboration and FTP sites.

Although the presentation includes carrier perspectives on Global Positioning System (GPS) benefits, transponder benefits, cost implications of using technologies, and information sharing, motor carrier views about automatically identifying vehicles at the roadside are of most interest to the team.

The topic of monitoring the vehicle, carrier, and driver was repeatedly brought up in the workshops. Feedback was indifferent; there were no objections raised in the meetings to being more efficiently identified. The attitude seemed to be that whatever is required of us (motor carriers), we will do. In sum, there was no hearty endorsement, but no articulated objection. There was the opinion that if carriers are asked to do something (use a technology, provide information), FMCSA must provide support.

Joe Crabtree reiterated the team's ongoing interest in how the industry feels about being automatically identified at the roadside through technology, and asked for confirmation of his impression that there was neither outright objection nor endorsement. Roan said this was an accurate portrayal of the participants' attitudes. Joe offered that these findings mark a shift in industry attitude from not wanting to be identified automatically to being rather complacent.

Joe Crabtree also asked if Battelle's study is related to the Cambridge Systematics study. Vince Brown, of Battelle, said that Battelle is doing a motor carrier survey that includes attitudes toward CVISN technologies. The studies are "similar but different." The Battelle study is oriented toward costs and benefits and quantifying the participation of carriers. Battelle also is evaluating what already is in place. In contrast, the CS study is more future oriented, looking at what motor carriers would like to see in the future.

Kentucky's Integrated Security and Safety Enforcement System - Update

Joe Crabtree discussed two additional ISSES installations. On the previous call, Joe had discussed early results from the installation on I-75 North in Laurel which has been in place for one year. He identified timing issues involving the image capture triggering device that were holding down the performance of the license plate reader (LPR).

The system has been installed in two new locations: I-75 South in Kenton County and I-65 North in Simpson County. Because of the problem at the Laurel site, the triggering devices at these two new locations will need to be checked.

Overall, there is a need to reevaluate both the LPR and U.S. DOT reader to ascertain how all three sites are performing. By the end of the week, Joe will have new data to evaluate.

The three sites are not identical, but similar. At the two newest installations, the photographic equipment was moved to the driver side (at the Laurel site, it is on the passenger side). This allows lighting to be directed away from the mainline. In addition, changes were made to automatically correct for ambient lighting, and the radiation detectors are a later generation with less width restriction and more advanced spectroscopy.

Tasks/Focus for This Group

Val Barnes asked Joe Crabtree, the team's champion, about his thoughts on the team's tasks and focus.

Joe offered that the team could work with Tim Adams of the American Association of Motor Vehicle Administrators (AAMVA) on standardizing license plates. Another course is for individual states to work together to develop a commercial motor vehicle (CMV) plate that is readily machine readable or includes a readable chip.

He cautioned against pushing for a standard, nationwide CMV plate; "it may be biting off too much." Instead, it may be better to start smaller with a few states.

Thomas Caves asked about states developing a national database that contains all vehicle identification numbers (VINs). He said this was a discussion item in Greensboro. Val replied that SAFER is supposed to be *that* database, but there is the problem of not all states contributing the information to SAFER.

Joe Crabtree stated that the ultimate goal is for a vehicle to transmit identifiers wirelessly to the roadside.

Mary Stuart mentioned, on the basis of the previous discussion of the I-95 project, that the stream of data would include U.S. DOT and VIN in phase two. Thomas said it is unclear at this point what the focus will be.

Joe Crabtree asked the team to keep in mind the continuing basis of voluntary participation, meaning that data will be obtained on the good trucks only. For all other trucks, states will have to rely on information on the license plate or the U.S. DOT number on the cab. If identifiers are mandated, states should modernize the technology beyond a license plate or painted U.S DOT number.

It was agreed that wireless roadside inspection is one focus of the group, and it is important to stay on top of states' efforts.

Joe Foster expressed that the team could be the champion of getting all vehicle information into SAFER. Roadside identification is dependent on the data in SAFER. Joe added that the Oak Ridge technology scan is critical.

Val noted that the Driver Information Sharing ad hoc team could be disbanding. She believes that the roadside identification ad hoc team still has issues to deal with that have a great bearing on roadside safety.

Mary, talking about the ACCB's consideration of the e-screening model, said that Doug Deckert of Washington State will champion e-screening enrollment business processes. Volpe will help model the processes. Doug had mentioned a couple of data items that could be added to SAFER to facilitate identification. APL will contact Doug to inform him of this group's items.

CVISN Guide to E-Screening

Val Barnes asked the team if they had any questions or comments based on their review of the *CVISN Guide to Electronic Screening.* Rick McDonough said there needs to be a functional definition of what e-screening is in terms of capabilities and performance.

Another issue is to update the screening model. Does the guide present an accurate representation of electronic screening today? Is there a need to expand/change the description?

Cathy Krupa asked if there is any intent to explain CVISN-compliant e-screening. Val responded that the team would do well to steer way from trying to redefine Core CVISN requirements regarding screening. The document should provide descriptions of how e-screening can be performed, incorporating up-to-date technology applications and issues.

New or Ongoing Action Items

Cathy Krupa recorded the following action items from today's conference call:

- Jeff Loftus will check on the status of Oak Ridge's technology scan of roadside identification technologies.

- Mary Stuart will update the team on the progress of the Volpe monthly report of SAFER uploads.

- Thomas Caves will advise the team of current design and timeline information for phase two of the I-95 Corridor Coalition project on the feasibility of wireless inspections.

- Roan Bennett will post an updated version of the "Industry Perception Task_Summary.ppt" file to the CVISN Collaboration site (following the call, the new file was posted to both the Collaboration site and FTP site).

- Joe Crabtree will provide the latest evaluation results from Kentucky's ISSES installations to Val Barnes for posting to the CVISN Collaboration site.

- Team should revisit the e-screening guide for further discussion.

Next Teleconference

Participants agreed that the next teleconference will be on November 8, 2006, at 2:00 p.m. Eastern time.