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PROGRAM HIGHLIGHTS

More than 130 people attended the National Private Truck Council's National Safety Conference, September 13-14, 2007 in Arlington, VA. This was the largest attendance in the five years the Council has been running this program. Following is a synopsis of the presentations from the program, "Building Blocks for Safety."

Safety and the Upcoming Highway Bill

Richard P. Schweitzer, NPTC General Counsel & Government Affairs, provided attendees with an overview of the issues impacting private fleets, including hours of service, the unified carrier registration plan, and the upcoming highway bill.

Mr. Schweitzer explained the events leading up to the D.C. Circuit Court of Appeals decision vacating the 11-hour and 34-hour restart provisions of the 2005 hours-of-service (HOS) rules. He said that NPTC members had provided input to assist the American Trucking Associations in seeking a stay of the decision. If granted, the stay will have the effect of keeping those provisions in place pending further review by the Federal Motor Carrier Safety Administration and the re-issuance of a revised rule. At the time of his presentation, Mr. Schweitzer held open the possibility that the FMCSA may use its emergency rulemaking authority to re-open the rulemaking proceeding, thus leaving in place the 11-hour and 34-hour provisions for a short interim period.

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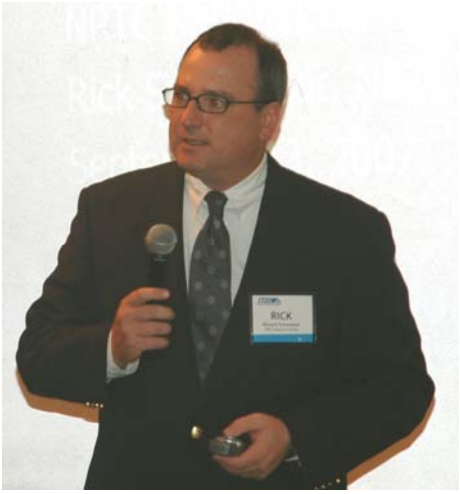
Mr. Schweitzer also updated attendees on the new fee structure for interstate motor carriers under the newly adopted Unified Carrier Registration Agreement (UCRA). The Single State Registration System (SSRS) imposed on interstate regulated motor carriers was repealed by Congress effective at the beginning of 2007. There will be no SSRS program in 2007 or in future years. Instead, all interstate motor carriers – regulated, exempt, and private – as well as interstate brokers, freight forwarders, and leasing companies, are subject to fees under a new system, the UCRA, which will be administered by states.



Rick Schweitzer

Motor carriers and others subject to UCRA should be receiving information from states including a UCRA application form and instructions, and information on how to register for UCRA and pay the UCRA fees on-line.

Like SSRS, UCRA is a base-state program. That is, a motor carrier or other business subject to UCRA will register with and pay fees to its base state only, on behalf of all the other UCRA participating states. The notice that carriers will be receiving from the states will include instructions on which state is a carrier's base state. In most cases, a regulated carrier's UCRA base state will be the same state as its SSRS base state has been.

The following 34 states are in the UCRA program for 2007 and can serve as a UCRA base state:

Alabama
Arkansas
Colorado
Connecticut
Georgia
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Massachusetts
Michigan
Mississippi
Montana
Nebraska
New Hampshire
New Mexico
New York
North Dakota
Ohio
Oklahoma
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Virginia
Washington
West Virginia
Wisconsin

Canada or Mexico will have to choose one of these states to serve as their UCRA base state.

A business may register for UCRA in either of two ways. Any business may register directly with its base state under procedures set by the base. It is anticipated that all states will accept mailed registrations and walk-in traffic, and some may also operate on-line systems. However, any business subject to UCRA, no matter what its base state may be, may register and pay its fees online through the single national online UCRA system developed and hosted by the Indiana Department of Revenue on behalf of all the UCRA states. This system is expected to be fully operational on and after September 10, 2007, and is located at www.ucr.in.gov.

A business registers for UCRA by filling out the one-page UCRA application. Submission of this form, with payment of the fees, completes registration for the year. No filing of federal financial responsibility (insurance coverage) is required.

Unlike SSRS fees, UCRA fees are not per-vehicle fees but are levied per fleet. Nor do the UCRA fees depend on where a carrier's traveled, as the SSRS fees did. The size of the fee depends only on the number of commercial motor vehicles operated. For this purpose, the term "commercial motor vehicles" includes trailing equipment as well as power units. The total of vehicles will in most cases be the same as the carrier reported to the U.S. Department of Transportation on its latest Form MCS-150. For 2007, the UCRA fees are:

Fleet Size	Fee
0-2 vehicles	$39
3-5 "	116
6-20 "	231
21-100 "	806
101-1000 "	3,840
More than 1000 "	37,500

Brokers, freight forwarders, and leasing companies that do not operate trucks of their own will owe $39.

When a business pays its UCRA fees, the base state will convey that information to the U.S. DOT, which will flag the carrier's US DOT number. Roadside enforcement can check for that flag online, to determine whether a carrier is current with its UCRA obligations. It is anticipated that states will begin to enforce the 2007 UCRA requirements about November 15, 2007.

NPTC Best Practices Safety Guide

Jim Noble, Line of Business Director for Zurich Services Corporation, spoke of the advantages of developing an "accident-free" culture – a business environment that tolerates and accepts no accidents. He also said that excellent results worry him because they can be the breeding ground for complacency.

To help fleet managers create this accident-free culture, Mr. Noble walked the attendees through the NPTC "Best Practices Safety Guide®" program, an interactive, online safety resource that has helped provide member companies with a snapshot of their safety status in six key areas: Leadership and Management; The Driver; Maintenance; Event Management; Culture; and Evaluation, Assessment and Measurement.

The core objectives of the guide are to reduce accidents and incidents; improve compliance; demonstrate employer "responsible care"; focus on road safety education with reduced training costs; monitor performance improvement; and achieve consistency of approach.

To participate, NPTC fleet members complete a confidential electronic questionnaire about their performance in those six areas. At the completion of each module, participants receive an immediate score and virtually instant feedback based on answers to 181 questions. Respondents can compare their scores with the average scores for all participating NPTC fleet members. Customized feedback includes lists of recommended best practices in areas where improvement may be a goal.

Jim Noble

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The Guide was developed through the collaborative efforts of the NPTC Safety Committee and financial sponsor ACS-PrePass, with technical and software support provided by Zurich Insurance and Interactive Driving Systems.

In a comparatively short amount of time, participants will have a complete safety audit — a comprehensive picture that includes areas in need of improvement — based on comparisons with their peers, as well as other trucking "averages."

By applying this value-added tool and the resulting best practices feedback, NPTC members can save months or even years of effort and tens of thousands of dollars, and be able to take advantage of the experience and expertise of some of the best private fleet practitioners in the industry.

Predicting Truck Crash Involvement

In spite of increasing the number of vehicle miles traveled and increased congestion over the years, the trucking industry has seen a general downward trend in fatal, injury and property damage crash rates over the last 20 years, according to **Dan Murray, Vice President of Research for the American Transportation Research Institute.** However, both industry and government recognize that more must be done to reduce the overall number of large truck crashes. Because driver-related factors have been determined to be a critical reason for the majority of crashes involving large trucks, ATRI research has been focusing on driver behaviors to determine which will have the most profound impact on crash reduction.

The objective of this research was to design and test an analytical model for predicting future crash involvement based on prior driver history information. A second objective of the research, conducted in conjunction with the Commercial Vehicle Safety Alliance (CVSA), was to identify effective enforcement actions to counteract the driving behaviors and events that are predictive of future crash involvement.

Dan Murray

This research is one of the first studies of its kind to analyze several available subsets of driver-specific data and statistically relate the data to future crashes. Data sources included the Motor Carrier Management Information System (MCMIS) and the Commercial Drivers License Information System (CDLIS).

The main dependent variable is crash involvement. For purposes of this research, crash involvement is the objective measure of driver “safety.” The independent variables are driver-specific performance indicators mined from the data including: specific violations; driver traffic conviction information; as well as past accident involvement information.

Driver data was gathered across a three-year time frame, and was analyzed to determine future crash predictability. For each of the drivers in the selected samples, driver history regarding past inspections and crashes were derived from MCMIS, and past conviction data was derived from CDLIS. The predictive model included data on 540,750 drivers.

The analysis shows reckless driving and improper turn violations as the two violations associated with the highest increase in likelihood of a future crash. The four convictions with the highest likelihood of a future crash are: improper or erratic lane change; failure to yield right of way; improper turn; and failure to maintain proper lane.

When a driver receives a conviction for one of these behaviors, the likelihood of a future crash increases between 91 and 100 percent. The following table ranks the top 10 driver events by the percentage increase in the likelihood of a future crash.

Summary of Crash Likelihood for all Data Analyzed

If a driver had:	The crash likelihood increases:
A Reckless Driving violation	325%
An Improper Turn violation	105%
An Improper or Erratic Lane Change conviction	100%
A Failure to Yield Right of Way conviction	97%
An Improper Turn conviction	94%
A Failure to Maintain Proper Lane conviction	91%
A Past Crash	87%
An Improper Lane Change violation	78%
A Failure to Yield Right of Way violation	70%
A Driving Too Fast for Conditions conviction	62%

The targeted surveys and interviews indicated that successful enforcement programs and strategies for addressing problem driver behaviors are those that exhibit one or more of the following components:

- Center on aggressive driving apprehension programs/initiatives;
- Target both commercial motor vehicle (CMV) and non-CMV behavior patterns;
- Utilize both highly visible and covert enforcement activities; and
- Incorporate an internal performance-based system for managing enforcement by specific crash types, driver behaviors, and locations.

The research also surveyed carriers to identify those hiring, training, and remediation practices most likely to mitigate the impacts of the problem behaviors identified.

A complete listing of findings and recommendations can be found in the full report, Predicting Truck Crash Involvement: Developing a Commercial Driver Behavior-Based Model and Recommended Countermeasures. To receive a copy of this report and other ATRI studies, please visit: www.atri-online.org.

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Converting Accident/Incident Data into Safety Strategies

Following Mr. Murray's presentation, **Jay Sterrett, Fleet Operations Manager for Mohawk Industries**, walked attendees through how he collects and analyzes accident data to develop meaningful solutions for both personal injuries (Workers Compensation) and crashes (Traffic Accidents).

In 2004, the last year for which complete data is available, the National Highway Traffic Safety Administration reported a total of 6.181 million highway crashes involving nearly 11 million vehicles and resulting in:

- 42,636 deaths
- 2,788,000 injuries
- 61,002,676 citations
- $230,000,000,000 spent

These numbers change slightly each year, but to make a meaningful impact on these totals, you needed to identify and change someone's behavior by creating a safety culture within your company.

He encouraged companies to proactively address their accident costs – both fixed and variable, including:

- Injuries
- Loss of material
- Insurance companies
- Stockholder expectations
- Bad Press
- Lost time for driver, your time, companies time

Most safety programs have been centered on reacting to what accidents have occurred in the past, in terms of what accidents have been the most costly or highest frequency. However, that does not necessarily lead to understanding and addressing those behaviors that might lead to an accident.

To help determine the likelihood of future crash involvement, Mr. Sterrett urged attendees to address the following questions:

- Are there similarities of drivers doing the same job that would allow a similar program to be developed?
- Can a program be developed that would modify the behavior of this group of drivers?

Jay Sterrett

"By identifying the similarities within specific jobs and the failures that the drivers are experiencing, you can develop a specific safety program that focuses on these issues. This specific focus, when done continually and in a meaningful way over a period of time, will bring about a behavior change. The question really then becomes how then do you gather and organize this data?"

Mr. Sterrett suggested that most companies have already collected most of the data they need from insurance forms, police accident reports and company investigations. Collecting even more data often points to the underlying cause of a series of crashes that usually aren't identified related causes. Some of these suggestions were: day of week, number of hours the driver had been on duty, time of day, specific location, driver's action at the time of the incident, age and native language. Each company must work to identify what factors they should be monitoring.

After collecting this data, it is a simple matter of downloading the responses to a spreadsheet and using common programs such as Microsoft Excel "Pivot Tables" to analyze this data. Most everyone already has this type of program in his personal computer.

Using these types of programs over a long enough period of time not only will identify each company's and each division's specific safety needs but will also monitor the effectiveness of your safety program and where you may experience problems in the future.

The Driver's Role in Safety

Sam Richardson

In a session moderated by **Sam Richardson, AVP, Safety & Operations for ADM Trucking**, two NPTC Hall of Fame Drivers and their fleet managers talked about the importance of safety in recruiting, hiring and training.

Larry Dean, fleet manager, NCI, Inc. credited his company's culture with helping the company achieve its outstanding safety record, which he reported as substantially above industry averages.

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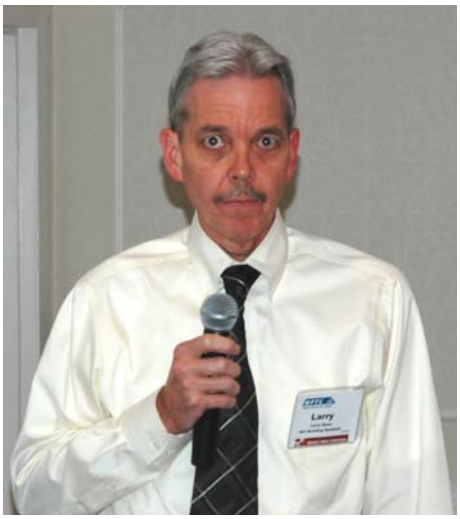
At the root of that culture are the following tenets:

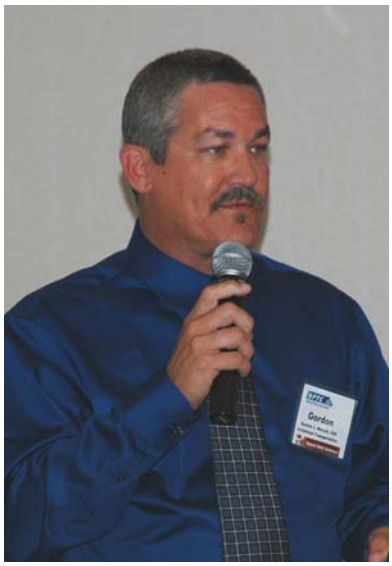
- Safety is a Core Value
- Open and Honest Communication
- Extraordinary Expectations
- Integrity - Most Precious Possession
- Do Right Rule



Larry Dean

"Our drivers know our culture and expectations and what it takes to be successful," explained Dean. "We infuse safety in every conversation. They then go out and recruit the kind of drivers they are."

"We hire tough," he added. "The most important asset in your company is having the right people on your team. Never lower your standards just to fill a position. You will pay for it later."

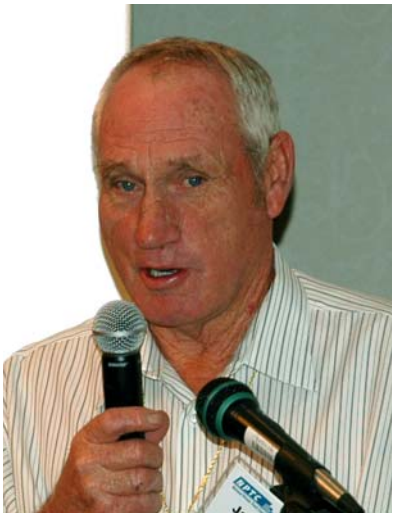


Gordon Worrell

Gordon Worrell, Fleet Safety Manager for Smithfield, said the attitudes his company looks for include: safety awareness, attitude, patience, dedication and an appreciation of rules and regulations. When a driver with those attributes joins the team, Smithfield ensures those attitudes remain at the core of driver attitude through training and ride-alongs with drivers to observe driver behaviors.

Like NCI, Smithfield underscores its commitment with quarterly safety meetings, monthly driver newsletters and river of the month and driver of the year programs.

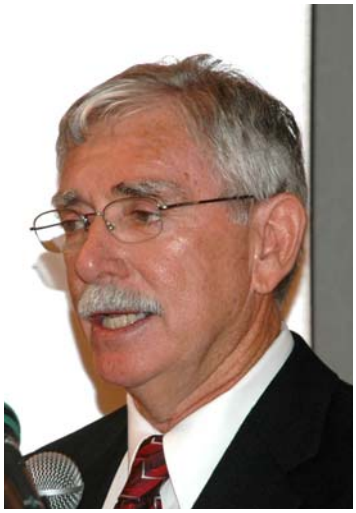
The company also participates in numerous industry recognition programs.



James Tolly

The drivers – Ernest B. Woodruff, III, of Smithfield Transportation, Inc. and James H. Tolly, who recently retired from NCI Building Systems, agreed that being treated professionally with respect and trust was the key ingredient in ensuring continued safe driving performance.

Asked how they put up with the frustrations of congestion and inattentive driving on the part of other motorists, they indicated it began with the right attitude on their part. And both indicated a desire to keep technology in the cab.



Ernest Woodruff

FMCSA Enforcement

Michael Fox, a safety investigator with the Virginia Division of the Federal Motor Carrier Safety Administration, briefed attendees on how he conducts a compliance review. The compliance review, the federal government's primary enforcement tool, stems from a fatal or significant crash, the Safestat list or a complaint lodged against the carrier.

During the review, Mr. Fox says he will review the following six elements

1. Accident Review (49 CFR Part 390). Mr. Fox shared his insight gleaned from years of investigating accidents, saying that most accidents result from over-confidence, distraction, poor driving habits, fatigue, speed or failure to respond to traffic conditions

2. Financial Responsibility (49 CFR Part 387)

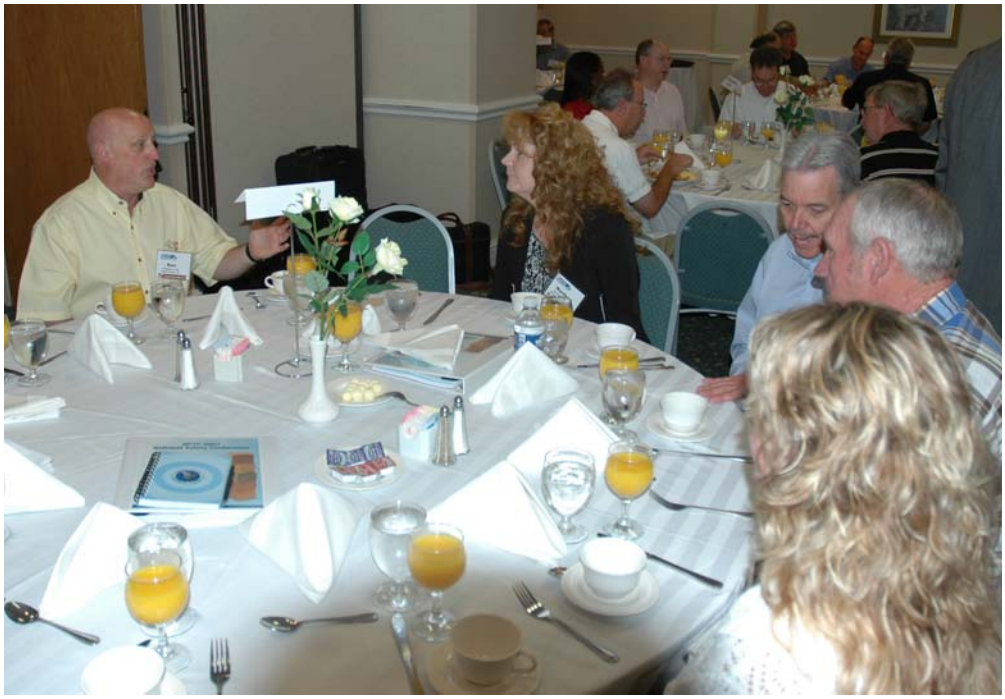
3. Maintenance Review (49 CFR Part 393 & 396). Specifically, he is looking for compliant vehicle inspection reports and to see whether the carrier has a systematic method of repairs. He also wants to ensure that each vehicle has a maintenance file, an annual inspection and a profile of out-of-service corrections.

4. Commercial Drivers License, FMCSRs, Controlled Substance Testing & Driver Review (49 CFR Part 382, 383, 391 & 392). The biggest issues he finds are incomplete driver files, lack of previous employer checks, annual review of violations, expired medicals and medically unqualified drivers.

5. Hours of Service Review (49 CFR Part 395). He wants to ensure carriers have logs or time cards and that someone is checking them. “Most errors result from no one checking the logs and thinking that the driver knew what he was doing.”

6. Hazardous Materials – 49 CFR Part 171-180

Michael Fox



Attendees discuss issues at the problem-solving breakfast

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Safety Technology

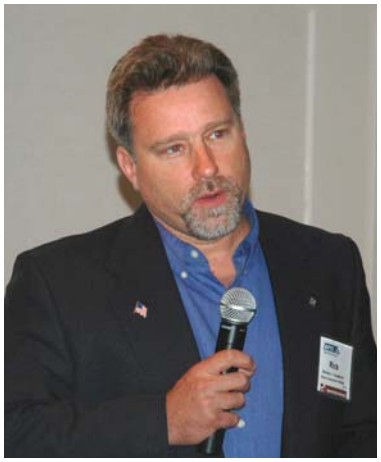
Amy Houser, General Engineer for FMCSA, kicked off this overview of active safety devices. As part of its continued effort to provide benefit-cost information to the motor carrier industry in support of future purchasing decisions for the following safety technologies:

- Forward Collision Warning Systems (FCWS)
- Lane Departure Warning Systems (LDWS)
- Roll Stability Control Systems (RSC)
- Electronic Stability Control Systems (ESC)

Amy Houser

Ms. Houser said that regardless of crash type, it costs the average motor carrier $7,000 to replace a driver. However, significant direct cost differences are dependent on the crash type addressed by on-board safety systems, ranging from approximately $130,000 for a typical property damage only jackknife crash to over $250,000 for a property damage only rollover. Typical crashes with fatalities can dramatically increase these costs by more than $1.5 million for one fatality.

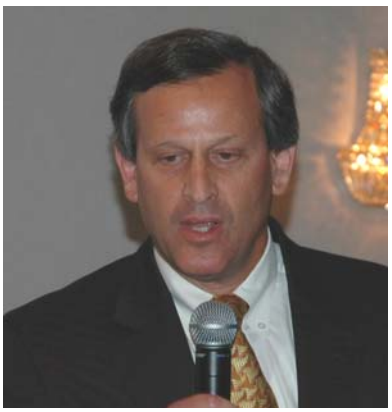
But the direct costs of an accident are just the tip of the iceberg," she said. "Motor carriers can also expect insurance and workers' compensation rate increases, an impact on safety ratings; loss of customer goodwill and/or business effects, public image impacts, and a decline in employee morale.



Rick Youngblood

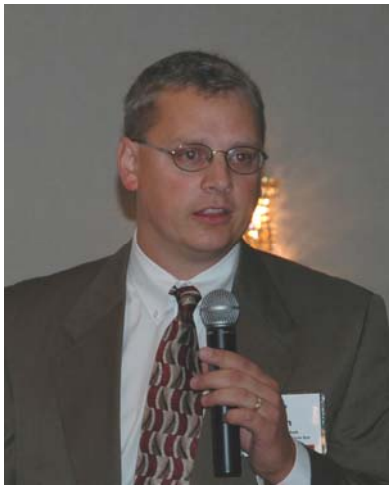
Rick Youngblood, Business Development Manager for Eaton Corporation (VORAD), explained that as congestion continues to increase, adaptive cruise control serves as an electronic co-pilot. Mr. Youngblood said that adaptive cruise control reacts to traffic ahead by automatically adjusting the truck speed to match their speed, helping to reduce accidents by avoiding tail-gating and, in the process, reducing driver stress.

Alan Korn, Chief Engineer Vehicle Dynamics and Controls for Meritor WABCO, explained that stability control systems constantly measure key variables affecting vehicle stability, estimate key stability thresholds necessary for safe driving and will automatically intervene should those thresholds be exceeded. Working through the antilock braking, the system decelerates the vehicle to reduce rollover tendency and applies counteractive brake forces to regain directional stability. Mr. Korn said that one of the advantages is the system warnings and interventions provide driver training resources.



Alan Korn

He also talked about collision mitigation systems, radar-based enhancement of traction and stability control systems that continuously monitors object landscape and identifies and reacts on potential collisionable events. The system warns and decelerates the vehicle in response to conditions indicating a potential rear end event.



Kevin Romanchok

Kevin Romanchok, Product Line Director – Electronic Control Systems for Bendix Commercial Vehicle Systems, explained that there are critical differences between full stability and roll-only systems. "Milli-seconds make a difference," he said. "The system needs to capture enough information to make the right decision and enough control to apply the necessary brakes. If the system is too sensitive, then the driver can be dissatisfied. On the other hand, if it happens if the intervention is too little or too late, the fleet manager is very unhappy."

Also, he reviewed adaptive cruise control with active braking. The radar sensor works with the engine and braking system to assist the driver with maintaining adequate following distance. "This reduces stress on the driver and allows him to stay in economical cruise a greater percentage of the time."

William J. Patrolia, Sales Director, Iteris, Inc., explained that lane departure warning systems automatically warns drivers when they are leaving the lane or roadway, unintentionally, anywhere there are lane markings - shoulder, centerline or between lanes. “LDW is designed to prevent side swipe, run-off-road and inadvertent lane change accidents caused by drowsiness, fatigue, inattention and distraction,” he said.

LDW uses “Machine Vision” technology which tracks most visible lane markings and provides an audible “virtual” rumble strip type warning.

LDW data collected from four different fleets show an average 80% decrease in the rate of LDW preventable accidents over nearly a half-billion total miles.

Smith System Defensive Driver Training

Leesa Mansen, Vice President of Sales for the Smith Systems Driver Improvement Institute, Inc. told attendees that learning to anticipate and avoid collisions is a matter of developing new habits or developing new concepts that do not normally occur to a driver. She said the leading causes of accidents were:

- Driver Impairment
- Speed
- Tailgating
- Inattention
- Fatigue
- Weather
- Lack of driver training
- Unnecessary backing or absence of backing skills
- Attitude
- Failure to Yield
- Inexperience
- New Routes
- Animals
- Vehicle Maintenance

She noted that new technology – particularly cell phones -- was adding to these challenges. “For example, distractions now out rank fatigue as the number one cause of incidents.”

Ms. Mansen reviewed the pros and cons of various training methodologies traditionally used to train drivers:

Leesa Mansen

- Classroom Seminars: This approach is popular because it allows larger groups and a lower per-driver delivery costs and a flexible presentation schedule. However, it is a passive training approach.
- Self-Directed Training: Employed by many small to medium-size fleets, this training often uses a lead driver as a trainer, which begs the question whether they are a good driver and/or a good teacher. It makes use of videos, books, posters, patches and other reward systems.
- Track or Skid Pad Training: Classroom combined with practice in a controlled environment and it allows refinement of skills through observed repetition.
- Simulator Training Offers a variety of simulated driving environments and can track driver response. Can be used anytime of the day or night and allows for a consistent message to be delivered.
- Computer-Based Training: Low risk way to deliver a consistent message around the clock helping to drive down the cost of training.
- Behind-The-Wheel Training: Combines the classroom theory with on-road experience. The vehicle in traffic is a teaching tool that allows personal involvement with the added benefit of "hands-on" feedback that promotes understanding, acceptance and retention

The Smith System training includes five tenets to provide increased space and provide greater visibility, thus giving the driver more time to avoid an accident:

1. Aim High In Steering®: Look further ahead than other drivers
2. Get The Big Picture®: See more around you than other drivers
3. Keep Your Eyes Moving®: Be more alert than other drivers
4. Leave Yourself An Out®: Plan ahead better than other drivers
5. Make Sure They See You®: Making yourself more visible than other drivers

Driver Wellness Programs

Timothy Lee, MD, MS, Medical Director, Sentara OBICI Occupational Health Services warned of the growing health affects from the two-thirds of the adult population that is now classified as obese. For instance, poor lifestyles and obesity greatly increase the risk of cancer, stroke, diabetes and heart disease and premature death.

Dr. Timothy Lee

"How did we get this way?" Dr. Lee asked. "Hypertension. Obesity. Diabetes. High Cholesterol. Inactivity. Poor diet. Poorly managed stress. And for the first time in modern history, our children may witness a decline in life expectancy of two-to-five years if these trends continue."

All of these risk factors are magnified in our drivers, he said. For instance, truck drivers have twice the prevalence of smoking compared to the general population. Also truck drivers are more likely to be obese and suffer from hypertension than others.

“Many of us and our drivers suffer from preventable conditions,” Dr. Lee told attendees. “Through education, we can positively affect our health.” He said, education, should center on the following core areas:

- Musculo-skeletal. He said that too many drivers sit for prolonged periods of time experiences static loading and chronic strain. The most effective countermeasure is to initiate a stretching program.
- Circulatory. Closely related is that drivers don’t get enough exercise which strains the circulatory system. “If there’s one thing to control, it’s blood pressure,” he emphasized.
- Diet: Avoid transfats and high fructose corn syrups as much as possible. Eat breakfast and snack on healthy foods, such as fruits and nuts, about every three hours. This helps to prevent “sugar lows” which can trick the body caloric regulation system.
- Exercise: Few drivers exercise regularly despite this being the most effective way to control blood pressure and blood sugars. Exercise should be a combination of weight lifting and aerobic activity.
- Sleep. Fatigue leads to decreased reaction time, impaired decision making and blurred vision. In fact, performance begins to decline after 13 hours of being awake. At 17 hours, performance imitates a blood alcohol level of 0.05, and at 23 hours your performance can be the equivalent of being legally drunk.”

Attendees at the problem solving breakfast