

Slater Inaugurates New Agency

U.S. Transportation Secretary Rodney E. Slater recently inaugurated the Federal Motor Carrier Safety Administration, the newest agency of U.S. DOT. Each year, crashes involving large trucks kill more than 5,300 people and injure about 130,000. Slater charged the agency with providing the leadership, direction, and action necessary to continue improving motor carrier safety and to guide the nation to a 50 percent reduction in truck- and bus-related fatalities by 2010.

In its efforts to achieve U.S. DOT's long-range goals, FMCSA is planning to make improvements to the commercial driver's license program. These improvements will result in identifying problem drivers; getting high-risk drivers off the road; ensuring the safety fitness of newly formed motor carrier companies; levying strong sanctions on foreign carriers that operate illegally in the United States; denying entry to carriers that are not properly registered; and imposing stiff penalties on violators, including fines and shutdowns. Funding under the Motor Carrier Safety Improvement Act will provide resources to help states conduct more vehicle, driver, and carrier inspections. Also to be funded are a major study of crash causes and a new system for collecting crash data.

For more information contact Dave Longo, U.S. DOT (telephone 202-366-0456), or visit the FMCSA website (www.mcs.dot.gov).

Minnesota Tests Advanced Crash Notification System

An operational test of Mayday Plus, a crash notification system designed to enable more rapid and better-informed emergency response to vehicle crashes, is under way in Minnesota. The field tests, which began in November 1999, will be used to evaluate the system's capabilities and benefits. The system was installed in 120 vehicles and will notify the Minnesota State Patrol and Mayo Clinic emergency dispatch centers if a crash occurs.

Mayday Plus is an extension of in-vehicle equipment developed during the Automated Collision Notification (ACN) field tests in New York. Sponsored by the National Highway Traffic Safety Administration, the ACN project developed crash severity reporting capabilities. Building on the foundation developed by ACN, Mayday Plus automatically notifies authorities in the event of a crash. The differences between the two are that Mayday Plus sends more data, establishes communication between the authorities and passengers, and intelligently routes emergency data to responders on the basis of the

vehicle's location and the type of emergency. When a crash occurs, an in-vehicle device relays information on the vehicle's location, direction of impact, change in velocity during the crash, and final resting position. After transmitting the data, the system opens a direct voice connection between an emergency dispatch center and the passengers.

Because Mayday Plus sends immediate notification and provides the crash location, emergency assistance can be dispatched without delay. By saving time, the system saves lives. Response time is an especially critical concern in crashes that occur in rural areas. In Minnesota 30 percent of miles traveled are on rural roads, yet 70 percent of fatal crashes occur on these roads.

For more information contact Douglas Funke, Veridian Engineering, Inc. (telephone 716-631-6938), or visit the Veridian website (www.veridian.com).

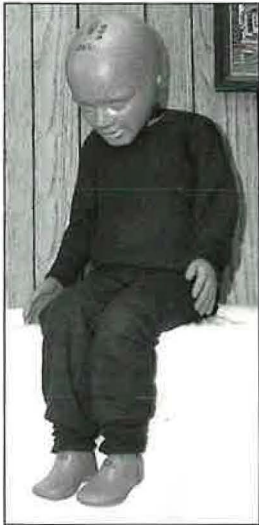
Integrated System Manages Vegetation

In an effort to reduce maintenance requirements and costs, increase species biodiversity, and decrease herbicide use, the Ontario Ministry of Transportation has evaluated an integrated system for recording roadside weed location and related features. Using the Global Positioning System to locate vegetation sites and a geographic information system to store, manage, manipulate, and display data, the Ministry recorded and mapped weed areas, areas of desirable vegetation, water features, culverts, and adjacent land uses. The Ministry found that, with refinements, the integrated system has the potential to serve as a valuable tool in the planning, administration, and quality control of maintenance contracts; in the linking of vegetation features and resources to the development, design, and construction processes; and ultimately in the automation of herbicide applications.

Summarized from an article in Road Talk, November 1999. For more information contact Steven Struger (telephone 905-704-2147) or Laura Kingston (telephone 905-704-2331), Ontario Ministry of Transportation.

Crash Dummies Made More Human

The National Highway Traffic Safety Administration has released the final design and performance specifications for the new 6-year-old child crash dummy. The advanced 6-year-old child dummy is the first addition to the Hybrid III crash dummy family since the Hybrid III male dummy was adopted in June 1986.



NHTSA's new child crash dummy is being used by researchers to better assess injury potential.

For several years researchers have been using an earlier model of the 6-year-old child dummy to evaluate child restraints and boosters, but that model was not able to measure the injuries that unbuckled or out-of-position children can suffer in those crashes in which air bags deploy. The new model must be certified for compliance testing to ensure that occupant protection systems, such as air bags, provide adequate safety.

Because neck injuries are one of the main causes of child fatalities resulting from air bags, the design and specifications for the new dummy include a multisegmented and highly instrumented neck that better simulates human neck responses. The dummy also is equipped with new multiple sensing capabilities to assess injuries to the chest, lumbar spine, pelvis, and upper legs.

To support assessment of injury potential for a range of occupant sizes, future Hybrid III family members will include a small female dummy, a 3-year-old child dummy, and a 12-month-old child restraint air bag interaction dummy.

For more information contact Tim Hurd, NHTSA (telephone 202-366-9550), or access the report online (dms.dot.gov/search/ and enter docket number 6714).

National Research and Technology Partnership Forum

The Transportation Research Board, the American Association of State Highway and Transportation Officials, and the Federal Highway Administration have convened a national partnership forum on highway research and technology (R&T). Participation by the full transportation community, including research sponsors, practitioners, researchers, and other stakeholders in highway transportation is being encouraged.

The purpose of the forum is to develop a new framework for coordinating the activities of the many groups involved in highway R&T. This framework is not intended to replace existing mechanisms for managing research, providing opportunities for collaboration between researchers and practitioners, or disseminating research findings. Instead, the objective is to better coordinate investments among highway R&T programs and to do so in a manner that encompasses the diverse array of stakeholders in highway transportation. Specific goals are:

- ◆ To make R&T investments more effective and efficient through broad-based stakeholder involvement and greater interaction among different research programs and program sponsors.

- ◆ To foster a better awareness and appreciation of existing research programs—a sense of ownership that extends beyond the research sponsors.

- ◆ To stimulate the formation of productive R&T partnerships, which could include jointly funded projects, closely coordinated projects funded by different sponsors, research consortia, and joint public and private initiatives.

- ◆ To help demonstrate needs and opportunities for research and the potential payoff from research investments, and to thereby help expand the constituencies for highway R&T.

Five working groups have been established to address specific R&T areas: safety, infrastructure renewal, operations and mobility, planning and environment, and policy analysis and system monitoring. In the area of planning and environment, TRB, on behalf of FHWA, has established an Advisory Group for the Surface Transportation Environmental Cooperative Research Program whose charge is similar to that of a working group; thus a new group will not be established in this area.

The working groups will identify the major issues in their area; review existing R&T programs, including those of FHWA, AASHTO, the National Cooperative Highway Research Program, state departments of transportation, and others; assess the coverage of these programs in relation to current issues and identify gaps and areas of overlap; determine priority R&T needs; develop marketing information on the anticipated benefits of research expenditures; and facilitate partnerships and coordination to meet the identified needs. It is anticipated that the working groups will deal primarily with research theme areas (e.g., roadside safety) instead of individual projects (e.g., barrier design). The groups' findings, including suggestions for new emphasis areas and coordination among programs, will be forwarded to the TRB Research and Technology Coordinating Committee for consideration and further action. The results will also be provided to the sponsors of the partnership forum for their information.

Organizations and individuals interested in participating in the forum or its working groups should consult the TRB website (www4.nationalacademies.org/trb/homepage.nsf/web/r&t_forum).

Low-Cost Feedstock Deices Roads

Researchers at Ohio State University have discovered a process that converts low-cost feedstock, specifically cheese whey, into calcium magnesium acetate (CMA), an inexpensive, environmentally friendly material