

Safety guides help states save lives

It was 1996, and significant gains in highway safety appeared stalled. Experts declared that the “low-hanging fruit” had been picked and more innovative strategies were needed to significantly reduce highway deaths in the U.S.

The American Association of State Highway and Transportation Officials took up the challenge and developed its Strategic Highway Safety Plan, completed in 1998. The Plan included 22 key safety emphasis areas for reducing highway fatalities and injuries. However, state DOTs needed additional resources to achieve the plan’s goals.

NCHRP got the call to help.

The NCHRP Report 500 series, developed with the assistance of hundreds of technical experts, includes a separate guide for implementing each of the 22 AASHTO emphasis areas. Volume 1, on aggressive driving, was published in 2003, followed by 16 more to date, all of which have become key resources for states by providing the latest strategies, countermeasures and models.



Compiling knowledge on safety

“We had thousands of the guides printed up and now they’re basically all gone—that’s how popular they are,” says Rudy Umbs, senior highway safety engineer for FHWA and a member of the Project 17-18 panel that developed the guides.

“Let’s get all that information into one place for each emphasis area in the AASHTO plan.”

“To some extent, Report 500 was born out of frustration over having to search everywhere for data, latest research and thinking on highway safety,” Umbs says. “We said, ‘Let’s get all that information into one place for each emphasis area in the AASHTO plan.’”

members are using the NCHRP 500 guides to help identify appropriate strategies.

“We’re also trying to utilize the model implementation processes outlined in each volume, and we’ve provided copies of the guides to our districts as a resource for developing safety projects,” she says.

Chuck Reider, principal safety engineer at Nevada DOT, indicated that Nevada’s strategic highway safety plan has five emphasis areas. “The first area we looked at,” he says, “was run-off-the road collisions. We used NCHRP 500, Volume 6, as our starting point for seeing what strategies are out there.”

“We used several volumes to come up with action plans for our safety emphasis areas.”

Hard copies of the NCHRP 500 guides are available from the TRB Bookstore at <http://www.trb.org/bookstore/>. PDF versions and details on the AASHTO Strategic Highway Safety Plan can be found at <http://safety.transportation.org/guides.aspx>.

Published Report 500 Volumes

- 1 Aggressive Driving
- 2 Unlicensed Drivers
- 3 Trees in Hazardous Locations
- 4 Head-On Collisions
- 5 Unsignalized Intersections
- 6 Run-Off-Road Collisions
- 7 Horizontal Curves
- 8 Utility Poles
- 9 Older Drivers
- 10 Pedestrians
- 11 Lack of Seat Belt Use
- 12 Signalized Intersections
- 13 Heavy Trucks
- 14 Drowsy and Distracted Drivers
- 15 Rural Emergency Medical Services
- 16 Alcohol-Related Collisions
- 17 Work Zones

Volumes to Come

Younger Drivers, Bicyclists, Speed, Head-on Collisions on Freeways, Motorcycle Safety, Data Collection and Analyses

State safety plans

Many states are using the Report 500 series to craft their strategic highway safety plans mandated under a new federal requirement of SAFETEA-LU. “We used several volumes to come up with action plans for our safety emphasis areas,” says Gary Ogletree, safety plan manager for Tennessee DOT.

“About 60 percent of Tennessee highway fatalities are from lane departure crashes, so the volumes on preventing these crashes have been very helpful. On the issue of older drivers, we pulled strategies for our state plan directly from the Volume 9 Guide for Reducing Collisions Involving Older Drivers.”

Illinois DOT has established implementation teams for each of the emphasis areas in its safety plan. According to Priscilla Tobias, state safety engineer for IDOT, “Team

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