



## Commercial Truck and Bus Safety Synthesis Program: A Status Report 2011

### DETAILS

4 pages | | PAPERBACK

ISBN 978-0-309-14327-1 | DOI 10.17226/14480

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# COMMERCIAL TRUCK AND BUS SAFETY SYNTHESIS PROGRAM

Sponsored by the Federal Motor Carrier Safety Administration

CTBSSP Manager: Donna Vlasak

## Research Results Digest 8

### COMMERCIAL TRUCK AND BUS SAFETY SYNTHESIS PROGRAM: A STATUS REPORT

This is a staff digest of the progress and status of the Commercial Truck and Bus Safety Synthesis Program, which is administered by the Transportation Research Board. Individual studies for the program are managed by Donna Vlasak, Manager, Commercial Truck and Bus Safety Synthesis Program.

### BACKGROUND

The Commercial Truck and Bus Safety Synthesis Program (CTBSSP) is a cooperative research program sponsored by the Federal Motor Carrier Safety Administration (FMCSA) and administered by the Transportation Research Board. The program began in 2002 in support of the FMCSA's safety research programs.

The program initiates several synthesis studies annually that address concerns in the area of commercial truck and bus safety. A synthesis report summarizes existing practice in a specific technical area based typically on a literature search and a survey of relevant organizations (e.g., state DOTs, enforcement agencies, commercial truck and bus companies, or other organizations appropriate for the specific topic). The program is modeled after the successful synthesis programs currently operated as part of the National Cooperative Highway Research Program (NCHRP) and the Transit Cooperative Research Program (TCRP). The primary users of the syntheses are practitioners who work on issues or problems using diverse approaches in their individual settings.

The program is overseen by a committee representing the truck and bus safety, labor, and insurance communities. Major

responsibilities of the panel are to (1) provide general oversight of the CTBSSP and its procedures, (2) annually select synthesis topics based on an industrywide solicitation, (3) refine synthesis scopes, (4) select researchers to prepare each synthesis, (5) review products, and (6) make publication recommendations.

### INTRODUCTION

Administrators, commercial truck and bus carriers, government regulators, and researchers continually face problems on

Suggestions for synthesis topics may be submitted at any time at the TRB website. Navigate to [www.trb.org](http://www.trb.org), click on "programs," and "synthesis truck and bus safety," and find the link for "suggest a topic."

Topics suggested must be accompanied by a brief scope statement, including a discussion of the problem (a paragraph or two). A title (preferably 10 words or fewer) and the name and affiliation of the submitter are also necessary. The CTBSSP Program Oversight Panel meets periodically to select new topics based on funding available.

which much information already exists, either in documented form or in terms of undocumented experience and practice. Unfortunately, this information is frequently fragmented, scattered, and undervalued. Often it is unknown to the person normally responsible for making decisions related to the topic. As a consequence, full knowledge of what has been learned about a problem is frequently not brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is a storehouse of information that exists on nearly every subject of concern to commercial truck and bus safety. Much of this information has resulted from both research and the successful application of solutions to the challenging issues faced by practitioners in their daily work. Because there has been no systematic means for compiling such useful information and making it available to the entire commercial truck and bus safety community, the CTBSSP was established to undertake a series of studies to search out and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in the subject areas of concern. Reports from this endeavor constitute the CTBSSP synthesis series, which collects and assembles the various forms of information into single concise documents pertaining to specific commercial truck and bus safety problems or sets of closely related problems.

## THE CTBSSP

This synthesis series reports on various practices in specific technical areas. Each document is a compendium of the best knowledge available on measures found to be successful in resolving specific problems. To develop these syntheses in a comprehensive manner and to ensure inclusion of significant knowledge, available information assembled from numerous sources, including a large number of relevant organizations, is analyzed. The program oversight panel guides the researchers in organizing and evaluating data collected on each topic and reviews each synthesis report.

For each topic, the project objectives are (1) to locate and assemble documented information; (2) to learn what practice has been used for solving or alle-

viating problems; (3) to identify all ongoing research; (4) to learn what problems remain largely unsolved; and (5) to organize, evaluate, and document the useful information that is acquired.

Each synthesis is an immediately useful document that records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As advancement continues, new knowledge can be expected to be added to that now on hand; eventually the synthesis may need to be updated or redone.

## Selection of Topics

The CTBSSP Program Oversight Committee meets periodically to select topics for study as funds are made available. The membership of this panel is given in Table 1. Current funding allows for initiation of approximately two syntheses per year.

The following factors are considered in the selection process for synthesis topics:

- The problem should be widespread enough to generate broad interest in the synthesis.
- The problem should be timely and critical.
- The problem is appropriate if current practice is non-uniform or inconsistent from agency to agency or if the validity of some practices appears to be questionable.
- The quality and quantity of useful available information should indicate a need to organize and compress that which has already been learned and written on the topic.
- The topic should not be one for which ongoing research or other activities in progress might be expected to render the synthesis obsolete shortly after completion.

The continued success of this program depends on a constant supply of worthy synthesis topics. Candidate topics are suggested by members of the program oversight panel and various other sources, including commercial truck and bus carriers; regulatory enforcement agencies; state DOTs; equipment and service suppliers; research organizations; FMCSA; relevant associations such as the Commercial Vehicle Safety Alliance, American Bus Association, American Trucking Associations, and Owner-Operator Independent Drivers Association; organized labor; and TRB committees. The interest of those who have recommended topics is sincerely

**Table 1** CTBSSP PROGRAM OVERSIGHT PANEL

	Name	Affiliation
Chair	Norm Littler	American Bus Association, Washington, DC
Member	Lamont Byrd	International Brotherhood of Teamsters, Washington DC
Member	B. Scott Claffey	Great West Casualty Company, Bloomington, ID
Member	Christopher Crean	Peter Pan Bus Lines, Inc., Springfield, MA
Member	Alessandro “Alex” Guariento	MV Transportation, Inc., Plano, TX
Member	Stephen A. Keppler	Commercial Vehicle Safety Alliance, Washington, DC
Member	Brenda Lantz	North Dakota State University, Fargo, ND
Member	Dean Newell	Maverick Transportation LLC, N. Little Rock, AR
Member	David Osiecki	American Trucking Associations, Alexandria, VA
Member	E. Jan Skouby	Missouri Department of Transportation, Jefferson City, MO
Member	Cari Sullivan	Two Men and a Truck International, Inc., Lansing, MI
Member	Tom Weakley	Owner-Operator Independent Drivers Association, Grain Valley, MO
Member	Greer Woodruff	J.B. Hunt Transport Services, Inc., Lowell, AR
Member	Christopher Zeilinger	Community Transport Association of America, Washington, DC
Liaison	Albert Alvarez	Federal Motor Carrier Safety Administration, Washington, DC
Liaison	Martin Walker	Federal Motor Carrier Safety Administration, Washington, DC
Liaison	Michael S. “Mike” Griffith	Federal Highway Administration, Washington, DC
Liaison	John C. Nicholas	Federal Highway Administration, Washington, DC
Liaison	Greg Hull	American Public Transportation Association, Washington, DC
Liaison	Leo Penne	American Association of State Highway & Transportation Officials, Washington, DC
Liaison	Charles W. “Chuck” Niessner	Transportation Research Board, Washington, DC
Liaison	Richard Pain	Transportation Research Board, Washington, DC

appreciated, and they are urged to continue to suggest topics.

### Conduct of the Studies

Throughout the year, following the program oversight panel’s selection of topics, studies are initiated in the order of priority assigned by the panel.

An agreement is negotiated with a consultant to gather information on the topic, synthesize it, and draft a report. Typically, the agreement covers a period of 10 months. Information gathering and preparation of the first draft of the synthesis report usually takes 8 months. This draft is then reviewed by the program oversight panel. A revised final synthesis report is subsequently submitted. This revised final report is then published in the CTBSSP synthesis series.

### Studies in Progress as of December 2010

Work is currently under way on the topics listed in Table 2. Questions on these topics should

be addressed to Donna Vlasak, CTBSSP Manager (e-mail: [dvlasak@nas.edu](mailto:dvlasak@nas.edu) and 202/334-2974).

### Available Publications

The syntheses completed under this project are listed in Table 3. Electronic copies of these syntheses can be found at <http://www.trb.org/Publications/Public/PubsCTBSSPSynthesisReports.aspx>. Hard

**Table 2** SYNTHESIS STUDIES—In Progress as of December 2010

No.	Title
MC-19	Chemical Substance Effects on Driving on Performance: Stimulants, Hypnotics, and Nutritional Aids
MC-20	Operator Drug and Alcohol Testing Across Modes
MC-22	Safety Effects of Carrier Efficiencies
MC-23	Driver Selection Tests and Measurement
MC-24	Distracted Driving—Successful Practices for Commercial Vehicle Drivers
MC-25	Safety Management in Small Companies

**Table 3** PUBLISHED CTBSSP SYNTHESSES

No.	Title/Pages/Price
1	Effective Commercial Truck and Bus Safety Management Techniques (2003) 100 pp., \$17
2	Security Measures in the Commercial Trucking and Bus Industries (2003) 50 pp., \$15
3	Highway/Heavy Vehicle Interaction (2003) 96 pp., \$21
4	Individual Differences and the “High-Risk” Commercial Driver (2004) 88 pp., \$22
5	Training of Commercial Motor Vehicle Drivers (2004) 46 pp., \$19
6	Operational Differences and Similarities Among the Motorcoach, School Bus, and Trucking Industries (2005) 47 pp., \$15
7	Motorcoach Industry Hours of Service and Fatigue Management Techniques (2005) 46 pp., \$15
8	Commercial Motor Vehicle Driver Safety Belt Usage (2005) 52 pp., \$16
9	Literature Review on Health and Fatigue Issues Associated with Commercial Motor Vehicle Driver Hours of Work (2005) 196 pp., \$29
10	Alternative Truck and Bus Inspection Strategies (2006) 43 pp., \$31
11	Impact of Behavior-Based Safety Techniques on Commercial Motor Vehicle Drivers (2007) 67 pp., \$48
12	Commercial Motor Vehicle Carrier Safety Management Certification (2007) 52 pp., \$45
13	Effectiveness of Commercial Motor Vehicle Driver Training Curricula and Delivery Methods (2007) 33 pp., \$34
14	The Role of Safety Culture in Preventing Commercial Motor Vehicle Crashes (2007) 49 pp., \$36
15	Health and Wellness Programs for Commercial Drivers (2007) 80 pp., \$43
16	Safety Impacts of Speed Limiter Device Installations on Commercial Trucks and Buses (2008) 43 pp., \$37
17	Special Safety Concerns of School Bus Drivers (2009) 43 pp., \$38
18	Older Drivers: Do They Pose a Safety Risk? (2010) 28 pp., \$37

copies of these syntheses can be obtained from the Publications Office, Transportation Research Board, 500 Fifth Street, N.W., Washington, D.C., 20001; by calling 202/334-3213, from 8:30 a.m. to

5:00 p.m. EST Monday-Friday; and through the Internet at [www.trb.org/bookstore](http://www.trb.org/bookstore). Please send check orders to TRB, Lockbox 289, Washington, D.C., 20055 or fax to 202/334-2519.











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