

MVMA Sponsored Motor Truck Research

(A Bibliography)

Motor Truck Manufactures Division - Motor Vehicle Manufacturers Association

December 1992

MVMA Sponsored Motor Truck Research

(A Bibliography)

Motor Truck Manufacturers Division Motor Vehicle Manufacturers Association 1620 I St., N.W., Suite 1000 Washington, D.C. 20006 202/775-2741

December, 1992

INTRODUCTION

The Motor Vehicle Manufacturers Association of the United States, Inc. is the trade association of U.S. car and truck makers. MVMA's seven member companies produce 90% of all domestically built motor vehicles.

MVMA generates accurate and useful information about the United States motor vehicle industry and its effect on the nation and its people. Among Association activities are research projects, economic studies, collections of historical facts and figures, legal analyses and statistical compilations. Information from these activities is communicated to legislators, government officials, educators, news media and the public.

MVMA's Motor Truck Manufacturers Division represents the interests and views of large truck manufacturing members of the Association. It anticipates and identifies truck issues; conducts issue-oriented research; identifies and evaluates options; and develops policy positions.

The Motor Truck Division's research program areas over the years have included:

- o Heavy Truck Safety
- o Braking/Handling/Stability
- o Tire/Wheel Systems
- o Truck Ride Quality
- o Driver Environment/Anthropometrics
- o Size and Weights/Highway Cost Allocation
- o Splash and Spray

What follows is a bibliography identifying almost 150 motor truck related research projects sponsored, totally or in part, by MVMA, dating back almost 25 years. Since the results of all MVMA research projects are public information, these reports are obtainable from the authors or the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

MVMA SPONSORED MOTOR TRUCK RESEARCH

Accidents and the Nighttime Conspicuity of Trucks, Paul Green, Michael Kubacki, Paul L. Olson, Michael Sivak, HSRI, UM-HSRI-7992, Final Report, 54 pages, December 1979. HTS-1, C-1

Aggregating Annoyance Patterns, Bolt, Beranek and Newman, Inc. , (AMA Motor Vehicle Noise Study Annoyance Survey Working Paper No. 9), 35 pages, August 1970. NR-1

Allocations of Federal Highway Program Costs to Motor Vehicles on the Basis of the Costs they Occasion (a classic incremental analysis), CounselTrans, Inc. 102 pages, September, 1981. S&W-8

Analysis of Accident Data Involving Light Trucks, Thomas A. Ranney, Calspan Field Services, Inc. CFSI Report No. 6303-Y-1, MVMA Contract No. CAL 7807-C1.45, September 1978. LTS-1

Analysis of Accident Rates of Heavy-Duty Vehicles, Campbell, Blower, Gattis and Wolfe, UMTRI, MVMA Contract 8164 (report actually submitted to NHTSA under parallel data analysis contract), April 1988. AR-5

Analysis of Heavy-Duty Truck Use in Urban Areas, Daniel F. Blower and Kenneth L. Campbell, UMTRI, MVMA Project No. 6125, UMTRI-8831, 76 pages, June 30, 1988. TU-1

Analysis of Heavy Truck Accident Data, Thomas A. Ranney, Calspan Field Services, Inc., Buffalo, New York, April, 1978. HTS-1

Analysis of Heavy Truck Underride Accident Data, Thomas A. Ranney, Calspan Field Services, Inc., Buffalo, New York, September, 1978. HTS-1

Analysis of Light Truck Accident Data, Thomas A. Ranney, Calspan Field Services, Inc. CFSI Report No 6507-Y-1, Dec. 1979, Contract CAL 7907-C1.45 (Draft Final Report). LTS-1

An Analysis of the Economics of Truck Sizes and Weights in Relation to State and Federal Regulations, Alan M. Voorhees & Associates, Inc., September 1973. S&W-1

Analysis of the Effects of Trade Policy Changes on the U.S. Truck Industry, Charles River Associates, Inc., MVMA Agreement CRA-7501-C6.15, 113 pages, April 1976. T-1

Analysis of Tractor-Trailer and Large Truck Accident Data, Robert L. Mason, Ph.D., Southwest Research Institute, San Antonio, Texas, June, 1976. HTS-1

Analysis of Truck Accident and Exposure Information, Phase I Report, O'Day et al, HSRI, UM-HSRI-79-89, 46 pages, November 1979. HTS-1

Analysis of Truck, Tractor/Trailer Accident Data, Kenneth Perchonok, and Thomas A. Ranney, Calspan Corporation, Calspan Report No. ZN-5926-V-1, MVMA Agreement No. CAL 7607-C1.22, 74 pages, June 1976. HTS-10

Braking, Stability and Structural Integrity of Longer Combinations, A Technical Report on Tests Conducted at Utica, MI, May 8-July 27, 1967, AMA-TTMA Longer Combinations Braking Task Force, October 1, 1968. B&H-2

A Brief Description of the UMTRI Tire/Wheel Uniformity Machine, Luis Balderas and Paul Fancher, UMTRI, UMTRI-87-48, MVMA Project No. 7168, 12 pages, October 1987. TR-2

<u>Car-Truck Fatal Accidents in Michigan and Texas</u>, Daniel J. Minahan and James O'Day, Highway Safety Research Institute, University of Michigan, October, 1977. HTS-1A

Census of Transportation, 1977 Truck Inventory and Use Survey - Combination-Truck Codebook, HSRI, (Not a formal report) 65 pages, 1980. TU-2

Characteristics of Large-Truck Accidents as Represented in Texas Accident Data at HSRI, John A. Green, HSRI, UM-HSRI-SA-75-12, 59 pages, October 1975. HTS-5

Combination Vehicles: Five-Year Accident Experience, James O'Day, Lyle Filkins, Richard Kaplan, HSRI, 96 pages, UM-HSRI-80-51, MVMA Project No. 1200, Final Report, July 1980. HTS-2

Community Noise Countermeasures Cost-Effectiveness Analysis, Robert Rackl, Louis Sutherland and Jack Swing, Wyle Laboratories, WCR 75-2, July 1975. N-1

A Comparative Analysis of Truck and Non-Truck Accidents in the State of Michigan, Snehamay Khasnabis and Ali Atabak, Wayne State University, Department of Civil Engineering, January 1980. HTS-2

A Comparison of Accident Characteristics and Rates for Combination Vehicles with One or Two Trailers, Thipatai Chirachavala and James O'Day, HSRI, 92 pages, UM-HSRI-81-41, MVMA Project 1164, August 1981. HTS-8

A Comparison of Injury Severity in Accidents Involving Passenger Cars, Pickups, Vans and Multipurpose Vehicles, Rex D. Hume, Institute for Research in Public Safety, Indiana University, 20 pages, I.U. 8220-C1166, MVMA Project No. 1161, June 1983. LTS-2

A Comparison of Light Truck and Passenger Car Occupant Protection in Single-Vehicle Crashes, Kenneth W. Terhune, Ph. D., Arvin/Calspan Franklin Research Center, Calspan Report No 7438-1, MVMA Project No. 6167, September 1986. LTS-3

Comparison of Michigan Fatal and Non-Fatal Car-Into-Truck Accidents, Daniel J. Minahan, James O'Day, HSRI, UM-HSRI79-49, 35 pages, November 1979. HTS-2

The Composition, Function, and Travel Patterns of Medium Duty Trucks (6,000 - 10,000 lb GVW), D.T. Maruoka, Olson Laboratories, Inc. MVMA No. OLI 7510-C1.21, February 1976. TU-1

A Computer Based Mathematical Method for Predicting the Braking Performance of Trucks and Tractor-Trailers, Phase I report: Motor Truck Braking and Handling Performance Study, R.W. Murphy, et al, HSRI, UM-HSRI-PF-72-1, 229 pages, Sept 15, 1972. B&H-4

A Computer Based Mathematical Method for Predicting the Directional Response of Trucks and Tractor-Trailers, Phase II technical report: Motor Truck Braking and Handling Performance Study. J.E. Bernard, et al, HSRI, UM-HSRI-PF-73-1, 227 pages, June 1, 1973. B&H-5

Computer Simulation of Heavy-Truck Dynamics, Paul S. Fancher, HSRI, The HSRI Research Review, Vol. 12, No. 2, MVMA Project 1196, 16 pages, September-October 1981. B&H-6

A Computerized Model for Simulating the Braking and Steering Dynamics of Trucks, Tractor-Semitrailers, Doubles, and Triple Combinations - Users Manual, phase 4, C. C. MacAdam, et al. HSRI, UM-HSRI-80-58, MVMA Project No. 1197, 355 pages, 1 Sept 1980. B&H-7

Correlation of Truck Cab Interior Noise to Existing Regulatory Limits, Ben Sharp and William Weiss, Wyle Laboratories, WCR 73-2, MVMA No. WYL 7303-C24, 41 pages, March 1973. NR-1

Descriptive Parameters Used in Analyzing the Braking and Handling of Heavy Trucks, Volume 2 - Inertial Properties of Commercial Vehicles, Christopher B. Winkler, HSRI, UM-HSRI-81-19-2, MVMA Project No. 1196, 25 pages, April 1981. B&H-11

Descriptive Parameters Used in Analyzing the Braking and Handling of Heavy Trucks, Volume 3 - Measurements of the Longitudinal and Lateral Friction Properties of Truck Tires, P.S. Fancher, ed. HSRI, UM-HSRI-81-18-3-1, MVMA Project No. 1196, 14 pages, October 1981. TR-1

<u>Descriptive Parameters Used in Analyzing the Braking and Handling of Heavy Trucks, Volume 4 - Steering and Suspension Systems, Final report. C.B. Winkler and P.S. Fancher, HSRI, UM-HSRI-81-19-4, MVMA Project No. 1196, 91 pages, Oct 1981. B&H-4</u>

<u>Descriptive Parameters Used in Analyzing the Braking and Handling of Heavy Trucks, Volume 5 - Properties of Antilock Systems, C. C.</u>

MacAdam and P. S. Fancher, HSRI, UM-HSRI-81-19-5, MVMA Project No. 1196, 89 pages, May 1981. B&H-11

Development of Microcomputer Models of Truck Braking and Handling, Paul Fancher and Luis Balderas, UMTRI, UMTRI-87-37, MVMA Project No. 7163, 129 pages, August 1987. B&H-9

<u>Development of a Recommended Practice for Heavy Truck Splash and Spray Evaluation</u>, Koppa, Pezoldt, Zimmer, Deliman and Flowers, Texas Transportation Institute, Texas A&M University, 2 Volumes, TTI 9004-C0131, March 1990. S&S-1.

The Dynamic Behavior of Nonuniform Tire/Wheel Assemblies, Thomas D. Gillespie, UMTRI-83-8, MVMA Project No. 1162, 53 pages, November 1983. TR-1

Effect of Altitude on Smoke and Performance of a Diesel-Powered Tractor-Trailer Truck, Karl J. Springer, Southwest Research Institute, Project 11-2729, done for AMA and EMA, 49 pages, October 1969. HTS-2

The Effect of Cab Style on the Accident Experience of Heavy Trucks, Michael Kubacki and James O'Day, HSRI, UM-HSRI-81-03, MVMA Project No. 1.48, Final Report, 70 pages, February 1981. HTS-2

Effects of Truck Conspicuity on Collisions, consisting of three parts, Car/Tractor-Trailer Underride Accidents: Analysis of 1977 FARS Data, by Michael Kubacki, Retroreflectorization and Nighttime Truck Conspicuity: A Literature Review, by Michael Sivak, and Truck Conspicuity Eye Mark Study, by Paul Olson, Draft Final Report, MVMA Project No. 1.47, HSRI, August 1979. C-1

Effects of Truck Weights on Pavement Deterioration, R. L. Lytton, et. al. Texas Transportation Institute, Texas A & M University, Final Report RF 4087-2, prepared for ATA and MVMA, September 1981. S&W-8

An Empirical Model for the Prediction of the Torque Output of Commercial Vehicle Air Brakes, L. Johnson, P. Fancher, T. Gillespie, UMTRI, UM-HSRI-78-53, MVMA Project No. 1.36, (Preliminary Draft), 83 pages, December 1978. B&H-2

Empirically Determine the Effect of Environmental Variables on Truck Noise Emission and Noise Propagation to Test Microphones, Robert N. Baker, Blachford Engineers, 80NJ002, 58 pages, July 1980. NR-1

An Enhanced Simulation Capability for Studying the Braking, Steering, and Ride of Commercial Vehicles, Sayers et. al., UMTRI-86-52, MVMA Project No. 6163, 128 pages, October 1986. B&H-8

Evaluation of Personal Injury Occurrences in, on, or around Medium and Heavy Trucks, Vincent A. Gallagher and Michael C. Ross, MVMA Project No. 1163, October 1991. M-6

Factbook on Combination Vehicles in Fatal Accidents, 1975-1981, Wolfe, Filkins and O'Day, UMTRI-83-15, MVMA Project No. 1165, PB 83-212001, April 1983. HTS-8

Feasibility Study: Accident Rates of Existing Longer Combination Vehicles, Campbell and Pettis, UMTRI-89-19, MVMA Project No. 8163, 141 pages, July 1989. AR-6

Feasibility Study of Concepts for an All-Weather Noise Test Facility for Trucks, Prof. Joseph Sullivan, Ray W. Herrick Laboratories, Purdue University, HL 75-39, MVMA Project No. PRF 8914, 85 pages, October 1975. NR-1

Female U.S. Truck Driver Anthropometric and Truck Work Space Data Survey, Shaw and Sanders, Essex Corporation (Canyon Research) done for SAE with MVMA support, May 1984. DE-1

File Transformation Program (FTP) - Flatbed and Mobile Data Reduction, Version 1.0, S. E. Bogard, University of Michigan Transportation Research Institute, MVMA Project 0161 (Computer Aided Reduction of Tire Data), July 8, 1990. TR-2

The Formation of Truck Spray on Wet Roads, Kamm, et. al. Davidson Laboratory, Stevens Institute of Technology, Final Report 1431, DL Project 3347/743, 111 pages, April 1970. S&S-1

Heavy Truck Crashworthiness, Phase I, Task A1-2, Statistical Analysis, Failure Analysis Associates, Prepared for SAE, MVMA Project 2160, February 18, 1992. HTS-13

Heavy Truck Fuel System Integrity Study, Summary of First Nine Months of Operation, December 1986 - August 1987, Dr. Rodger J. Koppa, Texas Transportation Institute, Texas A&M University, MVMA Agreement TTI 8714-C7162, October 1987. HTS-12

Heavy Truck Fuel System Integrity Study, Summary Report, December 1986 - October 1988, Human Factors Division, Texas Transportation Institute, Texas A&M University, MVMA Agreements TTI 8714-C7162 and TTI 8806-C8162, November 1988. HTS-12

Heavy Truck Splash and Spray Testing, Koppa et al, Texas Transportation Institute, Texas A&M University, September 1984. S&S-2

Heavy Truck Splash and Spray Testing, Phase II, Executive Summary and Final Report, Koppa et. al., TTI, Texas A&M University, Project RF 7040, August 1985. S&S-2

Heavy Truck Splash and Spray Testing, Phase II, Statistical Appendix, Pendleton and Bromer, TTI Texas A&M University, Project RF 7040, 352 pages, October 1985. S&S-2

<u>Historical and Projected Emissions Conversion Factor and Fuel Economy for Heavy-Duty Trucks 1962-2002</u>, Energy and Environmental Analysis, Inc., December 1983. ER-5

Improving Motor Truck Social, Environmental, and Economic Utilization: A Literature Review, Martha Johnson, The Laird Durham, Co. Agreement Number LADU 7502-C6.12, 113 pages, June 1975. TU-1

<u>Influence of Tire and Wheel Nonuniformities on Truck Ride Vibration - Bibliography</u>, Dr. T.D. Gillespie, HSRI, part of Jan-Mar 1980 quarterly report on Tire/Wheel Nonuniformity Project for MVMA. TR-1

<u>Influence of Tire/Wheel Nonuniformities on Heavy Truck Ride</u> <u>Quality</u>, T.D. Gillespie, HSRI, UM-HSRI82-30, MVMA Project No. 1163, 109 pages, September 1982. TR-1

<u>Investigation of a Sound Power Measurement Concept for Heavy Trucks</u>
- <u>Phase III Interim Report</u>, Bergmann and Sullivan, Ray W. Herrick
Laboratories, Purdue University, HL 78-15, MVMA Project No. PRF
0077, 63 pages, April 1978. NR-2

Investigation of All-Weather Noise Test Concepts for Trucks and Buses Phase II, Ryan et al, Ray W. Herrick Laboratories, Purdue University HL77-14, MVMA Project No. PRF 0009, 104 pages, March 1977. NR-2

Issues Related to the Usage of a Tilt Table for Measuring the Roll Stability Characteristics of Heavy-Duty Truck Combinations, Robert D. Ervin, UMTRI, MVMA Project No. 9167, 20 pages, September 1984. B&H-6

IVHS and the Truckmaker: Identifying the Need for Research, Robert D. Ervin, UMTRI, MVMA Project No. 2166, 26 pages, September 1992. IVHS-2

<u>Light Truck Accident Data Analysis</u>, Thomas A. Ranney, Calspan Field Services, Inc., CAL 7907-C1.45, (draft final report) 27 pages, August 1979. LTS-1

<u>Light- and Medium-Duty Truck Trip Survey in Greater Los Angeles</u>, Horie, Rollin and Sidawi, Valley Research Corporation, Contract No. VRC9013-C0123, July 1990. TU-3

<u>Light Truck Accident Data Bank and Data Analysis</u>, Thomas A. Ranney, Donald O. Neff, Calspan Field Services, Inc., CFSI Report No. 6741-Y-1, MVMA Agreement No. CAL 8105-C1191, 35 pages, November 1981. LTS-2

<u>Light Truck Accident Investigation, Final Report for the Period October 15, 1986 to August 15, 1987</u>, Franklin Research Center, Division of Arvin/Calspan, MVMA Project No. 7166, 4 pages, August 1987. LTS-3

Light Truck Accident Investigation, Final Report for the Period October 15, 1987 to August 15, 1988, Franklin Research Center, Division of Arvin/Calspan, MVMA Project No. 8166, 4 pages, August 1988. LTS-3

<u>Light Truck Accident Investigation and Data Bank Data Collection</u>, John W. Garrett, Calspan Field Services, Inc. CFSI Report No 6373-Y-1, Contract No. CAL 7906-C1-32, 27 pages, April 1980. LTS-1

Light Truck Accident Investigation and Data Bank, J. W. Garrett, Calspan Field Services, Inc., MVMA Project No. 1201, CFSI Report No. GSG3-Y-I, December 1980. LTS-1

Light Truck Accident Study and Data Bank, Establishment of Data Bank, John W. Garrett, Calspan Field Services, Inc., Calspan Report No ZN-6114-V-1, MVMA Contract No. CAL 7712-C1.32, April 1978. LTS-1

<u>Light Truck Accident Study</u>, Thomas A. Ranney, Calspan Corporation, Calspan Report No ZN-5925-V-1, MVMA No. CAL 7608-C1.24, 91 pages, February 1977. LTS-1

<u>Light Truck Safety: A Literature Review and Research Outline,</u> Kenneth W. Terhune, Ph.D., Calspan Corporation, Calspan Report No. 216, 44 pages, March 1985. LTS-2

Mechanical Characteristics of Truck Tires During Combined Slip, Winkler, Bogard and Baraket, UMTRI, UMTRI-92-33, MVMA Project No. 2165, 93 pages, August 1992. TR-2

Modeling the In-Stop Torque Performance of Hydraulically-Actuated Truck Brakes, T. Gillespie, et al, HSRI, UM-HSRI-78-58, MVMA Project No. 1.34, (Preliminary Draft), 47 pages, December 1978. B&H-3

Motor Vehicle Noise Identification and Analysis of Situations Contributing to Annoyance, Bolt Beranek and Newman, Inc. Report 2082, 79 pages, June 1971. NR-3

MVMA/NHTSA/SAE Round Robin Brake Test, Richard C. Kempf, Transportation Research Center of Ohio, MVMA Project 1161, August 26, 1991. B&H 12

National Truck Trip Information Survey, UMTRI Truck Study, Daniel Blower and Leslie C. Pettis, UMTRI, MVMA Project No. 8164 (actually submitted to NHTSA under parallel data analysis contract), UMTRI-88-11, March 1988. AR-5.

Noise and Traction Characteristics of Bias-Ply and Radial Tires for Heavy Duty Trucks, G.R. Thurman, et al., HSRI, 133 pages, October 1977. NR-3

Noise and Traction Characteristics of Bias-Ply Truck Tires. Vol. 2 - wet traction findings, R.D. Ervin and C.C. MacAdam, HSRI, UM-HSRI-76-2-2, 43 pages, October 1976. TR-1

Occupant Injury Sources in Light Truck Accidents, Thomas A. Ranney, Calspan Field Services, Inc., Buffalo, New York, CFSI Report No 6507-Y-1, MVMA Contract CAL 7907-C1-45, February 1980. LTS-1

Occupant Survivability in Heavy-Truck Crashes, Brian Wolf, Kenneth L. Campbell and James O'Day, HSRI, UM-HSRI-81-55, MVMA Project No. 1164, 34 pages, November 1981. HTS-9

Operational Time of School Bus Fan, H. E. Staph, Southwest Research Institute, SWRI Project 08-5451-020, 25 pages, July 31, 1979. NR-3

Participant Evaluations of Ride Quality from the MVMA Truck Ride Quality Demonstration, James C. Miller, Human Factors Research, Inc., HFR Technical Memorandum 2720, 16 pages, August 1979. TRQ-1

<u>Performance Evaluation of the UMTRI Tire/Wheel Uniformity Test Machine</u>, Thomas D. Gillespie, UMTRI, UMTRI-86-1, MVMA Project No. 9162, 22 pages, June 1986. TR-2

<u>Pickup Bumper Heights as a Determinant of Damage of Struck Passenger Cars</u>, Rex D. Hume, Indiana University Institute for Research in Public Safety, I.U. 8220-C1166, MVMA Project No. 1161, 44 pages, February 28, 1983. LTS-2

Pilot Study of the Relationship between Truck Cab Vibration Levels and Driver Alertness, Claudio Stampi, M.D., and Anneke Heitmann, Ph.D., Institute for Circadian Physiology, Report 9804-2-FR, MVMA Project No. 1162, 135 pages, November, 1992. B&H-12.

<u>Population Estimates from the National Truck Trip Information Survey</u>, Dr. Kenneth L. Campbell, UMTRI, Transportation Research Board Paper, January 1986, TU-2

The Potential for Bus Rapid Transit, Wilbur Smith and Associates, 68 pages, February 1970. BS-1

Predicting the Braking Performance of Trucks and Tractor-Trailers, Phase III technical report, C.B. Winkler, et al, HSRI, UM-HSRI-76-26-1, 215 pages, 15 June 1976. B&H-3

Proceedings of the National Truck Safety Symposium, Presentations on the Large Truck Survey Program by the University of Michigan

<u>Transportation Research Institute</u>, Campbell, Carsten and Ervin, Organized by Motor Vehicle Manufacturers Association of the United States, Inc. June 30, 1987. HTS-4

Public Attitudes and Knowledge of the Trucking Industry, Market Facts, Inc., 51 pages, April 1962. MISC-1

<u>Public Perceptions of the U.S. Trucking Industry</u>, ICR Research Group, AUS Consultants, 29 pages, May 1991. MISC-8

Rear-End Collisions and Conspicuity, Carsten, Schultz and Campbell, UMTRI, paper presented at MVMA/DOT National Truck Safety Symposium, June 30, 1987. C-1

Relationship of Truck Tire/Wheel Nonuniformities to Cyclic Force Generation, T.D. Gillespie, UMTRI, MVMA Project No. 1162, April 1984. TR-2

Report on Visibility Measurement Test (Field of Driver View), Vols. I and II, Approved Engineering Test Laboratories, General Environments Corporation, Report No. 6106.1, MVMA/GEC 7928-C4.40, by Harley E. Holt, June 30, 1980. HTS-7

Representation of Truck Tire Properties in Braking and Handling Studies: The Influence of Pavement and Tire Conditions on Frictional Characteristics, Zeev Bareket and Paul Fancher, UMTRI, MVMA Project No. 9163, UMTRI-89-33, December 1989. TR-2

Representation of Truck Tire Properties in Braking and Handling Studies: The Influences of Vertical Load on Side Force Characteristics, Luis Balderas and Paul Fancher, UMTRI, MVMA Project 8168, UMTRI-88-29, August 1988. TR-2

A Review of the Heavy Duty Gasoline Engine Certification Test Cycles, Arthur D. Little, Inc. Cambridge, MA, 85886, April 1981. ER-1

Road Class and Large Truck Involvements in Fatal Accidents, Oliver Carsten, UMTRI, MVMA Project 6165, UMTRI-87-19, May 1987. AR-2

Road Class and Large Truck Involvements in Fatal Accidents, Oliver Carsten, UMTRI, Transportation Research Board Paper, January 1986. AR-2

Rollover, Treatment-outline for a 16mm color, sound, motion picture, UMTRI and Liberty Films, 11 pages, final product of "Dynamic Stability in Crisis Maneuvers" MVMA Project 1163-83, September 1983. B&H-3

Safety Standard Benefit Estimates for Light Trucks, Vans, and MPVs, Rex D. Hume, Michael L. Squires, Robert A. Romberg, and Subbarao V. Uppaluri, Institute for Research in Public Safety, Indiana

University, 19-175-40/7200, Final Report, 142 pages, November 11, 1981. LTS-2

Side Impacts: An Analysis of Light Trucks, Intrusion, and Injury in FARS and NCSS Data, Robert E. Scott, UMTRI, UMTRI-82-43, MVMA Project No. 1147, 135 pages, November 1982. LTS-2

<u>Simplified Models of Truck Braking and Handling</u>, (including microcomputer models on 5 1/4 Inch disks) Engineering Research Division, UMTRI, February 1988. B&H-9

Simplified Models of Truck Braking and Handling, A User's Manual for the Brake Temperature Model, Engineering Research Division, UMTRI, April 1990. B&H-11

Simulation of the Directional Response Characteristics of Tractor-Semitrailer Vehicles, P.S. Fancher, et al, HSRI, UM-HSRI-79-9, MVMA Project No. 1.39. (Preliminary Draft), 81 pages, March 1979. B&H-3

Some Characteristics of Light-Truck Accidents in Texas, John A. Green, HSRI, UM-HSRI-75-15, 35 pages, January 1976. LTS-1

Sound Power Determination of a Truck in a Semi-Anechoic Room - Phase III Interim Report, Hornbostel and Sullivan, Ray W. Herrick Laboratories, Purdue Univ., HL 77-18, MVMA Project No. PRF 0009, 128 pages, May 1977. NR-4

Studies of Automobile and Truck Rear Lighting and Signaling Systems, R. G. Mortimer et al. HSRI, Contract No. UM-7101-C128, UM-HSRI-HF-74-25, Project No. 320164, 204 pages. November 1974. HTS-5

A Study of Light Truck and Passenger Car Rollover and Ejection in Single-Vehicle Crashes, Kenneth W. Terhune, Ph. D., Franklin Research Center Division of Arvin/Calspan, Calspan Report No. 7636, MVMA Agreement No. CAL 8717-C7167, May 1988, LTS-3

A Study of Light Truck Aggressivity, Terhune, Ranney, Smist and Woodill, Calspan Field Services, Inc. Report No. 7139-Y-1, 105 pages, February 1984. LTS-2

A Study to Define Physical and Acoustical Parameters of Exterior Truck Noise Test Measurement Sites, Thomas J. Henry, John K. Schreiber, Navnit C. Mehta, International Harvester Company, Agreement No. IH 7509-C 2.2, 1976. NR-5

A Subjective Assessment of Truck Ride Quality, James C. Miller, Human Factors Research, Inc. Technical Report 2720, Agreement No. HFR 7930-C1.57, 62 pages, August 1979. TRQ-3

Technical Inadequacies and Biases of the Highway Cost Allocation Study Plan, CounselTrans Inc. done in conjunction with ATA, 97 pages, September 1979. HR-2, HUT-1

A Test Procedure for Evaluating the Obstacle Evasion Performance of Heavy Trucks, Fancher et al, UMTRI-91-41, 35 pages, September 1971. B&H-12.

Tracking and Stability of Multi-Unit Truck Combinations, Fancher, et. al., UMTRI-84-25, 54 pages, July 1984. B&H-6

Tractor-Trailer Combinations: National Estimates of Their Distribution and Use, Based on the 1977 Truck Inventory and Use Survey, UMTRI, UMTRI-83-14, MVMA Project No. 1199 and 1164, Campbell, et al, PB 83-198176 (NTIS), 53 pages, April 1983. TU-1

Truck Accident Study, Report of Procedures and Findings, Ernst and Ernst, Management Services Division, 108 pages, August 1968. HTS-5

Truck/Bus Accident Study, University of Southern California, Institute of Safety and Systems Management, Agreement No. U.S.C. - 7404. C1.9, Five Volumes, Problem Area Identification (Task B), Univariate Frequency and Percentage Distribution (925 Cases) Appendix D, Step-Wise Regression Computer Program Output (MBDP2R), Appendix E, Exposure/Involvement Rates, Appendix H, December 1975. HTS-6

Truck Driver Informational Overload, C. C. MacAdam, UMTRI, UMTRI-92-36, MVMA Project No. 2163, 50 pages, September 1992. IVHS-2

Truck-Other Fatal Accidents, 1980-82, Carsten and Pettis, UMTRI, UMTRI-85-9, 153 pages, February 1985. AR-1

Truck Transportation Efficiency, De Vany and Saving, Texas A&M University, ASD/TRS 7501-C6.12, June 1975. TU-2

<u>Truck-Truck Fatal Accidents, 1980-82</u>, Carsten and Pettis, UMTRI-85-10, 177 pages, February 1985. AR-1

Trucking in 1995, Laird Durham, The Laird Durham Co. Agreement Number LADU 7502-C6.12, 71 pages, June 1975. TU-2

Trucks in Rural Injury Producing and Property Damage Utah Accidents, Schotz and Robinson, CAL No. VJ-2721-R9, Cornell Aeronautical Laboratory, December 1969. HTS-10

Trucks Involved in Fatal Accidents - Codebook 1980-88, Daniel Blower, UMTRI, UMTRI-91-36, MVMA Project No. 2164, 140 pages, September 1991. AR 7

Trucks Involved in Fatal Accidents, 1980, Carsten and Pettis, UMTRI, UMTRI-83-29, MVMA Project No. 1165, special report, PB 83264556, 111 pages, July 1983. AR-2

<u>Trucks Involved in Fatal Accidents, 1980-82</u>, Carsten and Pettis, UMTRI-85-1, 116 pages, January 1985. AR-2

Trucks Involved in Fatal Accidents, 1980-84, Carsten and Pettis, UMTRI-87-35, 118 pages, August 1987. AR-4

Trucks Involved in Fatal Accidents, 1980-84, by Power Unit Type, Carsten and Pettis, UMTRI-87-38, 118 pages, August 1987. AR-4

Trucks Involved in Fatal Accidents, 1980-86, Blower, Pettis and Sullivan, UMTRI-90-23, 130 pages, May 1990. AR-6

Trucks Involved in Fatal Accidents, 1980-86, by Power Unit Type, Blower, Pettis and Sullivan, UMTRI-90-26, 130 pages, July 1990. AR-6

Trucks Involved in Fatal Accidents, 1981, Carsten and Pettis, UMTRI, UMTRI-84-10, 116 pages, March 1984. AR-2

Trucks Involved in Fatal Accidents, 1982, Carsten and Pettis, UMTRI, UMTRI-84-38, 122 pages, November 1984. AR-2

Trucks Involved in Fatal Accidents, 1983, Carsten and Pettis, UMTRI, UMTRI-86-24, 119 pages, May 1986. AR-2

Trucks Involved in Fatal Accidents, 1984, Carsten and Pettis, UMTRI, UMTRI-87-22, 120 pages, June 1987. AR-3

Trucks Involved in Fatal Accidents, 1985, Blower and Pettis, UMTRI, UMTRI-89-24, 114 pages, September 1989. AR-6

Trucks Involved in Fatal Accidents, 1986, Blower, Pettis and Sullivan, UMTRI, UMTRI-90-4, 112 pages, March 1990. AR-6

Trucks Involved in Fatal Accidents, 1987, Blower, Pettis and Sullivan, UMTRI, UMTRI-90-43, 122 pages, October 1990. AR-7

Trucks Involved in Fatal Accidents Codebook 1988, Sullivan, Blower and Pettis, UMTRI, UMTRI-91-21, 123 pages, June 1991. AR-7

Trucks Involved in Fatal Accidents Codebook 1989, Sullivan, Blower and Pettis, UMTRI, UMTRI-92-10, 123 pages, February 1992. AR-8

Trucks Involved in Fatal Accidents Codebook 1990, Sullivan, Blower and Pettis, UMTRI, UMTRI-92-27, 123 pages, August 1992. AR-8

Trucks Involved in Fatal Accidents Factbook 1987, Dawn L. Massie, UMTRI, UMTRI-91-6, 110 pages, June 1991. AR-7

Trucks Involved in Fatal Accidents Factbook 1988, Kathleen P. Sullivan and Dawn L. Massie, UMTRI, UMTRI-92-9, 126 pages, April 1992. AR-8

Trucks Involved in Fatal Accidents Factbook 1989, Kathleen P. Sullivan and Dawn L. Massie, UMTRI, UMTRI-92-19, 124 pages, October 1992. AR-8

The UMTRI Large-Truck Survey Program, Oliver Carsten and Kenneth L. Campbell, UMTRI, The UMTRI Research Review, Vol. 17, No. 1, 12 pages, July-August 1986. AR-3

Upgrading the Suspension Measurement Facility, C. B. Winkler and M. R. Hagan, UMTRI, UMTRI-87-32, July 1987. B&H-8

U. S. Truck Driver Anthropometric and Truck Work Space Data Survey, Mark S. Sanders, PhD, Canyon Research Group, Inc., Society of Automotive Engineers (MVMA partially funded study), CRG/TR-83/002, 164 pages, January 1983. DE-2

December 10, 1992 2MVMASPON.MTR