

# Report and Publication List for Michael Paine

7 Apr 09

## **Engineering**

*Reports and papers prepared as Principal of Vehicle Design & Research P/L*

"Injury and structural trends during 12 years of NCAP frontal offset crash tests" ESV09 co-author

"A safe ride height line for child car occupants", ESV09 co-author

"Speed limiting trials in Australia" ESV09 co-author

"Head Protection Technology: Review and development of a standard for HPT in motor vehicles less than 4.5 tonnes" prepared for Vicroads, co-author

"Livestock vehicles - accuracy of methods of estimating axle loads" prepared for NSW RTA, December 2008, co-author

"Crash testing for safety - possible enhancements to ANCAP test and rating methods" 2008 Australasian Road Safety Research, Policing and Education Conference, co-author

"In-vehicle safety technologies - picking future winners!" 2008 Australasian Road Safety Research, Policing and Education Conference, co-author

"Expediting road safety benefits of intelligent vehicle technologies" prepared for Victorian TAC. March 2008, co-author

"Draft Regulatory Impact Statement on changes to Australian Child Restraint Regulations" National Transport Commission 2007, co-author

"Stay Safe Rangers Initiative at Balgowlah Heights Public School: A model 'kiss-and-drop' program" Journal of the Australasian College of Road Safety- November 2007, co-author

"Pedestrian protection through vehicle design" NSW Pedestrian Colloquium, 26 Nov 07

"Rear seat occupant safety" ACRS Conference, 3 Aug 07

"In-Vehicle Intelligent Speed Limit Advisory Systems", ESV07 co-author

"What's hot in road safety? Vehicles that obey the speed limits" ACRS ISA Seminar, 1 Aug 07

"Revised Assessment Protocols and Scoring Methods for the Australian Child Restraint Evaluation Program" ESV07, co-author

"Evaluation of SpeedAlert speed advisory system" prepared for Smart Car Technologies, June 2006.

"Preparation of Draft National Code of Practice for Retrofitting Passenger Restraints to Buses" prepared for National Transport Commission, January 2006. Principal author.

"Protocol for determining suitability of vehicles for older drivers and passengers", 2005 Road Safety Research Policing & Education Conference. Co-author.

"Electronic stability control - review of research and regulations" prepared for NSW Roads and Traffic Authority, 2005.

"Daytime running lights for motorcycles", ESV05. Principal author.

"Three point seat belts on coaches - the Australian experience", ESV05. Co-author.

"Side impact sand improved occupant protection", ESV05. Co-author.

"Child Restraint Evaluation Program - Ease-of-Use Evaluation" prepared for NSW RTA May 04. Co-author.

"Measures to encourage the supply and uptake of cleaner marine outboard motors and personal watercraft", prepared for Department of Environment and Conservation, NSW, November 2004. Co-author Catherine Wilson. Also a similar report on powered gardening equipment.

"ANCAP Pole Test for Assessing Side Impact Performance", report for Australian New car Assessment Program, June 2004.

"Cost and benefits of school bus rollover strength and seat belts", prepared for Queensland Transport, April 2004.

"Safety features and fleet vehicles", report for NSW RTA, December 2003.

- "Heavy vehicle object detection systems" prepared for Vicroads, June 2003.
- "Review of bus door safety systems" report for NSW RTA and Bus Door Safety Working Party, April 2003.
- "Protecting children in car crashes: the Australian Experience" (co-authors Julie Brown, Michael Griffiths, Michael Case and Owen Johnstone) & "The danger to young pedestrians from reversing motor vehicles" (co-authors Adam Macbeth and Michael Henderson) proceedings of the *18th International Conference on the Enhanced Safety of Vehicles (ESV)*, Nagoya, 2003.
- "Review of safety implications of aftermarket body panels" prepared for Technical Research Centre, IAG (NRMA Insurance), May 2003.
- "A Review of Daytime Running Lights", Report prepared for NRMA and RACV, 2002.
- "Effectiveness Of Child Restraints, The Australian Experience", Research Report RR 06/02 co-authored with Julie Brown, Michael Griffiths and Paul Kelly. Prepared for the Australian Automobile Association, 2002.
- "Encouraging the purchase of safer vehicles" - project reports for WA Dept of Planning and Infrastructure, 2002.
- "Potential use of crash test data for crashworthiness research', ICRASH 2002.
- "Information to support the uptake of cleaner vehicles in NSW", prepared for NSW EPA, February 2002.
- "Guidelines for the physical measurement of heavy vehicle mass", project reports prepared for Austroads, 2001-2003. Co-author Paul Wild.
- "Devices to Reduce the Risk to Young Pedestrians from Reversing Motor Vehicles", project report for Motor Accidents Authority of NSW, 2001.
- "Analysis of the relative safety of bicycles and scooters" for Vicroads, January 2001.
- "Scoping paper for Safercar website", prepared for Transport Accident Commission, Victoria, May 2001.
- "Analysis of IM240 emissions data: May 1999 to December 2000" report for NSW RTA, January 2001.
- "Surveys of child restraint use in New South Wales" (co-author Harry Vertsonis) and "Injury and deformation trends with offset crash tests" (co-author Michael Griffiths), proceedings of 17th ESV, Netherlands, 2001.
- "Assessment of Child Restraint Performance in Australia" presented at a child restraint seminar in Melbourne on 5 Feb 2001. Co-authored with Michael Griffiths and Julie Brown, 2001.
- "Crash and sled tests using child dummies", Impact Biomechanics 2001, co-authored with Julie Brown, 2000.
- "Green Car Guide - feasibility of rating the environmental performance of vehicles in Australia", prepared for NSW Sustainable Energy Development Authority (SEDA), October 2000
- "Strategies for heavy vehicle safety", report for NSW RTA, February 2000
- "Assessment of Pedestrian Protection Afforded by Vehicles in Australia" Impact Biomechanics conference in Sydney on 16 March 2000.
- "Vehicle roadworthiness and accidents" - submission to Victorian Parliament Road Safety Committee, April 2000.
- "Consumer crash tests: the elusive best practice", co-authored with Michael Griffiths and Jack Haley for Worldwide Harmonization of Crash Tests seminar, Germany, Dec 1999.
- "Vehicle Inspection Manual for Authorised Inspection Stations" for ACT Dept of Urban Services, 1999.
- "Administrative guidelines - vehicle operations legislation" - project reports for NRTC, 1998.
- "Child Restraints Surveys in NSW: 1998" for NSW RTA, November 1998.
- "Directions in Road User Protection" co-authored with Susie Gibbs and Phil Charles for NSW RTA, October 1998.

"Administrative guidelines - vehicle operations legislation", project reports for National Road Transport Commission, 1998

"Offset crash tests: observations about vehicle design and structural performance", co-authored with Donal McGrane and Jack Haley, *16th International Conference on the Enhanced Safety of Vehicles*, Windsor, 1998.

"Devices to help drivers control their speed" for Staysafe/SAE-A conference *Developments in Safer Motor Vehicles*, March, 1998.

"Bike Racks on the Front of Buses: Engineering and Road Safety Issues" prepared for ACT Dept of Urban Services, October 1997.

"Guidelines for a crashworthiness rating system" discussion paper prepared for ANCAP, Dec 1996.

"The School Bus Crossing Control Arm: An Evaluation" - co-authored with Dr Austin Adams (UNSW) for NSW Dept of Transport, Dec 1996.

"Specification for the Provision of Inspection Services" for ACT Dept of Urban Services, 1996.

"Speed Control Devices for Cars", report for NSW RTA, July 1996.

"Flashing Warning Lights on School Buses" for the *15th International Conference on the Enhanced Safety of Vehicles*, Melbourne, 1996. (co-authored with Dr Alec Fisher)

"Analysis of Australian In-service Vehicle Emissions Data" for NRMA, 1996.

"Passenger Car Roof Crush Strength Requirements", co-authored with Dr Michael Henderson, CR176, Australian Federal Office of Road Safety, 1995.

"School Bus Seat Belts", co-authored with Dr Michael Henderson for the New South Wales Department of Transport, 1995.

"Cash for Clunkers - analysis of strategies for dealing with older, high-polluting vehicles", for NRMA, 1995

"National Guidelines for Assessment of Defective Vehicles" - prepared for Austroads/NRTC, June 95.

"Australian Bus Safety Standards & Bus Accidents" prepared for the Australian National Road Transport Commission (NRTC) May 95.

"Contribution of vehicle defects to crashes" prepared for NRTC, 1994.

"Mobile Safety Checks of Light Vehicles" prepared for NSW RTA, January 1995.

"National Guidelines for Assessment of Defective Vehicles" - discussion paper prepared for Austroads/NRTC, June 95.

"Light vehicle brake study" for NSW RTA (Sydney Region), December 1993.

"Heavy Vehicle Roadworthiness Standards". Discussion paper prepared for Austroads, June 1991.

*Reports prepared as an RTA employee*

"Improving NSW Vehicle Inspections", prepared for discussions between the RTA and the motor industry, 1990.

"Bus/Semi-trailer crash near Grafton, 20 October 1989", Vehicle Engineering Report for on-site crash investigation, 1989. Co-authored with Rodney Vaughan.

Defects in the vehicle population (paper presented at the RTA Heavy Vehicle Roadworthiness Seminar, August 1989)

"Guidelines for the operation of B-Doubles", revised and updated RTA document, 1988.

## **Science**

"The Frequency and Predicted Consequences of Cosmic Impacts in the Last 65 Million Years" co-authored with Dr Benny Peiser, Proceedings of Bioastronomy 2002: Life among the stars, International Astronomy Union, 2004.

"Source of the Australasian Tektites?", Meteorite, Vol. 7, p. 34-37 (2001).

"Estimate flux of rocks bearing viable lifeforms exchanged between Earth and Mars", poster paper for Astrobiology Workshop, Macquarie University, Australia July 2001.

"Tsunami book gives a better understanding of ancient floods on Mars", Science of Tsunami Hazards Vol 20 No 1 (2002)

"Asteroid impacts: the extra hazard due to tsunami", Science of Tsunami Hazards, Volume 17 Number 3 1999

"Rocks from space" - series of 20 articles about asteroids and comets for Space.com website (1999-2003)

## ***Computing projects***

Inspections booking system for NSW Heavy Vehicle Inspection System (HVIS)

Vehicle inspection result recording and analysis database

Maintenance, parts and task tracking system for a helicopter operator.

Relational databases for in-depth crash studies (eg Children in Car Crashes)

Business management and accounting package

High school exam scaling and analysis system

Insurance agent client database

Crash test data processing and scoring system

Vehicle safety features analysis from Glass's Guide data

Marketing research client and project database

Corporation staff training database

Project management databases, including time-tracking.

Analysis of vehicle occupant surveys

Analysis of child restraint observational surveys.

Analysis of vehicle brake performance surveys

Distributed package to record, analyse and prioritise proposals for black-spot road treatments