

New Zealand Road Safety Research 2006

ISSN 1174-6017

YEARLY REPORT
2007



CONTENTS

Foreword2

Projects3

 Alcohol and Drugs.....3

 Data Analysis5

 Economics7

 Engineering10

 Human Factors25

 Miscellaneous39

FOREWORD

I am pleased to present the 2006 edition of New Zealand Road Safety Research. The information in this publication is collected each year in a survey of New Zealand research and funding organisations. It includes all reported research with a New Zealand component on any aspect of road safety being undertaken or completed during the year under review.

The Ministry of Transport is responsible for fostering and coordinating road safety research in New Zealand. We welcome this responsibility and see the production of this document as one of the many ways we can work towards fulfilling it. This summary report is published annually and distributed widely to New Zealand and international road safety contacts.

Research projects described here are arranged alphabetically by title under six main subject areas: alcohol and drugs, data analysis, economics, engineering, human factors and miscellaneous.

This information is also provided in electronic form to ARRB Transport Research Ltd, which produces the bibliographic database, Australian Transport Index database (ATRI). ATRI represents the holdings of the ARRB Transport Research Library as well as a number of other transport-related libraries. It covers both Australian and overseas material to do with land transport and contains records of books, reports, individual journal articles and conference papers.

I trust you will find the New Zealand Road Safety Research 2006 report useful and informative. Your comments or suggestions on its content would be most welcome; please address them to the Manager, Research and Statistics, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand.



Alan Thompson
Chief Executive, Ministry of Transport

ALCOHOL AND DRUGS

Identification of modifiable environmental factors to reduce community alcohol-related harm

Investigating organisation Injury Prevention Research Unit, University of Otago

Supporting organisation Health Research Council of New Zealand

Principal investigators MacLennan, B; Kypri, K; Langley, J

Aims/objectives This research will focus on the development and piloting of audit protocols to evaluate and characterise community policies and environments with respect to alcohol.

Progress/status Active

Commencement March 2006

Scheduled completion February 2009

Publications MacLennan, B; Kypri, K; Langley, J, "Evidence base for alcohol policy development in New Zealand". Queenstown, New Zealand. *ALAC Partnership Conference*, 6-7 April 2006.

Address for copies IPRUNZ@otago.ac.nz, Injury Prevention Unit, University of Otago, PO Box 913, Dunedin 9054, New Zealand

Illicit Drug Monitoring System

Investigating organisation Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University

Supporting organisation New Zealand Police

Principal investigators Butler, R; Girling, M; Sweetsur, P; Wilkins, C

Aims/objectives To provide timely information on trends in illicit drug use and drug related harm in New Zealand.

Progress/status Active

Commencement July 2005

Scheduled completion Ongoing

Publications Butler, R; Girling, M; Sweetsur, P; Wilkins, C (2005). Methamphetamine and Other Illicit Drug Trends in New Zealand: Findings from the Methamphetamine Module of the 2005 Illicit Drug Monitoring System (IDMS). Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.

Butler, R; Girling, M; Sweetsur, P; Wilkins, C (2005). Cannabis and Other Illicit Drug Trends in New Zealand: Findings from the Cannabis Module of the 2005 Illicit Drug Monitoring System (IDMS). Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.

Butler, R; Girling, M; Sweetsur, P; Wilkins, C (2005). Hallucinogens and Other Illicit Drug Trends in New Zealand: Findings from the Hallucinogen Module of the 2005 Illicit Drug Monitoring System (IDMS). Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.

Address for copies <http://www.shore.ac.nz/projects/IDMS%20study.htm> The Centre for Social and Health Outcome Research and Evaluation, Massey University, PO Box 6137, Wellesley Street, Auckland 1141, New Zealand

Monitoring the effectiveness of road safety countermeasures

Investigating organisation Ministry of Transport

Principal investigators Frith, W J; Jones, W R

Aims/objectives Use of crash data and other information including behavioural measures to monitor the effectiveness of road safety countermeasures.

Progress/status Active

Commencement July 1994

Scheduled completion Ongoing

Publications Mara, M K; Davies, R B; Frith, W J. Evaluation of the Impact of Compulsory Breath Testing and Speed Cameras in New Zealand. Proceedings Roads '96 Conference, Part 5, pp. 269-82.

Povey, L J; Frith, W J; Graham, P G (1999). Cycle helmet effectiveness in New Zealand. Accident Analysis and Prevention 31 (1999) 763-770.

Keall, M D; Povey, L J; Frith W J (2001). The relative effectiveness of a hidden versus a visible speed camera programme. Accident Analysis and Prevention 33 (2) 277-284.

Keall, M D; Povey, L J; Frith W J (2002). Further results from a trial comparing a hidden speed camera programme with visible camera operation. Accident Analysis and Prevention 34 (6) 773-777.

Address for copies Research and Statistics, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Traffic-Related Injury in the Pacific (TRIP)

Investigating organisation University of Auckland; Fiji School of Medicine; Department of Health (Fiji, Samoa and Palau)

Supporting organisation Health Research Council; Wellcome Trust (United Kingdom)

Principal investigators Jackson, R T; Ameratunga, S

Aims/objectives To gain the critical scientific knowledge that will help prioritise effective strategies to prevent traffic-related injury in Pacific communities; and to develop a trained and competent workforce to address other and future threats to the health and safety of Pacific peoples more generally.

Progress/status Active

Commencement March 2004

Scheduled completion February 2008

Risk trend analysis

Investigating organisation Ministry of Transport

Principal investigators Leung, J; Quazi, A; Mara, M K

Aims/objectives To analyse the trend in fatality risk by time and space: weekday vs weekend, night vs day and state highway vs local roads, and also by Police districts.

Progress/status Active

Commencement January 2003

Scheduled completion Ongoing

Publications Guria, J C; Mara, M K (2004). Trends in road travel risk in recent years in New Zealand by time and space. *Towards Sustainable Land Transport Conference*, Wellington, New Zealand.

Quazi, A (2004). Risk trend analysis by time, space, alcohol and speed *Road Safety Research, Policing and Education Conference 2004* Perth, Western Australia.

Address for copies Economic Evaluation, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Road safety resource allocation model

Investigating organisation Ministry of Transport

Principal investigators Guria, J C; Leung, J

Aims/objectives To develop and refine a resource allocation model for road safety funding.

Progress/status Active

Commencement June 1995

Scheduled completion Ongoing

Publications

1. Bliss, A G; Guria, J C; Jones, W R; Rockliffe, N A. (1998). A Road Safety Resource Allocation Model – Working Paper 1: Principles and Structure/Enforcement Results.
2. Bliss, A G; Guria, J C; Jones, W R; Rockliffe, N A. (1999). A Road Safety Resource Allocation Model. Transport Reviews, vol. 19, no. 4, 281-303.

Address for copies

1. www.ltsa.govt.nz/publications/docs/sdwp1.pdf
2. Economic Evaluation, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Social costs of crashes and injuries

Investigating organisation Ministry of Transport

Principal investigators Leung, J; Badger, S; Graham, P; Jones, W; Quazi, A

Aims/objectives To provide estimates of the average social cost per injury and crash, and the average social cost per reported crash and injury.

Progress/status Active

Commencement June 1999

Scheduled completion Ongoing

Publications The social cost of road crashes and injuries: June 2006 update, Ministry of Transport.

Address for copies 1. www.transport.govt.nz/socialcost
2. Economic Evaluation, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Accident benefits of sealing unsealed roads

Investigating organisation Beca Infrastructure Ltd

Supporting organisation Land Transport New Zealand

Principal investigators Bradshaw, P; Minchington, J

Aims/objectives To determine if there is sufficient data available to enable the 'accident benefit or cost' of sealing a road to be calculated with a desired level of confidence.

Progress/status Active

Commencement January 2006

Scheduled completion December 2006

Publications Bradshaw, P; Turner, S A (2006). Accident benefits of sealing unsealed roads.

Address for copies Email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand

Assessment of hazard warning signs used on New Zealand roads

Investigating organisation Transport Engineering Research New Zealand Ltd

Supporting organisation Land Transport New Zealand

Principal investigators Charlton, S G; Baas, P H

Aims/objectives This research compares the effectiveness of existing hazard warning signs with newer alternatives such as variable message signs and perceptual countermeasures (e.g. road and edge-line treatments). The warnings were systematically assessed in terms of both their suitability (conspicuity and comprehensibility to drivers) and their effectiveness (effects on driver compliance). Of particular interest were the reactions of older drivers to these warnings, given the projected aging of our road-using population.

Progress/status Completed

Commencement July 2003

Scheduled completion December 2004

Publications Charlton, S G; Baas, P H (2006). Assessment of New Zealand Hazard Warning Signs. Land Transport New Zealand Report 288

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html#safety> or email: research@landtransport.govt.nz, Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand (fee: \$30)

Benefits of brighter markings

Investigating organisation Opus International Consultants

Supporting organisations Land Transport New Zealand

Principal investigators Dravitzki, V; Lester, T; Wilkie, S

Aims/objectives To identify the safety benefit of making existing markings brighter. A before and after type crash study that examined the benefit of reflectorising markings in seven Transit New Zealand regions. Some indications of small benefits were obtained, but findings were also inconsistent.

Progress/status Completed

Commencement July 2003

Scheduled completion December 2006

Publications Dravitzki, V; Wilkie, S; Lester, T. (2006). The safety benefits of brighter road markings. Land Transport New Zealand Report 310.

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html#safety> or email: research@landtransport.govt.nz, Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand (fee: \$25)

Crash rates at rural junctions

Investigating organisation Beca Infrastructure Ltd

Supporting organisation Road Safety Trust

Principal investigators Turner, S A; Roozenburg, A P

Aims/objectives To develop accident prediction models for the more common rural intersection types.

Progress/status Active

Commencement January 2005

Scheduled completion May 2007

Crash risk relationships for quantifying the safety improvement potential of road networks

Investigating organisation Opus International Consultants Ltd

Supporting organisation Land Transport New Zealand

Principal investigators Cenek, P; Davies, R B; Henderson, R; Pitt, W

Aims/objectives To develop a tool, for use by road safety practitioners, that can be applied at a route level and network-wide level to identify the potential safety gains for the motoring public afforded by engineering measures such as realignment and high-friction surfacings.

Progress/status Active

Commencement July 2006

Scheduled completion October 2007

Curve speed management

Investigating organisation Transport Engineering Research New Zealand Ltd; Traffic & Road Safety Research Group, Waikato University

Supporting organisation Land Transport New Zealand

Principal investigators Charlton, S G; Baas, P H; de Pont, J; de Jong, D

Aims/objectives This research involved taking the multiple threads of road geometry, current vehicle speeds around curves, crash rates, driver judgements of appropriate speeds, vehicle dynamics, road camber, and the results of earlier studies to identify and evaluate potential treatments.

Progress/status Completed

Commencement July 2004

Scheduled completion June 2006

Publications Charlton, S G and de Pont, J (in press). Curve Speed Management. Land Transport New Zealand

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html>
or email: research@landtransport.govt.nz Land Transport
New Zealand, PO Box 2840, Wellington, 6140, New Zealand

Delineation investment priorities

Investigating organisation	Transport Engineering Research New Zealand Ltd
Supporting organisation	Land Transport New Zealand
Principal investigators	Charlton, S G; Baas, P H; Mackie, H
Aims/objectives	To develop a management tool that will assist road controlling authorities, and their consultants, to prioritise where and what type of delineation treatments should be used to obtain the greatest road safety benefits.
Progress/status	Completed
Commencement	July 2005
Scheduled completion	April 2007
Publications	Charlton, S G; Baas, P H; Mackie, H (in press). Delineation Investment Priorities, Land Transport New Zealand
Address for copies	http://www.landtransport.govt.nz/research/reports/index.html or email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand

Evidential based guidelines for temporary speed limits

Investigating organisation	Opus International Consultants Ltd
Supporting organisation	Land Transport New Zealand
Principal investigators	Moorthy H; Murray, S; Walton, D; Locke, N; Cenek, P
Aims/objectives	To produce clear and simple guidelines for the setting of safe, appropriate and consistent temporary speed limits around work zones.
Progress/status	Active
Commencement	July 2006
Scheduled completion	October 2007

Flush median safety

Investigating organisation GHD Ltd; University of Auckland

Supporting organisation Land Transport New Zealand; Auckland City Council

Principal investigators Cleaver, S; Jurisich, I; Dunn, R

Aims/objectives Research on the safety of flush median barriers in Auckland City. To observe whether there are reductions in crash severity, and if they prevent certain types of crashes from occurring.

Progress/status Active

Commencement July 2004

Scheduled completion December 2006

Publications Cleaver, S; Jurisich, I. (in press). Safety implications of flush medians in Auckland City – further analyses, Land Transport New Zealand.

Address for copies Email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand

Improved multi-lane roundabout designs for cycles

Investigating organisation GHD Ltd; University of Auckland

Supporting organisation Land Transport New Zealand; Manukau City Council

Principal investigators Campbell, D; Jurisich, I; Dunn, R

Aims/objectives The aim of this project was to review overseas literature, and to further develop a preliminary design guide for an on-road design for multi-lane roundabouts that is both safe and attractive to cyclists, and that can eventually be adopted for use in New Zealand.

Progress/status Completed

Commencement June 2004

Scheduled completion June 2006

Publication Campbell, D; Jurisich, I; Dunn, R (2006). Improved multi-lane roundabout design for cycles. Land Transport New Zealand Research Report 287.

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html>
or email: research@landtransport.govt.nz Land Transport
New Zealand, PO Box 2840, Wellington 6140, New Zealand
(fee: \$45)

Incorporating safety into rural highway design

Investigating organisation Department of Civil Engineering, University of Canterbury

Supporting organisation University of Canterbury; Road Safety Trust

Principal investigators Koorey, G F; Nicholson, A J

Aims/objectives To explore ways to assess the safety performance of rural highways in New Zealand, which are predominantly two-lane roads; and in particular to identify driver/road/environmental factors affecting crashes on rural curves. Road environment, geometry, crash, and traffic data will all be analysed to identify the key parameters affecting crashes at rural sites, and empirical relationships will be determined. Driver behaviour will be observed on selected rural curves, particularly speed choice and lateral placement, and these will be related to measurable road/environment factors. The findings from these investigations will be used to develop a suitably robust model for predicting the relative safety of a rural road's alignment.

Progress/status Completed

Commencement January 2002

Scheduled completion December 2006

Publications Koorey, G F. The Use of Road Geometry Data for Highway Applications. 3rd International Symposium on Highway Geometric Design, Chicago, June 2005.

Address for copies Department of Civil Engineering, University of Canterbury, Private Bag 4800, Christchurch Mail Centre, Christchurch 8140, New Zealand

Keep left

Investigating organisation Department of Psychology, Canterbury University

Supporting organisation Road Safety Trust

Principal investigators Billinghamurst, M; Belcher, J

Aims/objectives To explore situations that set the occasion for unintentional wrong-side driving; simulate these situations in a virtual driving reality simulator, and to study methods to reduce wrong-side driving.

Progress/status Active

Commencement January 2005

Scheduled completion June 2007

Log truck safety

Investigating organisation Transport Engineering Research New Zealand Ltd; Log Truck Safety Council

Supporting organisation Forest Owners Association

Principal investigators Baas, P H; Wilshier, W

Aims/objectives Improve the safety of log trucks.

Progress/status Active

Commencement 1998

Scheduled completion Ongoing

Publications Baas, P H; Wilshier, W (2005). Achievements in improving log truck safety.

Address for copies TERNZ Ltd, P O Box 97-846, South Auckland Mail Centre, Manukau 2240

Management of skid resistance under icy conditions on New Zealand roads

Investigating organisation Opus International Consultants Ltd

Supporting organisation Land Transport New Zealand

Principal investigators Jamieson, N; Dravitzki, V

Aims/objectives To study the effects of the de-icing agent Calcium Magnesium Acetate (CMA) on the magnitude and duration of skid resistance changes. The study was conducted on a range of road surface types through an on-road test programme on New Zealand state highways during the winter of 2004.

Progress/status Completed

Commencement 2004

Scheduled completion 2006

Publications Jamieson, N; Dravitzki, V (2006). Management of skid resistance under icy conditions on New Zealand roads, Land Transport New Zealand Report 293.

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html> or email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand (fee: \$45)

New techniques (countdown pedestrian timers) to improve the safety and efficiency of signal controlled pedestrian crossings.

Investigating organisation MWH Global; HTS Group

Supporting organisations Land Transport New Zealand

Principal investigators Tate, F; Wanty, D; Scarlett, W

Aims/objectives The project will take the form of a pilot trial of two sites with high pedestrian demand.

Progress/status Active

Commencement August 2006

Scheduled completion June 2007

Predicting accident rates for cyclists and pedestrians

Investigating organisation	Beca Infrastructure Ltd; Francis & Cambridge Ltd
Supporting organisation	Land Transport New Zealand
Principal investigators	Turner, S A; Roozenburg, A P; Francis, T
Aims/objectives	To investigate accidents involving pedestrians and cyclists and to develop accident prediction models.
Progress/status	Completed
Commencement	July 2002
Scheduled completion	April 2005
Publications	Turner, S. A, Roozenburg, A. P, Francis, T (2006). Predicting Accident Rates for Cyclists and Pedestrians, Land Transport New Zealand Report 289.
Address for copies	http://www.landtransport.govt.nz/research/reports/index.html or email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand (fee: \$30)

Public lighting for safe and attractive pedestrian areas

Investigating organisation	Opus International Consultants
Supporting organisations	Land Transport New Zealand
Principal investigator	Dravitzki, V
Aims/objectives	This project will develop guidelines for using public lighting to create safe and attractive pedestrian areas. The guidelines will be prepared through a review of national and international lighting strategies. The project will provide information to assist lighting designers to select lighting that will improve pedestrians' sense of comfort and safety.
Progress/status	Active
Commencement	July 2004
Scheduled completion	July 2006

Relationship between road geometry, observed travel speed and rural crashes

Investigating organisation	Beca Infrastructure Ltd; MWH NZ Ltd
Supporting organisation	Land Transport New Zealand
Principal investigators	Tate, F; Turner, S A
Aims/objectives	To investigate the relationship between observed 'free speed', the 'safe' driving speed and 'speed-related' crashes on various sections of rural roads.
Progress/status	Active
Commencement	July 2005
Scheduled completion	March 2007
Publications	Tate, F; Turner, S A (in press). Relationship between Road Geometry, Observed Travel Speed and Rural Crashes.
Address for copies	Email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand

Risk analysis in accident reconstruction and prediction

Investigating organisation	Department of Civil Engineering, Canterbury University
Principal investigator	Nicholson, A J
Aims/objectives	To use risk analysis techniques to assess the effect of uncertainty in variables involved in accident reconstruction and accident prediction.
Progress/status	Active
Commencement	January 2001
Scheduled completion	Ongoing

Roundabout accident prediction models – the influence of speed and visibility

Investigating organisation Beca Infrastructure Ltd

Supporting organisation Land Transport New Zealand

Principal investigators Roozenburg, A P; Turner, S A; Smith, A W

Aims/objectives To expand the current accident prediction models (previously developed by the study researchers for roundabouts, and based on traffic, pedestrian and cycle flows) to include geometric design elements such as deflection, approach alignment, visibility and approach, and negotiation speed variables.

Progress/status Active

Commencement July 2005

Scheduled completion February 2007

Publications Roozenburg, A P; Turner, S A (in press). Roundabout Accident Prediction Models – The Influence of Speed and Visibility.

Address for copies Email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand

Spatial-temporal modelling of road traffic accidents in Christchurch

Investigating organisation Departments of Geography and Civil Engineering, Canterbury University

Supporting organisation University of Canterbury

Principal investigators Sabel, C E; Kingham, S; Nicholson, A J; Dantas, A S

Aims/objectives To develop and extend spatial modelling techniques to further describe the variability of road traffic accidents. To examine the impact of transport policy initiatives (eg engineering treatments, social interventions) on road traffic accidents in Christchurch.

Progress/status Active

Commencement July 2004

Scheduled completion June 2007

Speed change management

Investigating organisation Transport Engineering Research New Zealand Ltd; Traffic & Road Safety Research Group, Waikato University

Supporting organisation Land Transport New Zealand

Principal investigators Charlton, S G; Baas, P H; de Jong, D

Aims/objectives This research examined driver compliance, through various speed change and treatment regimes, with self-explaining road initiatives in New Zealand. This project's aim was to establish the best possible designs for speed management and speeding countermeasures at and beyond speed change zones, including at rural towns, on arterial roads and at motorway off-ramps.

Progress/status Completed

Commencement July 2004

Scheduled completion June 2005

Publications Charlton, S G; Baas, P H (2006). Speed change management for New Zealand roads: Land Transport New Zealand Report 300

Address for copies <http://www.landtransport.govt.nz/research/reports/index.html> or email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand (fee: \$25)

Surfacing selection process for high-stress corners

Investigating organisation Opus International Consultants

Supporting organisation Land Transport New Zealand

Principal investigators Herrington, P; Ball, G; McClarin, M

Aims/objectives

To develop a process for the categorisation of the severity of such sites, and for the selection of the most appropriate surfacing type. This research will occur in two stages: stage one involves the development of systematic means of ranking the severity of any particular site by calculating the traffic stresses acting on the surface. Stage two will involve measuring the strength of different chip seal designs (and binder types) in the laboratory. By comparing these seal strengths to site stresses, the most appropriate surfacing type for a particular site can be selected. The final task in stage two is to bring together the work from both stages into a set of guidelines and software for practical application.

Progress/status Active

Commencement July 2001

Scheduled completion July 2005

Analysis of the safety benefits of heavy vehicle accreditation

Investigating organisation Transport Engineering Research New Zealand Ltd; Ian Wright and Associates

Supporting organisation Austroads

Principal investigators Baas, P H; Wright, I.

Aims/objectives To determine the safety benefits of the heavy vehicle accreditation schemes in Australia, such as: NHVAS Mass Management, NHVAS Maintenance Management, the Western Australia Heavy Vehicle Scheme, and Trucksafe.

Progress/status Active

Commencement February 2005

Scheduled completion April 2007

Behavioural influences on fuel use: attitudes to vehicle size and safety

Investigating organisation Opus Central Laboratories

Supporting organisation Foundation for Research, Science, and Technology

Principal investigators Thomas, J A; Walton, D.

Aims/objectives To determine whether drivers perceive larger vehicles to be safer, and if so whether this concern for safety motivates drivers to purchase sports utility vehicles (SUVs).

Progress/status Active

Commencement August 2004

Scheduled completion June 2007

Publication Thomas, J A; Walton, D (in press). Vehicle size and driver perceptions of safety. International Journal of Sustainable Transport

Address for copies Opus Central Laboratories, PO Box 30845, Lower Hutt 5040, New Zealand.

Cycle safety – reducing the crash risk

Investigating organisation	Beca Infrastructure Ltd
Supporting organisation	Land Transport New Zealand
Principal investigators	Turner, S A; Roozenburg, A P.
Aims/objectives	To establish what additional reductions in crash risk for cyclists can be achieved by reducing traffic speeds, installing cycle lanes, cycle paths and/or intersection cycle facilities.
Progress/status	Active
Commencement	July 2005
Scheduled completion	May 2007
Publication	Turner, S A; Roozenburg, A P (in press). Cycle safety – reducing the crash risk
Address for copies	Email: research@landtransport.govt.nz Land Transport New Zealand, PO Box 2840, Wellington 6140, New Zealand.

Distractive effects of cellphone use

Investigating organisation	Transport Engineering Research New Zealand Ltd; University of Waikato
Supporting organisation	Land Transport New Zealand
Principal investigator	Charlton, S G
Aims/objectives	To investigate the role of ‘conversational suppression’, for example when drivers and passengers stop talking when approaching particularly demanding or hazardous driving situations.
Progress/status	Active
Commencement	July 2006
Scheduled completion	June 2008

Evaluation of New Zealand's road safety advertising/policing package

Investigating organisation Ministry of Transport

Principal investigators Guria, J C; Leung, J.

Aims/objectives To evaluate the effects of a high-intensity enforcement and advertising programme that targets alcohol-impaired drivers, speeding and seatbelt use.

Progress/status Active

Commencement July 1995

Scheduled completion Ongoing

Publications Cameron, M; Vulcan, P (1996). Review of the evaluation of the SRSP and its outcomes. Report to the Land Transport Safety Authority.

Cameron, M; Vulcan, P (1998). Evaluation Review of the SRSP and its outcomes during the first two years. Report to the Land Transport Safety Authority.

Cameron, M; Guria, J; Leung, J (2002) An evaluation of the Supplementary Road Safety Package: July 1995 to June 2000.

Guria, J C; Leung, J (2003). An evaluation of a supplementary road safety package. Accident Analysis and Prevention (36) 5, 893-904.

Address for copies Economic Evaluation, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Fatigue engineering countermeasures in New Zealand

Investigating organisation ARRB Group

Supporting organisation Land Transport New Zealand

Principal investigators Mabbott, N; Roberts, P; Turner, B

Aims/objectives Investigate suitable engineering countermeasures against fatigue crashes on New Zealand roads; and specifically for roads that have a high number of known fatigue crashes. Trial one or more of these countermeasures to determine their impact on the reduction of accidents and severity.

Progress/status Active

Commencement July 2006

Scheduled completion December 2007

Frontal lobe project

Investigating organisation Waikato University

Supporting organisation Accident Compensation Corporation New Zealand; Automobile Association; Road Safety Trust; Road Transport & Logistics

Principal investigator Isler, R

Aims/objectives A double-blind longitudinal study of the effectiveness of cognitive skills training designed to enhance executive functioning in young drivers.

Progress/status Active

Commencement October 2006

Scheduled completion December 2007

Health and fitness for older log truck drivers

Investigating organisation	Transport Engineering Research New Zealand Ltd.
Supporting organisation	Accident Compensation Corporation; Log Transport Safety Council
Principal investigators	Mackie, H; Baas, P
Aims/objectives	Profiles the health, fitness and injury rate of log truck drivers. Designed to address concerns about the increasing incidence of health and injury related problems of older drivers in the industry.
Progress/status	Active
Commencement	November 2006
Scheduled completion	July 2007

Identifying barriers to car driver licensing among Māori

Investigating organisation	Injury Prevention Research Unit, University of Otago
Supporting organisation	Health Research Council of New Zealand
Principal investigators	Begg, D; Broughton, J; Williamson, P
Aims/objectives	To identify barriers to obtaining a car driver's licence among Maori; strategies for overcoming these barriers, and how to implement the strategies.
Progress/status	Active
Commencement	July 2004
Scheduled completion	June 2007

Implicit and explicit self-enhancement bias in drivers and the influence of road safety advertisements

Investigating organisation University of Auckland

Principal investigators Harré, N; Sibley, C G

Aims/objectives Two studies were conducted looking at the implicit and explicit self-enhancement bias in drivers (158 participants), and the influence of road safety advertisements on drivers (150 participants).

Progress/status Completed

Commencement January 2006

Scheduled completion February 2007

Publication Harre, N; Sibley, C G (in press) Implicit and explicit self-enhancement bias in drivers and the influence of road safety advertisements. Accident Analysis and Prevention.

Address for copies Email: n.harre@auckland.ac.nz, Department of Psychology, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

Improved delineation: a new method of assessing the effect of better delineation on driving

Investigating organisation Opus Central Laboratories

Supporting organisations Land Transport New Zealand

Principal investigators Dravitzki, V; Walton, D; Thomas, J; Jackett, R; Lamb, S

Aims/objectives This project will further develop a method to establish the effect of improved delineation on driving, a technique known as "hands-on", which identifies drivers' perceptions of risk as they drive through a roading context.

Progress/status Active

Commencement July 2006

Scheduled completion December 2007

Measuring perceived risk: self-reported and actual hand positions of SUV and car drivers

Investigating organisation Opus Central Laboratories

Supporting organisation Foundation for Research, Science and Technology

Principal investigators Thomas, J; Walton, D.

Aims/objectives This research examines the use of hand positions on the steering wheel as an indirect measure of perceived risk.

Progress/status Active

Commencement August 2004

Scheduled completion

Publication Thomas, J; Walton, D. (in press). Measuring perceived risk: self-reported and actual hand positions of SUV and car drivers. Transportation Research Part F: Psychology and Behaviour.

Address for copies Opus Central Laboratories, PO Box 30845, Lower Hutt 5040, New Zealand

New Zealand Drivers Study: a follow-up study of newly licensed drivers

Investigating organisation	Injury Prevention Research Unit, University of Otago; Ngai Tahu Maori Health Research Unit; School of Population Health, Auckland
Supporting organisation	Health Research Council of New Zealand, Accident Compensation Corporation, Road Safety Trust
Principal investigators	Ameratunga, S; Begg, D; Brookland, R; Broughton, J; Langlely, J; McDowell, A
Aims/objectives	The primary objective of this study is to examine risk and protective factors for traffic-related injury among newly licensed drivers in New Zealand; and from this, identify factors that can be targeted to reduce these injuries.
Progress/status	Active
Commencement	November 2005
Scheduled completion	September 2009
Publication	Kypri, K; Voas, R B; Langlely, J D; Stephenson, S C R; Begg, D J; Tippetts, A S; Davie, G. (2006). Lowering the minimum purchase age for alcohol increased traffic crash injuries among 15-19 year olds in New Zealand. American Journal of Public Health. 96: pp 126-131.
Address for copies	IPRUNZ@otago.ac.nz , Injury Prevention Unit, University of Otago, PO Box 913, Dunedin 9054, New Zealand

Pedestrian facilities benefits

Investigating organisation	Beca Infrastructure
Supporting organisation	Land Transport New Zealand
Principal investigator	Turner, S
Aims/objectives	To determine the effect of new and improved pedestrian facilities on the induced number of pedestrians.
Progress/status	Active
Commencement	August 2005
Scheduled completion	July 2008

Reducing traffic speed in road works zones using obtrusive perceptual countermeasures

Investigating organisation	University of Otago
Supporting organisation	Road Safety Trust
Principal investigator	Leland, L
Aims/objectives	This project aims to investigate the ability of various arrangements of road cones to reduce traffic speeds at road works sites.
Progress/status	Active
Commencement	March 2007
Scheduled completion	November 2007

Refinement and validation of a computerised driving assessment tool for prediction of driving in persons with brain disorders or age-related cognitive decline

Investigating organisation Van der Veer Institute for Parkinson's and Brain Research

Supporting organisation Road Safety Trust

Principal investigators Jones, R; Innes, C; Davidson, P; Anderson, T; Dalrymple-Alford, J

Aims/objectives The project aims to refine and validate a computerised driving assessment tool for prediction of driving in persons with brain disorders or age-related cognitive decline.

Progress/status Active

Commencement December 2006

Scheduled completion December 2008

Road user behaviour and attitude monitoring

Investigating organisation Ministry of Transport

Principal investigators Frith, W J; Graham, P G; Povey, L J

Aims/objectives Monitoring of road user behaviour/attitudes including: roadside surveys of drivers' speed and breath alcohol; road users' restraint use; and cyclists' use of helmets. It also includes surveys of peoples' attitudes to various issues related to road safety and enforcement.

Progress/status Active

Commencement July 1994

Scheduled completion Ongoing

Publications Keall, M D; Frith, W J (1999). Measures of Exposure to Risk of Road Crashes in New Zealand. IPENZ Transactions, Wellington.

Ministry of Transport (2005) Public attitudes to road safety: highlights of the 2006 survey.

<http://www.transport.govt.nz/2006-survey-2>

Address for copies Research and Statistics, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Understanding Drivers Reactions to Perceived Risk: Speed, Headway and Hand Position

Investigating organisation University of Canterbury; Opus International Consultants

Supporting organisation University of Canterbury; Road Safety Trust; Opus International Consultants

Principal investigators Fourie, M; Walton, D., Kemp, S

Aims/objectives Measuring drivers' reactions to perceived risk (in rainy weather) in terms of speed, headway and hand position on the steering wheel. The relationship between the variables will be examined, as well as their effectiveness as measures of perceived risk. The project will provide a greater understanding of how drivers respond to perceived risk, as well as providing a key insight into how perceived risk can be measured.

Progress/status Active

Commencement November 2006

Scheduled completion February 2008

Work-related fatal injury deaths due to motor vehicle traffic crashes 1985-1998

Investigating organisation	Injury Prevention Research Unit & NZ Occupational Health Research Centre, University of Otago
Supporting organisations	Health Research Council of New Zealand
Principal investigators	McNoe, B; Langley, J D; Feyer, A-M
Aims/objectives	To identify and describe all work-related traffic fatalities that occurred on public roads in New Zealand between 1985 and 1998 inclusive.
Progress/status	Completed
Commencement	January 2001
Scheduled completion	June 2003
Publication	<p>McNoe, B; Feyer, A-M; Langley, J D (2005). Work-related fatal traffic injuries in New Zealand 1985-1998 New Zealand Medical Journal, 2005; 118 No. 1227. www.nzma.org.nz/118-1227/1783/</p> <p>Langley, J D; McNoe, B; Feyer, A-M (2006). Work-related bystander deaths in New Zealand: a significant hidden problem. New Zealand Medical Journal. 2006; 119, No 1247. http://www.nzma.org.nz/119-1247/2357/</p>
Address for copies	IPRUNZ@otago.ac.nz , Injury Prevention Research Unit, University of Otago, PO Box 913, Dunedin 9054, New Zealand

Work-related road injuries

Investigating organisation Auckland University

Supporting organisations Accident Compensation Corporation

Principal investigator Ameratunga, S.

Aims/objectives Investigate factors around work-related road injury resulting in an Accident Compensation Corporation (ACC) claim.

Progress/status Active

Commencement October 2006

Scheduled completion June 2007

MISCELLANEOUS

Control charts for assessing the effectiveness of Police traffic safety activities

Investigating organisation Ministry of Transport

Principal investigators Mara, M K; Leung, J; Quazi, A

Aims/objectives To establish the statistical methodology for providing a monitoring tool for the effect of Police enforcement activity on traffic safety.

Progress/status Active

Commencement July 1997

Scheduled completion Ongoing

Publications Mara, M K; Guria, J C (1998). An Application of Control Charts in Monitoring Road Safety Performance at National and District Levels. Road Safety Research Policing Education Conference, Wellington.

Guria, J C; Mara, M K (2000). Monitoring performance of road safety programmes in New Zealand. Accident Analysis and Prevention (32) 5 695-702.

Guria, J C; Mara, M K (2001). Predicting performance of annual safety outcomes. Accident Analysis and Prevention (33) 3, 387-392.

Address for copies Economic Evaluation, Ministry of Transport, PO Box 3175, Wellington 6140, New Zealand

Study on the Future Options for Roadworthiness Enforcement in the European Union (AUTOFORE)

Investigating organisation	Transport Engineering Research New Zealand Ltd
Supporting organisation	FRST International Investment Opportunities Fund; European Union and EU member states
Principal investigator	Baas, P H
Aims/objectives	The purpose of the Autofore project is to recommend improvements in roadworthiness enforcement in the European Union. This will ensure that the benefits that accrue from the original design and manufacture of vehicles are retained throughout the life of those vehicles.
Progress/status	Active
Commencement	February 2005
Scheduled completion	February 2007
Publications	Autofore Report (2007) Study on the Future Options for Roadworthiness Enforcement in the European Union.
Address for copies	http://www.cita-vehicleinspection.org/
