Austroads Annual Report 2006–07















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Austroads

Austroads' purpose is to contribute to improved Australian and New Zealand transport outcomes by:

- providing expert advice to SCOT and ATC on road and road transport issues
- facilitating collaboration between road agencies
- promoting harmonisation, consistency and uniformity in road and related operations
- undertaking strategic research on behalf of road agencies and communicating outcomes
- promoting improved and consistent practice by road agencies.

Membership

Austroads' membership comprises the six state and two territory road transport and traffic Authorities, the Australian Department of Transport and Regional Services, the Australian Local Government Association and Transit New Zealand. It is governed by a Council consisting of the chief executive officer (or an alternative senior executive officer) of each of its eleven member organisations:

- Roads and Traffic Authority New South Wales
- Roads Corporation Victoria (VicRoads)
- Department of Main Roads Queensland
- Main Roads Western Australia
- Department for Transport, Energy and Infrastructure South Australia
- Department of Infrastructure, Energy and Resources Tasmania
- Department of Planning and Infrastructure Northern Territory
- Department of Territory and Municipal Services Australian Capital Territory
- Australian Department of Transport and Regional Services
- Australian Local Government Association
- Transit New Zealand.

The success of Austroads is derived from the collaboration of member organisations and others in the road industry. It aims to be the Australasian leader in providing high quality information, advice and fostering research in the road sector.

Vision

Austroads' vision is to be recognised for its leadership in providing high quality information and advice and fostering research in the Australasian road and road transport sectors.

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CHAIRMAN'S MESSAGE

Austroads aims to be recognised for its leadership in providing the road sector with high quality information and advice and by fostering road research throughout Australasia. We have continued to work hard to achieve that aim in the past twelve months.

2006-07 was the last year of the strategic plan before we moved to a new plan covering a five year period until 2012. It is pleasing to report that Austroads successfully achieved the goals of the strategic plan and is in a strong position to implement the new plan.

A total of 31 projects were completed and 56 high quality guides, research reports and technical reports have been published. We are continuing to develop a comprehensive library of guides covering design, construction, maintenance and operation of the road network for use by road authorities and local government in Australia and New Zealand.

The publications website has again been popular with demand for electronic downloads of guides and reports higher than before and a significant increase recorded in the number of hard copy sales. The awareness of Austroads' publications is constantly increasing which assists us to achieve greater consistency in practice across all jurisdictions. More than 500 publications are available online to help staff from road agencies plan, design, build, maintain and operate the road network. The email notification service about new and updated publications, RoadWatch, also continues to gain popularity. There are now over 11,000 subscribers to this facility, a successful method of keeping people aware of our work.

Austroads operates on a decentralised model and much of the work is undertaken by staff from member organisations. There are seven program areas with each managed by a senior executive from a member organisation. I acknowledge the hard work of all Austroads program managers and support staff who contributed to the success of the various Austroads programs over the last 12 months.

During the year there was a change to Austroads program managers under the strategic plan arrangements. I would like to express our thanks for their significant contributions; Gary Norwell (Assets); Rod Tout (Capability); John Dudgeon (Freight); Dennis Walsh (Network); Michael Bushby (Registration and Licensing); Bill Frith (Safety); and Gary Liddle (Technology). I would also like to welcome the new program managers and wish them well in their respective programs.

Austroads provided continuing support for the development and maintenance of technical research through an agreement with the ARRB Group. 2006-07 was the third year of the agreement which was established to develop and sustain a national capability to meet the future requirements of our regions road industry.

Under our new strategic plan we will continue to work towards promoting improved transport outcomes for our region over the next twelve months.

Chairman

Menno Henneveld

Commissioner, Main Roads WA

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HIGHLIGHTS FROM 2006-07

Projects completed

There were a total of 126 projects in the 2006-07 work program. A number of these are scheduled to run over three years. Thirty one projects were completed during 2006-07.

Work program expenditure

Total expenditure for the 2006-07 work program was \$7.5 million. The table below provides a breakdown of the expenditure:

Туре	Amount \$'000s
Technical research	4,280
Strategic	1,407
Development of publications	614
Other projects (corporate, SCOT, ATC, COAG)	586
Program management	630
TOTAL	7,517

Guides

Austroads is producing a comprehensive library of guides which cover the design, construction, maintenance and operation of the road network for use by road authorities in Australia and New Zealand.

Austroads guides are intended to be a reference for road authorities and to promote national consistency and harmonisation. They represent an agreed approach to the work road authorities undertake in relation to the road network. Austroads member organisations have agreed to adopt Austroads guides as the basis of their operation. A further six parts of various guides were published during the year, bringing the total number of completed parts to 23.

Young professional's study tour

A young professional's study tour visited North America in September 2006 to study current practice in the field of asset management. The study tour visited four Canadian provinces, Washington and Maryland in the USA. Seven Austroads member organisations participated in the study tour. A presentation on the tour findings was made to the Austroads Council and a comprehensive report prepared.

Technical research

2006-07 was the third year of the Austroads/ARRB technical research agreement, which provides for an ongoing research program in the four key areas of:

- bituminous surfacings
- pavement technology
- asset management
- road safety engineering.

The agreement with ARRB was established to develop and sustain a national capability for technical research and knowledge in each of the key areas, to be available to meet the future requirements of the Australasian road industry.

STRUCTURE AND PROGRAMS

Governance

Austroads is an association incorporated in New South Wales under the Associations Incorporations Act 1984 (NSW). Austroads is governed by a Council consisting of the chief executive (or alternative senior executive officer) from each member organisation. During 2006-07 the Council met in October 2006, March and June 2007. The Austroads national office, based in Sydney, provides secretariat support to the Council.

Operational model

Austroads operates using the staff and other resources of its member organisations to undertake or manage a significant part of the work. The benefits of this operational model are that it:

- provides opportunities for the staff of member organisations to participate in the operation of Austroads and the development and delivery of projects
- promotes professional development for staff of member organisations
- encourages a collegiate, collaborative approach
- facilitates a high level of consistency across jurisdictions
- creates opportunities for networking and information exchange between staff of road agencies.

Membership

Member organisation	Representative (as at 30 June 2007)
Roads and Traffic Authority New South Wales	Les Wielinga — Chief Executive
Roads Corporation Victoria (VicRoads)	Gary Liddle — Chief Executive
Department of Main Roads Queensland	Alan Tesch — Director-General
Main Roads Western Australia	Menno Henneveld — Commissioner
Department for Transport Energy and Infrastructure South Australia	Flett Steele — Director, Road and Traffic Management
Department of Infrastructure Energy and Resources Tasmania	Peter Todd — General Manager, Roads and Traffic
Department of Planning and Infrastructure Northern Territory	Marj Morrissey — Executive Director, Transport and Infrastructure
Department of Territory and Municipal Services Australian Capital Territory	Tony Gill — Executive Director City Management
Australian Department of Transport and Regional Services	Andrew Wilson — Executive Director, Maritime and Land Transport
Australian Local Government Association	Adrian Beresford-Wylie — Chief Executive
Transit New Zealand	Rick van Barneveld — Chief Executive

Observer organisation	Representative	
ARRB Group	Gerard Waldron — Managing Director	
National Transport Commission	Nick Dimopoulos — Chief Executive	
Bureau of Transport and Regional Economics	Phil Potterton — Executive Director	
Department of Transport Papua New Guinea	Henry Parakei — Secretary	

Program structure

Austroads' work is divided into major areas, called programs, so the work is more manageable and shared amongst Austroads member organisations.

As at June 2007, there were seven programs; Assets, Capability, Freight, Network, Registration and Licensing, Safety and Technology. The programs, their objectives and the designated program manager and member organisation are as follows:

Program	Objective	Program manager
Assets	Minimising whole of life cost of road assets	Ken Russell — VicRoads
Capability	Assist members in developing and maintaining sustainable levels of capability	Peter Mitchem — VicRoads
Freight	Addressing the future freight task	Philip Halton — RTA NSW
Network	Optimising utilisation of the network	John Erceg — MR WA
Registration and Licensing	Improving the security and integrity of registration and licensing systems and promoting national consistency	David Stuart-Watt — RTA NSW
Safety	Improving road safety	Phil Allan — DTEI SA
Technology	Promoting improved practice in technology	John Worrall — DMR Qld

Program managers

Each program is managed by a program manager who is a senior officer from a member organisation. Program managers are responsible to the Austroads Council for the development of project proposals and reporting on the performance of their program.

They work on Austroads' activities for a proportion of their time in addition to their regular responsibilities. This is formally recognised in an agreement between Austroads, their chief executive and themselves. Austroads does not reimburse the member organisation for the time the program manager spends on Austroads' activities, but contributes towards the cost of a support person for the program manager and to the direct program costs, such as travel and accommodation.

In preparation for the implementation of the Austroads Strategic Plan 2007-2012 on 1 July 2007, new program management arrangements commenced on 1 January. New program managers and support staff were appointed and tasked with the continuation of the 2006-07 work program and development of the 2007-08 program.

A great deal of effort was put into the transition arrangements. An induction package was developed by the national office and a program managers meeting held in February. The primary focus of the meeting was the finalisation of the 2007-08 work programs for submission to the March Council meeting, but there was also emphasis on the role of the program manager and explanation of Austroads' processes and procedures. Program managers also collectively reviewed the administrative arrangements for programs and the terms of reference for review panels and task forces.

The outgoing program managers were very helpful in attempting to finalise as much work as possible in the 2006-07 work program and identifying any project proposals to be considered in the determination of the 2007-08 program.

Austroads recognises their achievements and thanks the out-going program managers and support staff for their dedication over the past three years:

- Gary Norwell / Kathryn Martin, MR WA Assets
- Rod Tout, RTA NSW Capability
- John Dudgeon / Russell Ingham, DMR Qld Freight

- Dennis Walsh / Philip Rankine, DMR Qld Network
- Michael Bushby / Cheryl Richey, RTA NSW Registration & Licensing
- Bill Frith / Grant Strachan, MoT NZ Safety
- Gary Liddle / Peter Mitchem / Gary Rykers, VicRoads Technology.

Task forces

Task forces have been established for six of the programs. The role of each task force is to:

- develop the identified areas of interest into a program of research to be undertaken
- develop specific project proposals from the program of research and ensure their relevance to Austroads member and related organisations
- identify suitable project managers from member organisations and oversee the conduct of those projects
- encourage member organisations to provide appropriate and timely inputs to projects and ensure that member organisations' concerns and views are adequately addressed
- champion the dissemination of the results of projects and research to road agencies and related organisations
- provide a forum for the exchange of information between Austroads member and related organisations.

Task force membership is made up predominantly of senior staff from the relevant area of member organisations. An exception is in the case of the Safety and Registration and Licensing programs where, in jurisdictions that the member organisation does not have responsibility for those functions, task force members come from the organisation responsible for that area.

External stakeholders are engaged in accordance with a strategy developed by the task force.

Task forces meet two or three times a year to develop projects and review progress on approved projects.

Review panels

Review panels oversee the development of each of the Austroads guides. In the case of the Safety and Asset programs, this function is performed by the relevant task force.

The membership of review panels comprises representatives of member organisations. External stakeholders may also be included.

ASSETS

Program manager
Ken Russell
Manager Asset Management
VicRoads

Program support Gary Rykers

Coordinator - Austroads Programs

Program overview

The Assets program focuses on the following streams:

- optimal levels of service
- road user requirements
- monitoring and performance reporting.

The Assets program is supported by a task force comprising senior staff from the relevant areas of Austroads member and observer organisations. The primary objective of the task force is to develop and deliver a program of research that will assist road and transport agencies in their efforts to minimise the whole of life cost of road infrastructure assets to meet the transport task.

An additional major responsibility for the Assets task force is to act as a review panel to promote best practice in asset management through the development and maintenance of the Austroads Guide to Asset Management.

Achievements 2006-07

The Assets program has developed a significant and structured program comprising projects which address the assets strategy, projects to develop the Guide to Asset Management and projects under the technical research program. In 2006-07, the Assets program completed six projects.

Assets program guides and strategic research publications completed in 2006-07 included:

- Guide to Asset Management Part 5C: Rutting
- Guide to Asset Management Part 5E: Cracking
- Telecommunications in Road Reserves: Operational Guidelines for Installations
- Telecommunications in Road Reserves: Administrative Guidelines for Road Authorities
- Interim Works Effects Models
- A Review of Road Use Data Pricing, Partnerships and Accessibility
- A Review of Road Use Data Integration and Management Models.

A suite of asset management specifications and test methods, for the standardised measurement of road condition, were also published on the Austroads web site.

Assets program technical research publications completed in 2006-07 included:

- Application of the Analytical Hierarchy Process in Road Asset Management: User Manual
- Austroads LTPP and LTPPM Study: Summary Report for 2005-06
- Process for Setting intervention Criteria and Allocating Budgets: Literature Review
- Managing the Impacts of Rising Watertables and Salinity on Remaining Pavement Life: Report of 2005-06 Activities



- Service Life of Pavements: Context, Review and Definition of Terms
- Report of Skid Resistance Test Device Trials May 2005
- Selection of Additional Sites for Inclusion in Austroads Long Term Pavement Performance (LTPP) Study
- Process for Setting Intervention Criteria and Allocating Budgets: Process Description and Allocation
- Correlation of WIM Data with Classified Counts: An Initial Analysis
- Automatic Vehicle Classification by Vehicle Length.

The following are the highlights of the Assets program during 2006-07:

- The Assets task force met on two occasions in 2006-07 (November 2006 and February 2007).
- A number of workshops were held for various strategic and technical research projects.
- The young professional's study tour to North America to study current international practice in the field of asset management. This tour was led by Mr Gary Norwell, Assets program manager and he was accompanied by seven participants nominated by Austroads member organisations. The tour was highly successful and brought back a number of ideas to cast future work programs.
- Program managers during the year were:
 - Mr Gary Norwell (July 2006 to December 2006)
 - Dr Bruce Van Every (January 2007 to April 2007)
 - Mr Ken Russell (April 2007 to present).

Ongoing projects 2007-08

The Assets program currently focuses on the research, development and completion of the following ongoing work areas:

Publication projects

Completion of the Guide to Asset Management – 16 publications in total.

Strategic research projects

- Communicating Strategic Decisions to Stakeholders
- Road Use Data Harmonisation of Collection, Reporting and Access
- Improved Cost Allocation Rules by Road Type (including unsealed roads)
- Examine the Technical and Data Requirements of Alternatives to PAYGO
- Establishing a New National Pavement Maintenance Database
- Asset Management National Performance Indicators.

Technical research projects

- Long-Term Performance Monitoring to Develop Consistent Performance Models
- Management of Skid Resistance
- Economics of PBS and Heavy Vehicle Loadings Standards at the Network and Route Level
- Service Life of Pavements
- Management of Road Surface Characteristics
- Managing the Impacts of Rising Water Tables and Salinity on Remaining Pavement Life
- Probability Models for Project Level Decision Making
- Measuring Heavy Vehicle Loads Dynamically
- Optimal Axle Mass Limits.

Future directions

'Optimal Axle Mass Limits' is a key new project during 2007-08 and 2008-09. This project is being undertaken in conjunction with the National Transport Commission and considers both bridge and pavement aspects. The primary aim of this project is to:

- develop a tool kit for assessing the capacity of road infrastructure to withstand current and future heavy vehicle axle loads
- assess the implications of subjecting road infrastructure to higher axle mass limits
- investigate ways of using existing tools, processes and data to improve the robustness of input parameters used in the assessment model and identify areas requiring further research.

During 2007-08, the Assets task force will focus on completion of the 16 parts comprising the Austroads Guide to Asset Management.

CAPABILITY

Program manager

Peter Mitchem

Executive Director, Technical and Information Services VicRoads, Victoria

Program support

Gary Rykers

Coordinator – Austroads Programs

Program overview

The Capability program was formed to address the skill/competency shortages facing road authorities across Australasia. Revised terms of reference for the Capability task force were endorsed by the Austroads Council in October 2006. The objective of the Capability task force is to provide Austroads member organisations with a forum for knowledge sharing on initiatives to ensure sustainable levels of capability, including skill attraction and development, and where necessary national strategies to address these issues.

The program focuses on the following streams:

- national workforce capability strategy
- national marketing plan for careers in road authorities
- best practice guide for road authorities in addressing skills shortages and building capability
- review of tertiary education courses and possible development and delivery of post graduate courses to meet the needs of road authorities.

Achievements 2006-07

In 2006-07, the Capability program completed four projects as follows:

- Best Practice Capability Management this project reported on a survey of jurisdictional strategic human resource management plans and a workshop was held to identify and develop best practice in techniques/initiatives used to address capability management/skill shortages.
- Professional Development the purpose of this project was to set the strategic direction for the development of professional capability across road engineering. The project:
 - established a list of core road-related technical competencies that should be covered in a nationally consistent manner to support the road infrastructure sector
 - recommends that these core road-related technical competencies be used to create a range of post graduate education programs.

Phase 2 of this project is being undertaken through Austroads project CO1221 (Professional Development – Post Graduate Development Requirements).

- National Skills Marketing Plan the purpose of this project was to develop a national marketing plan and associated materials to promote the uptake of technical careers to address identified skills gaps in Austroads member authorities:
 - this project identified senior secondary students and first year university students as the target audiences and recommended the development of communication materials, mediums and key messages to increase Austroads' profile amongst its target audiences.

Phase 2 of this project is being undertaken through Austroads project CO1222 (Development of National Skills Marketing Plan and Materials).



- Capability Analysis the purpose of this project was to develop workforce capability analysis
 for member authorities on planned and forecasted infrastructure development requirements in
 Australia and New Zealand over the next ten years:
 - This project produced a research report entitled 'Australia and New Zealand Roads Capability Analysis 2006-2016'.
 - The report presented a detailed economic analysis of projected road infrastructure activity (public and private) on a state/territory and national basis for Australia and for New Zealand.
 - The major finding of the report is that future skilled labour supply in Australia and New Zealand will not be enough to meet predicted skilled labour demand in the roads sector, based on forecast road construction, maintenance and other road management activity, and taking into account labour lost through workforce attrition largely as a result of ageing. Anticipated flat growth in the number of new graduates entering the roads sector will exacerbate this problem. As a consequence, in theory, a capability deficit will arise.

In 2006-07, two new Capability projects were progressed as follows:

- Professional Development Post Graduate Development Requirements the purpose of this
 project is to develop a suitable model for the delivery of post graduate learning programs that
 meet the needs of the road authorities:
 - a project brief has been prepared to assist with consultation, negotiation and partnership development with key stakeholders.
- Development of National Skills Marketing Plan and Materials the purpose of this project is to develop a national marketing strategy and associated materials for particular market segments to promote careers with road authorities, the wider road industry and technical careers generally:
 - A marketing campaign entitled 'use your powers for good' has been developed. This
 campaign aims to encourage senior secondary students and first year university
 students to consider undertaking engineering courses and select a career in the road
 industry.
 - A suite of advertising material has been developed for this campaign and distributed to Austroads member organisations for implementation.

Future directions

The Capability task force will meet three times a year and conduct a one-day workshop in conjunction with each of these meetings. The first of these workshops, targeted on 'retention of staff', was held in Melbourne on 20 June 2007.

The proposed work program during 2007-08 includes:

- Completion of project CO1221 (Professional Development Post Graduate Development Requirements). The primary tasks involved in delivery of this project include:
 - prioritising and ranking the key program areas for development
 - presenting the options for delivery
 - collaborating with universities so they understand the Austroads/state road authority needs for postgraduate development for road engineering.
- Austroads member organisations' implementation of the 'use your powers for good' advertising material developed under project CO1222 (Development of National Skills Marketing Plan and Materials).
- It is proposed that the model developed under project CO1185 (Capability Analysis) for the analysis of the road industry labour market be updated every two years to monitor trends and establish any subsequent actions required. It is anticipated that a project proposal will be submitted in 2007-08 for funding in 2008-09.

FREIGHT

Program manager

Philip Halton

General Manager, Compliance & Freight Strategy Roads & Traffic Authority, New South Wales

Program support

Michael McKenna

Senior Project Manager, Compliance & Freight Strategy

Program overview

The program focuses on enabling the future freight task by concentrating on the following streams:

- understanding the future freight task
- understanding community impacts and industry needs
- managing freight growth
- improving heavy vehicle access.

The Freight program is supported by a task force comprising senior regulators from freight and heavy vehicle policy and operational areas of Austroads member organisations. The primary objective of the program is to improve road freight operations and the integration with other transport modes in the context of a rapidly increasing freight demand.

At the national level, the Council of Australian Governments (COAG) transport reform agenda impacts significantly on national freight operations, and the Freight program continues to be an active participant representing the unique needs of road freight at the national level, during a period of significant change.

Achievements 2006-07

In 2006-07, the Freight program completed and published the following projects:

- Review of Mass Concessions
- Heavy Vehicle Access Management Workshop
- Guidelines for the Content, Development, Approval and Use of Industry Codes of Practice
- Guidelines for the Practical Application of New Chain of Responsibility Provisions.

Ongoing projects 2007-08

The Freight program currently focuses on the research, development and completion of the following ongoing work areas:

Strategic research projects

- Community Attitudes to Road Freight Vehicles behavioural research
- Freight Routes in Urban and Rural Areas scoping study
- Guidelines for Identifying, Assessing and Managing the Environmental Impacts Arising from Trucks Using Metropolitan Road Links
- Development of a Road Network for B-Triples
- Vehicle Environmental Standards for Night Time Operations
- Freight Forecasting and Analysis scoping study
- Managing High Wide Loads



- Heavy Vehicle Access Management Workshop (2)
- Road Transport Compliance and Enforcement monitoring and reporting
- Local Government and the Future Freight Task
- Freight Task Industry Stakeholder Assessment
- Demand for B-Triple/Quad-axle B-Double Network de-Coupling Points
- Compliance & Enforcement Technology Opportunities
- Driver Specific Monitoring Devices Compliance Solutions.

Future directions

Anticipated strategic projects intended to inform future initiatives in the wider COAG Reform Research Plan and to be undertaken in 2007-08 include:

- Freight Data & Business Systems Feasibility Study
- Administrative Trial and Assessment of Electronic Tacograph Pilot.

NETWORK

Program manager

John ErcegManager, Road Network Operation
Main Roads Western Australia

Program support

Amy Hall

Austroads Program Assistant

Program overview

In 2006-07, the program focused on the following streams:

- Operational performance:
 - identification of best practice in the optimisation and measurement of traffic performance considering all categories of road users
 - research the use of new technological developments in Intelligent Transport Systems to optimise traffic performance
 - investigation of analytical tools used to evaluate the performance of the network
 - identification and sharing best practice in managing incidents, planned and un-planned.
- Travel demand management:
 - research the means by which road authorities can best influence travel demand by:
 - dissemination of real-time travel time information
 - application in Australia of international developments in electronic road pricing.
- Improving levels of service to specific users:
 - freight
 - public transport
 - emergency vehicles.

The primary objective of the program is to assist road and transport agencies in their efforts to optimise utilisation of the road network.

Achievements 2006-07

In 2006-07, the Network program completed the following projects:

- Improving Incident Management
- Performance Based Standards (PBS) Administrative Guidelines
- Review Recent Developments in Road Pricing, Including Freight
- TRARR (Traffic on Rural Roads) Software Program Upgrade.

Ongoing projects 2007-08

The Network program currently focuses on the research, development and completion of the following ongoing work areas:

Strategic research projects

- Guidelines for Evaluation of Travel Demand Management Measures
- Improving Levels of Service to Specific Users, Including Freight, Public Transport and Emergency Vehicles



- National Performance Indicators for Network Operations
- Traveller Information Benefits to Users
- Optimising Freeway Traffic Flow Under Congested Conditions
- Securing Dedicated Short Range Communications (DSRC) Spectrum for ITS applications
- Austroads Microsimulation Standards.

Publications

In 2007, the Network program assumed the responsibility for the Traffic Management review panel, tasked with developing the 13 parts of the Austroads Guide to Traffic Management. Drafting of nine of the 13 parts took place in 2006-07.

Future directions

Network optimisation is one of five priority areas for strategic research in the 2007-12 strategic plan. The Network program aims to focus research on improving the productivity and reliability of the road network in moving people and goods. A strategic research work program has been developed for 2007-09 that is aligned with this objective and its four sub-themes; managing traffic control through a network approach; supporting sustainable transport modes; managing demand by all user groups; and leading strategic and technical developments.

These research areas include:

- Estimating Road Network Congestion and Associated Costs
- Operational Impacts of Alternative Vehicles
- Development of a National Approach to Traffic Control at Work Sites
- Network Operations Planning Framework
- Freeway Design Parameters for Fully Managed Operations
- Implementation of Network National Performance Indicators
- Traffic Signal Controllers Future Directions
- Best Practice for Variable Speed Limits.

The Network program will commence drafting Parts 3 (Traffic Studies and Analysis), 7 (Traffic Management in Activity Centres), 10 (Traffic Control and Communication Devices) and 13 (Road Environment Safety) of the Guide to Traffic Management in 2007-08.

A number of projects that build upon the current project to secure a dedicated short-range communications spectrum for ITS applications have been identified in the 2008-2012 period, including a review of intelligent vehicle to infrastructure applications for pilot application in Australia and the development of management arrangements for the secured bandwidth.

Australian Bicycle Council (ABC)

Overview

In 2005, the Australian Transport Council (ATC) approved *The Australian National Cycling Strategy 2005-2010* (NCS). The main objective of the NCS is to increase participation in cycling and improve safety for cyclists across Australia.

The ABC's primary role is to oversee and coordinate the implementation of the NCS. It also operates as a jurisdictional forum on cycling issues. The ABC secretariat is housed at, and supported by the Austroads national office.

Priorities

The priorities for NCS are:

- improving coordination of activities relevant to increased cycling in the appropriate portfolios of Australian, state, territory and local governments
- including cycling as an essential component in integrated transport and land use planning in all spheres of government
- creating infrastructure and facilities that support increased cycling
- enabling and encouraging safe cycling
- providing leadership and developing partnerships to support and promote cycling in Australia
- developing the skills needed to undertake actions that will increase cycling.

Achievements 2006-07

In 2006-07, the ABC:

- initiated the development of the Cycling Resource Centre with funding from DOTARS
- undertook a cycling survey of Australian local government 2007 with the aid of the Australian Local Government Association
- Austroads took over responsibility for the ABC secretariat from DOTARS.

Ongoing projects 2007-08

The following projects will be progressed during 2007-08:

- completion and national launch of the Cycling Resource Centre
- implementation of the NCS.

Future directions

A number of new projects are scheduled to commence in 2007-08:

- investigation of regulatory, taxation and other fiscal impediments to increased cycling
- development of measures for cycling participation.

REGISTRATION AND LICENSING

Program manager

David Stuart-Watt

Director Licensing, Registration & Freight
Roads and Traffic Authority NSW

Program support Cheryl Richey Project Manager R&L Task Force



Program overview

The program focuses on the following streams:

- development and promotion of national policy initiatives to achieve best practice in vehicle registration and driver licensing
- data integrity national consistency and compliance through interoperability and accuracy
- using technology to improve data security
- data exchange
- managing access to information.

The Registration and Licensing program is supported by a task force comprising senior staff from the relevant areas of Austroads member, observer and stakeholder organisations. The primary objective of the task force is to assist road and transport agencies in their efforts to improve the security and integrity of vehicle registration and driver licensing systems and to promote national consistency. The work of the task force is undertaken in the context of an increasing focus on the security and integrity of registration and licensing information, and in particular client enrolment processes.

The task force also provides strategic direction for the ongoing operation and enhancement of the National Exchange of Vehicle and Driver Information (NEVDIS) system which provides for the real time access to, and exchange of, driver and vehicle information between states and territories in Australia.

Achievements 2006-07

In 2006-07, the Registration and Licensing program completed the following projects:

- Development of Customer Enrolment Best Practice Framework
- Participation in the Development of the National Identity Security Strategy Inter-Governmental Agreement
- Completion of Facial Recognition Biometric Software Trial
- Smartcard Licence Interoperability Project development of a draft inter-government Memorandum of Understanding and two of the four schedules
- Participation in the National Document Verification Service Pilot
- Registration and Licensing Performance Indicators Workshop
- Development of the Program Knowledge Sharing Plan
- Phase One of the Use and Application of Registration Labels
- Renewal of Austroads' Agreement with the American Association Motor Vehicle Administrators
- Revision of Overseas Licence Assessment Criteria including an update of the Austroads website.

Ongoing projects 2007-08

The program currently focuses on the research, development and completion of the following ongoing work areas:

- Security and Identity Management driver licence (SCOT/ATC project)
- Vehicle Information Request System
- Participation in the Development of the National Document Verification Service
- NEVDIS Information Strategy Plan 2008-2013
- Use & Application of Motor Vehicle Registration Labels
- Driver Licence Exchange of Information Systems
- Enhancing the National Written Off Vehicle Register
- Performance Indicators for the Delivery of Registration & Licensing Services
- Smartcard Licence Interoperability Project.

Future directions

A number of new projects have been identified for the 2007-08 period which will continue to strengthen the national driver licensing and vehicle registration frameworks. These include:

- response to the Council of Australian Federation request for options to achieve national consistency in driver licensing and vehicle registration
- national recognition of road worthiness procedures
- removal of engine numbers as an identifier
- participation in the Commonwealth review of the Personal Property Securities Law.

NEVDIS (National Exchange of Vehicle and Driver Information System)

Project overview

In 1993, a study was undertaken for Austroads which formulated a *National Strategy for Interfacing/Integrating Registration and Licensing Systems*. The main outcome of the study was the definition of a system solution, the *National Exchange of Vehicle and Driver Information System* (NEVDIS), to provide the interface between Australian registration and licensing jurisdictions.

Operation of the NEVDIS application began in 1998. The contract and day to day operational matters are managed by the NEVDIS administration unit. The unit is housed and supported by RTA NSW under the terms of a Memorandum of Understanding with Austroads.

The Registration and Licensing task force provides strategic direction for the ongoing operation and enhancement of NEVDIS.

NEVDIS objectives

The Austroads Council has approved the following objectives for NEVDIS:

- provide information to jurisdictions to prevent the issue of multiple drivers' licences by different jurisdictions
- prevent the issue of multiple heavy vehicle driver log books by different jurisdictions
- aggregate demerit points gained in any jurisdiction, to enable appropriate sanctions to be initiated by the licence issuing jurisdiction
- enable licence suspension, cancellation or driver disqualification in any jurisdiction to be available to all jurisdictions
- ensure driver licence history in any jurisdiction is available to all jurisdictions

- within privacy constraints, provide access for authorised agencies to registration and licensing status information e.g. current or restricted licence, positive vehicle identification and specific restrictions including stolen and written off
- enable management of vehicle defects across all jurisdictions
- provide access to alternative compliance information in other jurisdictions
- facilitate transparent conversion of a licence from one jurisdiction to another
- facilitate transparent conversion of vehicle registration from one jurisdiction to another
- in conjunction with jurisdictions, clearly identify individuals accessing NEVDIS data
- accommodate the progressive adoption of enhancements by jurisdictions
- facilitate opportunities for commercialisation of NEVDIS data with privacy constraints
- support the national compliance and enforcement provisions under development by the NTC
- provide the flexibility to support future functionality enhancements.

Achievements 2006-07

In 2006-07, the NEVDIS team completed the following projects:

- system and network upgrade to ensure NEVDIS is able meet Service Level Agreement requirements
- provided a pilot Document Verification Service (DVS) transaction in conjunction with Australian Government National Identity Security Strategy
- provided an initial and ongoing driver licence data extraction service to the Australian Electoral Commission in response to recent legislative changes
- progressed the Vehicle Information Request System project to allow tender documents to be released in July 2007
- implemented additional functionality on NEVDIS to allow tracking of those overseas licences used to obtain an Australian licence
- commenced the development of data clean up tools to enhance the ability of NEVDIS to support the 'one vehicle – one VIN' principle
- completed initial testing of the Search Software America (SSA) name searching software being implemented to improve the ability of NEVDIS to support the 'one person – one licence' objective.

Ongoing projects 2007-08

The following projects will be progressed during 2007-08:

- contract re-negotiation with Fujitsu Australia Limited
- NEVDIS Information Strategy Plan 2008-2013
- SSA software testing and implementation
- upgrading the pilot DVS system to production status with improved name matching capability
- improving overseas licence tracking to allow better management of duplicate licence numbers
- continue data integrity improvements
- implement vehicle checking system with Centrelink to support the AusIndustry LPG conversion grants scheme
- support Australian Government Personal Property Security Register (PPSR) project to ensure written off and stolen vehicle information is provided as part of future vehicle financial encumbrance checks.

Future directions

A number of new projects may arise in relation to the recent Council of Australian Federation initiatives which will require significant NEVDIS involvement, in particular:

- driver licence history transfer
- vehicle registration history transfer.

SAFETY

Program manager

Phil Allan

Executive Director, Safety and Regulation Division Department for Transport, Energy and Infrastructure SA

Program support

Jerome Claessen Senior Policy Adviser



Program overview

The program focuses on a safe system – a framework for action.

Key elements of the safe system:

- road risk assessment, treatment and standards (including safe speeds)
- driver licensing
- safer vehicles.

The primary objective of the program is to develop and deliver a program of research that will assist road and transport agencies in their efforts to improve road safety.

Achievements 2006-07

In 2006-07, the Safety program completed the following projects:

- Australasian Road Safety Handbook Volume 4
- Road Safety Engineering Risk Assessment Stages 3 and 4
- Guide to Road Safety Part 2 Strategy and Evaluation
 - Part 5 Safety for Rural and Remote Areas.

Ongoing projects 2007-08

The Safety program currently focuses on the research, development and completion of the following ongoing work areas:

Publication projects

- Development of the Guide to Road Safety (ongoing)
 - Part 4 Local Government and Community Road Safety
 - Part 6 Road Safety Audit
 - Part 8 Treatment of Crash Locations.

Strategic research projects

- A Road Safety Engineering Toolkit
- Balance Between Harm Reduction and Mobility in Setting Speed Limits Stage 3
- Older Driver Model Assessment Program Phase 4
- Australasian Road Safety Handbook: Volume 5
- Road Safety Audit Toolkit.

Technical research projects

- Development of Performance Measures that Reflect the Contribution of Road Engineering to Road Safety
- Rural Safety in Rural and Remote Areas heavy vehicle safety
- Road Safety Risk Assessment.

Future directions

A number of new projects have been identified and are proposed to be undertaken over the 2007-08 period. They are designed to build on the strategic theme; safe system – framework for action, and to include the key elements underlying this strategic priority; safe system, road risk assessment, treatment and standards, driver licensing and safer vehicles. These research areas include:

- Consideration of Component Costs in Transport Projects to Ensure the Appropriate Valuing of Safety Effects
- Traffic Management and Infrastructure: Lessons from In-depth Crash Investigation
- Content and Benefits of Effective Supervised Driving Programs
- Reducing Trauma Associated with Non-wearing of Seatbelts in Australia: Where to Next?
- Development of Best Practice Model for Recidivist Speeding Offenders
- Evaluation of the Safety Impact of Centre-of-the-road Wire Rope Barrier on Undivided Rural Roads
- Review of ITS and VMS for Safety, including Rural and Remote Areas
- Scoping Study to Assess Road Safety Engineering Measures to Address Fatigue
- Impact on Speed and Safety Benefits of LATM Treatments.

TECHNOLOGY

Program manager

John Worrall

Director (Project Delivery Improvement) Queensland Department of Main Roads

Program support

Philip Rankine

Principal Advisor (Austroads)

Program overview

The objective of the Technology program is to promote best practice in technology.

The development and maintainance of a comprehensive catalogue of publications was the primary focus of the program in 2006-07. The program is in the process of developing the following Austroads guides:

- Bridge Technology
- Pavement Technology
- Project Delivery
- Project Evaluation
- Road Design
- Road Transport Planning.

In addition to the guides, the program oversees several major technical research projects in the areas of bituminous surfacings and pavement structures.

The program is supported by review panels comprising senior staff from the relevant areas of Austroads member, observer and stakeholder organisations. The primary objective of the review panels is to manage and support the development of the guides and oversee technical research.

In January 2007, the Traffic Management review panel, previously under the Technology program, transferred to the Network program, taking with it the responsibility for development of the Guide to Traffic Management.

Achievements 2006-07

The following guides and publications were produced:

- Guide to Bridge Technology Part 3: Bridge Design Procurement
- Guide to Road Design Part 2: Design Considerations
- Impact of PBS Vertical Loading Standard at the Network Level.

The following Austroads technical reports were produced as part of the Austroads technical research program:

- Austroads Test Methods: Summary for 2005-06
- Transducer for the Measurement of Horizontal Stresses at the Tyre Pavement Interface
- The Asphaltene content of Australian Bitumens Part 1: Testing of Pre-1992 Samples
- Review of AS2008 from an Emulsion and PMB Manufacturing Perspective
- Development of a Procedure to Chemically Characterise Bitumens using the Latroscan
- Asphalt Permeability
- Proceedings: Austroads National Asphalt Workshop



- CoreLok Evaluation
- Commissioning a Cooper Wheel Tracking Device
- Proficiency Exercise: Resilient Modulus
- Wheeltracking Temperature Sensitivity and Repeatability Investigation
- Development of an Asphalt Workability Index Pilot Study
- Introduction to Asphalt Mix Design
- Asphalt Characterisation for Pavement Design
- Asphalt Manufacture
- Asphalt Paving
- Asphalt Recycling
- Maintenance of Asphalt Surfacings
- Update of the Austroads Sprayed Seal Design Method
- Update of Road User Cost Unit of Values to June 2005
- Investigation of the Local Damage Exponent of Unbound Granular Material Under Accelerated Loadings
- Physical Properties of Australian Bitumens 1956-2004
- Case Study and Test Method Review on Moisture Damage
- Optimum Use of Granular Bases Material Selection for Detailed Performance Evaluation.

Ongoing projects 2007-08

The Technology program is focussing on the following work areas:

Publication projects

- Guide to Bridge Technology
 - Part 2: Introduction to Bridge Technology
 - Part 4: Specification and Quality Assurance of Materials and Components
 - Part 5: Design Notes
 - Part 6: Bridge Construction
 - Part 7: Management of Existing Bridges.
- Guide to Pavement Technology
 - Part 2: Pavement Structural Design
 - Part 3: Pavement Surfacings
 - Part 4: Pavement Materials
 - Part 4A: Granular Base and Sub Base Materials
 - Part 4C: Materials for Concrete Road Pavements
 - Part 4F: Bituminous Binders
 - Part 4H: Test Methods
 - Part 6: Unsealed Pavements
 - Part 9: Pavement Work Practices.
- Guide to Project Delivery
 - Part 1: Overview
 - Part 2: Project Delivery Planning and Control
 - Part 3: Contract Management
 - Part 4: Direct Management of Construction.

- Guide to Road Design
 - Part 3: Geometric Design
 - Part 4: Intersections and Crossings
 - Part 5: Drainage Design
 - Part 6: Roadside Design
 - Part 7: Geotechnical Design
 - Part 8: Design Process and Documentation.
- Guide to Road Transport Planning.
- Austroads Guides Glossary of Terms.

Technical research projects

- Influence of Vertical Loading on the Performance of Unbound and Cemented Materials
- Quantifying the Stresses at the Tyre/Surface Interface and the Resulting Performance Impacts
- Improved Sprayed Sealing Operations procedures and guidelines
- Maximising the Benefits from Polymer Modified Binders
- Using Overseas Bitumen
- Delivering Better Quality Asphalt
- Batter Basis for Bases: Optimum Use of Granular Bases
- Materials Innovation Management System
- Influence of Multiple Axle Loads on Pavement Performance
- Innovative Binder Delivery (Pilot Study).

Future directions

Building on the strategic objectives of the new Austroads Strategic Plan 2007-12, new projects proposed for commencement in 2007-08 will largely bring a conclusion to development of the guides and will continue important technical, strategic and other research. New projects fall within the following areas:

- Guide to Pavement Technology remaining parts
- Technical Research:
 - Updating Austroads RUE Unit Values and Related Methodologies
 - Maintaining the Rural Road Network
 - Asphalt Properties and Mix Design Procedures
 - Optimising Binder Performance
 - Surface Characteristics to Meet Road User Needs
 - Management of Scarce and Quality Resources
 - Strategic Review of Pavement Design Practice
 - Cost-Effective Structural Treatments for Rural Highways.
- Strategic Research:
 - PBS Bridge Loading Package (NTC)
 - Develop ESA (Equivalent Standard Axles) Relationships for all Heavy Vehicle Classes
 Using Both and Average and a Distribution Approach Methodology (NTC)
 - Investigate Cost Allocation Relationships for Bridges in Relation to Heavy Vehicles (NTC).

Other:

- Review of CPEE Distance Learning Study Unit Pavement Wearing Surfaces
- Development of new CPEE Distance Learning Study Unit Project Evaluation Principles
- Review of CPEE Distance Learning Study Unit Pavement Design, Pavement Maintenance and Rehabilitation and Road Asset Management.

TECHNICAL RESEARCH

Program overview

In 2004, Austroads entered into an agreement with the ARRB Group to support technical research in four key areas:

- bituminous surfacings
- pavement technology
- asset management
- road safety engineering.

The agreement with ARRB was established to develop and sustain a national capability for technical research and knowledge in each of the key areas, to be available to meet the future requirements of the Australasian road industry.

An important part of the program is dissemination of the outputs by the research. In 2006-07 this has been achieved by:

- over 30 technical reports which are available free of charge from the Austroads website
- integration of results into the Austroads guides
- over 20 related conference papers presented in Australia and overseas
- project related newsletters in road safety and asset management
- two day roadshows describing the research held in most states and territories
- specialist project related workshops
- user pays workshops covering various parts of the Austroads guides.

The following sections provide a brief overview of progress in 2006-07. A more detailed description of the research is provided in the ARRB Third Annual Report on Technical Research.

Bituminous surfacings

Work towards implementation of the Austroads mix design procedures continued with a major cooperative road trial on a three lane, heavily trafficked, urban arterial in Melbourne, and a trial on a quarry road in Brisbane. Monitoring of the trial sections and related laboratory testing will continue for several years.

The database of bitumen properties is being expanded to include products in current use across Australia. An improved seal design method has been published on the Austroads website with greater emphasis on the heavy vehicle component of the traffic stream.

Flushing or bleeding seals are a major cause of early failures and work has been carried out to better understand the mechanisms leading to bleeding seals and develop measures to reduce their incidence.

Pavement technology

The pavement technology research program is focussed on improving knowledge in the areas of materials characterisation and pavement analysis. This improved knowledge is required to better respond to changes in the heavy vehicle fleet and to get the best possible performance from available construction materials.

For cement treated materials, the research deals with the issues of performance under increasing axle loads and the development and validation of new laboratory characterisation techniques. The recently completed Accelerated Loading Facility (ALF) full scale field trial has provided a valuable reference data set, which is now being used to assess the standardised laboratory test outputs against real performance under ALF.

For unbound granular materials, the research is currently focussed on field validation of the laboratory-based repeated load triaxial (RLT) test. Successful implementation of the test will allow the assessment of a much wider range of natural and non-traditional materials than those currently used for unbound granular pavements. The vast majority of the sealed road network is made using these materials, and the increasing scarcity of traditional high-quality road making materials is an increasing concern to road agencies.

Improved procedures for Finite Element (FE) analysis of pavement structures incorporating unbound granular materials and bound cement treated materials are also being developed and tested. Such procedures will enable more detailed and accurate analysis of pavement structures.

Asset management

New framework specifications and test methods for the collection of road condition data have been published and are available on the Austroads website. Additionally, commentaries providing further guidance have been published for each specification and test method.

A support tool to assist road asset managers in the decision making process has been developed using a multi-criteria analysis technique that allows trade-off between objectives with different measurement units. A user manual has been developed to provide guidance for the application.

Long term pavement performance monitoring and predicting future pavement performance is a major part of the asset management program and continued in 2006-07. The work has been used to calibrate the HDM-4 road deterioration models for roughness and rutting for Australian and New Zealand conditions.

A major component of the Assets program has been to develop tools to assist network managers assess the impacts of varying vertical loading standards on either a route or network level. These tools allow the users to assess the economic impacts of changes in the vehicle fleet, the transport task and axle mass limits, taking into account the benefits of increased productivity and the costs of increased damage to infrastructure.

Road safety engineering

Work in 2006-07 included a trial to determine the combined effects of horizontal and vertical alignment on road safety. A pilot study has been successfully completed and data analysis is now underway for the full trial. If this study is successful, the results from this research will provide information on this topic for the first time and will be of international importance.

Other investigations included crashes on unsealed roads, the factors involved in run-off-the-road crashes, the role of asset condition in crashes and the expected life of road safety treatments. Reports on all of these issues will be available from the Austroads publications website.

INTERNATIONAL

International Committee Chairman
Rick van Barneveld
Chief Executive
Transit New Zealand



Austroads coordinates certain aspects of the international involvement of its member organisations, such as:

- involvement with the World Road Association (PIARC)
- partnerships with peak road organisations in other countries
- involvement with other international road organisations including the Road Engineering Association of Asia and Australasia.

World Road Association (PIARC)

The World Road Association is an international road organisation based in Paris. It was established in 1909 and now has 111 member countries. It convenes various technical committees which undertake a four year program of work on road industry issues and report to the World Road Congress, which is held at the end of the four year period. The next World Road Congress, which will be its centenary, will be in Paris in September 2007.

The technical committees are comprised of representatives of member countries. Australia and/or New Zealand have representatives on 17 of the 18 committees. These representatives provide regular progress reports on the work of their technical committee, which are included on the Austroads website. Linkages are also established for these reports to be considered by the relevant Austroads groups. Austroads includes updates of the work of technical committees in its regular newsletters. Previously, a separate World Road Association newsletter was produced, but incorporating the information in the Austroads newsletter means it reaches a wider audience. In addition to its involvement in technical committees, Australia is represented on the Executive Committee, the Strategic Planning Commission and the Communications Commission of the World Road Association.

Austroads also supports the World Road Association by arranging the secondment of a staff member from a member organisation to work with the Association's secretariat in Paris. Kevin Locke from Transit New Zealand was seconded from April 2006 until the end of 2006. Pierre Castelino, from VicRoads, commenced a secondment in January 2007 which will conclude in October.

Austroads has been coordinating arrangements for the Australasian delegates attending the World Road Congress. A welcome function has been arranged at the Australian Embassy in Paris for the Australasian delegation prior to the official Congress opening. As part of the national committees' exhibition at the Congress, Austroads is organising a national committee display for Australia and New Zealand. The display will contain information about Austroads, its involvement with the World Road Association and general information about Australia and New Zealand.

Austroads representatives from several of the technical committees will be contributing to selected technical sessions at the Congress. Austroads has also organised a special session on 'Providing for the Operation of High Productivity Heavy Vehicles on Roads'.

An historical symposium has been arranged by the French Ministry reviewing roads and road transport in the 20th century. The symposium retraces evolutions that have marked the road since the end of the 19th century to the present day from a technical, social and cultural point of view and includes contributions from around the world. Australia's contribution has been prepared by VicRoads and is about Collins Street in Melbourne, where a number of pictures depicting the history of Collins Street and the Melbourne CBD will be on display.

Austroads will also provide Australasian delegates with information about transport options, things to do and places of interest in Paris, together with a handbook containing information about the Australasian delegates.

Partnerships with peak road bodies in other countries

AASHTO and TRB

Austroads has an agreement with the American Association of State Highway and Transportation Officials (AASHTO), an association representing highway and transportation departments in the United States of America. This involves the exchange of information and research results and publications.

The Austroads national office continues to maintain regular contact with AASHTO. Free copies of AASHTO publications are received under the agreement between the two organisations. These are forwarded to the ARRB library so they are available to the staff of Austroads member organisations.

In early 2007, Austroads was contacted by the US Transportation Research Board (TRB) regarding the Strategic Highway Research Program, phase 2 (SHRP2). The program is administered by TRB, a component of the United States National Academy of Sciences. Austroads was invited to become involved. SHRP2 is a US\$150m, multi-year program to address complex goals that require integrated and atypical research approaches. Four specific focuses are: reducing traffic crashes through a better understanding of driver behavior; renewing the highway infrastructure through rapid design and construction methods; increasing travel reliability by reducing congestion through incident mitigation and management; and increasing capacity through an integrated approach to planning and design. Austroads has nominated relevant program managers to participate in project specific oversight teams as corresponding members.

Transportation Association of Canada

Austroads has an agreement with the Transportation Association of Canada (TAC). TAC promotes the provision of safe, efficient, effective and environmentally and financially sustainable transportation services in Canada. The agreement provides for the exchange of information and possible cooperative and collaborative research on topics of mutual interest.

The Austroads national office maintains regular contact with TAC. Through Austroads' contacts with TAC, a Canadian speaker was arranged for the Australian Institute of Traffic Planning and Management (AITPM) Conference, which is to be held in Canberra later in 2007.

TAC also played a significant role in arrangement for the young professional's asset management study tour.

AAMVA

Austroads has an agreement with the American Association of Motor Vehicle Administrators (AAMVA). AAMVA is the equivalent organisation of AASHTO which covers vehicle registration and driver licensing in the United States of America. The agreement was renewed in December 2006 for a further three years. It provides for the sharing of information between the two organisations.

OECD/ECMT

The Organisation for Economic Cooperation and Development (OECD) and the European Council of Ministers of Transport (ECMT) have agreed to work together on transport research through the establishment of a Joint Transport Research Centre (JTRC). Austroads works with DOTARS to participate in the various research initiatives of the JTRC, generally as corresponding members of projects teams. Reports are provided to the relevant Austroads forums.

ARF China visit

The Australian Road Forum (ARF) arranged an industry delegation to China in November, 2006. Austroads was represented on the delegation by Paul Smith and Ian Reeves from DMR Qld. Subsequently, it was proposed that a pilot interchange project with the Chinese Ministry of Communications road transport area be conducted by Main Roads Queensland on behalf of Austroads. As at June 2007, negotiations were continuing.

Road Engineering Association of Asia and Australasia (REAAA) – Australian Chapter

The Road Engineering Association of Asia and Australasia (REAAA), based in Kuala Lumpur, Malaysia, promote the science and practice of road engineering and related professions in the Asia Pacific region. REAAA has about 1,000 members in 26 countries and holds regular events including a triennial international conference, technical visits and study tours, trade displays, seminars, forums and workshops.

There are chapters of REAAA established in both Australia and New Zealand. The Austroads national office provides secretariat support to the Australian Chapter of REAAA, which provides opportunities for Australian members to consult with colleagues in other REAAA member countries and from time to time organises technical visits, seminars and information exchange in Australia and Asia.

Regular newsletters are distributed by both REAAA and the Australian Chapter informing members of local and regional activities and major road engineering activities.

Austroads asset management young professional's study tour

The Austroads Council endorsed a young professional's study tour to visit North America in September 2006 to study current practice in the field of asset management. The Assets program manager at the time, Gary Norwell, led the study tour which visited four Canadian provinces and attended the TAC conference. They also visited Washington and Maryland in the USA. Seven Austroads member organisations participated in the study tour. A presentation on the tour findings was made to the Austroads Council in October 2006. A comprehensive report was also prepared.

Tour participants were:

- Gary Norwell MR WA (tour leader)
- Wesley Soet MR WA
- Pawel (Paul) Potapowicz TAMS ACT
- Liam Terris RTA NSW
- Gary Rykers VicRoads
- Jack Hansby Transit NZ
- Andrew Excell DTEI SA
- Michelle Baran DMR Qld.

CORPORATE

Murray Kidnie Executive Director



National office

The Austroads national office provides the secretariat for the Austroads Council and overall coordination of Austroads' activities. The national office manages the production and distribution of Austroads publications and other outputs. It produces a small range of corporate and general information publications. It also manages Austroads' international involvement and provides support for the International Committee and the Australian First Delegate to the World Road Association.

The national office is located at level 9, 287 Elizabeth Street, Sydney.

Newsletters

An electronic newsletter was produced in August, October and December 2006, and February, April and June 2007. The newsletter was refocussed to provide a wider range of information and more detail about specific projects and initiatives. It now also incorporates the previously separate World Road Association and local government newsletters, which have been discontinued. The newsletter is distributed to over 2,500 subscribers and made available for download from the Austroads website. Austroads also produces and distributes newsletters for the REAAA Australian Chapter.

Publications

Development of the comprehensive library of Austroads guides covering design, construction, maintenance and operation of the road network for use by road authorities in Australia and New Zealand continued throughout 2006-07. Each of the nine guides is made up of various parts, totaling 91 separate publications.

Austroads guides are intended to be a reference for road authorities and promote national consistency and harmonisation. They represent an agreed approach to the work road authorities undertake in relation to the road network. Austroads member organisations have agreed to adopt the guides as the basis of their operation.

A further six parts of various guides were published during the year, bringing the total number of completed parts to 23. Austroads was also involved in a joint review with Communications Alliance Limited of the guide *Telecommunications in Road Reserves — Operational Guidelines for Installations* which was published in March 2007. Other reports produced include 49 research and technical reports and all are available for download or purchase from the publications website.

A full list of the publications produced is provided on page 35 of this report.

Publications website

All Austroads publications are available through a dedicated publications website in either hard copy or electronically as a PDF. A search facility is available to help visitors find specific publications, or a search can be conducted by category. Over 500 guides, research reports and technical reports are available from the site. Research and technical reports are available for free as a PDF or for purchase as a hard copy. Guides are also available for purchase, except for member organisations where they can download guides for free as a PDF.

The publications website is operated on Austroads' behalf by SAI Global. Sales revenue continues to be maintained even though a substantial proportion of the publications are downloaded as free PDFs.

The publications website also allows for Austroads to follow up buyers for feedback. This was used to evaluate the level of satisfaction with selected publications. Austroads continues to receive positive feedback about the publications website.

Austroads free PDF downloads

Overall demand for the free PDF downloads increased in 2006-07 compared to previous years. See Table 1 below for more information.

Public Austroads Local **Members** Government 2004-05 1.027 406 319 2005-06 477 414 1,188 2006-07 1,316 548 386

Table 1 - Average monthly free PDF downloads

Publications distributed through the website

There was a significant increase in the number of hard copy publication sales compared to the previous year. The total number of publications distributed is also higher than previous years. See Table 2 below for more information.

	Free PDF	PDF Sales	Hardcopy Sales
2004-05	1,752	438	285
2005-06	2,078	559	125
2006-07	2,250	482	285

Table 2 – Average monthly sales and downloads – all publications

RoadWatch subscribers

RoadWatch is an email based service that distributes customised notification alerts. Subscribers can nominate to receive alerts about specific publications and/or subject areas, or all publications and subject areas. An email notification is sent when new publications are released, or when changes are made to existing publications. It is free to subscribe.

The number of RoadWatch subscribers has continued to increase. There were 2,887 subscribers at 30 June 2005, 7,281 at 30 June 2006 and 11,530 at 30 June 2007, an increase of approximately 63 percent in 12 months.

Australian Bicycle Council secretariat

During 2006-07, the secretariat for the Australian Bicycle Council (ABC) was transferred from DOTARS to Austroads with funding from DOTARS. An Executive Officer, Fiona MacColl, has been appointed. She is located at the Austroads national office.

The national office has also project managed the development of a web-based cycling resource centre, which is an action specified in the National Cycling Strategy. This is also to be funded by DOTARS.

National office staff

In 2006-07, the Austroads national office operated with five full-time staff. In November 2006 the Communications Manager position was filled by David Armstrong under a secondment arrangement with the Roads and Traffic Authority NSW for a period of 18 months. In January 2007 Finance Officer Jeannie Sanoo resigned after 10 years of service. Her contribution to Austroads was greatly appreciated during that period. Rodney Berman was appointed as the Finance Officer in February.

PERFORMANCE REVIEW

The Austroads Strategic Plan 2004–07 identified several performance measures. The main areas are:

- member satisfaction
- project completions.

Member satisfaction

Each year as part of the performance review provisions of the strategic plan, a survey is undertaken of Austroads Council members, as well as users of outputs, to establish their level of satisfaction with Austroads' performance on several key aspects of its operation. Surveys were undertaken again in August/September 2006.

In 2006-07 two separate surveys were undertaken; one of Council members; and one of internal users, comprised mainly of task force and review panel members. The surveys were in two parts. The first dealt with the performance of Austroads and the second related to ARRB technical research work.

Overall the level of satisfaction with Austroads' performance continues to be high. There has been a slight decline in the level of satisfaction amongst Council members over the previous year. There was a noticeable reduction in satisfaction of value for money by Council members. The level of satisfaction amongst internal users remains reasonably higher and has improved somewhat over the previous year.

Satisfaction with the overall performance of Austroads was expressed by 91 percent of Council members. In 2005 it was 100 percent. Of the users from member organisations, 80 percent were either satisfied or very satisfied overall. This is slightly higher than the 2005 survey when it was 74 percent.

Project completions

There were 126 projects approved in the 2006-07 work program, including 82 projects continuing from previous financial years and 44 new projects to start in 2006-07. There were 36 projects scheduled for completion by 30 June 2007, with eight completed by that date.

During 2006-07 a total of 31 projects were completed, two were cancelled and two were deferred to 2007-08. Reducing the number of overdue projects continues to be a high priority for program managers. At 30 June 2007 there were two projects which were overdue by more than 12 months and 11 by more than six months.

Table 3 provides a comparison of work program status figures as at 30 June for the last four financial years.

	Completed	Cancelled or Deferred	More than 12 months late	Between 6 and 12 months late	Other projects	Total
2003-04	71	6	20	12	47	156
2004-05	49	2	12	7	64	134
2005-06	39	4	2	7	72	124
2006-07	31	4	2	11	78	126

Table 3 – Status of Austroads work program

In 2007-08, 91 projects will carry over from 2006-07 and there will be 49 new projects making a total of 140.

PUBLICATIONS

Publications released during the year ended 30 June 2007.

Guides

- Guide to Asset Management Part 5C: Rutting
- Guide to Asset Management Part 5E: Cracking
- Guide to Bridge Technology Part 3: Bridge Procurement
- Guide to Road Design Part 2: Design Considerations
- Guide to Road Safety Part 2: Road Safety Strategy and Evaluation
- Guide to Road Safety Part 5: Safety for Rural and Remote Areas
- Telecommunications in Road Reserves Operational Guidelines for Installations.

Research reports

- A Review of Road Use Data Integration and Management Models
- A Review of Road Use Data Pricing, Partnerships and Accessibility
- Vehicle Fleet Mix and Practices for improving the level of Service for Freight Vehicles
- Australia and New Zealand Roads Capability Analysis 2006-2016
- Improving Traffic Incident Management: Literature Review
- Review of Current Traffic Incident Management Practices
- Improving Traffic Incident Management: Evaluation Framework
- Microsimulation as a Planning, Operation and Training Aid for Incident Management
- Interim Works Effects Models
- Review of recent development in road pricing including freight Phase I: Key issues and experience
- Review of recent development in road pricing including freight Phase II: Possible applicability of road pricing in Australasia
- Telecommunications in road reserves: Administrative Guidelines for Road Authorities
- Traffic Incident Management: Best Practice.

Technical reports

- Revision of GTEP Part 8: Traffic Control Devices
- Austroads Test Methods: Summary for 2005/06
- Transducer for the Measurement of Horizontal Stresses at the Tyre Pavement Interface
- The Asphaltene content of Australian Bitumens Part 1: Testing of Pre-1992 Samples
- Review of AS2008 from an Emulsion and PMB Manufacturing Perspective
- Development of a Procedure to Chemically Characterise Bitumens using the Latroscan
- Asphalt Permeability
- Proceedings: Austroads National Asphalt Workshop
- CoreLok Evaluation
- Commissioning a Cooper Wheel Tracking Device
- Proficiency Exercise: Resilient Modulus
- Wheeltracking Temperature Sensitivity and Repeatability Investigation
- Development of an Asphalt Workability Index Pilot Study
- Automatic Vehicle Classification by Vehicle Length
- Correlation of WIM Data with Classified Counts: An Initial Analysis

- Introduction to Asphalt Mix Design
- Asphalt Characterisation for Pavement Design
- Asphalt Manufacture
- Asphalt Paving
- Asphalt Recycling
- Maintenance of Asphalt Surfacings
- Update of the Austroads Sprayed Seal Design Method
- Process for Setting Intervention Criteria and Allocating Budgets
- Update of Road User Cost Unit of Values to June 2005
- Selection of Additional Sites for Inclusion in Austroads Long Term Pavement Performance (LTPP) Study
- Report on Skid Resistance Device Trials May 2005
- Investigation of the Local Damage Exponent of Unbound Granular Material Under Accelerated Loadings
- Physical Properties of Australian Bitumens 1956-2004
- ITS Technologies for Metropolitan Freight Vehicle Operations: A Literature Review
- Case Study and Test Method Review on Moisture Damage
- Service Life of Pavements: Context, Review and Definition of Terms
- Managing the Impacts of Rising Watertables and Salinity on Remaining Pavement Life: Report of 2005-06 Activities
- Process for Setting Intervention Criteria and Allocating Budgets: Literature Review
- Austroads LTPP and LTPPM Study: Summary Report for 2005/06
- Application of the Analytic Hierarchy Process in Road Asset Management: User Manual
- Optimum Use of Granular Bases Material Selection for Detailed Performance Evaluation.

AUSTROADS AWARDS

The success of Austroads' operations is heavily dependent on the contributions of staff from member organisations and a small number of related organisations. Austroads awards are intended to recognise those people who have made particularly noteworthy contributions.

Austroads medal

The Austroads medal is awarded to a person who has made an exceptionally meritorious contribution to Austroads and the achievement of its objectives over a sustained period. This is Austroads' highest award and is intended only to be issued occasionally. This year there was one recipient:

David Anderson

In recognition of his outstanding achievements of national significance in the delivery of Austroads objectives and its activities over a sustained period. David has been involved with Austroads since its inception and was also involved with its predecessor NAASRA.

He was the Road Use Management program manager from 1994 to 1997 and the Technology program manager from 1997 to October 1998.

Up until his retirement in September 2006, he was:

- Austroads Council member (since 2001)
- Austroads Executive committee member (since 2002)
- Austroads International Chairman (since 2003)
- REAAA Australian Chapter Chairman (since 2002)
- Australia's First delegate to PIARC (since 2004)
- PIARC Executive member (since 2004).

Outstanding service awards 2006-07

The Austroads outstanding service award is provided to a person who has made an outstanding contribution to Austroads and its activities over a sustained period. In 2006-07 it was awarded to:

Rod Frisbv

In recognition of his contribution from 1995 to 2007 in relation to policy issues associated with vehicle registration and his demonstrated commitment to the Registration and Licensing task force and to its objective of promoting national consistency.

Gary Norwell

In recognition of his contribution since 1982 to Austroads and its predecessor NAASRA, in the fields of road construction, asset management and road system management, particularly as program manager, chair of a World Road Association technical committee and organiser of the 2006 young professional's study tour.

Geoff Shanks

In recognition of his contribution to Austroads and its activities, particularly through his dedication and leadership in the Registration and Licensing program over an extended period.

Achievement awards 2006-07

Achievement awards are provided in the interests of formally recognising the role of staff within Austroads member organisations and a small number of related organisations, when bringing about the successful completion of an Austroads project. In 2006-07 they were awarded to:

Alan Colegate

In recognition of his outstanding project management of the successful 6th Austroads Bridge Conference held in Perth from 12-15 September 2006.

John Dudgeon

In recognition of his valuable contribution to Austroads through his management of the Freight program from April 2004 until December 2006.

William Frith

In recognition of his significant contribution to Austroads through his management of the Safety program from September 2004 until December 2006.

Russell Ingham

In recognition of his valuable contribution to Austroads through his work with the Freight program from April 2004 until December 2006.

Kathryn Martin

In recognition of her valuable contribution to Austroads through her work with the Assets program from March 2004 until December 2006.

Ed McGeehan

For his contribution to Austroads, particularly through his effective management of the Austroads project NS1015 – 'Review Recent Developments in Road Pricing, including Freight'.

Jock Scanlon

In recognition of his outstanding project management of the successful 6th Austroads Bridge Conference held in Perth from 12-15 September 2006.

Grant Strachan

In recognition of his significant contribution to Austroads through his work with the Safety program from September 2004 until December 2006.

Vince Taranto

For his contribution to Austroads, particularly through his effective management of the Austroads project NS1137 – 'TRARR (Traffic on Rural Roads) Software Program Upgrade'.

TASK FORCES AND REVIEW PANELS

Assets task force/review panel

Ken Russell (Chair) VicRoads (Program Manager, Assets)

Geoff Clarke Australian Department of Transport and Regional Services

Rob Di Cristoforo National Transport Commission

Renny Duckett Department of Infrastructure, Energy and Resources Tasmania

Greg George Department of Transport and Regional Services

Andrew Golding Department of Main Roads Queensland

Ian Hickson Department of Territory and Municipal Services Australian Capital Territory

Lance Midgley VicRoads

Chris Parkman Transit New Zealand

Bob Peters Main Roads Western Australia

Mick Savage Institute of Public Works Engineering

Bob Sharpe Roads and Traffic Authority New South Wales

John Statton Department for Transport, Energy and Infrastructure South Australia

Ernie Wanka Department of Planning and Infrastructure Northern Territory

Bridge technology review panel

John Worrall (Chair) Department of Main Roads Queensland (Program Manager, Technology)

Wije Ariyaratne Roads and Traffic Authority New South Wales

Geoff Boully VicRoads

John Fenwick Department of Main Roads Queensland

Eddy Go Standards Australia

Ian Hickson Department of Territory and Municipal Services Australian Capital Territory

Rudolph Kotze Transit New Zealand

Louise McCormick Department of Planning and Infrastructure, WA

Graeme Roberts Department of Infrastructure, Energy and Resources Tasmania

Jock Scanlon Main Roads Western Australia

Peter Wilson Department for Transport, Energy and Infrastructure South Australia

Capability task force

Peter Mitchem (Chair) VicRoads (Program Manager, Capability)

Geoff Balmain Transit New Zealand

Phil Cantillon Department of Infrastructure, Energy and Resources Tasmania

Martin Fletcher Transit New Zealand

Lou George Department for Transport, Energy and Infrastructure South Australia

Tony Gill Department of Territory and Municipal Services Australian Capital Territory Ian Hickson Department of Territory and Municipal Services Australian Capital Territory

Kate McTaggart Department of Planning and Infrastructure Northern Territory

Ross Moody Institute of Public Works Engineering Australia
Brendan Nugent Roads and Traffic Authority New South Wales

Jon Oxford Department of Main Roads Queensland

Judith Pettitt VicRoads

Richard Phillips Engineers Australia

Mike Shackleton ARRB Group

Viki Smith Department of Planning and Infrastructure Northern Territory

Michael Stanley Roads and Traffic Authority New South Wales

John Taya Main Roads Western Australia

Freight task force

Philip Halton (Chair) Roads and Traffic Authority New South Wales (Program Manager, Freight)

John Bessell Department of Infrastructure, Energy and Resources Tasmania
Lloyd Binks Australian Department of Transport and Regional Services

Angus Draheim Queensland Transport

Don Hogben VicRoads

Mark Mitchell Department of Main Roads Queensland

Lindsay Oxlad Department for Transport, Energy and Infrastructure South Australia

Rod Paule Department of Territory and Municipal Services Australian Capital Territory

Alex Rae Department of Planning and Infrastructure Northern Territory

Paul Salter National Transport Commission

Lynn Sleath Transit New Zealand

Mark Walker Main Roads Western Australia

Network task force

John Erceg (Chair) Main Roads Western Australia (Program Manager, Network)

Michael Blyleven Transit New Zealand

Simon Buxton Department of Infrastructure, Energy and Resources Tasmania

David Gargett Bureau of Transport and Regional Economics

Jeff Goode Department for Transport, Energy and Infrastructure South Australia

Ken Grattan Department of Planning and Infrastructure Northern Territory

Phil Margison Roads and Traffic Authority New South Wales

Barry Moore National Transport Commission

Rifaat Shoukrallah Department of Territory and Municipal Services Australian Capital Territory

Ted Vincent VicRoads

Dennis Walsh Department of Main Roads Queensland

Pavement technology review panel

John Worrall (Chair) Department of Main Roads Queensland (Program Manager, Technology)

David Alabaster Transit New Zealand
Bruce Hansen Brisbane City Council

David Harris Main Roads Western Australia

Stephen Jackson Department of Planning and Infrastructure Northern Territory

Allan Jones Department of Main Roads Queensland

Adrian LaManna Standards Australia

David Mangan Australian Asphalt Pavement Association

Chris Mathias Department for Transport, Energy and Infrastructure South Australia

Andrew Papacostas VicRoads
Bryan Pidwerbesky Roading NZ

Ken Porter Roads and Traffic Authority New South Wales

Neal Smith Department of Territory and Municipal Services Australian Capital Territory

Con Tsemtsidis Cement Concrete and Aggregates
George Vorobieff Stabilisation Industry Association

Barry Walker Department of Infrastructure, Energy and Resources Tasmania

Project delivery review panel

John Worrall (Chair) Department of Main Roads Queensland (Program Manager, Technology)

Phil Cantillon Department of Infrastructure, Energy and Resources Tasmania

Bruce Douglas Mornington Peninsula Shire Council

Bruce Gidley VicRoads

Gabriel Joseph Department of Territory and Municipal Services Australian Capital Territory

Peter Letts Roads and Traffic Authority New South Wales

Colin MacKay Transit New Zealand

Brian Noble Main Roads Western Australia

Robert Pemble Department of Planning and Infrastructure Northern Territory

Tim Warren Department for Transport, Energy and Infrastructure South Australia

Dennis Wogan Department of Main Roads Queensland

Registration and licensing task force

David Stuart-Watt Roads and Traffic Authority New South Wales (Chair) (Program Manager, Registration & Licensing)
Lloyd Binks Department of Transport and Regional Services

Leah Croke Department of Planning and Infrastructure Northern Territory

Greg Deimos National Transport Commission

Richard Fowler Department of Infrastructure, Energy and Resources Tasmania

Geoff Hughes National Motor Vehicle Theft Reduction Council
Trevor Maughan Department of Planning and Infrastructure, WA
Michelle McCormick Land Transport Safety Authority New Zealand

Terry Moore Austroads

John Neville Department for Transport, Energy and Infrastructure South Australia

Rod Paule Department of Territory and Municipal Services Australian Capital Territory

David Shelton VicRoads

Irene Siu Roads and Traffic Authority New South Wales

Steve Venning Queensland Transport

Road design review panel

John Worrall (Chair) Department of Main Roads Queensland (Program Manager, Technology)

Owen Arndt Department of Main Roads Queensland

Peter Aumann Monash City Council

Anthony Barton VicRoads
David Barton VicRoads

Tom Brock The Association of Consulting Engineers

Rob Grove Main Roads Western Australia

James Hughes Transit New Zealand

Pat Kenny Roads and Traffic Authority New South Wales

Adrian LaManna Standards Australia

Ken Marshall Department of Territory and Municipal Services Australian Capital Territory

Graeme Nichols Department of Infrastructure, Energy and Resources Tasmania

Noel O'Callaghan Department for Transport, Energy and Infrastructure South Australia

Peter Toll Department of Planning and Infrastructure Northern Territory

Safety task force/review panel

Phil Allan (Chair) Department for Transport, Energy and Infrastructure South Australia

(Program Manager, Safety)

Colin Brodie Transit New Zealand
lain Cameron Premier and Cabinet (WA)

Angela Conway Department of Infrastructure, Energy and Resources Tasmania

Jon Douglas Department of Main Roads Queensland

Tim Eaton National Transport Commission

Nial Finegan VicRoads

Andy Hrast Local Government Association

Soames Job Roads and Traffic Authority New South Wales

Joe Motha Australian Department of Transport and Regional Services

David Quinlan Department of Territory and Municipal Services Australian Capital Territory

Martin Small Department for Transport, Energy and Infrastructure South Australia

Mike Stapleton Queensland Transport

Paula Timson Department of Planning and Infrastructure Northern Territory

Traffic management review panel

John Erceg (Chair) Main Roads Western Australia (Program Manager, Network)

Anthony Barton VicRoads

Simon Buxton Department of Infrastructure, Energy and Resources Tasmania
Steve Clark Department for Transport, Energy and Infrastructure South Australia

Griff Davis City of Whittlesea VIC
Dennis Davis Transit New Zealand

Jon Douglas Department of Main Roads Queensland

Jason Firmstone Australasian Railway Association

David Freeman Standards Australia

Bob Gibson Land Transport New Zealand

Geoff Horni Department of Planning and Infrastructure Northern Territory

David Johnson Department of Infrastructure, Energy and Resources Tasmania

Dave Landmark Main Roads Western Australia

Phil Margison Roads and Traffic Authority New South Wales

Rifaat Shoukrallah Department of Territory and Municipal Services Australian Capital Territory

Greg Smith Australian Automobile Association

Ted Vincent VicRoads

Transport planning and project evaluation review panel

John Worrall (Chair) Department of Main Roads Queensland (Program Manager, Technology)

John Brewer Roads and Traffic Authority New South Wales

Lindsay Broadhurst Main Roads Western Australia

Geoff Clarke Department of Transport and Regional Services

Dave Gennard Transit New Zealand

Ken Grattan Department of Planning and Infrastructure Northern Territory

Mark Harvey Bureau of Transport and Regional Economics

Peter Hookham Transit New Zealand

Kuga Kugathas Department of Territory and Municipal Services Australian Capital Territory

Ed McGeehan VicRoads
Cliff Naude ARRB Group

Allan Richmond Department of Main Roads Queensland

Peter Tisato Department for Transport, Energy and Infrastructure South Australia
Andy Van Emmerik Department of Infrastructure, Energy and Resources Tasmania

ABBREVIATIONS

AAMVA American Association of Motor Vehicle Administrators

AASB Australian Accounting Standards Board

AASHTO American Association of State Highway and Transportation Officials

AS Australian Standard

ABC Australian Bicycle Council

AEC Australian Electoral Commission

AITPM Australian Institute of Traffic Planning and Management

ALF Accelerated Loading Facility

ARF Australian Road Forum

ARRB ARRB Group

ATC Australian Transport Council

CAF Council of Australian Federation

CBD Central Business District

COAG Council of Australian Governments

CPI Consumer Price Index

CPEE Centre for Pavement Engineering Education

DMR Qld Department of Main Roads Queensland

DOTARS Department of Transport and Regional Services

DPX Demerit Point Exchange

DSRC Dedicated Short Range Communications

DTEI SA Department of Transport, Energy and Infrastructure South Australia

DVS Document Verification Service

ECMT European Council of Ministers of Transport

ESA Equivalent Standard Axles

FE Finite Element

GST Goods and Services Tax

GTEP Guide to Traffic Engineering Practice

HDM-4 Highway Development and Management System

IAP Intelligent Access Program
ITS Intelligent Transport Systems
JTRC Joint Transport Research Centre
LATM Local Area Traffic Management

LPG Liquefied Petroleum Gas

LTPP Long Term Pavement Performance

LTPPM Long Term Pavement Performance Maintenance

MoT NZ Ministry of Transport New Zealand

MR WA Main Roads Western Australia

NAASRA National Association of Australian State Road Authorities

NCS Australian National Cycling Strategy 2005-2010

NEVDIS National Exchange of Vehicle and Driver Information System

NSW New South Wales

NTC National Transport Commission

NZ New Zealand

OECD Organisation for Economic Cooperation and Development

PAYGO Pay As You Go

PBS Performance Based Standards

PMB Polymer Modified Binders

PDF Portable Document Format

PIARC World Road Association

PPSR Personal Property Security Register

R&L Registration and Licensing

REAAA Road Engineering Association of Asia and Australasia

RLT Repeated Load Triaxial

RTA NSW Roads and Traffic Authority New South Wales

RUE Road User Effects
SA South Australia

SCOT Standing Committee on Transport
SHRP Strategic Highway Research Program

SSA Search Software America

TAC Transportation Association of Canada

TAMS ACT Department of Territory and Municipal Services Australian Capital Territory

Transit NZ Transit New Zealand
TRARR Traffic on Rural Roads

TRB Transportation Research Board

USA United States of America

VIC Victoria

VicRoads Roads Corporation Victoria
VIN Vehicle Identification Number

VMS Variable Message Sign

WA Western Australia
WIM Weigh-in-Motion

FINANCIAL INFORMATION

Income statement for the year ended 30 June 2007

		20	07	20	06
		\$	\$	\$	\$
Income					
contributions					
	Membership		821,100		797,200
	Work Program		6,650,200		6,456,400
Special program	s and projects				
	DOTARS (NS1207) Funding	40,000		-	
	DOTARS - Australian Bicycle Council				
	Secretariat (note 4)	39,406		-	
	DOTARS – ABC web based resource	50,000			
	centre (Note 4)	50,000		-	
	NTC (Note 5) User Satisfaction Index 2006-07	78,500 177,063		-	
	Oser Satisfaction index 2000-07	177,003			
			384,969		0
Publications					
	Gross Sales Revenue	167,236		167,863	
	Royalties	5,953		2,451	
			173,189		170,314
Interest received					
	Short Term Investments	172,932		126,678	
	Rental Bond	2,045		1,860	
			174,977		128,538
04					
Other income	Avetas de Bridas Osafonsas	00.000			
	Austroads Bridge Conference	38,093		202	
	Sundry	323	. 20 416	303	202
			38,416		303
TOTAL INCOME			8,242,851		7,552,755
. O IAL INCOME			O,272,001		1,002,100

The accompanying notes form part of these financial statements

Income statement for the year ended 30 June 2007 (continued)

		2007		2006	
		\$	\$	\$	\$
Expenditure					
corporate					
	Salaries and Related Charges	479,644		485,320	
	Other National Office Expenses (Note 2)	225,593		232,970	
	Projects	394,562		180,963	
	Corporate Services	200,717		162,670	
	Depreciation (Note 1b)	16,988		20,080	
	Program Management	629,508		594,448	
			1,947,012		1,676,451
Work program					
	Assets	128,9591		1,029,780	
	Freight	371,484		94,907	
	Network	822,012		677,266	
	Registration and Licensing	16,148		236,946	
	Safety	1,319,113		1,082,392	
	Technology	2,532,014		2,782,157	
	Capability	141,312		69,006	
	IAP	-		220,409	
	NTC Support (Note 5)	87,154			
	DOTARS - Australian Bicycle Council				
	Secretariat (Note 4)	39,406			
	DOTARS – ABC Web based resource				
	centre (Note 4)	13,490			
			6,631,724		6,192,863
Publications					
	Cost of Sales	1,727		2,443	
	Production and Distribution	40,000		40,000	
	Promotion and marketing				
			41,727		42,443
TOTAL			0.000.400		7 044 757
EXPENDITURE			8,620,463		7,911,757
Nat (dafiait)/	alice for the year		(277 (40)		(250,000)
Net (deficit)/sur	olus for the year		(377,612)		(359,002)

The accompanying notes form part of these financial statements

Balance sheet as at 30 June 2007

	2	007	20	06
	\$	\$	\$	\$
ASSETS				
Current assets				
Cash	2,691,676		2,114,385	
Investments (Note 1d)	2,519,111		1,763,132	
Receivables (Note 3)	702,931		183,245	
Prepayments	23,987		20,901	
Other Debtors	35,781		23,830	
Cirici Debiois	30,701	- 5,973,486	20,000	4,105,493
		5,515,155		.,,
Non-current assets				
Office Furniture and Equipment at Cost	167,653		212,581	
Less: Provision for Depreciation	(153,806)	_	(192,948)	
	13,847	_	19,633	
Motor Vehicles at Cost	21,410		21,410	
Less: Provision for Depreciation	(6,393)	_	(2,112)	
	15,017	_	19,298	
Sundry Debtor	37,120	_	35,074	
		65,984		74,005
T				4.470.400
Total assets		6,039,470		4,179,498
LIABILITIES				
Current liabilities				
Accounts Payable	2,910,191		1,141,258	
Contributions received in advance	401,000		253,527	
Subscriptions invoiced in advance (NEVDIS II)	151,619		38,336	
Unacquitted funds (NEVDIS II) (Note 6)	810,348		558,635	
Provision for Annual Leave	56,380		55,633	
Provision for Long Service Leave (Note 1c)	41,720		18,996	
		4,371,258		2,066,385
Non-current liabilities				
Provision for Long Service Leave		8,199		19,172
Total liabilities		4 270 457		2 005 557
Total liabilities		4,379,457		2,085,557
NET ASSETS		1,660,013		2,037,625
				
Represented by:				
MEMBERS' FUNDS				
Net (Deficit) / Surplus		(377,612)		(359,002)
Cumulative Surplus Brought Forward		2,037,625		2 306 627
Ournalianve Outplus Diought Forward		2,007,020		2,396,627
Members' funds		1,660,013		2,037,625
				_,,
The accompanying notes form pa	rt of these fi	nancial statemer	nts	

Statement of cash flows for the year ended 30 June 2007

		2007 \$	Inflows (Outflows)	2006 \$
Cash flows	from operating activities			
Receipts				
	Member Contributions	8,723,689		7,763,969
	Publication Sales	173,189		184,574
	Interest Received	174,977		175,391
	External Project Funding	384,969		-
	Other Receipts	38,416		28
	Net GST Receipt	25,966 -		169,213
	Total receipts	9,521,206	•	8,293,175
Payments				
	Salaries and Related Costs	(467,146)		(485,029)
	National Office including Corporate	(894,271)		(592,547)
	Publications	(41,727)		(42,443)
	Programs	(6,777,871)		(7,489,653)
	Total payments	(8,181,015)	•	(8,609,672)
Net cash (u	used in)/provided by			
Operating a	activities (Note 8)	1,340,191	:	(316,497)
Cash flows	from investing activities			
	Proceeds from Sales of Fixed Assets	-		15,275
	Payment for Purchases of Fixed Assets	(6,921)		(35,376)
Net cash u	sed in investing activities	(6,921)	-	(20,101)
Net (decrea	ase)/increase in cash held	1,333,270		(336,598)
Cash at the	e beginning of the year	3,877,517		4,214,115
Cash at the	e end of the year (Note 7)	5,210,787	=	3,877,517

The accompanying notes form part of these financial statements

Notes to and forming part of the accounts for the year ending 30 June 2007

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

This financial report is a special purpose financial report prepared in order to satisfy the financial reporting requirements of the Associations Incorporation Act [NSW]. The Executive Committee has determined that the association is not a reporting entity.

The financial report has been prepared in accordance with the requirements of the Associations Incorporation Act [NSW] and the following Australian Accounting Standards:

AASB 1031 Materiality

AASB 110 Events After the Balance Sheet Date

No other applicable Accounting Standards, Urgent Issues Group Interpretations or other authoritative pronouncements of the Australian Accounting Standards Board have been applied.

The financial report has been prepared on an accruals basis and is based on historical costs and does not take into account changing money values or, except where specifically stated, current valuations of non-current assets.

The following material accounting policies, which are consistent with the previous period unless otherwise stated, have been adopted in the preparation of this report:

a) Publications

Austroads has ceased retaining levels of publications for resale. All inventories were written down to nil value and transferred to SAI Global. The association is uncertain what sales will be generated from such inventories. As sales are made, Austroads receives the proceeds less a commission. These proceeds are brought to account as income. SAI Global have also commenced producing Austroads publications for which Austroads receives royalty payments as sales are made.

b) Depreciation

Furniture and equipment and motor vehicles are depreciated on a straight line basis over their useful lives.

c) Provision for employee entitlements

Provisions for long service leave and annual leave are made for all employees from the date of their commencement and are calculated at current pay rates. Additionally, provision is made for OnCosts on Long Service at 13%. Provision for long service leave for service under six years is treated as non current.

d) Investments

Investments reflected on the balance sheet represent funds held with the National Australia Bank in short term investments. These funds are placed for varying periods up to 12 months, but may be withdrawn at short notice.

e) NEVDIS II

Austroads on behalf of Australian jurisdictional driver licensing and vehicle registration authorities has contracted with Fujitsu Australia Limited to operate and maintain the National Exchange Vehicle Driver Information System (NEVDIS) for the period ending 25 August 2008. This commitment involves a monthly subscription payment to Fujitsu for \$162,440 in 2006-07, adjusted for CPI increases in future years.

Funding of NEVDIS implementation is recognised as income to the extent of expenditure incurred to balance date (refer Note. 6). Funding in excess of expenditure was carried forward to the subsequent year as unacquitted funds in the balance sheet.

f) Income tax

The Association has been exempted from income tax under Section 50-5 of the Income Tax Assessment Act 1997.

Notes to and forming part of the accounts for the year ending 30 June 2007 (continued)

			2007 \$		2006 \$
2) OTHER NATIO	ONAL OFFICE EXPENSES				
	Other National Office Expenses includes the	he following			
	Remuneration of Auditor for Audit	40.500		0.000	
	Services Remuneration of Auditor for Prior year	10,500 1,500		9,000 410	
	 Remuneration of Auditor for Prior year 	1,500	12,000	410	0.410
			12,000		9,410
	- Rental expense on operating lease		82,597		72,627
3) RECEIVABLE	9				
3) RECEIVABLE	Trade Debtors		142,862		30,327
	NEVDIS Subscriptions Receivables		560,069		152,918
	TVE V DIO Gubscriptions (Cocivables		300,003		102,010
		•	702,931	-	183,245
		•		-	
4) DOTARS – CO IN RESPECT (OMMONWEALTH FUNDING RECEIVED OF THE ABC				
	Specific Funding received for ABC				
	Secretariat	100,000			
	Less Expenditure Acquitted to Balance Date	(39,406)			
	Refundable to DOTARS		60,594		
	Specific Funding received for ABC Web Based Resource Centre Less Expenditure Acquitted to Balance Date	50,000			
	Unacquitted Funds carried over to next		00.540		
	year	:	36,510		
5) NTC FUNDING PROJECTS	FOR SPECIFIC JOINTLY FUNDED				
	Funding received	78,500			
	Less Expenditure incurred on jointly				
	funded projects	(87,154)			
	Project Funding by Austroads		(8,654)		
6) NEVDIS II					
	Income				
	Members' contributions		3,298,457		3,074,256
	Work Request Recoveries		6,303		-
	Transport SA extract charges		106,000		5,998
	Recalls		-		172,857
	DVS Project Income		277,083		66,600
	Interest Received		400,000		44,986
	T-1-11		60,276	-	0.007.007
	Total Income	:	4,148,119	=	3,364,697

Notes to and forming part of the accounts for the year ending 30 June 2007 (continued)

Expenditure		
Bank Charges	225	236
Fujitsu Upfront fees	-	-
Enhancements	66,407	184,685
AEC Project	167,148	4,024
Fujitsu DPX	31,328	29,796
Fujitsu Miscellaneous Upgrades	490,000	-
Fujitsu Recalls	7,582	63,208
Fujitsu Subscriptions	1,927,636	1,837,753
RTA NEVDIS Administration Unit	373,661	512,373
RTA NEVDIS Salary	607,600	671,423
Access to Registration Data	224,364	66,670
DVS Project	5,848	94,247
Transport SA extract charges	6,303	5,998
T-4-1 19		
Total expenditure	3,896,406	3,470,413
Net Surplus for the year	251,713	(105,716)
Amount Unexpended in prior year	558,635	664,351
Amount Unexpended transferred to		
Liabilities (Note 1e)	(810,348)	(558,635)
Net Surplus		

7) RECONCILIATION OF CASH

For the purposes of the Statement of Cash Flows, the Association considers cash to include cash on hand and at banks and short term investments. Cash at the end of the reporting period as shown in the Statement of Cash Flows is reconciled to the related items in the Balance Sheet as follows:

	5,210,787	3,877,517
Investments	2,519,111	1,763,132
Cash	2,691,676	2,114,385

8) RECONCILIATION OF NET CASH USED IN OPERATING ACTIVITIES TO OPERATING RESULTS

Net cash from operating activities	1,340,191	(316,497)
Increase/(Decrease) in Liabilities	2,237,584	(1,178,421)
Decrease/(Increase) in prepayments and other debtors	(17,083)	976,937
Decrease/(Increase) in trade debtors	(519,68)	224,184
Decrease/(Increase) in inventories	-	-
Net gain on disposal of plant and equipment	-	(275)
Depreciation	16,988	20,080
Operating Result	(377,612)	(359,002)

Statement by members of the Executive Committee

The Executive Committee has determined that Austroads Incorporated is not a reporting entity and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the Executive Committee, the attached financial report as set out on pages 47 to 53:

- 1. Present fairly the financial position of Austroads Incorporated as at 30 June 2007 and its performance for the year ended on that date.
- 2. At the date of this statement, there are reasonable grounds to believe that Austroads Incorporated will be able to pay its debts as and when they fall due.

This statement is made in accordance with a resolution of the Executive Committee and is signed for and on behalf of the Committee by:

Murray Kidnie Executive Director Menno Henneveld Chairman

h Herral

Dated in Sydney this 5th day of October 2007.

Independent audit report to the members of Austroads Incorporated

Report on the Financial Report

We have audited the accompanying financial report, being a special purpose financial report, of Austroads Incorporated. (the association), which comprises the balance sheet as at 30 June 2007, and the income statement, statement of cashflows, a summary of significant accounting policies, other explanatory notes and the statement by members of the committee.

Executive Committee's Responsibility for the Financial Report

The Executive Committee of the association is responsible for the preparation and fair presentation of the financial report and have determined that the accounting policies described in Note 1 to the financial statements, which form part of the financial report, are consistent with the financial reporting requirements of the Associations Incorporation Act [NSW] and are appropriate to meet the needs of the members. The Executive Committee's responsibilities also include establishing and maintaining internal control relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial report based on our audit. No opinion is expressed as to whether the accounting policies used, as described in Note 1, are appropriate to meet the needs of the members. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the committee, as well as evaluating the overall presentation of the financial report.

The financial report has been prepared for distribution to members for the purpose of fulfilling the committee's financial reporting under the Associations Incorporation Act [NSW]. We disclaim any assumption of responsibility for any reliance on this report or on the financial report to which it relates to any person other than the members, or for any purpose other that that for which it was prepared.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independence

In conducting our audit, we have complied with the independence requirements of Australian professional ethical pronouncements.

Auditor's Opinion

In our opinion, the financial report of Austroads Incorporated presents fairly, in all material respects the financial position of Austroads Incorporated as of 30 June 2007 and of its financial performance for the year then ended in accordance with the accounting policies described in Note 1 to the financial statements.

MOORE STEPHENS SYDNEY Chartered Accountants

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S. Tzannes Partner

Address: Level 7, 20 Hunter Street, Sydney NSW 2001

Dated in Sydney this 5th day of October 2007.