

Austroads

ANNUAL REPORT 2011



Austroads Ltd Annual Report 2010-11

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CHAIRMAN'S MESSAGE

Gary Liddle
Chief Executive
VicRoads



The 2010-11 financial year was one of change and challenge. In recent times there have been major institutional transformations across the country with road agencies being incorporated into broader transport structures. There has also continued to be a high level of activity and reform at a national level. It is important that Austroads positions itself to contribute to these reforms, ensuring it continues to provide value for its members, the broader road industry and road users.

We have commenced development of a new strategic plan for Austroads for 2012-2016. The new plan will reflect this changing landscape, with new strategic priorities and greater emphasis on leadership, relationships and customer service as well as the operational side of road agency activities. We believe Austroads has an important role to play and that the new plan will deliver positive outcomes.

The Decade of Action for Road Safety 2011-2020 was launched globally in May 2011 by the United Nations. This initiative with a decade long focus highlights the "goal to stabilise and then reduce the forecast level of road traffic fatalities around the world by increasing activities conducted at the national, regional and global levels". Austroads, through its member organisations and programs, is fully supportive of this Decade of Action and has endorsed a range of initiatives both nationally and throughout the Asia Pacific region and will continue to drive the road safety message throughout the decade and beyond.

During the year, the strong working relationship between Austroads and ARRB continued. Austroads engaged KPMG to bring a better understanding of this partnership and ways to further enhance and create a more efficient and beneficial environment. The review is now complete and steps are being implemented currently for both parties to embark on this new partnership heading into the future.

Austroads publications are an important resource to members and the road industry generally. They are highly regarded for their technical content, particularly the Austroads guides which are accepted by road agencies as the authoritative reference. We have been keen to ensure that they are widely and easily available. In October 2010, Austroads moved to a new service provider for its publications website which has resulted in a higher quality product and a reduction of all guide prices.

We have also reviewed our future publications strategy. Arrangements are now in place to ensure that Austroads guides are up to date and reflect the latest in technical developments and knowledge. This approach is expected to result in more frequent updates. Consequently, there will be increasing emphasis on promoting access to publications electronically so that users always have access to the current version. We recognise that users are increasingly using smart phones and other hand-held electronic devices to access this information. Austroads will also continue to make hardcopies of the guides available for those who prefer this means of accessing the information.

Austroads has also continued its involvement with international road organisations and the World Road Association in particular. The Association's Executive Committee met in Perth in April, hosted by Main Roads WA. This event was a great success and an opportunity to further extend and consolidate our international relationships and standing. Austroads will be coordinating a delegation from Australia and New Zealand to the World Road Congress in Mexico in September 2011.

A handwritten signature in black ink, appearing to read "Gary Liddle". The signature is fluid and cursive, written over a light grey horizontal line.

ABOUT AUSTRROADS

PURPOSE

Austrroads' purpose is to:

- promote improved Australian and New Zealand transport outcomes
- provide expert technical input to national policy development on road and road transport issues
- promote improved practice and capability by road agencies
- promote consistency in road and road agency operations.

MEMBERSHIP

Austrroads' membership comprises the six state and two territory road transport and traffic authorities, the Commonwealth Department of Infrastructure and Transport, the Australian Local Government Association, and New Zealand Transport Agency. Its eleven members are:

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

GOVERNANCE

Austrroads Ltd is a company limited by guarantee under the *Corporations Act 2001*. Austrroads is governed by a Board comprised of directors. There is currently one director from each member organisation. They are the chief executive or a senior executive officer of their organisation.

The Austrroads national office, based in Sydney, provides secretariat support to the Board. The Chief Executive is the Secretary of Austrroads Ltd. There is also an Executive Committee.

WHAT AUSTRROADS DOES

Conducts strategic research - by undertaking projects with assist road agencies to address current and emerging issues that have the potential to have a major impact on their operation.

Develops guides – by establishing national consistency on technical and operational aspects of road networks for adoption by road agencies.

Facilitates the sharing of knowledge – by promoting the wide dissemination of outputs and technology, conducting seminars, and promoting the use of Austrroads work.

Conducts business activities on behalf of Australasian road authorities.

Fosters international involvement – by engaging with and supporting international road organisations.

MAKING IT HAPPEN

Austrroads work is driven by its Strategic Plan. The current Strategic Plan covers the five year period 2007 to 2012. A new strategic plan to cover 2012 to 2016 is being developed. While it will commence in July 2012 it is already guiding the development of the forward work program.

Austrroads utilises the expertise of its member organisations to achieve its outcomes and therefore staff of member organisations participate in the operation of Austrroads. This encourages a collegiate, collaborative approach and facilitates learning, development, sharing and a high level of consistency across jurisdictions. The primary players are the program managers, task forces, review panels and the national office.

Program managers are responsible for the development and management of annual work programs and report to the Board.

Task forces identify areas of interest and develop project proposals, oversee projects, promote the dissemination of results and provide a forum for the exchange of information between Austrroads' member and related organisations. Review panels oversee the development of Austrroads' guides.

RELATIONS WITH OTHER ORGANISATIONS

Austrroads' most important relationships are with its member organisations. The resources and expertise contained in member organisations are drawn on extensively. However, Austrroads also works closely with other organisations in the road industry and specifically with the ARRB Group, the National Transport Commission and the Bureau of Infrastructure, Transport and Regional and Economics, which are observers at Austrroads' Board meetings.

Each program has a strategy for the engagement of external stakeholders and makes provision for their involvement on a project by project basis. It is important to note however that primary engagement with external stakeholder organisations is generally undertaken by member organisations.

AUSTROADS PERFORMANCE INDICATORS

The collection of performance information enables Austrroads members to benchmark themselves at both a national and international level as part of the overall Austrroads' goal to identify and implement world best practice in the management of roads. The result is performance measures in the following areas:

- road safety
- asset management
- program and project assessment
- travel speed and productivity
- user satisfaction.

MEMBER SATISFACTION

Surveys are undertaken of Austrroads Board members, a cross section of staff from member organisations and key external stakeholders, to establish their level of satisfaction with Austrroads' performance on several key aspects of its operations, including:

- collaboration
- research
- publications
- professional development
- value for money
- overall performance.

STATUS OF AUSTRROADS WORK PROGRAM

Austrroads performance is also measured through the delivery of the work program. Austrroads tracks all projects and reports to the Board on the progress. There were 137 projects approved in the 2010-11 work program, with 98 projects continuing from previous financial years and 39 new projects starting in 2010-11. There were 28 projects scheduled for completion by 30 June 2011. Two were completed by that date.

During 2010-11 a total of 47 projects were completed and one cancelled. At 30 June 2011 there were no projects which were overdue by more than 12 months and nine by more than six months.

Table 1 provides a comparison of work program status figures as at 30 June for the last four financial years.

In 2011-12, 89 projects will carry over from 2010-11 and there will be 43 new projects making a total of 132.

Table 1 — Status of Austrroads work program

	Completed	Cancelled or Deferred	More than 12 months late	Between 6 and 12 months late	Other projects	Total
2007-08	41	10	3	8	82	144
2008-09	68	7	1	4	77	157
2009-10	39	0	1	3	94	137
2010-11	47	1	0	9	80	137

WORK PROGRAM EXPENDITURE

Total expenditure for the 2010-11 work program was \$9.34 million. Table 2 provides a breakdown of the expenditure by program:

**Table 2 — Work program expenditure by program
(Amount \$'000s)**

Program	Total
Assets	1,698
Capability	3
Freight	714
Network	1,526
Registration & Licensing	373
Safety	1,657
Technology	3,373
Total	9,344

More details on program expenditure are contained in the financial statements on pages 49-56.

DIRECTORS OF AUSTROADS LTD

Gary Liddle

BEng(Civil), GradDipMgt

Age: 58

Chairperson

Mr Liddle is the Chief Executive of VicRoads. He was appointed as Chairperson at the inaugural meeting of the Board of Austroads Ltd in October 2009.

He is Chair of the Austroads Executive Committee.

Mr Liddle is a Director of ARRB Group Ltd and a board member of the Linking Melbourne Authority. He is also the Chairman of the Australian Chapter of the Road Engineering Association of Asia and Australasia (REAAA) and a member of the REAAA Governing Council.



Michael Bushby

BE, MEng, BBus, MIE(Aust), FAICD

Age: 52

Deputy Chairperson

Mr Bushby was appointed as Deputy Chair at the inaugural meeting of the Board of Austroads Ltd in October 2009. He is a member of the Austroads Executive Committee.

Mr Bushby is a Director of ARRB Group Ltd.

Mr Bushby has been Chief Executive of the Roads and Traffic Authority (RTA) since February 2009.

After various roles in construction, maintenance and road asset management in Tasmania, he moved to NSW in 1998 to take up the role of General Manager Infrastructure Maintenance. After six years in this role, Mr Bushby was appointed as Director Road Safety, Licensing and Vehicle Management.

Following the refocussing of the RTA in 2006, Mr Bushby was appointed as Director Network Management responsible for long term network planning, maintenance and traffic management for the NSW road network.



Adrian Beresford-Wylie

BA(Hons) LLB

Age: 52

Mr Beresford-Wylie is the Chief Executive Officer of the Australian Local Government Association (ALGA). He took up that position in May 2006.

Prior to his appointment to ALGA Mr Beresford-Wylie was a senior public servant in the Australian Public Service and headed the area dealing with local government and natural disasters in the Federal Department of Transport and Regional Services. Other roles include head of the road safety area of the Australian Transport Safety Bureau in 2000-2002.

Mr Beresford-Wylie was the advisor on maritime and land transport issues to the Hon John Anderson MP, Deputy Prime Minister and Minister for Transport and Regional Services.

He began his public service career in 1984 as a Foreign Affairs Officer with the Department of Foreign affairs. He has also worked in corporate sales in Telstra and for a large law firm in Sydney.



Colin Crampton

BEng (Hons), GradDipAdmin, CPEng, M, IPENZ

Age: 49

Mr Crampton is a member of the Austroads Executive Committee.

He is a Group Manager with the New Zealand Transport Agency responsible for the operation and improvement of the state highway network. Mr Crampton is a civil engineer with some 20 years experience in the transport sector.

Mr Crampton is interested in the practice of general management and the leadership of people and likes to maintain currency around procurement practice.



Graham Fraine

B Psych (Hons) Phd.

Age: 43

Mr Fraine is the Acting Deputy Director-General, Policy and Planning, Department of Transport and Main Roads Queensland.

He is responsible for the Department of Transport and Main Roads strategic policy development, integrated transport planning, road safety and system management, rail, ports and freight, and passenger transport.

He has worked in transport policy for 17 years, including in the fields of road safety, behaviour change and program evaluation, and national transport policy reform. He previously led the Department of Transport and Main Roads strategic policy agenda as General Manager (Strategic Policy). In this role he was responsible for ensuring the department undertook an integrated approach to policy development to ensure the delivery of government priorities and departmental policy programs. Key initiatives included development of the National Reform agenda, the Regional Safety and Development Fund for local government and establishing the Office of Sustainable Transport.

When he led the former Queensland Transport's road safety policy area, he managed development and implementation of the *Queensland Road Safety Strategy 2004–11* and the department's response to Parliamentary Travelsafe Committee inquiries on the safety of young drivers and fatigue-related crashes.

Mr Fraine has a Bachelor degree and PhD in Psychology, the latter based in the field of transport psychology. He is currently a visiting fellow at the Centre for Accident Research and Road Safety at the Queensland University of Technology.

Mr Fraine commenced as director on 10 January 2011.



Tony Gill

BSc(Eng)

Age: 53

Mr Gill is Director Roads in the ACT's Department of Territory and Municipal Services.

Prior to his current role Mr Gill held various positions with the Department, covering traffic management and road maintenance responsibilities. He also worked for three years with private consultant engineers Scott and Furphy from 1985 to 1988 and prior to this as a graduate Engineer with Dublin County Council, Ireland for four years.



Menno Henneveld

BEng(Civil), GradDipAdmin, FIEAust, FATSE, FAICD, CMCILT, AAIM

Age: 65

Mr Henneveld is Chairman of the Australian and New Zealand National Committee of the World Road Association and in 2006 he was appointed Australia's First Delegate to the WRA where he is currently a member of the Executive Committee and Chairman of the Communications and International Relations Commission.



Mr Henneveld had a 38 year career in the water industry before his appointment as Commissioner of Main Roads in WA in December 2002. He assumed the title of Managing Director of Main Roads following the new arrangements for the Transport Portfolio taking effect on 3 May 2010.

Mr Henneveld is a Fellow of Engineers Australia; the Australian Academy of Technological Sciences and Engineering which was awarded in recognition of his 43 years of public service in the water and road transport industries; the Australian Institute of Company Directors; the Customer Service Institute of Australia and the Chartered Institute of Logistics and Transport. He is also a member of the National Engineers Registration Board, the ROADS Foundation and the Planning and Transport Research Centre. More recently, he was appointed the Chair of the National Heavy Vehicle Regulator Project Board.

Andrew Milazzo

BEng(Hons), MEng(Civil), MIE(Aust), MIHT, CPEng

Age: 55

Mr Milazzo is currently the Executive Director of Transport Services Division in the South Australian Department for Transport, Energy and Infrastructure (DTEI).



He joined the Highways Department (a predecessor of DTEI) as a civil engineering Scholarship holder in 1976.

Prior to his current role, he held various positions in DTEI including Director Sustainable Transport, General Manager Transport Policy and Planning, Regional Manager Metropolitan and Manager Strategic Investment Planning. In 1990-91 he was Australia's International Road Federation Fellow when he worked and studied at the Texas Transportation Institute and Texas A&M University.

Sharron Noske

MIM, GDHlthProm, BEd

Age: 49

Ms Noske has held senior positions across the Northern Territory public sector since 1988, including Deputy Chief Executive Strategic Policy and Futures with Department of Education and Training and Executive Director Strategic Services in the Department of the Chief Minister.



Ms Noske joined the Department of Lands and Planning in early 2010 as the Executive Director Strategic Planning to oversee the planning for the new City of Weddell. In February 2011, Ms Noske moved to the Transport Group as the Executive Director, with responsibility for the road network, transport assets, transport services and policy reform.

Ms Noske commenced as a director on 1 December 2010.

Leslie Riggs

BSc

Age: 57

Ms Riggs is a member of the Austroads Executive Committee.

Ms Riggs is currently an Executive Director in the Department of Infrastructure and Transport. Her most recent role in the Department involved overseeing the Commonwealth's involvement in all surface transport (road, rail and maritime) policy and regulatory dimensions including priority transport regulatory and pricing reforms agreed by the Council of Australian Governments.

Previously (mid 2005 – early 2008), Ms Riggs was Executive Director, AusLink, working with the state and territory governments and the Australian Rail Track Corporation in planning for the National Land Transport Network and administering investments on the AusLink Network for the Australian Government and in regional land transport and black spot (road safety) programs.

Ms Riggs joined the then Department of Transport and Regional Services in January 2003 as the Executive Director, Regional services.

Ms Riggs has 22 years senior executive experience in public administration: designing policy and regulation and implementing and managing programs, in subject matter as diverse as schools, training, workplace relations and employment services as well as regional services and transport. She is a career public servant originally from rural Australia, with qualifications in pure mathematics, statistics and management.



Peter Todd

BEng(Civil)(Hons), MBA

Age: 54

Mr Todd has more than 30 years experience in road transport engineering. He has worked in both South Australia and Tasmania and has experience in road planning, bridge design, materials engineering, pavement management, asset management and field operations.

Currently he is the General Manager of the Roads and Traffic Division in the Tasmanian Department of Infrastructure, Energy and Resources. He has responsibility for leading the Division in the planning, development, management and operation of the State road network.



Marj Morrissey

BA, GradDipHRMg, GradDipEd, FAICD

Age: 56

Ms Morrissey was Executive Director, Transport with the Northern Territory Government with responsibility for the road network, transport assets, transport policy, and transport services. She was appointed as a director at the inaugural meeting of the Board of Austroads Ltd in October 2009 and continued until 30 November 2010.

Alan Tesch

BEc(Hons) M. AustIICD, MFTA, MFEIAust., MESAust

Age 53

Mr Tesch was Associate Director-General of the Queensland Department of Transport and Main Roads. He was appointed as a director at the inaugural meeting of the Board of Austroads Ltd in October 2009 and continued until 10 January 2011.

OBSERVERS

Observer organisation	Representative
ARRB Group Ltd	Gerard Waldron — Managing Director
National Transport Commission	Nick Dimopoulos — Chief Executive
Bureau of Infrastructure, Transport and Regional Economics	Dr Gary Dolman — Head of Bureau
Department of Transport and Civil Aviation Papua New Guinea	Henry Parakei — Secretary

PROGRAM STRUCTURE

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

As at 30 June 2011, there were seven programs. The programs, their objectives and the designated program manager and their member organisation were as follows:

Program	Objective	Program Manager
Assets	To minimise the whole of life cost of road and bridge assets to meet the transport task	Kathryn Martin — MR WA
Capability	To assist members in developing and maintaining sustainable levels of capability	Peter Mitchem — VicRoads
Freight	To address the future freight task	Nial Finnegan — VicRoads
Network	To improve the productivity and reliability of the road network in moving people and goods	Duncan Elliott — VicRoads
Registration & Licensing	To improve the security and integrity of registration and licensing systems and promote national consistency	Martin Small — DTEI SA
Safety	To reduce road trauma through a safe systems approach	Jon Douglas — DTMR Qld
Technology	To promote best practice in technology	Chris Harrison — RTA NSW

PROGRAM MANAGERS AND SUPPORT STAFF

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

They work on Austrroads activities for a proportion of their time in addition to their regular responsibilities within their own organisation. This is formally recognised in an agreement between Austrroads, their chief executive and themselves. Austrroads does not reimburse the member organisation for the time the program manager spends on Austrroads activities, but contributes towards the costs associated with the management of the program.

Each program manager is supported by a program assistant. Program assistants provide administrative support and advice to the program manager in the execution of their Austrroads responsibilities.

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 Austrroads 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 the Registration and Licensing task force where, in jurisdictions that the member organisation does not have responsibility for that function, the task force member comes from the organisation responsible for that area.

External stakeholders may be 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 and maintenance of each of the Austroads guides. In the case of the Safety and Assets guides, 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

Kathryn Martin
Acting Director Portfolio Investment Coordination
Department of Transport Western Australia



PROGRAM SUPPORT

Natalie Lockwood
Civil Engineer
Main Roads Western Australia

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.

In 2010-11, this research focussed on:

- understanding network wear and cost implications of incremental load increases on axle groups
- improving asset management decision making capabilities
- promoting best practice in asset management through the maintenance of the Austroads Guide to Asset Management.

HIGHLIGHTS FOR THE YEAR

The Assets program has developed a significant and structured program comprising projects which address the assets strategy.

A large modelling project to develop decision tools to assist road authorities to determine the short and long run marginal costs of road wear and the condition impact of increases in axle loads on the sealed road network (AT1394) was undertaken in conjunction with the National Transport Commission, and will provide significant inputs to the COAG Road Reform Plan.

A project to quantify the relationships between dynamic wheel loading and pavement wear effects (AT1480) has developed a low-cost tool for measuring wheel loads as well as providing an improved understanding of the relationships between dynamic loading and pavement roughness, horizontal curvature and vehicle configurations as well as an improved understanding of other causal relationships (suspensions, tyres, speed and road geometry).

A project providing guidance on the management and analysis of weigh-in-motion (WIM) data (AT1482) has provided a suite of documents and a website to assist WIM practitioners to establish national best practice guidelines and share knowledge on current topics such as WIM technologies, installation, calibration, data processing and reporting.

Collaborative work (AT1613) between RTA NSW, TMR Qld, ARRB and Austroads provided a unique opportunity to develop an independent national perspective on the applicability of the Traffic Speed Deflectograph to Australian conditions and practices.

The program designed an approach for developing agency specific skid resistance management policies. This project also provided guidance on levels of testing, setting investigatory levels and site investigations.

The Assets task force met three times during the year, meeting in Melbourne in conjunction with the ARRB Conference, holding a joint meeting with the Bridge Technology Review Panel in Brisbane and following their meeting in Auckland, undertook a site visit to the Auckland Motorways office.

EMERGING TOPICS

The Assets program continues to have a strong focus on minimising the whole of life cost of road and bridge assets. The program of research for 2011-12 will complete the objectives of the 2007-12 strategic plan.

The four challenging research topics being scoped for the 2012-16 strategic plan include:

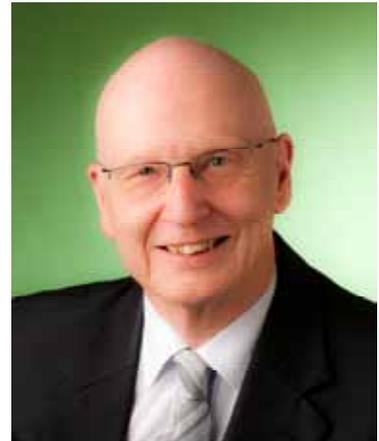
- integrating customer defined levels of service into asset management practice
- defining the relationships between road surface characteristics and road safety
- quantifying road and bridge wear under increased loads
- managing constraints and the utilisation of opportunities for improved asset management practice in a changing environment.

The Guide to Asset Management will continue to be reviewed and updated incorporating user feedback, best practice and new research.

CAPABILITY

PROGRAM MANAGER

Peter Mitchem
Executive Director Technical and Information Services
VicRoads



PROGRAM SUPPORT

Julie Cooper
Austroads Program Assistant
VicRoads

PROGRAM OVERVIEW

The Capability task force was formed to address skill/competency shortages facing agencies across Australia and New Zealand, with particular emphasis on road industry related technical capability.

The role of the task force is to:

- Provide a forum for the exchange of information on capability development and skill shortages between Austroads member and related organisations.
- Identify successful initiatives and facilitate the sharing of related information for matters such as workforce planning, attraction and retention of staff with specialist technical skills, and ongoing development of staff.
- Identify areas where a national approach is required and develop appropriate action proposals.

The program focuses on the following areas:

- Identify a national workforce capability strategy.
- Best practice approaches for road authorities in addressing skill shortages and building capability.
- Review of tertiary specialist technical courses and options for the development and delivery of post graduate courses to meet the specific needs of road authorities.

HIGHLIGHTS FOR THE YEAR

One highlight was the publication of the Workforce Capability Analysis Update 2008-2009, undertaken by BIS Shrapnel. This report provides an analysis nationally and by jurisdiction of the estimated demand for specialist engineering skills for road projects over the decade to 2019. It also provides a snapshot of the supply of skills to meet the expected demand. The study forecasts a significant shortage of capability for the road sector from the middle of the decade, peaking in 2018-2019. The task force has engaged widely on this issue with private sector consultants, tertiary institutions and others in the road sector such as Roads Australia to raise awareness and to seek innovative ways of mitigating the expected skills gap.

A report on Professional Development – Post graduate Development Requirements Phase 3 – Road Engineering was finalised. This study reviewed tertiary engineering courses against core skill requirements of road agencies and identified a number of gaps. Recommendations include the development of study units to fill these gaps, together with possible delivery channels and the potential establishment of a degree in road engineering.

The National Skills Marketing Plan has continued. This is targeted at engineering undergraduates in particular, and encourages them to seek a career in road engineering. Advertising focuses around the theme “Use your powers for good”. Promotion has been shifted towards the use of online channels and data shows access at levels at least equal to independently established benchmarks. The task force continues to promote the exchange of information, ideas and approaches to retaining and building technical capability in our agencies. This has included the use of social media as a forum for dialogue and knowledge sharing for specialist groups.

EMERGING TOPICS

There is a heightened interest and growing level of data relating to the availability of core technical skills for the road sector in the future. Roads Australia has a keen interest in this topic and the release of the Australian National Engineering Taskforce (ANET) report, undertaken by the Association of Professional Engineers, Scientists and Managers Australia (APESMA) and funded by the federal government, has augmented the BIS Shrapnel review and underscored key factors in skill shortages. These include significant social and demographic factors such as low female participation in the engineering profession, the changing ethnic composition of the workforce, and questions around the content of courses, the quality of providers, and the need for greater industry participation in setting and supporting courses.

Road agencies must continue to play a lead role in engaging with the sector on resolving these issues.

Competing industries and an ageing workforce are contributing to the growing difficulty in attracting and retaining skilled people in remote areas. A study reviewing practices across a number of sectors and within individual agencies has commenced and it is expected that the findings of this review will provide agencies with significant guidance in retaining suitable capability in remote locations.

FREIGHT

PROGRAM MANAGER

Nial Finegan
Regional Director Metropolitan North West
VicRoads



PROGRAM SUPPORT

Julie Cooper
Austroads Program Assistant
VicRoads

PROGRAM OVERVIEW

In 2010-11 the freight program was focused on improving the delivery of the on-road freight task as part of an integrated transport system.

The program focused 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
- support capability in compliance and enforcement in line with the move towards a National Heavy Vehicle Regulator.

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 and the Australian Transport Council (ATC) National Transport Policy Framework both impact significantly on national freight operations. 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.

HIGHLIGHTS FOR THE YEAR

The task force made two significant inputs to the national agenda with the publication of FS1409 and FS1412.

- FS1409 Feasibility Study – Freight Data and Business Systems. This work provided significant operational and technical insight on the freight task to the COAG Road Reform Plan. The task force worked to ensure the report was available to support national consultation on road pricing led by COAG Road Reform Plan (CRRP) and National Transport Commission (NTC).
- FS1412 Speed and Fatigue Management – Development of a Performance Based Specification – This work has facilitated Transport Certification Australia's operational pilot of electronic work diaries.

2010 also saw the publication of two reports aimed at improving understanding of the freight task and access issues.

- AP- R367-10 Guidelines for Assessing Heavy Vehicle Access to Local Roads
- AP-R376-11 Impact of Light Commercial Vehicles / Rigid Trucks in Urban Networks Scoping Study

Significant progress was made on assessing the feasibility of developing a bridge assessment tool for determining access for High Productivity Freight Vehicles (FS1580).

EMERGING TOPICS

The task force will continue to work on projects that support transition to the National Heavy Vehicle Regulator by delivering a framework for the “Competency and Capability Development of Road Transport Regulators” (FS1582) and “Harmonisation of Pilot and Escort Vehicle Driver Requirements” (FS1701).

NETWORK

PROGRAM MANAGER

Duncan Elliott
Regional Director Metro South East
VicRoads



PROGRAM SUPPORT

Heather Bishop
Austroads Program Assistant
VicRoads

PROGRAM OVERVIEW

In 2010-11, the objective of the Network program was to focus research on improving the productivity and reliability of the road network in moving people and goods. The work of the program was focussed on delivering outcomes that support the following strategic priorities:

- Managing traffic control through a network approach by:
 - investigating analytical tools that manage the network
 - investigating the information that is provided to the network user
 - consideration as to the network needs in the future.
- Supporting sustainable transport modes through:
 - strategy development
 - review of network operations for different modes.
- Managing demand by all user groups including:
 - vehicle users
 - freight
 - rail
 - cyclists
 - pedestrians.
- Leading strategic technical developments:
 - Cooperative ITS
 - passive and active solutions to network/safety concerns.

This was done through the Network task force, Traffic Management review panel, Cooperative ITS steering committee, System Managers working group and Australian Bicycle Council. Further information about the Australian Bicycle Council can be found on page 22.

HIGHLIGHTS FOR THE YEAR

The Network program has had a number of highlights for the year including the delivery of a large program of work, including 14 completed projects of which 10 are published, continued dissemination of the Guide to Traffic Management, significant steps forward in the Cooperative ITS arena and continued work to harmonise practices.

Completed Projects:

The Network projects completed in 2010-11 covered the broad areas of network congestion and management, accessibility measures, cycling and alternative vehicles, and the use of ITS to support the above. The following are snapshots of five of the major projects delivered in 2010-11.

NS1632 – Cooperative ITS

While this project is ongoing it has progressed and utilised the work completed under NS1415 to deliver a draft Strategic Plan for the introduction of 5.9 GHz Cooperative ITS into Australia.

NS1435 - Effectiveness and selection of intersection treatments for cyclists

The purpose of this project was to provide an assessment of the safety impacts of providing cycle facilities on the road network, with a view to determining which (if any) treatments provide better outcomes than others.

The key findings of the project included:

- The overall effect of cycle lanes was neutral and the safety outcome depended on the standard to which the lanes were constructed.
- The total space available at a wider kerbside approach lane, or the total width of cycle lane and adjoining traffic lane, is more important for safety than whether a cycle lane is marked within the available space.
- Cycle lane width had varying impact depending on crash type.
- The provision of coloured cycle facilities result in substantially safer outcomes.
- Sites with shared left-turn and through lanes have higher initial crash rates. This report indicates that they may benefit from coloured cycle lanes and advanced storage boxes.
- Sites with exclusive left turn lanes are much safer for cyclists than those with a shared through and left turning lane. Any cycle lanes provided need to use colour from the transition across the diverge area to the limit line.
- Deep intersection distances appear to increase right turn against crashes and reduce crossing crashes.
- The overall benefits of providing advanced storage, could not be separated due to correlations. However for treated sites greater storage depth (up to 4 metres) was clearly beneficial.

NS1510 - Traffic Signal Controller – Functional Specification

The proposed output of this project was to start the development of a functional specification of an Enhanced Australian Traffic Signal Controller. The outputs to date have included:

- A traffic or logical architecture for the controller utilising switches and control modules.
- A framework for the application of key Australian Standards for the specification of the safety integrity levels.

NS1520 – Comparative studies of location and communication technologies including cellular phones, GPS, wireless mesh and others

The purpose of this project is to:

- Conduct comparative studies of current and future wide area network (WAN) and local area network (LAN) communication technologies to support ITS networks.
- Produce recommendations regarding appropriate WAN and LAN technologies that are able to provide road agency ITS networks with the ability to support efficient and safe vehicle movements.

The outputs to date have included:

- Providing road authorities with background information on the current available technologies.
- Identifying the need to work closely with NBN Co on the roll-out of the NBN to minimise the possible disruptions in the event of a shut down of the copper networks.
- Identifying the need to consider the impact of a change in internet protocols.

NS1586 - Application of Accessibility Measures

Project NS1516 – Development of Accessibility Measures developed a new method of measuring accessibility. NS1586 took the information delivered in NS1516 and reviewed it against other three other accessibility measures to review their ability to provide an accurate measure of accessibility using car, public transport, cycling and walking as modes of transport.

Knowledge Sharing

The Network program in partnership with ARRB also had a large program of dissemination for both projects and the Guide to Traffic Management. Over 30 information sessions were run during 2010-11 on the various projects and Guide to Traffic Management or its parts, which is assisting road authorities.

EMERGING TOPICS

As with previous years, the Network program continues to have a strong focus on managing the road network and its performance for all users, and leading strategic technical developments in ITS.

2011-12 and beyond will see continued research in the strategic areas of network management with themes including:

- The use of technology to improve the management of the network:
 - Cooperative ITS
 - harmonisation and continued development in the use of new equipment
 - the next stage in the development of a functional specification for an enhanced Australian Traffic Signal controller
 - development of national reference architectures and standards for the use of ITS.
- Strategic Review, including support of the development of the new Austroads Strategic Plan.
- Commencing the review of the Guide to Traffic Management to incorporate user feedback, best practice and new research.

AUSTRALIAN BICYCLE COUNCIL

The Australian Bicycle Council (ABC) oversees and coordinates implementation of the Australian National Cycling Strategy 2011-16. The ABC provides a forum for the sharing of information between stakeholders involved in implementing the Strategy and maintains a repository of information and resources relevant to providing for and promoting increased cycling in Australia.

The ABC met in August and November 2010 and March 2011.

The approval by Australian Transport Ministers of the National Cycling Strategy 2011-16 was a major achievement. The Strategy aims to double the number of people cycling in Australia by 2016. The Strategy has six key priorities and objectives.

- Cycling promotion: promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity.
- Infrastructure and facilities: create a comprehensive and continuous network of safe and attractive routes to cycle and end-of-trip facilities.
- Integrated planning: consider and address cycling needs in all relevant transport and land use planning activities.
- Safety: enable people to cycle safely.
- Monitoring and evaluation: improve monitoring and evaluation of cycling programs and develop a national decision-making process for investment in cycling.
- Guidance and best practice: support the development of nationally consistent guidance for stakeholders to use and share best practice across jurisdictions.

During the year the ABC developed a survey to provide reliable data on cycling participation. It is the first time that a national survey of this kind has been carried out.

Key findings from the survey were:

- 17.8% of the Australian population had ridden in the previous week and 39.6% had ridden at least once in the previous year.
- Young children have the highest levels of cycling participation: 46.2% of 2 to 4 year old children had ridden in the previous week, increasing to 63.0% of 5 to 9 year olds and decreasing to 33.6% of 10 to 17 year olds.
- Males are more likely to participate in cycling than females: 22.1% of males and 13.5% of females had ridden in the previous week.
- The average Australian household has 1.46 bicycles in working order, although 44.3% of households do not have any bicycles in working order.

The results of the survey provide the baseline against which performance towards the goals of the National Cycling Strategy will be evaluated.

The Cycling Resource Centre (CRC), funded by Department of Infrastructure and Transport (DoIT), is a web-based hub of utility and recreational cycling information. The site is managed by the ABC and is designed to provide high quality information resources about bicycle infrastructure, planning, encouragement, education, safety and funding. In 2010-11 the CRC had just over 30,000 visitors; 71% were from Australia and just under two per cent were from New Zealand. The site was redeveloped at the end of 2010 to improve flexibility and functionality.

The ABC and the Australian Local Government Association (ALGA) continue to work together to help local government to provide a more integrated sustainable transport network, via the CRC and the ABC Local Government Cycling Network.

During the year the ABC and ALGA surveyed local governments across Australia to assess their level of commitment to encouraging cycling within their local area. This survey was first carried out in March 2007, and provided a 'snap shot' of the existing cycling infrastructure, services and programs across Australian local government. The results of the 2011 survey will be published in October.

The secretariat to the ABC is provided by the Austroads national office with funding from DoIT.

REGISTRATION AND LICENSING

PROGRAM MANAGER

Martin Small
Director, Safety and Regulation Division
Department for Transport, Energy and Infrastructure
South Australia
(Phil Allan from DTEI SA was Program Manager until 16 June 2011)



PROGRAM SUPPORT

Jane Fitzgerald
Program Coordinator
Registration and Licensing Task Force

PROGRAM OVERVIEW

The primary aim of the Registration and Licensing 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. In the 2010-11 program the task force has focused on developing national frameworks and policies in the areas of heavy vehicle and motorcycle instructor training and assessment standards, multi-combination driver training and alternative vehicles. A specific focus has also been on overseas drivers including the requirements for permanent and temporary visa holders, recognised and non-recognised countries and the recognition process.

The task force provides strategic direction for the on-going operation and enhancement of the National Exchange of Vehicle and Driver Information System (NEVDIS) which provides for real time access to, and exchange of, driver and vehicle information between state and territories in Australia. Further information about NEVDIS can be found on page 25.

HIGHLIGHTS FOR THE YEAR

In 2010-11 the Registration and Licensing program undertook and completed the following projects:

- RS1638 Consistent Policy on Alternative Vehicles
- RS1464 Multi-Jurisdictional Facial Recognition
- RS1639 Review of Overseas Driver Licensing
- RS1578 National Review of Multi-Combination Driver Training Scheme
- RS1637 Harmonisation Study
- RS1461 Feasibility of Implementing a Smart Registration/Smart Plate and Future Parameters regarding ANPR
- RS1458 National Review of Heavy Vehicle and Motorcycle Instructor Training and Assessment Standards
- RS1460 Enhancement of Assessing Fitness to Drive Procedures
- RS1342 National Recognition of Road Worthiness Procedures.

Highlights for the 2010-11 period include:

- The development and implementation of a new assessment form, criteria and process for recognising overseas driver licences.
- The development of a competency framework for heavy vehicle drivers which was endorsed by the Standing Committee on Transport.
- Working with the National Motor Vehicle Theft Reduction Council to develop updated criteria for statutory and repairable write-off vehicles and a set of best practice principles to guide the development of more consistent and robust vehicle identity and safety inspection arrangements for the management of written-offs.

The Austroads Young Professionals Study Tour visited transport agencies in both the United States of America and across Europe. Key topics covered and learnings from the tour include facial image exchange systems, document examiner devices, standardised and centralised issue of driver's licences, commercialisation of data, continuous registration, driving simulators and novice driver training programs.

EMERGING TOPICS

Harmonisation and the development and application of consistent policies across Australian jurisdictions will continue to be a strong theme in the years to come with the aim being to strengthen national driver licensing and vehicle registration frameworks.

Emerging topics for the 2011-12 program include:

- Harmonisation of high powered vehicle restrictions for P plate drivers. The task force will continue to work with the Federal Chamber of Automotive Industries to enable the easy identification of high powered vehicles in the future.
- A detailed framework for power assisted pedal cycles, including the adoption of a new definition and amendments to the Australian Design Rules.
- Indigenous licensing issues, including the development of a national resource to improve motor vehicle and driver licensing outcomes for indigenous Australians.
- Investigation of strategies to deal with unlicensed drivers for which licence cancellation or disqualification may not be a deterrent.
- A national standard for photo cards in relation to the data elements captured and the position in which they appear on the face of the card.
- Options for establishing common charging mechanisms for light vehicles.
- Closing existing loopholes in the licensing system, with a specific focus on pending licence sanctions.

NEVDIS

PROGRAM OVERVIEW

NEVDIS (National Exchange of Vehicle and Driver Information System) provides access to and exchange of driver and vehicle information between states and territories in Australia. It also maintains the national Vehicle Identification Number (VIN) database and the national Written Off Vehicle Register (WOVR) database.

Austrroads has assigned responsibility for NEVDIS to the Austrroads Registration and Licensing program manager and the Registration and Licensing task force. Austrroads Registration and Licensing task force provide strategic direction and the NEVDIS management group provides strategic and operational support for the ongoing operation and enhancement of NEVDIS. NEVDIS is managed by the NEVDIS Administration Unit (NAU) which is hosted and supported by RTA NSW.

The NAU responds to the day-to-day operational demands of registration and licensing jurisdictions, vehicle manufacturers/importers and police jurisdictions in relation to driver and vehicle management issues. There is a relationship with Attorney General's Department (AGD) in relation to Driver Vehicle Standards (DVS) for identity of security issues and Personal Property Security Record (PPSR) enabling the general public to access information about their vehicles.

HIGHLIGHTS FOR THE YEAR

- Managed Services Contract - NAU developed a new statement of work for a new managed services contract to commence from August 2012.
- The VIRS trial was restarted in November 2010 and successfully concluded at the end of January 2011 with insurers indicating strong support to develop to the commercial phase of operations.
- A detailed assessment of NEVDIS information and data quality concerns was undertaken with key priorities and solutions developed in consultation with jurisdictions. A number of data items were also identified which could be quickly cleaned by jurisdictions.
- The NEVDIS interface to the PPSR system was successfully built and tested. A services contract and deeds have been executed between Austrroads and the Attorney General's Department and additional capital payments received.
- RANDL Interface specification - NAU staff and its outsourcing partner successfully collaborated with VicRoads to develop an interface specification for Victoria's proposed new registration and licensing system. The work will become the basis for improving NEVDIS system documentation.
- A review of the NEVDIS Administration Unit was completed in December 2010 which resulted in a restructure of the NAU.
- NEVDIS developed a commercial service for financial services companies to 'wash' their data prior to adopting the new Personal Properties Securities Register with two brokers signing agreements to use this service.

EMERGING TOPICS

NEVDIS defines its program of works from a three year Business Plan. This takes into consideration the key findings from the Strategic Review and the NEVDIS Structure and Resource Review. The next iteration covers the period 2012-2015.

The focus will be on improving:

- business and operational efficiency
- information quality and architecture
- expanding revenue from commercialisation initiatives and reinvestment.

As well as expanding NEVDIS capabilities via key projects such as:

- import of historical data that builds towards a national data set and registration/licensing functions
- implementation and Operation of Personal Properties Securities Register (PPSR)
- building upon the Vehicle Information Request System (VIRS), commercial strategies and next steps.

SAFETY

PROGRAM MANAGER

Jon Douglas
Director (Safer Roads)
Department of Transport and Main Roads Queensland



PROGRAM SUPPORT

Philip Rankine
Principal Advisor (Austroads)
Department of Transport and Main Roads Queensland

PROGRAM OVERVIEW

Through its strategic and technical research program, the Safety program aims to build the evidence basis for policies to address road safety risk through the safe system approach and thus assist road and transport agencies in their efforts to improve road safety. Projects and publications over 2010-11 addressed each element of the safe system, with some encompassing multiple elements, including:

Safe roads and roadsides:

- Road Safety Audit Toolkit: Further development (ST1498). Published as IR-188-10.
- Road safety engineering measures to address fatigue (ST1500). Published as AP-R379-11.
- Traffic management and infrastructure: Lessons from in-depth crash investigation (SS1384). Published as IR-189-10.
- Safe intersection approach treatments and safer speeds through intersections (ST1429). Published as AP-R363-10.
- Road Safety Audit and Road Safety Engineering Toolkit: Site maintenance (ST1434). Published as IR-189-10.
- National risk assessment model, program development and trials (Australian Transport Council – Safety and Security Working Group project) (ST1571). Published as IR-194-11.

Safe vehicles:

- Heavy Vehicle Brake Safety on Long Steep and Very Steep Roads: An investigation into Auxiliary Braking Systems (SS1420). Published as AP-R362-10.
- The impact of changes in the Australian vehicle fleet on crashworthiness and crash outcomes (SS1570).

Safe speeds:

- Methods to achieve overall reductions in operating speeds in rural areas (ST1426). Published as IR-193-11.
- Speed enforcement: National survey of driver attitudes (SS1573).

Safe road users:

- Heavy Vehicle Brake Safety on Long Steep and Very Steep Roads: An investigation into Auxiliary Braking Systems (SS1420). Published as AP-R362-10.
- Nature of errors made by drivers (SS1421). Published as AP-R378-11.
- Improving older driver safety (SS1572). Published as IR-195-11.
- Improving safety of heavy vehicles in urban areas: Stage 1 (ST1430).
- Medical conditions as a factor in crash causation (SS1385).

The Safety program undertakes other projects to support jurisdictions in applying best practice road safety interventions and research, including:

- Road crash injuries: Cost and prevention (SS1494).
- Safe system demonstration project involving an Indigenous community (SS1579). Published as AP-R377A-11 and AP-R377B-11.
- Road Safety on Local Government Roads (SS1502). Published as AP-R359-10.
- Road Safety Risk Assessment – Dissemination of Research Findings, and Updating of Crash Data Bases and Crash Reduction Factors (ST1428). Published as AP-T153-10, AP-T154-10, AP-T155-10 and AP-T156-10.
- Infrastructure-Speed Limit Relationship in Relation to Road safety Outcomes (ST1433). Published as AP-T141-10.
- Shifting Transport Modes and the Impact on Road Safety (ST1418). Published as AP-R361-10.

HIGHLIGHTS FOR THE YEAR

Safe roads and roadsides

Road safety engineering risk assessment has been a major topic of research. The research was aimed at better defining the relationship between road elements and crash risk, and providing methods, tools and information to better address risk on the road. The research program has culminated in a fundamental change in the way in which road safety risk is assessed in Australia and New Zealand, from a process that relied on crashes occurring to treat risk to one that can also proactively assess risk before crashes occur. Eleven external reports have now been produced on this topic as well as 15 newsletters. The research has gained international recognition, and forms the basis of tools developed at the international level to address road safety risk.

Sound progress has been made on a project to develop a nationally agreed crash risk assessment model, to develop an implementation guide for its adoption by road authorities and to propose road safety funding program guidelines based on crash risk assessment. The project will also produce a stand-alone guide to the evaluation of road safety treatment effectiveness. A prototype of the Austroads National Risk Assessment Model (ANRAM) has been finalised together with a report on a standard approach to evaluation of treatment effectiveness.

One of the major causes of deaths on roads occurs through collisions with roadside objects, particularly on rural roads. Current research is aimed at gaining a greater understanding of how to best manage and treat roadside hazards. This year's component of the study examined the effectiveness of safety barriers in reducing road trauma, looked at the safety benefits of substituting unforgiving poles with frangible alternatives, and continued to investigate the effectiveness of clear zones. The results from this project will be of high interest to road authorities in assessing risk for roadsides, and in identifying the most appropriate actions to address this risk.

Safer speeds

Methods to achieve reductions in rural speeds are currently being investigated. This research is aimed at identifying and providing information to road safety professionals on appropriate treatments for use on high speed rural roads that might bring about reductions in speed and subsequent improvements in safety. Effective techniques for reducing speeds across the rural road network, and at specific locations on rural roads (e.g. at bends, intersections and the entry to townships) have been investigated. A number of treatments are now being trialled and the results of this work will form the basis of guidance to road authorities.

A study seeking to identify ways of reducing speeds on the approach to, and through intersections has been undertaken. A previous literature review of factors influencing speeds at intersections, an analysis of casualty crash data and inspections of relevant intersection crash sites had indicated some promising treatments. Additional evidence was gathered from various intersection speed management treatments implemented in Australia and New Zealand. The review indicated that composite treatments, utilising a combination of various devices, achieve reductions in speeds on the approach to rural intersections; vehicle activated signs, particularly in association with reduced legal speed limits and other enhanced signing, assist in reducing approach speeds at rural intersections; in urban locations, treatments of street lengths or local areas, not just intersection sites, are associated with reduced speeds on local streets and potentially on the approach to local street intersections; and vertical displacement devices such as speed cushions and raised pavement areas are associated with speed reductions on the approach to local street urban intersections.

While the effect of lowering speed limits on road safety performance on road networks is well documented, the real world effect of either increasing or decreasing speed limits on other network and traffic performance indicators is less well understood. A new project, spanning two years, is seeking to identify the effect of changing speed limits via real world traffic surveys on rural and urban arterial roads where a change in the speed limit is proposed.

EMERGING TOPICS

The safe system approach to road safety will continue to inform the major themes of the Safety program's research.

A significant objective for the Safety program from 2011-12 will be to work with other Austroads programs to incorporate safe system principles into Austroads policies and practices. This will include updating Road Safety and Road Design guides.

Projects planned for work over 2011-12 and beyond encompass each of the four cornerstones of the safe system. New topics include: development of a best practice model Graduated Licensing Scheme for car drivers, development of a national Graduated Licensing Scheme for motorcycle riders, motorcycle in-depth crash study and national guidelines for setting speed limits at higher-risk locations.

The Safety program will support the research needs of the National Road Safety Strategy 2011-2020.

TECHNOLOGY

PROGRAM MANAGER

Chris Harrison
Group General Manager, Engineering Technology Services
Roads and Traffic Authority New South Wales



PROGRAM SUPPORT

Tye Anthonisz
Technology Program Administrator
Roads and Traffic Authority New South Wales

PROGRAM OVERVIEW

The objective of the Technology program is to promote best practice in technology. The Technology program consists of the following review panels the primary objective of which is to manage and support the development and maintenance of the Austroads guides and to oversee Austroads technical and strategic research projects:

- Bridge Technology
- Evaluation and Planning
- Pavement Technology
- Project Delivery
- Road Design
- Road Tunnels.

Technology projects over the year have been aligned with the evolving direction of the Austroads Strategic Plan whilst recognising the need to ensure continuity between last financial years work program and that proposed for this financial year, for example in the revision of Austroads guides, update of design models, and in the review of other Austroads deliverables such as Design Vehicles and Turning Templates.

Other projects have been directed towards the promotion of best and standardised practice and to the development of innovative solutions, processes and procedures. An example of this was the investigation into the social cost of road crashes in Australia and in particular willingness-to-pay values in road safety. This project is jointly being overviewed with the Safety task force.

Development of projects has drawn on the expertise from ARRB, Industry (material suppliers, consultants and contractors) representatives in the various Technology review panels and specialist sub-groups such as the Austroads Asphalt Research reference group and the Austroads Bituminous Surfacing research group. In addition and, from time to time, specialists consultants and practioners have been invited to further advise on specific issues.

HIGHLIGHTS FOR THE YEAR

The key national project completed and implemented during this year was the “Harmonisation of Prequalification systems” (TO1640). The Council of Australian Government (COAG) identified pre-qualification reform as an area of interest and Austroads was given carriage of the reform agenda for the civil (road / bridge) construction area. Tight project timeframes required the harmonised system to be delivered and made operational by 1 January 2011, and this was achieved. In addition, Austroads established a national management committee to oversight and provide direction in regard to the implementation and refinement of the National Contractor Prequalification Scheme.

Work has also commenced on the Harmonisation of General Conditions of Contract (TO1683). The commencement of the project is linked to the need to ascertain the overall direction at the COAG IWG sub-group level. The first meeting of the project team occurred on the 18 May 2011 in conjunction with the Austroads National Pre-Qualification meeting. Austroads will work closely with APCC and Roads Australia on this initiative.

Some of the major projects that have been completed in this past year are:

- Updating Austroads Road User Effects (RUE) values and related methodologies (TP1349).
- Cost-effective structural treatments for Rural Highways (TP1359).
- Elastometer upgrades for assessment of polymer modified binders (TT1627).
- Vertical loading standard for Performance based Standards (PBS) vehicles (TT1635).

The Technology program has worked closely with other Austroads task forces in the development of cross program projects such as:

- Development of Bridge Assessment Tool and Bridge Economics Project (NTC) for Future Higher Productivity Vehicles (as part of FS1580: Bridge Assessment Tool Project). This project has widespread implications for the structures, the road asset and the freight industry. Technology's Bridge Technology review panel has worked closely with the Freight task force in the development of these projects.
- Cross program knowledge transfer has been established with Assets, Safety and Network task forces in regards to safe system principles and cyclist projects.

Technology program also submitted and had approved by Standards Australia a proposal for the review of AS 5100 – Bridge Design. This review is underway with major contributions from the Austroads jurisdictions.

EMERGING TOPICS

The Technology program has recognised the changing environment in the manufacture and supply of bituminous products. Consequently, the Pavement Technology review panel continues to work with APPA, AustStab and CCAA in the development of pavements projects which are of jurisdictional and broad industry benefit. The warm mix asphalt field trials should conclude shortly with positive outcomes.

In addition Austroads Technology program has focused on specific national imperatives such as:

- TP1718: Update to the Guide to Road Design – Part 4. This review of Part 4 includes the design of 'Intersections and Crossings', 'Unsignalised and Signalised Intersections', 'Roundabouts' and 'Interchanges'. The review of Part 4 is aimed at improving road utilisation (productivity), Road construction and maintenance costs and, Road Safety.
- TS1543: Road geometry study for improved rural safety – Stage 1. This project is directed towards the identification and quantification of road design elements that contributes to crash occurrence and crash severity leading to the reduction of the potential for road design factors to be attributed as a crash factor. This will provide a potential reduction in cost resulting from road accidents, trauma and fatalities.

During the year the Bridge Technology review panel has also worked closely with the construction and consultant industry seeking participation in the forthcoming Austroads Bridge Conference to be held late 2011 in Sydney. This conference will feature both local and international speakers and is seen as a key event within the national and international Bridge community.

PARTNERSHIP AGREEMENT

PROGRAM OVERVIEW

2010-11 marks the first year reporting on ARRB research activities carried out under the Austroads ARRB Partnership Agreement.

Broadening the Austroads ARRB Technical Research Agreement which operated for six years, the Austroads ARRB Partnership Agreement encompasses five core areas of research. The key criterion is that these are areas where ARRB maintains the key source of significant research expertise in the region:

- Bituminous Surfacing
- Pavement Technology
- Asset Management
- Road Safety Engineering
- Network Operations

A key mechanism for facilitating research into practice is the publication of Technical and Research reports and the Austroads Guides, which now comprise 96 separate parts with the addition in 2010-11 of the Guide to Road Tunnels. ARRB personnel were involved in the authorship of 36 technical and research reports and four Guides during 2010-11.

Complementing another active year of ARRB's knowledge transfer program, which saw over 800 attendees at workshops across Australasia covering various parts of the Austroads Guides, was the reporting of program outputs through papers at the 24th biennial ARRB and 2nd International Sprayed Sealing conferences in Melbourne in October 2010, that attracted over 600 delegates.

The following sections provide a brief overview of the 2010-11 research program. A more detailed description of the research is provided in the first Partnership Agreement annual report.

BITUMINOUS SURFACINGS

The bituminous surfacings work program aims to address research needs in the areas of bitumen and polymer modified binders, asphalt and sprayed seals. The research involves laboratory testing and development of test methods, theoretical analysis, field trials and validation trials. The research process provides training and experience necessary for development and maintenance of expertise, and the outputs of the research support improved practice, specifications and standards.

Bitumen in Australia has remained a key focus of the surfacings research. ARRB has continued to test bitumen samples currently used by Australian jurisdictions. This work is important as the proportion of bitumen refined in Australia (where refineries manufacture solely to Australian specifications) has continued to decline and the bitumen sourced from various refineries in South East Asia (where refineries manufacture to a variety of specifications) continues to increase. Austroads technical reports relating to a number of these testing rounds are now available through the Austroads publications website.

In the asphalt area, work has continued on the review of stone mastic asphalt (SMA) compaction and permeability issues, along with a review of SMA-like mixes with high texture. Also undertaken during the year was work on the performance of dense graded asphalt and on the AAPA/Austroads warm mix asphalt (WMA) validation project.

Research into polymer modified binder (PMB) morphology found that 5 out of 12 commercially produced PMBs tested showed significant issues with regard to segregation and degradation. This is particularly important to jurisdictions that must transport their PMBs over long distances involving extended transportation time and vibration.

PAVEMENT TECHNOLOGY

Improving understanding of the response of flexible pavements to changing vehicle loads and new-generation heavy vehicles remains a focus of the pavement technology program. Emphasis is being placed on unbound granular pavement materials, which make up the bulk of Australia's road network and on cemented materials, whose performance is most sensitive to changes in load level.

This year saw the development and commissioning of a large scale laboratory wheel-tracker in the ARRB laboratory, with the aim to significantly improve the laboratory performance characterisation of unbound granular pavement materials.

In 2010-11, the development of a two dimensional non-linear finite element pavement response to load model (AustPads) was completed. This enables more realistic characterisation of elastic characteristics of unbound granular materials and subgrade than is possible with the current Austroads linear elastic response to load model.

Research investigating improvements to the laboratory characterisation of cemented materials, with particular emphasis on sample conditioning and fatigue testing, progressed with the completion of the testing of one material using new test protocols.

A better understanding of the relative pavement wear due to different axle group types (e.g. single, tandem, triaxle) is a critical input required for road pricing. Accelerated loading of an unbound pavement continued with repeat tests being conducted in 2010-11 as a key part of the assessment of the relative damaging effects of different axle group types in terms of pavement rutting.

The assessment of the feasibility of obtaining information about the fatigue characteristics of foamed bitumen stabilised materials by reviewing the performance of in-service pavements also progressed during the year. One element of this work involves working with jurisdictions to identify possible sites where under-designed pavements may be constructed and monitored to provide earlier performance data.

ASSET MANAGEMENT

Asset management provides an overarching framework for implementation of the detailed technical investigations delivered in the bituminous surfacings and pavement technology research areas. In addition, there is increasing consideration of road safety elements in asset management, and research has progressed in this area in 2010-11.

The Freight Axle Mass Limits Investigation Tool (FAMLIT) developed by ARRB for Austroads has been refined and further developed during the year under combined Austroads, NTC and COAG Road Reform Plan (CRRP) funding. FAMLIT was developed to incorporate currently available knowledge for the assessment of the effects of increases in axle group loads on the road network in terms of road condition and road agency costs.

Collaborative work between ARRB, RTA NSW, DTMR QLD and other jurisdictions on the assessment of the Danish Traffic Speed Deflectometer (TSD) continued during the year. The project is a showcase for the collaboration of interested stakeholders to achieve best research outcomes. Through its duration, in addition to the working group of Australian road authorities, the project team collaborated and worked with other researchers including the UK Transport Research Laboratory (TRL), the Danish Road Directorate research arm, and the German transport research institute BAST.

Other achievements during 2010-11 included initial work to quantify pavement dynamic loading, and to connect this with associated pavement wear effects, and progress on the review and improvement of road condition test methods and specifications, with the focus on digital imaging and road location referencing.

ROAD SAFETY ENGINEERING

The key focus of the road safety engineering program is to assist to develop the road and the roadside environment in order to reduce the incidence and severity of crashes as part of the Safe Systems approach.

Research projects are focused on improving roadside safety, determining how to achieve reductions in operating speeds in rural areas, safety-operational-environmental impacts of lower speed limits, safer speeds on the approaches to and through intersections, heavy vehicle safety in urban areas, road safety engineering measures to address fatigue, the dissemination of the findings from research conducted into crash risk, development of a national risk assessment model, and the impact of roadside advertising on road safety.

A major topic of research conducted under the partnership agreement has been that on road safety engineering risk assessment, aimed at further defining the relationship between road elements and crash risk, and providing methods, tools and information to better address risk on the road.

The work on improving roadside safety aims to prepare the groundwork for the revision of design practices relating to the management of roadside hazards and use of safety barriers. This is a topic of much interest to asset managers, particularly in regard to the whole-of life cost of treatments.

The project on speeds and rural roads looks to address knowledge gaps through trials of various treatments, including vehicle activated speed signs at intersections and gateway treatments at the entrance to towns. This research will lead to updates to the Guide to Road Safety covering effective speed related safety treatments for rural roads.

Through the national risk assessment project a prototype model has been developed and is being trialled. It is hoped that the completed model will have wide adoption for the identification of high risk locations.

NETWORK OPERATIONS

The network operations research program is targeted at improving the productivity and reliability of the road network in moving people and goods. This was the first year that the network operations program was incorporated into the ARRB Austroads Partnership Agreement with the aim that this will provide an important boost to the retention and development of expertise at ARRB in this critical area.

The major network program project covered Cooperative ITS, however work was also undertaken on the development of future traffic signal controllers, the use of microsimulation traffic models for on-road public transport and arterial congestion management, and the economic evaluation of the benefits of active traffic management projects.

AUSTROADS FELLOWSHIP

The second Austroads Fellow was Tony Matacin of the Queensland Department of Transport and Main Roads. Tony was awarded a Master of Engineering by Monash University in 2010 for his thesis on unbound granular pavement moisture response due to climate. This project was very topical given the extensive flooding along the eastern seaboard of Australia during 2010-11.

The third Austroads PhD Fellowship holder is Ryan de Carteret of the Roads and Traffic Authority of New South Wales. Ryan commenced his studies for a Doctor of Philosophy at the University of Newcastle in February 2010. Ryan's project is titled 'Salinity and Road Pavements' and aims to determine the mechanisms and processes by which salts move and accumulate within road pavements, and to determine how salinity affects performance characteristics of sealed unbound granular road pavements. To date Ryan has undertaken a review of literature, designed and constructed a field trial site, designed and established an instrumented laboratory column study and commenced laboratory testing. Ryan's initial work was published and presented at the 24th ARRB Conference in 2010 and there will be further conference presentations during 2011. Ryan is currently on schedule to submit his PhD thesis in early 2013.

INTERNATIONAL

Menno Henneveld

Chair, Australian and New Zealand National of the World Road Association
Managing Director
Main Roads Western Australia



Austrroads coordinates aspects of the international activities of its member organisations and particularly the engagement with the World Road Association. There are also collaboration agreements in place with equivalent organisations in several other countries to keep abreast of emerging trends and to share knowledge and technical good practice.

WORLD ROAD ASSOCIATION

The World Road Association is the premier international road organisation with 118 member governments and some 2,500 road experts. Both Australia and New Zealand are full country members of the Association. Each is represented by a First Delegate on the Association's Council which meets annually. Menno Henneveld is currently the Australian First Delegate. Ernst Zöllner from the New Zealand Transport Agency is currently the New Zealand First Delegate.

With the agreement of the Australian Government, Austrroads manages Australia's involvement in the World Road Association and coordinates it with that of New Zealand. The Australian and New Zealand National Committee of the World Road Association operates through Austrroads as the national committee of the World Road Association for both countries.

The Association's main activity is managing and coordinating the work of its technical committees which bring together technical experts from around the world. Committees covering the full range of road agency activities meet over a four year cycle to address current and emerging issues. The committees report on their work to the World Road Congress which is held at the end of their four year cycle. Australia and New Zealand currently have full or corresponding representatives on 16 of the 17 committees and are English speaking secretaries for six of them.

These representatives provide regular progress reports on the work being conducted by their technical committee. These are available on the Austrroads website allowing easy access to the committees work not only to Austrroads members but the wider road and road transport industry throughout Australia and New Zealand.

The next World Road Congress is being held in Mexico in September 2011. Austrroads will coordinate a delegation from Australia and New Zealand. Austrroads conducted an essay competition for young professionals in the lead up to the Mexico Congress. The winner of the competition was Graham Jacoby from Main Roads WA with a paper titled – *A continuum flow model for freeways*. The winner of the Young Professional section of the international essay competition conducted by the Association was Maria Sarubin, also from Main Roads WA for a paper titled – *Integrated services arrangements: an innovative approach to manage WA's road network*.

As well as being the Australian First Delegate, Menno Henneveld is also a member of the Association's Executive Committee and Chair of its Communication and International Relations Commission. Under his Chairmanship the Commission has produced a Communications and Marketing Plan for the Association which has been endorsed by the Association's Council.

Austrroads also supports the Association by arranging the secondment of a professional officer from one of its member organisations to the general secretariat in Paris. The current secondee is Claire Murdoch from RTA NSW. She took over from Mozelle Morrison from VicRoads who concluded her secondment in October 2010. These secondments have been very successful in building closer linkages between Australian and New Zealand road agencies the activities of the World Road Association.

In April 2011 a meeting of the Association's Executive Committee was held in Perth, Western Australia hosted by Main Roads WA

ROAD ENGINEERING ASSOCIATION OF ASIA AND AUSTRALASIA (REAAA) – AUSTRALIAN CHAPTER

The Road Engineering Association of Asia and Australasia (REAAA) based in Kuala Lumpur, Malaysia, promotes the science and practice of road engineering and related professions in the Asia Pacific region. It has over 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 the REAAA established in both Australia and New Zealand. The Chairman of the Australian Chapter is Gary Liddle. The Austroads national office provides secretariat support to the Australian Chapter of the 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.

PARTNERSHIPS WITH PEAK ROAD BODIES IN OTHER COUNTRIES

The American Association of State Highway and Transportation Officials (AASHTO)

Austroads has an agreement with 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 maintains regular contact with AASHTO. Free copies of AASHTO publications are received under the agreement between the two organisations, which are forwarded to the ARRB library where they are made available to the staff of Austroads member organisations.

American Association of Motor Vehicle Administrators (AAMVA)

Austroads has an agreement with AAMVA. AAMVA is the equivalent organisation of AASHTO covering vehicle registration and driver licensing in the United States of America. The agreement provides for the sharing of information between the two organisations.

Transportation association of Canada (TAC)

Austroads has an agreement with the 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.

Organisation for Economic Cooperation (OECD) and European Council of Ministers of Transport (ECMT)

The OECD and ECMT work together on transport research through the establishment of a Joint Transport Research Centre (JTRC). Austroads in conjunction with DoIT participate in the various research initiatives of the JTRC, generally as corresponding members of projects teams. Reports are provided to the relevant Austroads forums.

PUBLICATIONS

PUBLICATIONS RELEASED DURING THE YEAR ENDED 30 JUNE 2011

GUIDES:

- Guide to Road Tunnels Part 1: Introduction to Road Tunnels (AGRT01-10)
- Guide to Road Tunnels Part 2: Planning, Design and Commissioning (AGRT02-10)
- Guide to Road Tunnels Part 3: Operation and Maintenance (AGRT03-10)
- Guide to Pavement Technology Part 2: Pavement Structural Design (AGPT02-10)
- Guide to Road Design Part 1: Introduction to Road Design (AGRD01-10)
- Guide to Road Design Part 3: Geometric Design (AGRD03-10)
- Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (AGRD04A-10)
- Guide to Road Design Part 4B: Roundabouts (AGRD04B-11)
- Guide to Road Design Part 5: Drainage Design (AGRD05-10)
- Guide to Road Design Part 6: Roadside Design, Safety and Barriers (AGRD06-10)
- Austroads Guidelines for Environmental Reporting (AP-G70-10)
- Cycling Aspects of Austroads guides (AP-G88-11)

RESEARCH REPORTS:

- The Road Safety Consequences of Changing Travel (AP-R361-10)
- Heavy Vehicle Brake Safety on Long Steep and Very Steep Roads (AP-R362-10)
- Safe Intersection Approach Treatments and Safer Speeds Through Intersections (AP-R363-10)
- Freeway Incident Detection – technologies and techniques (AP-R36-10)
- Modelling of Signalised Intersections: Case Study (AP-R365-10)
- Australia & New Zealand Roads Capability Analysis 2009 – 2019 (AP-R366-10)
- Guidelines for Assessing Heavy Vehicle Access to Local Roads (AP-R367-10)
- Defining applicability of international standards for intelligent transport systems (ITS) (AP-R368-10)
- Balancing Traffic Density in a Signalised Network (AP-R369-10)
- Measures for Managing Safety of Heavy Vehicles at Passive and Active Railway Level Crossings (AP-R370-10)
- National Prequalification System for Civil (Road and Bridge) Construction Contracts (AP-R371-10)
- Pavement Wear Assessment for Performance Bases Standards (PBS) Vehicles (AP-R372-11)
- Updating Austroads RUE Unit Values and Related Methodologies (AP-R373-11)
- Guidance to the Development of Policy to Manage Skid Resistance (AP-R374-11)
- Evaluation of the Potential Safety Benefits of Collision Avoidance Technologies Through Vehicle-to-Vehicle Dedicated Short Range Communications (DSRC) (AP-R375-11)
- Impact of Light Commercial Vehicles / Rigid Trucks in Urban Networks Scoping Study (AP-R376-11)
- Safe System Demonstration Project Involving an Indigenous Community: Literature Review and Methods (AP-R377A-11)
- Safe System Demonstration Project Involving an Indigenous Community: Audit and Implementation Plan (AP-R377B-11)
- The nature of errors made by drivers (AP-R378-11)
- Innovative Road Safety Measures to Address Fatigue: Review of Research and Results from a Treatment Trial (AP-R379-11)

- Effectiveness and Selection of Intersection Treatments for Cyclists at Signalised Intersections (AP-R380-11)
- Understanding the Impacts of Road Pricing Factors on Future Road Use and Network Wide Traffic Patterns (AP-R381-11)
- DSRC Interference Study (AP-R382-11)
- Examination of Major Policy Issues Relating to Introduction of Cooperative ITS to Australia (AP-R383-11)
- Feasibility Study: Heavy Vehicle Charging Australia (AP-R384-11)

TECHNICAL REPORTS:

- Interim Network Level Functional Road Deterioration Models (AP-T158-10)
- Predicting Structural Deterioration of Pavements at a Network Level – Interim Models (AP-T159-10)
- Asphalt and Seal Life Prediction Models based on Bitumen Hardening (AP-T160-10)
- A method to Correlate Weigh-in-motion and Classification Data (AP-T161-10)
- Noise and Long-life Surfacing - Characteristics to Meet Road User Needs (AP-T162-11)
- Review of the Environmental Aspects of Warm Mix Asphalt (AP-T163-10)
- Laboratory Study on Relationships Between Binder Properties and Asphalt Rutting (AP-T164-10)
- Optimising Binder performance – Proceedings Austroads National Workshop – Performance Requirements of Sprayed Seal Binders (AP-T165-10)
- Measurement of Changes in PMBs During Transport and Storage – A Pilot Study (AP-T166-10)
- Towards the Revision of Austroads Procedures for the Design of Pavements Containing Cemented Materials (AP-T167-10)
- Cost-effective Structural Treatments for Rural Highways: Cemented Materials (AP-T168-10)
- Review of Specifications for the Collection of Digital Road Imaging (AP-T169-10)
- Performance-based Specification for Electronic Work Diary and Heavy Vehicle Speed Monitoring (DRAFT FOR PUBLIC COMMENT) (AP-T170-10)
- Weigh-in-Motion Management and Operation Manual (AP-T171-10)
- Austroads LTPP and LTPPM Study – Summary Report for 2009-10 (AP-T172-10)
- Elastometer Upgrade and Commissioning (AP-T173-10)
- Understanding the Impact on Pavement Surfaces from Next Generation Freight Vehicles - Literature Review (AP-T174-11)
- Historical Development of PBS Standard for Pavement Horizontal Loading and Recent ARRB Research (AP-T175-11)
- Network Performance Indicators – Next Generation (AP-T176-11)
- Review of Skid Resistance and Measurement Methods (AP-T177-11)
- Review of Foamed Bitumen Stabilisation Mix Design Methods (AP-T178-11)
- Review of Primes and Primerseal Design (AP-T179-11)
- Cutter Contents for PMB Seals (AP-T180-11)
- Performance Requirements for Bitumen Sprayers (AP-T181-11)
- Second National Survey of Australian Bitumens (AP-T182-11)
- Third National Survey of Australian Bitumens (AP-T183-11)

AUSTROADS AWARDS

AUSTROADS MEDAL

Gary Norwell (MR WA)

Awarded the Austroads Medal in recognition of his excellent contribution to Austroads and its activities over an extended period of time. This is Austroads highest award. Gary was presented with his medal at a special joint dinner in Perth attended by the Austroads Board and World Road Association Executive Committee members.

Gary has had a long career with Main Roads WA commencing in 1968 on the Engineering Cadet Program. Gary's association with Austroads commenced in 1982, and in 2001 he was awarded the Austroads Fellowship Award for his outstanding service in the fields of road construction, asset management and road system management, with specific reference to his roles as:

- Convenor of the Road Construction Liaison Group from 1992 to 1995 and his contribution to the development of good construction practices throughout Australia.
- Member of the Asset Management Reference Group from 1995 to 1999, his leadership in developing a best practice asset management planning process.
- Member of the World Road Association (PIARC) Committee C6 on Road Management from 1993, and its Chairman from 1995 to 1999.

OUTSTANDING SERVICE

Gavin Donald (RTA NSW)

For an outstanding contribution to the development of Austroads Guide to Pavement Technology and to major contributions to industry knowledge regarding pavements, pavement deterioration cycles and road pricing strategies over an extended period.

Gavin Donald has had extensive involvement over many years firstly with NAASRA and then with Austroads. Gavin chaired the working group in the 1980's that led to the development of the Austroads Guide to Structural Design of Road Pavements. This was a major achievement firstly in achieving the preparation of the Guide, but also in achieving a national position on structural design of road pavements.

Gavin as a part of his Austroads involvement has worked closely with ARRB and was co-author of a paper on aquaplaning which was delivered to a 1996 International Symposium on Pavement Surface Characteristics.

In the 1990s he worked with Geoff Youdale to produce reports on the effect of increasing axle loads and the interaction with road user economic efficiency which was the forerunner to much of the current research in this area.

More recently, Gavin had a lead role in a number of major Austroads projects, most notably the Vertical Loading Standard for Performance Based Standard vehicles.

SPECIAL COMMENDATION

Geoff Bouly (VicRoads)

For long service to the Austroads Bridge Technology review panel, an outstanding contribution to the development of Austroads Guide to Bridge Technology, and for technical input into a range of Austroads bridge technical research projects.

Geoff represented VicRoads on the Austroads Bridge Technology review panel for many years. In that role he was involved in the following projects in recent years:

- Creation and subsequent revisions to the Australian Bridge Design Standard AS5100
- Work with NTC on Future Higher Productivity Freight Vehicles
- Organising Austroads bridge conference.
- Recently produced Austroads Guide to Bridge Technology.

Elisa Casey (DIER Tasmania)

For the successful delivery of the prequalification harmonisation project to very short timeframes, coordinating industry consultations, and integrating with APCC (non-residential building sector) to overall enable the excellent management of the project.

Phil Margison (RTA NSW)

For providing invaluable representation and advice to Austroads and other road authorities from a New South Wales and broader perspective over an extended period.

ACHIEVEMENT AWARDS

Andrew Golding (DTMR Qld)

In recognition of his valuable contribution to Austroads through his work with the Assets program and management of the project related to understanding the impacts of climatic change on road performance.

Chris Mathias (DTEI SA)

For contribution to and project management of a range of Austroads pavements projects including:

- TT1359: Cost-effective Structural Treatments for Rural Highways
- TS1398: Developing ESA (Equivalent Standard Axles) relationships for all Heavy Vehicle Classes using both and average an a distribution approach methodology

Chris Parkman (NZTA)

In recognition of his valuable contribution to Austroads through his work with the Assets program.

Ken Grattan (DLP NT)

For providing invaluable representation and advice to Austroads and other road authorities from a Northern Territory and broader perspective for in excess of 20 years.

Ricky Cox (ex DTMR Qld)

For project managing the preparation of the Austroads Guide to Road Tunnels which required extensive industry consultation within constrained completion dates.

Ron Ferguson (ex RTA NSW)

In recognition of his valuable contribution to the Assets task force, promotion of good practice asset management and significant foundation work for the Guide to Asset Management Part 5: Pavement Performance.

ESSAY COMPETITION

Graham Jacoby (MR WA)

The Austroads essay competition, run in parallel with the World Road Association international essay competition, was open to young professional working for an Austroads member or observer organisation.

Graham was judged the winner for his paper *A Continuum Flow Model for Perth's Freeways*.

TASKFORCE AND REVIEW PANEL MEMBERS

AS AT 30 JUNE 2011

ASSETS

Kathryn Martin (Chair)	MR WA	Tim Martin	ARRB
David Darwin	NZTA	John Statton	RTA NSW
Andrew Golding	DTMR Qld	Mick Savage	ALGA
Rob Gilpin	VicRoads	Kieran Sharp	ARRB
Michael Hayward	MR WA	Shane Tepper	DLP NT
Ian Hickson	TAMS ACT	Barry Walker	DIER Tas
Andrew Hyles	DoIT	Michael Wilson	NTC
Mick Lorenz	DTEI SA		

BRIDGE TECHNOLOGY

Chris Harrison (Chair)	RTA NSW	Graeme Nichols	DIER Tas
Wije Ariyaratne	RTA NSW	Nigel Powers	VicRoads
Matthieu Bereni	NTC	Ross Pritchard	DTMR Qld
Ian Hickson	TAMS NSW	Jock Scanlon	MR WA
Rudolph Kotze	ARRB	Peter Wilson	DTEI SA
Louise McCormick	DLP NT	Barry Wright	NZTA
Phil Molloy	DTEI SA		

CAPABILITY

Peter Mitchem (Chair)	VicRoads	Ross Moody	IPWEA
Melly Andrew	NZTA	Brendan Nugent	Transport NSW
David Austin	DTEI SA	Jon Oxford	DTMR Qld
Lesley Blefari	ARRB	Judith Pettitt	VicRoads
Phil Cantillon	DIER Tas	Michael Stanley	RTA NSW
Lou George	DTEI SA	John Taya	MR WA

EVALUATION AND PLANNING

Chris Harrison (Chair)	RTA NSW	Cliff Naude	ARRB
John Brewer	Transport NSW	Greg Scott	DLP NT
Dave Gennard	NZTA	Don Seiler	DTMR Qld
Mark Harvey	BITRE	Wesley Soet	MR WA
Ed McGeehan	VicRoads	Peter Tisato	DTEI SA

FREIGHT

Nial Finegan (Chair)	VicRoads	Daniel Kicuroski	Transport NSW
John Bessell	DIER Tas	George Konstandakos	NTC
Pascal Felix	MR WA	Marinus La Rooij	NZTA
Gregory Forbes	DTMR Qld	Barb Littler	DLP NT
Greg George	DoIT	Lindsay Oxlad	DTEI SA
Don Hogben	VicRoads	Rod Paule	TAMS ACT
Andrew Hyles	DoIT	Marion Sefaniw	DTMR Qld

NETWORK

Duncan Elliott (Chair)	VicRoads	Craig Moran	RTA NSW
Glenn Bunting	NZTA	Riffaat Shoukallah	TAMS ACT
Simon Buxton	DIER Tas	Anthony Swan	DoIT
Paul Gelston	DTEI SA	Andrew Wall	VicRoads
Geoff Horni	DLP NT	Dennis Walsh	DTMR Qld
Tom McHugh	MR WA		

PAVEMENT TECHNOLOGY

Chris Harrison (Chair)	RTA NSW	Chris Mathias	DTEI SA
David Alabaster	NZTA	William Moodie	DLP NT
Dougall Broadfoot	AAPA	Kym Neaylon	ARRB
John Esnouf (BSSRG)	VicRoads	John Nichols	CCAA
David Harris	MR WA	Andrew Papacostas	VicRoads
Geoff Jameson	ARRB	George Vorobieff	RTA NSW
Allan Jones	DTMR Qld	Barry Walker	DIER Tas
Paul Keech	ALGA	Phil Walker	RTA NSW
John Lambert	AAPA	Greg White	AustStab

PROJECT DELIVERY

Chris Harrison (Chair)	RTA NSW	Peter Letts	RTA NSW
Alex Atkins	ALGA	Colin MacKay	NZTA
Phil Cantillon	DIER TAS	George Mavroyeni	VicRoads
Bruce Cunningham	MR WA	Carlos Rial	ARRB
Ross Guppy	DTMR Qld	Tim Warren	DTEI SA

REGISTRATION AND LICENSING

Martin Small (Chair)	DTEI SA	Paul Rajan	DPI NT
Brett Dooley	NZTA	Iqbal Samnakay	DoT WA
Karen Greenland	DTMS ACT	Martin Small	DTEI SA
James Holgate	VicRoads	Michael Stapleton	DTMR Qld
Geoff Hughes	NMVTRC	Michael Sutton	DoIT
Penny Nicholls	DIER Tas	Phil Tout	NAU
Ben Piper	NTC	Peter Wells	RTA NSW

ROAD DESIGN

Chris Harrison (Chair)	RTA NSW	Adil Jamil	DLP NT
Owen Arndt	DTMR Qld	Pat Kenny	RTA NSW
Tom Brock	Consult Australia	Mark McDonald	DTMR Qld
Richard Fanning	VicRoads	Noel O'Callaghan	DTEI SA
Shane Gregory	DIER Tas	Julie Peters	DTMR Qld
Rob Grove	MR WA	Michael Tziotis	ARRB
James Hughes	NZTA		

ROAD TUNNELS

Chris Harrison (Chair)	RTA NSW	Kingsley Noble	DTEI SA
Gregg Buyers	ALGA	Ross Pritchard	DTMR Qld
Matthew Callander	RTA NSW	Geoff Raynor	LMA
Ricky Cox	DTMR Qld	Michael Tziotis	ARRB
Steve Di Cicco	VicRoads	John Venables	MR WA
Nigel Lloyd	NZTA		

SAFETY

Jon Douglas (Chair)	DTMR Qld	Jenny Malone	DLP NT
Colin Brodie	NZTA	Joe Motha	DoIT
Iain Cameron	MR WA	Pam Palmer	DTMR Qld
Deborah Davis	DIER Tas	Jeff Potter	NTC
Soames Job	RTA NSW	David Quinlan	TAMS ACT
Julian Lyngcoln	VicRoads	Martin Small	DTEI SA

TRAFFIC MANAGEMENT

Duncan Elliott (Chair)	VicRoads	Geoff Horni	DLP NT
Richard Burk	DIER Tas	Dave Landmark	MR WA
Steve Clark	DTEI SA	David Nash	VicRoads
Griff Davis	ALGA	Craig Newland	AAA
Jon Douglas	DTMR Qld	Bob O'Keefe	RTA NSW
David Freeman	SA	Rifaat Shoukrallah	TAMS ACT
Bob Gibson	NZTA		

WORLD ROAD ASSOCIATION TECHNICAL COMMITTEE MEMBERS

AS AT 30 JUNE 2011

Committee	Representative(s)	Organisation
A.1 — Preserving the Environment	Lisa Rossiter (<i>English Speaking Secretary</i>)	NZTA
	Helen Murphy*	VicRoads
	Kathryn Mahoney*	DTMR Qld
A.2 — Financing Managing and Contracting of Road System Investment	Brian Noble	MR WA
	Vincent Scarcella*	DTMR Qld
A.3 — Road System Economics and Social Development	Ernest Albuquerque	NZTA
	Neil McGladrigan*	DTMR Qld
A.4 — Rural Road Systems and Accessibility to Rural Areas		
B.1 — Good Governance of Road Administrations	Brendan Nugent (<i>English Speaking Secretary</i>)	RTA NSW
	Flori Mihai*	MR WA
B.2 — Road Network Operations	Phil Lawes	DTEI SA
	Andrew Wall*	VicRoads
	Kelvin Marrett*	DTMR Qld
B.3 — Improved Mobility in Urban Areas	Anita Curnow (<i>English Speaking Secretary</i>)	VicRoads
	Shane Doran*	DTMR Qld
	Lyndon Hammond*	NZTA
B.4 — Freight Transport and Inter Modality	Don Hogben	VicRoads
	Trudi Meakins*	DTEI SA
	Mark Mitchell*	DTMR Qld
	Rick Barber*	NZTA
B.5 — Winter Service	Alan Burkett*	NZTA
C.1 — Safer Road Infrastructure	Jon Douglas (<i>English Speaking Secretary</i>)	DTMR Qld
	Brendan Marsh*	MR WA
C.2 — Safer Road Operations	George Mavroyeni	VicRoads
	Bob Gibson*	NZTA
C.3 — Managing Operation Risk in National & International Road Operations	Maurice Cammack	MR WA
C.4 — Road Tunnel Operations	Arnold Dix	Consultant
	Jason Venz*	DTMR Qld
D.1 — Management of Road Infrastructure Assets	Mick Lorenz (<i>English Speaking Secretary</i>)	DTEI SA
	Adrian Tofful*	VicRoads
D.2 — Road Pavements	Peter Bryant	DTMR Qld
<i>D.2a — Road Surface Characteristics sub-committee</i>	Peter Bryant (<i>English Speaking Secretary</i>)	DTMR Qld
<i>D.2b — Flexible and Semi Rigid Pavements sub-committee</i>	Narelle Dobson*	DTMR Qld
<i>D.2c — Concrete Pavements sub-committee</i>	David Hazell*	RTA NSW
D.3 — Road Bridges	Erica Smith	MR WA
	Peter Graham*	DTMR Qld
D.4 — Geotechnics and Unpaved Roads		

* *Corresponding Member*

ABBREVIATIONS

AAA	Australian Automobile Association
AAMVA	American Association of Motor Vehicle Administrators
AASB	Australian Accounting Standards Board
AASHTO	American Association of State Highway and Transportation Officials
ACMA	Australian Communications Media Authority
ANPR	Automated Number Plate Recognition
AS	Australian Standard
ABC	Australian Bicycle Council
AEC	Australian Electoral Commission
AITPM	Australian Institute of Traffic Planning and Management
ALF	Accelerated Loading Facility
ALGA	Australian Local Government Association
ANO	Austrroads National Office
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
CRC	Cycling Resource Centre
DIER Tas	Department of Infrastructure, Energy and Resources
DLP NT	Department of Lands and Planning Northern Territory
DoIT	Department of Infrastructure and Transport
DTMR Qld	Department of Transport and Main Roads Queensland
DPX	Demerit Point Exchange
DSRC	Dedicated Short Range Communications
DTEI SA	Department for 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
IPWEA	Institute of Public Works Engineering Australia
ITS	Intelligent Transport Systems
JTRC	Joint Transport Research Centre
LATM	Local Area Traffic Management
LMA	Linking Melbourne Authority
LPG	Liquefied Petroleum Gas
LTTP	Long Term Pavement Performance
LTTPM	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 2011-2016
NEVDIS	National Exchange of Vehicle and Driver Information System
NPI	National Performance Indicators
NSW	New South Wales
NTC	National Transport Commission
NZ	New Zealand
NZTA	New Zealand Transport Agency
OECD	Organisation for Economic Cooperation and Development
PAYGO	Pay As You Go
PBS	Performance Based Standards
PMB	Polymer Modified Binders
PDF	Portable Document Format
WRA	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	Standards Australia
SCOT	Standing Committee on Transport
SHRP	Strategic Highway Research Program
SLIP	Smartcard Licence Interoperability Protocol
SMA	Stone Mastic Asphalt
SSA	Search Software America
TAC	Transportation Association of Canada
TAMS ACT	Department of Territory and Municipal Services Australian Capital Territory
NZTA	New Zealand Transport Agency
TRB	Transportation Research Board
USA	United States of America
VIC	Victoria
VicRoads	Roads Corporation Victoria
VIN	Vehicle Identification Number
VIRS	Vehicle Information Request System
VMS	Variable Message Sign
WA	Western Australia
WIM	Weigh-in-Motion

DIRECTORS' REPORT

Your directors present this report on the entity for the financial year ended 30 June 2011.

Directors

Directors have been in office since the start of the financial year and are still directors to the date of this report unless otherwise stated. The names of each person who has been a director during the year are:

- Gary Liddle
- Michael Bushby
- Adrian Beresford-Wylie
- Colin Crampton
- Graham Fraine (appointed 10 January 2011)
- Tony Gill
- Menno Henneveld
- Andrew Milazzo
- Sharron Noske (appointed 1 December 2010)
- Leslie Riggs
- Peter Todd
- Alan Tesch (until 10 January 2011)
- Marj Morrissey (until 30 November 2010)

Each director's qualifications, experience and special responsibilities are shown on pages 7 to 10.

Principal Activities

The principal activities of Austroads Ltd during the financial year were to coordinate road transport related research and projects and to produce publications related to road transport.

Austroads' short-term objectives are to:

- conduct strategic research that assist road agencies to address current and emerging issues
- develop guides to establish national consistency on technical and operational aspects of road networks
- facilitate knowledge sharing by promoting the wide dissemination of outputs and technology, conducting seminars and promoting the use of Austroads work
- foster international involvement by engaging with and supporting international road organisations.

Austroads' long-term objectives are to:

- promote improved Australian and New Zealand transport outcomes
- provide expert technical input to national policy development on road and road transport issues
- promote improved practice and capability by road agencies
- promote consistency in road and road agency operations.

Further details of Austroads principal activities can be found from pages 4 to 6.

Meetings of Directors

During the financial year, four meetings of directors were held. Attendances by each director were as follows:

Director	Eligible Meetings	Meetings Attended
Gary Liddle	4	4
Michael Bushby	4	4
Alan Tesch	1	1
Graham Fraine	3	3
Menno Henneveld	4	3
Andrew Milazzo	4	4
Marj Morrissey	1	1
Sharron Noske	3	2
Peter Todd	4	4
Tony Gill	4	4
Colin Crampton	4	3
Adrian Beresford-Wylie	4	2
Leslie Riggs	1	1

Alternate Directors attended meetings as follows:

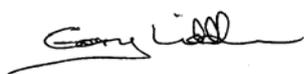
Alternate director	Alternate for	Meetings Attended
Des Snook	Menno Henneveld	1
Michael Sutton	Leslie Riggs	3

Austroads is a company limited by guarantee and is incorporated under the *Corporations Act 2001*. If the company is wound up, the constitution states that each member is required to contribute a maximum of \$20 each towards meeting any outstanding obligations of the entity. At 30 June 2011, the total amount that members of the company are liable to contribute if the company is wound up is \$220 (2010: \$220).

Auditor's Independence Declaration

The lead auditor's independence declaration for the year ended 30 June 2011 has been received and can be found on page 49 of the financial report.

Signed in accordance with a resolution of the Board of Directors.



Gary Liddle
 Chairman
 Austroads Ltd

Dated this 8th day of September 2011.

Level 7, 20 Hunter Street
Sydney NSW 2000

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**LEAD AUDITOR'S INDEPENDENCE DECLARATION
UNDER SECTION 307C OF THE CORPORATIONS ACT 2001
TO THE DIRECTORS OF AUSTRROADS LTD**

As lead auditor for the audit of Austroads Ltd for the year ended 30 June 2011, I declare that, to the best of my knowledge and belief, there have been:

- a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b) no contraventions of any applicable code of professional conduct in relation to the audit.



MOORE STEPHENS SYDNEY
Chartered Accountants



SPIRO TZANNES
Partner

Dated in Sydney this 7th day of September 2011

Moore Stephens Sydney ABN 90 773 984 843. Liability limited by a scheme approved under Professional Standards Legislation*
*Other than for the acts or omissions of financial services licensees. An independent member of Moore Stephens International Limited - members in principal cities throughout the world The Sydney Moore Stephens firm is not a partner or agent of any other Moore Stephens firm.

FINANCIAL REPORT

STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2011

	Notes	2011 \$	2010 \$
Revenue	2	12,311,925	10,964,486
Expenses			
Corporate Expenses	3	1,423,953	1,485,935
Work Program	3	8,744,994	8,580,333
Specific Projects	3	848,705	253,803
Publications	3	122,838	139,206
Total expenses		11,140,490	10,459,277
Profit from continuing operations before income tax expense		<u>1,171,435</u>	<u>505,209</u>
Income tax expense	1(c)	-	-
Profit for the year		<u>1,171,435</u>	<u>505,209</u>
Other comprehensive income for the year		-	-
Total comprehensive income for the year		<u>1,171,435</u>	<u>505,209</u>
Total comprehensive income attributable to members of the entity		<u>1,171,435</u>	<u>505,209</u>

The accompanying notes form part of these financial statements

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2011

	Notes	2011 \$	2010 \$
ASSETS			
Current assets			
Cash and cash equivalents	4	4,536,669	3,364,454
Investments	4	3,000,000	3,071,186
Receivables	5	785,078	452,352
Prepayments		50,775	22,895
Other Debtors	6	176,049	152,677
Total current assets		8,548,571	7,063,564
Non-current assets			
Property, Plant and Equipment	7	48,119	40,827
Sundry Debtor	6	44,863	42,344
Total non-current assets		92,982	83,171
Total assets		8,641,553	7,146,735
LIABILITIES			
Current liabilities			
Payables	8	2,885,106	1,621,543
Contributions received in advance		217,000	304,844
Subscriptions received in advance (NEVDIS)		82,833	400,000
Unacquitted Funds (NEVDIS)	15	1,323,112	1,815,788
Provision for Employee Benefits		117,962	160,142
Total current liabilities		4,626,013	4,302,317
Non-current liabilities			
Provision for Employee Benefits		11,375	11,688
Total liabilities		4,637,388	4,314,005
Net assets		4,004,165	2,832,730
Equity			
Net Current Year Surplus		1,171,435	505,209
Cumulative Surplus Brought Forward		2,832,730	2,327,521
Total Equity		4,004,165	2,832,730

The accompanying notes form part of these financial statements

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 JUNE 2011

	Retained earnings \$	Total equity \$
Balance at 1 July 2009	2,327,521	2,327,521
Profit for the year	<u>505,209</u>	<u>505,209</u>
Balance at 30 June 2010	2,832,730	2,832,730
Profit for the year	1,171,435	1,171,435
Balance at 30 June 2011	<u>4,004,165</u>	<u>4,004,165</u>

The accompanying notes form part of these financial statements

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2011

	Notes	2011 \$	2010 \$
Cash flows from operating activities			
Cash Inflows from operating activities			
Member Contributions		12,100,160	11,770,463
Publication Sales		461,841	251,014
Interest Received		246,673	159,300
External Project Funding		955,711	159,000
Other Receipts		81	4,471
		<u>13,764,466</u>	<u>12,344,248</u>
Cash generated from operating activities			
Cash Outflows from operating activities			
Salaries and Related Costs		(529,388)	(607,161)
National Office including Corporate Projects		(196,410)	(217,964)
Publications		(122,838)	(139,206)
Programs		(11,759,825)	(11,116,463)
Other Expenses		–	(188)
Net GST Payment		(29,231)	(53,630)
		<u>(12,637,692)</u>	<u>(12,134,612)</u>
Cash used in Operating activities			
Net Cash Inflow from Operating Activities	14	<u>1,126,774</u>	<u>209,636</u>
Cash flow from investing activities			
Proceeds from sale of Property, Plant and equipment		90	14,545
Payment for purchase of Property, Plant and equipment		(25,835)	(37,801)
Cash used in Investing activities			
		<u>(25,745)</u>	<u>(23,256)</u>
Net increase in cash held		1,101,029	186,380
Cash at the beginning of the financial year		6,435,640	6,249,260
Cash at the end of the financial year	4	<u>7,536,669</u>	<u>6,435,640</u>

The accompanying notes form part of these financial statements

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The directors have prepared the financial statements on the basis that the company is a non-reporting entity because there are no users who are dependent on general purpose financial statements. These financial statements are therefore special purpose financial statements that have been prepared in order to meet the requirements of the *Corporations Act 2001*.

The financial statements have been prepared in accordance with the mandatory Australian Accounting Standards applicable to entities reporting under the *Corporations Act 2001* and the significant accounting policies disclosed below, which the directors have determined are appropriate to meet the needs of members. Such accounting policies are consistent with those of previous periods unless stated otherwise.

The financial statements have been prepared on an accruals basis and are based on historical costs unless otherwise stated in the notes. The accounting policies that have been adopted in the preparation of the statements are as follows:

The financial statements were authorised for issue on 8th of September 2011 by the directors of the company.

Accounting Policies

a. Revenue

Membership revenue is recognised over the period of time to which it relates.

Work Program Contributions are recognised when Austrroads has received or is expecting to receive such contributions.

Grant revenue is recognised in the statement of comprehensive income when the entity obtains control of the grant and it is probable that the economic benefits gained from the grant will flow to the entity and the amount of the grant can be measured reliably.

If conditions are attached to the grant which must be satisfied before it is eligible to receive the contribution, the recognition of the grant as revenue will be deferred until those conditions are satisfied.

Interest revenue is recognised on a proportional basis taking into account the interest rate and period applicable.

Revenue from the rendering of a service is recognised upon the delivery of the service to the customers.

Publication Sales revenue is recognised monthly when advised by the distributor.

All revenue is stated net of the amount of goods and services tax (GST).

b. Foreign currency translation

The financial statements of Austrroads Ltd are presented in Australian dollars, the entity's functional and presentation currency.

c. Income tax

Austrroads has been exempted from income tax under section 50-5 of the Income Tax Assessment Act 1997.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

d. Leases

Payments made under operating leases where substantially all the risks and benefits remain with the lessor are charged to the income statement on a straight-line basis over the lease term.

e. Property, Plant and Equipment

Each class of property, plant and equipment is carried at cost or fair values as indicated, less, where applicable, accumulated depreciation and impairment losses.

Plant and Equipment

Plant and equipment are measured on the cost basis less depreciation and impairment losses.

The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the assets employment and subsequent disposal.

Depreciation

The depreciable amount of all fixed assets is depreciated on a straight line basis over the asset's useful life to the entity commencing from the time the asset is held ready for use.

The depreciation rates used for each class of depreciable assets are:

Class of Fixed Asset Depreciation Rate

Furniture and office equipment	20 - 33.33%
Motor vehicle	20%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are included in the statement of comprehensive income.

f. Cash, cash equivalents and investments

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, and other short term highly liquid investments with original maturities of three months or less.

g. Trade receivables

All trade debtors are recognised at the amounts receivable as they are due for settlement no more than 120 days from the date of recognition, and no more than 30 days for other debtors.

There is no general provision for doubtful debts, as there has been no need for it.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

h. Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

i. 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 of 13% on Long Service Leave.

Provisions for long service leave for service under six years is treated as a non current liability.

j. Trade and other payables

These amounts represent liabilities for goods and services provided to the company prior to the end of financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

k. Income in advance

This represents the invoices raised or monies received but goods and services not yet provided to the customers at the end of the financial year.

l. NEVDIS

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) to 25 August 2012. The annual fee is \$1,520,000 per annum (ex GST) payable monthly in arrears.

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

m. Change of accounting policy

There have been no changes to Austroads' Accounting policies as a consequence of its change from an incorporated Association to a Public Company Limited by Guarantee.

n. Comparative figures

Comparative figures have been adjusted to conform to changes in presentation for the current financial year, where required by Accounting Standards.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

o. Critical accounting estimates

The Directors evaluate estimates and judgements incorporated into the financial report based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained externally and within the company.

p. Adoption of New and Revised Accounting Standards

During the current year the company adopted the following revised Australian Accounting Standards to the extent they affect the mandatory Australian Accounting Standards applicable to entities reporting under the *Corporations Act 2001*.

AASB 2009-5: Further Amendments to Australian Accounting Standards arising from the Annual Improvements Project (applicable for annual reporting periods commencing from 1 January 2010).

This standard made amendments to various AASB standards including AASB 101: Presentation of Financial Statements and AASB 107: Statement of Cash Flows.

Some of the amendments arising from AASB 2009-5 resulted in accounting changes for presentation, recognition or measurement purposes, whereas others only related to terminology and editorial changes. The following principal amendments are considered to be applicable to the company, although these changes are not expected to materially affect the company's financial statements.

AASB 101 Current/non-current classification of convertible instruments:

Under this amendment, in classifying a liability as current because the entity does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period, if there are terms that could result in its settlement by issuing equity instruments (at the option of the counterparty), those terms do not affect the liability's classification.

AASB 107 Classification of expenditures on unrecognised assets:

Under this amendment, in classifying cash flows arising from investing activities, only those expenditures that result in a recognised asset in the statement of financial position are eligible for classification as investing activities.

q. New Accounting Standards for Application in Future Periods

The Australian Accounting Standards Board has issued new and amended accounting standards and interpretations that have mandatory application dates for future reporting periods and which the Company has decided not to early adopt. A discussion of those future requirements and their impact on the Company is as follows:

AASB 2009-12: Amendments to Australian Accounting Standards [AASBs 5, 8, 108, 110, 112, 119, 133, 137, 139, 1023 & 1031 and Interpretations 2, 4, 16, 1039 & 1052] (applicable for annual reporting periods commencing on or after 1 January 2011).

This Standard makes a number of editorial amendments to a range of Australian Accounting Standards and Interpretations, including AASB 108: Accounting Policies, Changes in Accounting Estimates and Errors and AASB 1031: Materiality. However, these editorial amendments have no major impact on the requirements of the respective amended pronouncements

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

AASB 2010–4: Further Amendments to Australian Accounting Standards arising from the Annual Improvements Project [AASBs 1, 7, 101 & 134 and Interpretation 13] (applicable for annual reporting periods commencing on or after 1 January 2011).

Key changes include:

clarifying the application of AASB 108 prior to an entity's first Australian-Accounting-Standards financial statements; and amending AASB 101 to the effect that disaggregation of changes in each component of equity arising from transactions recognised in other comprehensive income is required to be presented, but is permitted to be presented in the statement of changes in equity or in the notes.

AASB 2010–5: Amendments to Australian Accounting Standards (October 2010) [AASBs 1, 3, 4, 5, 101, 107, 112, 118, 119, 121, 132, 133, 134, 137, 139, 140, 1023 & 1038 and Interpretations 112, 115, 127, 132 & 1042] (applicable for annual reporting periods beginning on or after 1 January 2011).

This Standard makes numerous editorial amendments to a range of Australian Accounting Standards and Interpretations, including AASB 101 and AASB 107. However, these editorial amendments have no major impact on the requirements of the respective amended pronouncements

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

	Notes	2011 \$	2010 \$
NOTE 2 REVENUE			
Member Contributions			
Membership Contributions		940,900	917,900
Work Program Contributions		9,706,800	9,472,800
		<u>10,647,700</u>	<u>10,390,700</u>
Special Programs and Projects			
DoIT – Australian Bicycle Council Secretariat		126,000	123,000
DoIT – Redevelopment of ABC Cycling Resource Centre Website		21,500	3,500
NTC – Jointly funded projects		101,610	7,500
RTA NSW – Contribution to Bridge Design Guidelines for Earthquakes		–	25,000
DTEI SA Road Safety Knowledge Transfer		72,444	–
Contributions to National Cycling Participation Survey 2011		124,393	–
National Skills Marketing Plan		89,910	–
User Satisfaction Index 2010-11		131,148	–
Development of ITS Architecture Stage 1		275,000	–
US Funded Safety Performance Measures		13,706	–
		<u>955,711</u>	<u>159,000</u>
Publications			
Gross Sales Revenue		457,495	248,800
Royalties		4,346	2,214
		<u>461,841</u>	<u>251,014</u>
Interest Received			
Short Term Investments		244,153	158,388
Rental Bond Deposit		2,520	912
		<u>246,673</u>	<u>159,300</u>
Other Income			
Sundry		–	4,472
		<u>–</u>	<u>4,472</u>
Total revenue		<u>12,311,925</u>	<u>10,964,486</u>

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

Notes	2011 \$	2010 \$
NOTE 3 EXPENSES		
Corporate		
Salaries and Related Charges	486,895	540,574
Other National Office Expenses	259,608	276,964
Corporate Projects	–	600
Corporate Services	59,079	51,494
Depreciation	18,371	16,303
Program Management	600,000	600,000
	<u>1,423,953</u>	<u>1,485,935</u>
Work Program		
Assets	1,598,496	1,533,452
Freight	614,482	568,526
Network	1,425,787	1,144,811
Registration and Licensing	272,701	401,406
Safety	1,557,007	1,416,899
Technology	3,273,457	3,404,606
Capability	3,064	110,633
	<u>8,744,994</u>	<u>8,580,333</u>
Specific Projects		
International Participation	83,335	45,189
Austrroads ARRB Fellowship	60,000	60,800
CPEE Support	15,000	19,200
ALGA Support	14,513	7,455
Test Methods & Pavement Technology Work Tips	31,000	(5,440)
Redevelop Austrroads Databases and Publications Website	22,650	–
Australian Standards Development related activity	13,000	–
DTEI SA Road Safety Knowledge Transfer	2,403	–
National Skills Marketing Plan	57,674	–
User Satisfaction Index 2010-11	131,148	–
Independent Review of ARRB	137,688	–
US Funded Safety Performance Measures	9,500	–
DoIT – Australian Bicycle Council Secretariat	126,117	123,099
DoIT – ABC Cycling Resource Centre Website	20,938	3,500
ABC National Cycling Participation Survey	123,739	–
	<u>848,705</u>	<u>253,803</u>
Publications		
Austrroads Publication Purchases	3,353	10,786
Canprint Printing & Distribution Costs	57,985	–
Production and Distribution	42,000	42,000
SAIG Printing, Distribution and web facility	19,500	72,000
Promotion and marketing	–	14,420
	<u>122,838</u>	<u>139,206</u>
Total Expenditure	<u>11,140,490</u>	<u>10,459,277</u>

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

Notes	2011 \$	2010 \$
NOTE 4 CURRENT ASSETS – CASH AND CASH EQUIVALENTS		
Cash at bank and on hand	2,428,408	926,748
Cash at Bank (NEVDIS)	<u>2,108,261</u>	<u>2,437,706</u>
Sub-total	4,536,669	3,364,454
Short-term deposits and deposits at call	<u>3,000,000</u>	<u>3,071,186</u>
	<u>7,536,669</u>	<u>6,435,640</u>
Cash at the end of the financial year is reconciled to the statement of cash flow as follows:		
Cash and cash equivalents	<u>7,536,669</u>	<u>6,435,640</u>
NOTE 5 CURRENT ASSETS — RECEIVABLES		
Trade debtors	181,023	15,383
NEVDIS Receivables	604,055	428,361
Other receivables	<u>–</u>	<u>8,608</u>
	<u>785,078</u>	<u>452,352</u>
NOTE 6 OTHER DEBTORS		
Current		
GST Receivable	176,049	152,677
Non Current		
Rental Deposit Bond	<u>44,863</u>	<u>42,344</u>
	<u>220,912</u>	<u>195,021</u>
NOTE 7 NON-CURRENT ASSETS — PROPERTY, PLANT & EQUIPMENT		
Office Furniture and Equipment at Cost	128,363	112,858
Accumulated depreciation	<u>(100,894)</u>	<u>(99,375)</u>
Net book amount	<u>27,469</u>	<u>13,483</u>
Motor Vehicle at Cost	33,469	33,469
Accumulated depreciation	<u>(12,819)</u>	<u>(6,125)</u>
Net book amount	<u>20,650</u>	<u>27,344</u>
Total	<u>48,119</u>	<u>40,827</u>

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

Notes	2011 \$	2010 \$
NOTE 8 CURRENT LIABILITIES – PAYABLES		
Trade Payables	1,505,882	859,005
NEVDIS Payables	1,306,371	642,239
Accrued Expenses	<u>72,853</u>	<u>120,299</u>
	<u>2,885,106</u>	<u>1,621,543</u>

NOTE 9 MEMBERS' GUARANTEE

The company is a company limited by guarantee, incorporated and domiciled in Australia
The liability of each of its members is limited to \$20.

NOTE 10 REMUNERATION OF DIRECTORS

There is no income received, or due and receivable by the directors.

NOTE 11 REMUNERATION OF AUDITORS

During the year Moore Stephens Sydney ,the auditor of the company earned the following remuneration:

Remuneration of Auditor for Audit of the Current Year	15,750	15,000
Remuneration of Auditor for Audit of the Previous Year	<u>1,650</u>	<u>1,250</u>
Total remuneration	<u>17,400</u>	<u>16,250</u>

NOTE 12 CONTINGENT LIABILITIES OR ASSETS

The company is not aware of any contingent liabilities or assets at year end (2010 – nil).

NOTE 13 LEASE COMMITMENTS

Operating Lease Commitments – being for the rent of office

Payable – minimum lease payments

- Not later than 12 months	129,252	113,035
- Between 12 months and 5 years	<u>133,128</u>	<u>226,069</u>
	<u>262,380</u>	<u>339,104</u>

The property lease is for a remaining term of two years, with rent payable monthly.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

	Notes	2011 \$	2010 \$
NOTE 14 RECONCILIATION OF PROFIT FROM ORDINARY ACTIVITIES AFTER INCOME TAX TO NET CASH GENERATED FROM OPERATING ACTIVITIES			
Operating (loss) / profit after income tax		1,171,435	505,209
Adjustment for non-cash-flow items			
Depreciation and amortisation		18,371	16,303
Net Profit / (loss) on sale of non-current assets		81	(188)
Change in operating assets and liabilities			
(Increase) Decrease in accounts receivable		(332,726)	(187,028)
(Increase) Decrease in other operating assets		(53,771)	37,740
Increase (Decrease) in trade creditors and accruals		1,263,563	70,074
Increase (Decrease) in other provisions		(42,493)	6,765
Increase (Decrease) in other operating liabilities		(897,686)	(239,239)
NET CASH GENERATED FROM OPERATING ACTIVITIES		1,126,774	209,636
NOTE 15 NEVDIS			
Income			
Members' contributions		3,058,562	2,483,960
Safety Recalls		140,805	113,828
Data Extracts (ABS, QT and Other)		–	6,500
AEC Extract Charges		168,131	163,476
Attorney General DR Connectivity		–	9,000
Transport SA extract charges		–	1,669
PPSR Enhancements Recovery		800,000	–
Data Wash Project Income		23,507	–
Interest Received		67,399	44,962
Total Income		4,258,404	2,823,395
Expenditure			
Fujitsu Subscription and Operating Costs		1,799,564	1,597,835
RTA NEVDIS Administration Unit and Salaries		1,963,455	1,488,351
NEVDIS Projects		950,300	363,036
Other		37,760	12,849
Total Expenditure		4,751,079	3,462,071
Net Deficit for the Year		(492,675)	(638,676)
Amount Unexpended in Previous Years		1,815,787	2,454,463
Amount Unexpended transferred to Liabilities		(1,323,112)	(1,815,787)

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2011

NOTE 16 MATTERS SUBSEQUENT TO THE END OF THE FINANCIAL YEAR

There were no subsequent events that occurred prior to the end of the financial year

NOTE 17 ENTITY DETAILS

The registered office and principal place of business of the company is:

Level 9, 287 Elizabeth Street
SYDNEY NSW 2000

DIRECTORS' DECLARATION

Austroads Ltd
ABN 16 245 787 323

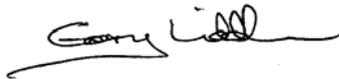
The directors have determined that the company is not a reporting entity, and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

The directors declare that the financial reports and notes set out on pages 50 to 64 are in accordance with the *Corporations Act 2001* and:

- a) comply with Australian Accounting Standards as detailed in Note 1 to the financial statements; and
- b) give a true and fair view of the company's financial position as at 30 June 2010 and of its performance for the financial year ended on that date in accordance with the accounting policies described in Note 1 to the financial statements.

In the directors' opinion there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the Board of Directors on 8 September 2011.



Gary Liddle
Chairman

Date: 8 September 2011

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Sydney NSW 2000

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INDEPENDENT AUDITORS REPORT

Report on the Financial Report

We have audited the accompanying financial report, being a special purpose financial report of Austroads Ltd, which comprises the statement of financial position as at 30 June 2011, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the period then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration.

Directors' Responsibility for the Financial Report

The directors of the company are responsible for the preparation of the financial report and have determined that the basis of preparation described in Note 1 to the financial report is appropriate to meet the requirements of the *Corporations Act 2001* and is appropriate to meet the needs of the members.

The directors' responsibility also includes such internal control as the directors determine is necessary to enable the preparation of a financial report that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We have conducted our audit in accordance with Australian Auditing Standards. Those standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about 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 judgement, 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 of the financial report that gives a true and fair view 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 directors, as well as evaluating the overall presentation of the financial report.

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 the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Austroads Ltd, would be in the same terms if given to the directors as at the time of the auditor's report.

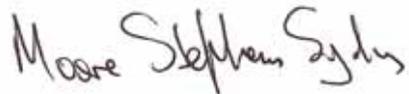
Opinion

In our opinion the financial report of Austrroads Ltd. is in accordance with the *Corporations Act 2001*, including:

- a) giving a true and fair view of the company's financial position as at 30 June 2011 and of its performance for the period ended on that date; and
- b) complying with Australian Accounting Standards to the extent described in Note 1, and the *Corporations Regulations 2001*.

Basis of Accounting

Without modifying our opinion, we draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared for the purpose of fulfilling the directors' financial reporting responsibilities under the *Corporations Act 2001*. As a result, the financial report may not be suitable for another purpose.



Moore Stephens Sydney
Chartered Accountants



SPIRO TZANNES

Partner

Dated in Sydney this 8th day of September 2011

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