



Annual Report





Letter to the Minister

The Honourable Carl Scully, MP Minister for Transport Minister for Roads Level 36 Governor Macquarie Tower I Farrer Place Sydney NSW 2000

Dear Minister,

I have pleasure in submitting the Annual Report and Financial Statements of the Roads and Traffic Authority for presentation to the Parliament of New South Wales for the financial year ended 30 June 2002. It has been prepared in accordance with the *Annual Reports (Statutory Bodies) Act 1984 and the Public Finance and Audit Act 1983.*

Yours sincerely,

Paul Forward

Chief Executive



Cover photographs – Anti-clockwise from top left: RTA staff, Lakshmy Mulavana, Steve Mead and Catherine Parker: © Roads and Traffic Authority NSW ISSN 1037 3276 – RTA/Pub 02.206 This report was printed on recycled paper. (50% recycled fibre and 50% oxygen bleached).

I

Contents IFC Letter to the Minister

- 02 Towards triple bottom line reporting
- 03 About the RTA
- 04 Vision, mission and priorities
- 04 RTA strategic plan
- 05 Corporate governance
- 06 Management structure
- 08 The Executive team
- 10 Chief Executive's overview of 2001-02
- 12 Financial overview
- 16 Our people
- 22 Road safety
- 28 Mobility of people and goods
- 34 Developing the road network
- 42 Road system maintenance
- 48 Road use regulation
- 52 Customer service
- 56 The environment
- 64 Value for money
- 68 Consultation and information
- 74 Informed and accountable management
- 78 Financial statements
- 113 Appendices
- 151 Index
- IBC Contact the RTA

Towards triple bottom line reporting

This annual report marks a new step for the RTA. For the first time, the RTA has adopted 'triple bottom line' reporting principles. This means you won't just find financial performance information and a list of our achievements here. This document reports on the three 'bottom lines' of importance to the community – the economic, social and environmental sustainability of the RTA's performance. Each chapter contains a section on 'sustainability' summarising key points relating to the triple bottom line. However, further details are contained throughout the report.

The RTA's reporting will become more sophisticated and comprehensive in the coming years, ensuring that the community can effectively assess contributions across all the measures that are important. The RTA strives to be a leader in environmental and social performance in the course of providing the services and facilities required by the people of New South Wales. The RTA is the only road agency in Australia to prepare an annual report on environmental performance. The annual environment report is not a statutory requirement but reflects the RTA's commitment to being at the forefront of environmental practice.

This annual report is a new step in striving for best practice. The new reporting approach is supported by the implementation of sustainable practices across the vast range of RTA activities.

About the RTA

Statutory framework

The Roads and Traffic Authority (RTA) is a NSW statutory authority established under the Transport Administration Act 1988. It administers the Transport Administration Act 1988, Roads Act 1993, Road Transport (General) Act 1999, Road Transport (Safety and Traffic Management) Act 1999, Motor Vehicles Taxation Act 1988, Road Transport (Heavy Vehicles Registration) Act 1995, Road Transport (Driver Licensing) Act 1998, Road Transport (Vehicle Registration) Act 1997 and Driving Instructors Act 1992.

Responsibilities

The RTA is the NSW State Government agency responsible for:

- Providing road planning, construction and maintenance solutions for the NSW community, with an emphasis on meeting community, environmental, regulatory and economic needs.
- Improving road safety, through better road user behaviour, vehicles and roads to save lives and reduce injuries.
- Managing the use of the road network to achieve consistent travel times, particularly during peak periods, by reducing congestion and delays and helping the community use the road system more effectively.
- Testing and licensing drivers, and registering and inspecting vehicles.

In delivering and managing a safe, reliable and efficient road network, the RTA consults with the community and coordinates with other transport and planning agencies to develop the most effective transport system to meet the needs of the people of NSW and contribute to the State's continued economic development in an environmentally responsible manner.

The RTA continues to foster the technical expertise and professionalism of staff.

The RTA manages the operation, maintenance and enhancement of 17,670km of State Roads, including 3106km of National Highways. This includes facilities such as traffic lights, roundabouts, signs and linemarking. It also manages nearly 3000km of Regional Roads and Local Roads in the unincorporated area of NSW where there are no local councils. It provides financial assistance to local councils to manage 18,488km of Regional Roads and, to a limited extent, Local Roads, through funding and other support.

Roads in which the RTA has an interest include 4588 bridges, including major culverts and tunnels, and nine vehicular ferries.

History

The RTA was established on 16 January 1989 under the *Transport Administration Act 1988* through an amalgamation of the former Department of Main Roads, Department of Motor Transport and the Traffic Authority.

Assets

The written down value of the road, bridge and traffic infrastructure the RTA manages is more than \$50 billion, including the value of land under roads. Property, plant, equipment, private sector provided infrastructure and other non-current assets are valued at \$3.8 billion.

Funding

Annual funding for the Roads Program is about \$2.5 billion, including State and Commonwealth contributions and road user charges.

Our people

The RTA employs about 6400 staff in more than 200 offices throughout NSW, including 130 Motor Registries.

Customers

The RTA has a vast range of customers, including individuals, private organisations, community and road transport groups, local councils and State and Federal Government agencies.

The 4.2 million drivers and owners of 4.5 million vehicles in NSW generate about 380,000 road-related transactions and 60,000 phone calls a week.

Vision, mission and priorities

Our vision

A continually improving and increasingly safe roads and traffic system, meeting community, environmental and economic needs, as a key part of transport in New South Wales.

Our mission

Delivery of the best transport outcomes, balancing the needs of public transport passengers, cyclists, pedestrians, motorists and commercial operators by:

- Maintaining a strong customer focus.
- Working with innovation, openness and integrity.
- Achieving value for money.
- Being environmentally responsible.

Government priorities for the RTA Meeting transport needs

- Manage and develop the State Road network and its use in a way that balances the needs of public transport passengers, bicycle riders, pedestrians, motorists and commercial operators.
- Develop and maintain efficient and reliable passenger and freight transport corridors between regional centres, capital cities and ports.
- Serve regional and rural communities by improving the country road network and effective access to services.
- Maintain roads and bridges to ensure reliability, safety and retained value.
- Continuously improve road safety on NSW roads.
- Provide leadership in national land transport reform to deliver efficiency, productivity and safety benefits to NSW.
- Provide fair and consistent licence and registration administration to promote responsible road use.
- Implement Action for Transport 2010 in partnership with other transport agencies.

Meeting customers' needs

- Facilitate ease of access to RTA's essential customer services by providing a range of outlets, including via the Internet.
- Improve incident response and provide timely, quality road and traffic information through the Transport Management Centre. Continue to develop a customer focus in all areas of traffic management, registry services and community consultation.

Protecting and enhancing

- the environment
- Minimise impacts on the natural and built environment from road use and RTA activities.
- Working with other agencies, move towards a more sustainable transport system.

Providing best value for money

• Actively pursue the best value for money in the performance of activities and the delivery of services.

RTA strategic plan

The Journey Ahead is the RTA's strategic plan, which builds on the organisation's achievements and outlines the vision for the future. It sets out direction and priorities, and reflects the initiatives and challenges of implementing the NSW Government's Action for Transport 2010 – An Integrated Transport Plan for NSW. This annual report includes information on the RTA's performance and achievements against *The Journey Ahead*, its objectives, initiatives and performance measures.

Corporate governance

The RTA has implemented corporate governance structures and practices to ensure high standards of business ethics and accountability throughout the organisation and to ensure it delivers cost-effective products and services to the community.

Code of Conduct and Ethics

The RTA's Code of Conduct and Ethics details the standards and values the organisation will apply in relationships with customers, contractors, employees and the community. This code is reviewed regularly and enhanced to ensure it provides practical assistance to staff on standards of behaviour and in solving ethical issues.

The RTA has issued an update of its *Statement of Business Ethics* that sets out the appropriate standards for doing business between the RTA and the private sector. It provides guidelines on what to expect from the RTA and explains the mutual obligations, roles and constraints of all parties.

Corporate structure

The Chief Executive is responsible and accountable to the Minister for Roads and Parliament for the RTA's overall performance and ensuring that the RTA performs in a manner consistent with legislative compliance and best practice principles. Senior management, advisory bodies and committees assist the Chief Executive with his duties. This structure supports effective corporate governance of the organisation.

Audit committee

The Audit Committee is chaired by the Chief Executive and comprises senior executives, a non-public sector representative from the audit profession and an observer from the Audit Office of NSW. The committee meets every three months to consider progress against the audit program, generally oversee the direction of the audit function and consider the adequacy of the financial control and reporting systems. It also reviews the authority's year end financial statements.

Strategic and business planning

Corporate objectives and strategies are set by the Chief Executive and senior management to meet the NSW Government's priorities and the community's road-based transport needs. The RTA's Strategic Plan -The Journey Ahead - sets out the organisation's vision, mission and key priorities. It also provides an integrated planning approach to transport through the inclusion of strategies linked to the NSW Government's Action for Transport 2010 – An Integrated Transport Plan for NSW. The Journey Ahead is supported by five-year strategic and business plans that are reviewed annually. Progress is monitored and reported against these plans and against community outcomes. Strategic management and planning is a cyclic process involving analysis of internal and external environments, strategic development and planning, service delivery and performance monitoring and evaluation.

Corporate card and purchasing card

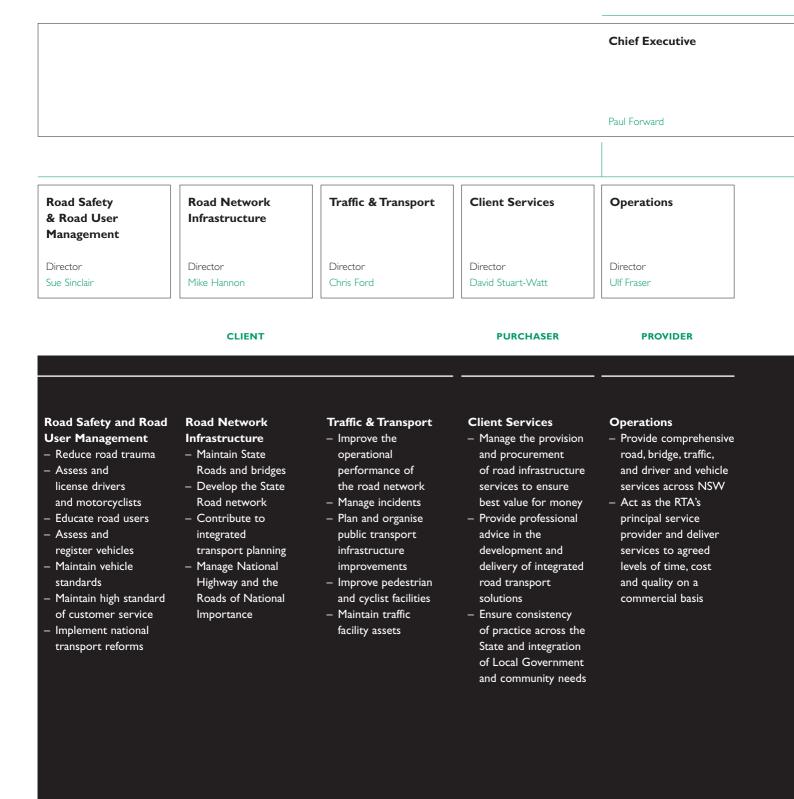
The introduction and use of corporate credit and purchasing cards throughout the RTA has been in accordance with the Premier's memorandum and the Treasurer's Directions.

Executive appointments and remuneration

The Minister for Roads is responsible for approving the Chief Executive's appointment and contract. The Chief Executive is responsible for approving senior executives' appointments and contracts. These contracts may have a duration of up to five years and include annual performance agreements.

The Chief Executive's remuneration is determined by the Minister for Roads and the Chief Executive determines the remuneration of senior executives in accordance with determinations issued by the Statutory and Other Offices Remuneration Tribunal on I October of each year.

Management structure



6

Environment & Community Policy
General Manager Jay Stricker

FinanceCorporate ServicesCommunications
& Corporate
RelationsDirectorDirectorDirectorBrett SkinnerRod ToutDirector

CORPORATE SUPPORT

Finance

- Maintain contemporary financial and commercial management framework and manage the RTA's finance functions
- Monitor, evaluate and report on the financial performance of the RTA in all key areas
- Develop robust proposals to ensure adequate funding for the RTA
- Ensure adequate management of the RTA's risk exposures
- Ensure effective management of the RTA assets and financial resources
- Lead improvements in budgeting and resource management decision making

Corporate Services

- Develop and implement strategic human resource plans and policies including Occupational Health and Safety
 Plan and manage
- the deployment of information technology resources across the RTA
- Provide legal services to the RTA
- Lead corporate strategic planning and performance monitoring and evaluation
- Provide centralised management of resources for delivery of business services in a consistent and cost efficient manner

Communications &

- Corporate Relations
- Manage internal and external communications in support of RTA core programs
- Manage the corporate identity of the RTA
- Assist in the management of special events and publication of key internal and external RTA documents
- Provide
 communications
 advice and strategies
 for the RTA

Environment and Community Policy

- Develop the RTA's environmental
- management system and community consultation processes – Provide policy advice
- and guidance on various environmental and planning issues
- Ensure comprehensive environmental impact assessment, community consultation, environmental management and compliance across the RTA

The Executive team



Paul Forward – Chief Executive

Paul Forward began his career as a lecturer in economics at the University of NSW and has degrees in economics and town planning. He joined the NSW public sector in 1980, holding senior management positions in the Department of Industrial Development and at the Sydney Water Board.

In 1989 he joined Coopers and Lybrand Consultants as an Associate Director and conducted consulting assignments in strategic planning and marketing for public and private sector clients. In 1992 he was appointed Director, Corporate Planning, at the Water Board. He joined the RTA in February 1995 as Director, Road Network Infrastructure, and was responsible for the Network Development Program and the Infrastructure Maintenance Program. Paul was appointed Acting Chief Executive in May 1999 and Chief Executive in December 1999.

Jay Stricker – General Manager,

Environment and Community Policy

Jay Stricker is an ecologist and environmental strategist with more than 25 years' experience in the management of a broad range of environmental issues spanning air quality, stormwater management, road traffic noise, biodiversity conservation, energy and waste management and indigenous and European heritage. Jay previously worked in the public sector at Sydney Water Corporation and The Australian Museum.

Mike Hannon – Director, Road Network Infrastructure

Mike Hannon is a civil engineer with over 30 years' experience in the NSW Public Service. Mike began work with the Public Works Department and in 1989 was appointed Regional Manager Metropolitan North and subsequently Deputy Director Regional Operations. A range of subsequent senior appointments included Chair of the Construction Policy Steering Committee, responsible for implementing the recommendations of the Royal Commission into Productivity in the Building Industry. He was involved in major projects such as the Walsh Bay Redevelopment, the Conservatorium of Music, Hunter Sewerage Scheme and Wharves 9 and 10, Darling Harbour: Mike was seconded to the RTA in 1999 and subsequently appointed Director, Road Network Infrastructure.

Rod Tout – Director, Corporate Services

Rod Tout has had broad management experience in seven very different government organisations at State and Federal level, including a central agency, a commercialised business agency, the Judiciary and direct service-delivery agencies. Rod holds a Diploma in Public Administration, a Bachelor of Business and a Masters Degree in Law and Policy. He is a Fellow of the Australian Institute of Management and Justice of the Peace.

Ulf Fraser - Director, Operations

Ulf Fraser is a civil engineer by profession with over 35 years' experience in all aspects of the development and management of the NSW major roads and traffic system. He started his career with the then Department of Main Roads designing bridges before moving on to supervision of their construction and maintenance. His responsibilities were later broadened to include accountability for the contract management of all road and bridgeworks across the State. In 1987 Ulf was appointed Project Manager, Sydney Harbour Tunnel, and subsequently negotiated the first tollroad project in NSW – the M4 in Sydney. Ulf held several senior positions with the RTA before being appointed Director; Operations, in 1999.

- 9
- 01 Paul Forward Chief Executive
- 02 Jay Stricker General Manager, Environment and Community Policy
- 03 Mike Hannon Director, Road Network Infrastructure
- 04 Rod Tout Director, Corporate Services
- 05 Ulf Fraser Director, Operations
- 06 David Stuart-Watt Director, Client Services
- 07 Chris Ford Director, Traffic and Transport
- 08 Paul Willoughby Director, Communications and Corporate Relations
- 09 Sue Sinclair Director, Road Safety and Road User Management
- 10 Brett Skinner Director, Finance



David Stuart-Watt - Director, Client Services

David Stuart-Watt was educated in Australia and France and holds degrees in both engineering and management. David worked for 25 years in a variety of positions with the Department of Main Roads and then the RTA before joining Local Government in London, England. David was appointed back to the RTA as a Director in 1995 and has held his current position of Director, Client Services, since 1999.

Chris Ford – Director, Traffic and Transport

Chris Ford is an engineer with extensive experience in traffic management. He began his career with the Department of Motor Transport in 1966. He worked as a consultant engineer, a transportation specialist with the Planning and Environment Commission and a network manager with the Ministry of Transport, before joining the Traffic Authority in 1986. His long career with the RTA included appointments as the Manager of Development and Road Safety, Sydney Western Region, Manager, Network and Road Safety, Sydney Region, and Director of Road Safety and Traffic Management.

Paul Willoughby - Director,

Communications and Corporate Relations

Paul Willoughby has spent more than 20 years involved in media and communications. He began his career as a journalist at the Adelaide Advertiser, working in the Federal Parliamentary Press Gallery before joining Government in 1990. Before joining the RTA, Paul was Director, Corporate Affairs at the Olympic Roads and Transport Authority (ORTA). He developed the successful media and communications strategy on transport for the Sydney 2000 Olympic and Paralympic Games. He was appointed the RTA's Director, Communications and Corporate Relations, in March 2001.

Sue Sinclair – Director, Road Safety and Road User Management

Sue Sinclair has worked for the RTA since 1981. During this period she has been appointed to a range of senior positions within the organisation and has a wealth of experience in public administration. Her roles at the RTA include Corporate Counsel, Director of Corporate Services and, from April 2000, Director, Road Safety and Road User Management. In 1994–95 she was seconded to the Homebush Bay Corporation as Senior Manager, Investments Olympics. Sue has managed a broad range of projects and led a diverse number of negotiations with both the private and public sector including major toll roads, data processing and desk top support, and commercial initiatives including the tourist development opportunity for the Sydney Harbour Bridge. In October 2001 Sue was selected by the Premier's Department to attend the Strategic Public Sector Leader's course. This is a State and Commonwealth initiative to recognise and develop senior executives in the public sector.

Brett Skinner – Director, Finance

Brett Skinner began his career with a global accounting firm, working in the audit area covering a wide range of clients. He then worked for large private companies involved in agriculture and manufacturing. For 10 years Brett held Chief Financial Officer roles in the utilities industry covering electricity, gas, water and wastewater. These roles included ensuring good financial management and corporate governance. The roles also required advising the organisation's Board of Directors and executive management team on strategies to enhance the financial performance of their business units and the organisation as a whole. Most recently Brett worked for ActewAGL, an energy and water company in Canberra. One of his key roles was in forming and implementing a joint venture with AGL to ensure the financial security of ACTEW in a competitive market. In November 2001 Brett was appointed as Director, Finance, at the RTA.

Overview of 200I–02



By RTA Chief Executive Paul Forward

This annual report: a fresh approach

This report unashamedly focuses on the RTA's staff and the people we serve – the community of NSW. While containing everything you would expect in an annual report, this report also attempts something new. In the interests of greater accountability, we are moving towards 'triple bottom line' reporting. That is, we have sought to report on the environmental and social sustainability of our activities, alongside the usual financial reporting. Each chapter contains a section on sustainability, highlighting how each area of endeavour contributes to a sustainable economy, a healthy environment and a healthy community. In future reports, we will refine this approach, providing more data and analysis of the RTA's triple bottom line.

The report is different in other ways too. This year we report directly against the measures we set ourselves in our strategic plan, *The Journey Ahead*. The chapters in this report mirror exactly the strategic outcomes contained in the plan. Our performance towards achieving these outcomes is clearly set out at the beginning of each chapter.

You can see where we have met our targets, and where we need to do better. This approach is another sign of our commitment to accountability and serving the community. The strategic plan incorporates the priorities of the NSW Government, reflecting:

- Action for Transport 2010 the Government's integrated transport plan, mapping out the biggest transport improvement program in NSW history.
- Road Safety 2010 the Government's plan for halving the NSW road toll by 2010. As the lead agency for road safety in NSW, the RTA plays a fundamental role in delivering programs designed to reduce road casualties.

Our performance in 2001-02

The RTA faced and met enormous challenges this year in all of our core programs.

A comprehensive road safety program again showed positive results. In the 12 months ending 30 June 2002, there were 570 fatalities on NSW roads, 21 (4%) more than the 549 deaths in the year to 30 June 2001. However, the 2001–02 road toll was still the third lowest road toll since the financial year ending 30 June 1950 (see Figure 1)

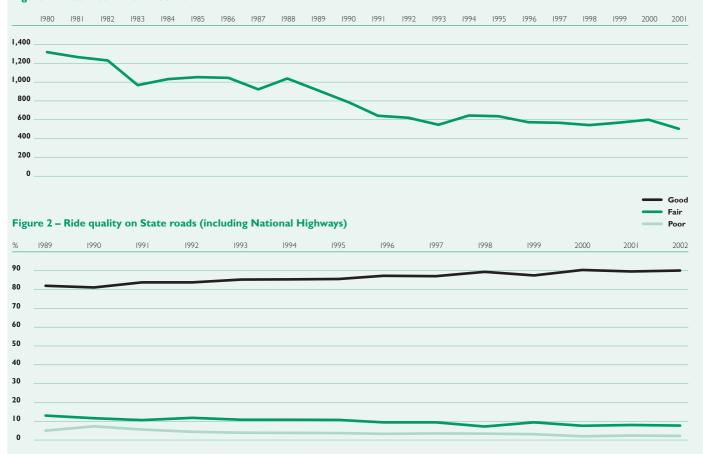


Figure I - Fatalities in NSW 1980-01

and the road toll for the 2001 calendar year was the lowest on record. The skills of drivers will be enhanced with the introduction of the Hazard Perception Test, as part of the new Graduated Licensing Scheme for novice drivers. Initiatives to stop dangerous driving were also advanced, including the alcohol interlock program for repeat drink-drive offenders. *Operation WestSafe* – a strategic alliance between NSW Police, Motor Accidents Authority (MAA) and the RTA – had a significant impact on the road toll in Western Sydney. Fatalities in Western Sydney were reduced by a third in 2001 – meaning that 47 lives were saved.

It was a very important year for a number of **major construction** projects, which have delivered – or will deliver – big benefits for motorists, the community and business. The M5 East Freeway opened, vastly improving travel times, reducing traffic on local streets and increasing the value of local homes. Planning for the proposed Western Sydney Orbital, Cross City Tunnel and Lane Cove Tunnel progressed significantly. Planning and implementation for the bus-only T-ways will provide innovative public transport options for the people of Western Sydney. Major **upgrade works** were progressed on Windsor Road, the Great Western Highway and the Pacific Highway. The quality of the road network is being maintained with ride quality continuing to improve (see Figure 2).

The RTA's skills in **managing the flow of traffic** on the road network were proven during the Sydney 2000 Olympic Games. While the RTA works to halt the growth in vehicle kilometres travelled, we also seek to maintain the efficiency of the system. Again this year, peak travel speeds on major Sydney routes were maintained (see Figure 3).

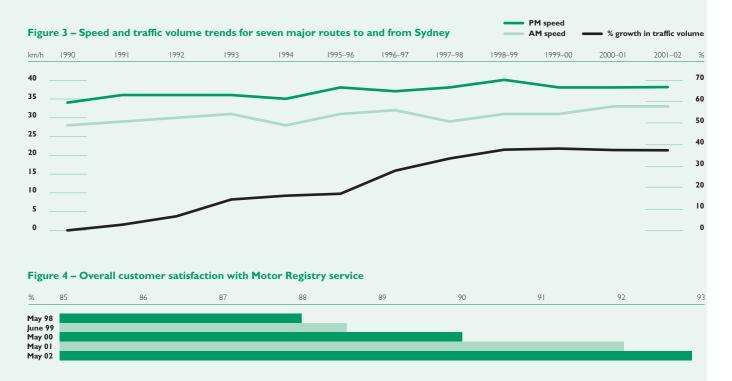
The RTA's **customer services** were improved further this year, with a range of electronic transactions to make driver licensing and vehicle registration much more convenient. Our work in the growing area of 'e-business' was recognised with a Gold award for 'Best Practice in e-Government' in the 2001 Premier's Public Sector Awards (for our On-Line Registration Renewal Service). Other innovations in this field are detailed in the **Customer service** chapter: Customer satisfaction with our work continues to remain high (see Figure 4).

The RTA has been at the forefront of public sector agencies in **protecting the environment.** Initiatives this year crossed the gamut of environmental care and protection, from managing air quality to protecting native wildlife near our major highways.

I would like to acknowledge the work of the staff of the RTA, who are professional, hard-working and innovative. Our conscientious and intelligent approach to risk management and Occupational Health and Safety has led to considerable cost savings, as well as the human benefits of fewer workplace injuries (see **Our people** chapter for more details).

Finally, the RTA's work would be very difficult indeed without the cooperation and involvement of the community – from local government to other State Government agencies to the RTA's commercial partners. My thanks and gratitude go out to all of our partners, who have worked with diligence and goodwill to deliver services to the people of NSW.

Paul Forward Chief Executive



Financial overview

Bottom line

The RTA's economic bottom line is based on sound financial management, efficiency and productivity. It means the RTA strives to operate efficiently and effectively to maximise the benefits from funds provided to us by the State and Federal governments and generated by the RTA, to support the continuity of our business. These funds enhance the organisation's financial strength and enable us to develop and provide the best road network, road safety and traffic management solutions and value for money services to customers and the NSW community.

The RTA also contributes to social and environmental outcomes by extending the range of services provided, making them more accessible to the community and ensuring that services are delivered in a sustainable manner. A strong focus on customer service contributes to provision of better roads program related solutions and a high level of customer satisfaction.

As our customer base broadens and the RTA's economic strength grows, we are able to consider and invest in new technology and better service delivery options that will further benefit stakeholders.

Objectives

Managing the finances by focusing on:

- Ensuring adequate funding for core programs.
- Managing risk exposures.
- Implementing the Integrated Management System.
- Implementing Principal Arranged Insurance for contractors.
- Ensuring provision of high level financial and economic advice to support strategic business decision-making.

Achievements

- Sound financial management of \$2.5 billion funding and expenditure program.
- Implemented Stage I of a new Integrated Financial Management System in March 2002.
- Implemented Principal Controlled Insurance Scheme for construction and road maintenance projects and provided training courses for staff.
- Received the NSW Treasury Managed Fund Award 'Excellence in the Field of Risk Management' for implementation of Critical Control Management process in Road User Management business.
- Generated gross revenue of \$54.9 million from sale of surplus property and leasing of residue property.
- Secured better quality office accommodation in Parramatta and Blacktown to relocate 580 staff within easy access to public transport.
- Administered \$55.5 million and processed 302,700 claims from more than 185,900 registered customers of M4/M5 Cashback Scheme.
- Led development and implemented an On-line Property Inquiry System for NSW State Government authorities in December 2001.
- Introduced robust evaluation and benefit realisation monitoring processes of business investment and other commercial proposals.
- Evaluated proposed private sector infrastructure projects for financial and economic viability and developed benchmark models for assessing bids and determining the value of potential risks.
- Conducted a major review of the RTA's Road Cost Index.
- Further enhanced the organisation's control environment.
- Managed property information relating to \$2.8 billion of property assets.

FOCUSING ON ENHANCING BUSINESS EFFICIENCY AND RISK MANAGEMENT ACROSS THE RTA ///

Total roads program

The expenditure for the year was \$2,496 million (\$2,375 million in 2000–01). This was \$66 million more than the revised budget. In achieving this result, the RTA met Government commitments to specific initiatives, including *Action for Transport 2010*, the Pacific Highway Upgrading, Western & South Western Sydney Roads, and Rebuilding of Country Roads programs.

Funding sources

Of the total funds received by the RTA in 2001–02, State sources provided \$2,039 million or 85% (\$1,917 million in 2000–01). The Federal Government contributed \$359 million or 15% (\$332 million in 2000–01) towards National Highways in NSW, Roads of National Importance and the Australian Transport Safety Bureau – Blackspot Program.

A summary of the RTA's financial performance in 2001–02, as compared to previous years, is shown in the table below:

	Notes	Result 98–99	Result 99–00	Result 00–01	Target 01–02	Result 01–02	Target 02–03
Financial performance indicators							
Debt servicing cost as % of Roads Program		5.4	4.4	3.3	3.6	3.5	6.5
Asset sales (\$M)	1	34.5	38.7	34.4	31.0	35.9	35.0
Interest earned – Hourglass facility	2	5.0	5.5	6.0	5.0	5.3	5.0
- Other institutions		5.0	5.4	6.0	5.0	5.0	5.0

General Notes

The RTA is a budget dependent agency funded by the State and Federal Governments. Many standard financial ratios are therefore not applicable.

I Sale of surplus real properties including those acquired for roadworks, and which are no longer required. All dollar amounts reported in nominal terms.

2 Target represents benchmark rate as advised by Treasury Corporation

Financial management

The focus was on enhancing business efficiency and risk management across all RTA operations. Policies, procedures and guidelines were developed and issued on Business Improvement Capital and Non-Capital Budget submissions to further enhance the financial management framework. Change management and staff team briefing sessions and electronic communication processes were used extensively during implementation of the Integrated Management System (IMS) Stage I. Training on various IMS modules was provided to appropriate staff across the RTA during the year, achieving high levels of user knowledge and skills and a smooth transition to the new system.

e-Business

In December 2001 the RTA implemented the Online Property Inquiry System (OPIS), an electronic service delivery initiative utilising leading edge web technology. OPIS provides the public an alternative channel for lodging a property inquiry with the RTA and making credit card payment for this service via the internet.

The project supports the State Government's 'connect.nsw' strategy, which provides a framework to support the interactions between Government, business and the community.

Integrated management system

The RTA successfully completed the Stage 1 implementation of a new Integrated Management System (SAP R/3) to replace separate financial and human resource systems during the year. The system will achieve significant cost saving by reducing interfaces, streamlining and automating business processes, facilitating e-commerce and, in Stage 2, improving workflow and employee self-service capabilities.

This complex project was completed on time and within budget due to the cooperation, enthusiasm and commitment of staff and management both directly and indirectly involved in specifying requirements, acceptance testing and making the successful transition to using the new system.

Risk management

The RTA is committed to risk management as a means of:

- Identifying and reducing risk exposures and losses.
- Providing greater certainty and insight to support decision making.
- Improving contingency and disaster recovery planning.
- Complying with statutory obligations.

The RTA's approach to risk management is based on the requirements of the Australian/New Zealand Standard *Risk Management* AS/NZS 4360/1999. Key elements in the RTA's approach to risk management include:

- A formal risk management policy that specifies the objectives of risk management in the RTA and the Executive's commitment to formal risk management.
- A risk management manual that supports the understanding, implementation and maintenance of risk management throughout the organisation.
- Formal consideration of risk issues in high level planning.
- A requirement that formal risk management processes be utilised for projects which:
 - Have a total concept cost of more than 5 million.
- Are significantly sensitive to external conditions.
- A commitment to the incorporation of risk management concepts into all of the RTA's activities.

All RTA managers and staff are responsible for the identification, analysis and treatment of risks. Risk management practices are a requirement at all levels of the organisation and include:

- The formal risk management model (Critical Control Management) developed by Control Management Services and adopted by the Road Safety and Road User Management Directorate.
- Specific risk management plans for major infrastructure and capital works projects.
- Priorities for the Infrastructure Maintenance Program are established using risk management strategies to support safety, retained asset value and reliability of travel on the RTA's arterial roads.
- The risk approach used to identify and assess OHS operational risks.
- The RTA has provided clear policy leadership in State and national forums following changes to common law by the High Court of Australia in May 2001 which removed traditional immunities of road authorities from certain types of public liability. A range of risk management strategies has been developed in response to the High Court's decision.

The RTA is committed to continuous improvement in its application of risk management practices. The NSW Audit Office report, *Managing Risk in the NSW Public Sector*, identified several areas in which General Government Sector agencies could improve their practices and compliance with legislative requirements. The RTA is considering its practices in these areas.

Commercial risk

Contemporary financial and economic evaluation techniques were applied by staff and independent consultants to assess infrastructure and business asset investment proposals, to ensure that projects were subject to appropriate criteria including predetermined rates of return.

The pre-qualification process applied to potential suppliers and contractors also provided assurance on the financial capacity of service providers to fulfil their obligations.

Interest rate risk

Interest rates on the RTA's debt are a mixture of fixed and floating rates. In January 2000, the RTA agreed that Treasury Corporation should manage the RTA Debt Portfolio.

For more information, see Appendix 8: Risk Management – Insurable Risks.

Office accommodation

The RTA submits an annual Office Accommodation Strategy to the NSW Government Asset Management Committee. The current average utilisation rate of office space across the RTA's accommodation portfolio is 14.8m² per person, which is in line with the NSW Government accommodation guidelines.

As part of the RTA's Sydney Office Accommodation Strategy, consolidation of the Greater Sydney area office accommodation was completed during the year. The process was undertaken in accordance with the NSW Government's Total Asset Management Guidelines. Sites at Rosebery, Parramatta, Blacktown, Flemington and Milson's Point were assessed taking into consideration asset service dependency, utilisation, capacity and functionality. Implementation of this strategy enabled the RTA to relocate 580 staff to Blacktown and Parramatta, providing better quality accommodation within easy access of public transport, and move to sell the surplus site at Rosebery.

Property management

The RTA's property portfolio is reviewed regularly. Property not required for current and future road construction and related purposes was either disposed of or leased in accordance with Government policy. During the year the revenue generated from the leasing or sale of property exceeded the target of \$47 million, generating gross revenue of \$54.9 million.

Internal audit

The quality accredited Control Management Services Branch provided a high-quality, cost-effective auditing service across the full range of the authority's activities. The branch also provided a range of other services such as corruption prevention and investigation, focused on improving the RTA's control environment.

Further details of internal audit and other services are provided in Appendix 7.

Cashback scheme

In October 1996, the State Government announced that from I January 1997 drivers of NSW privately registered motor vehicles using the M4 and M5 Motorways would be eligible for a refund on tolls paid on these roads. The M4/M5 Cashback Scheme is administered by the RTA and refund claims are made quarterly. During 2001–02, 302,783 claims were processed. The total cost of the scheme including administration was \$55.5 million. At 30 June 2002, there were more than 185,900 Cashback accounts registered with the motorway companies. The total cost of the scheme is funded from Consolidated Revenue.

Future challenges

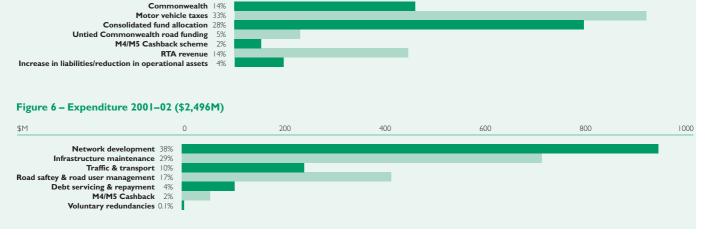
- Improve budgeting and funding bids to better reflect resource requirements with corresponding gains and benefit outcomes.
- Improve and broaden the RTA's revenue base through commercial agreements, partnering arrangements and private financing proposals.

Figure 5 - Source of funds 2001-02 (\$2,496M)

0

100

\$M



200

300

400

500

600

700

800

900

15

/// financial overview

Our people

Strategic outcome

A safe, skilled, motivated and ethical workforce.



Performance summary

STRATEGIC OUTCOME	MEASURES OF SUCCESS	THESE MEASURES IN 2001–02
A safe, skilled, motivated and ethical workforce.	Reduction in the number and severity of injuries.	7.5 % reduction in total number of workers compensation claims, and31% reduction in claims liability.
	Reduction in sick leave absences.	Sick Leave rate increased marginally. Only 2.62% of working days were unscheduled days absent (working days lost as a percentage of all possible working days for all RTA employees).
	Human resources benchmarks are within the desired range for industry groups.	Benchmarks for Human Resources are within the desired range for industry groups.
	Percentage participation in management development activities.	The RTA supports management development and provides training and other development opportunities for staff, including targeting 24 senior managers to participate in the RTA's Management Development Centres.

SUSTAINABILITY

The economy

The RTA is committed to providing a safe working environment that protects the health and welfare of staff while ensuring that its business is conducted efficiently. The RTA has developed a human resources policy framework, including a Code of Conduct and Ethics, to ensure staff carry out duties in an economical and resource-efficient manner. The RTA's work in Occupational Health and Safety has resulted in a range of significant cost savings over the past 12 months, including a workers compensation premium refund of \$3.8 million.

The environment

The RTA has established telecentres at West Gosford and Penrith. These telecentres enable staff who usually work at Sydney

Performance in detail

Occupational Health and Safety

The RTA has a strong record in safeguarding the health and safety of employees, contractors and visitors to RTA workplaces. This record was enhanced further this year as the RTA continued to implement and update its OHS Strategic Plan.

In 2001–02 the RTA's commitment and achievements in OHS were recognised in many ways, including winning the Treasury Managed Fund Public Sector Risk Management OHS award for the fourth consecutive year. In 2001, the RTA was joint winner with the Department of Public Works and Services.

The RTA's OHS performance continued to improve with the following results compared to the previous year:

- 7.5% reduction in total number of workers compensation claims.
- 8.2 workplace claims per 100 employees compared to 9.2 last year.
- 19% reduction in lost time injury claims.
- 5.1 lost-time injury claims per 100 employees compared to 6.4 last year.

metropolitan locations to access RTA office and computer systems closer to home. The telecentres have a range of benefits, including reducing travel times and associated motor vehicle emissions.

PERFORMANCE AGAINST

The community

RTA staff were an integral part of the emergency response during the 2001 Christmas bushfire emergency fire fighting effort. The RTA's strong performance in Occupational Health and Safety has a significant social dividend through ongoing reductions in injuries in RTA workplaces.

- 31% reduction in claims liability.
- \$415 cost of claims per employee compared to \$609 last year.
- No fatalities.

The RTA's performance was also measured by the Premier's Department against the targets and performance criteria of the three-year Corporate Services Reform initiative, *Taking Safety Seriously*. Over the three years to September 2001, the RTA achieved:

- A 25% reduction in claims frequency compared to a target reduction of 10%.
- A 10% reduction in claims liability compared to a target reduction of 13%.
- Best practice ranking on 10 performance criteria.
- Essential requirements met on the remaining three performance criteria.

Arrangements are in place to maintain best practice and improve performance on criteria where best practice was not achieved. A system of regular self-assessment and audit against the RTA OHS Management Standard has been implemented to highlight areas for improvement.

17

The RTA allocates significant resources to the prevention of work-related injury and the promotion of health in the workplace. The strategies are also designed to achieve compliance with OHS legislation. Where areas of non-compliance are identified by WorkCover, the RTA works cooperatively to rectify hazards and minimise risks to employees. In 2001–02 the following activities were recorded in relation to WorkCover:

- I WorkCover Prohibition Notice.
- 7 WorkCover Improvement Notices.
- 68 reports of notifiable workplace incidents to WorkCover.

During the year, the RTA's excellent performance was rewarded with a workers compensation premium refund of \$3.8 million for the period 1998–1999. The performance indicators reported above demonstrate a continuing trend to better injury prevention and injury management. This is depicted in Figure 7 below.

Developing our people

Workforce planning

Two key strategic planning documents were developed – the *Diversity* and *Equity Plan* and the *Aboriginal Action Plan*. These plans assist delivery of critical employment and workplace initiatives.

RTA training excellence

The RTA won the Public Administration Category Industry Training Award as part of the 2001 Australian Training Awards for excellence in training in public administration. The RTA was a finalist in the 2001 NSW Training Awards, Employer of the Year Award.

The RTA has maintained its status as a Registered Training Organisation (RTO) under Section 22C of the Vocational Education and Training Accreditation Act of 1990 and is compliant with the Australian Quality Training Framework (AQTF) introduced in 2002. The RTA develops and delivers a range of competency-based programs to staff across all areas.

Competency based training and assessment

Implementation of the Wages Classification Structure has involved the training and development of 20 wages staff as workplace assessors, from across different trades and non-trades areas. These staff have developed more than 140 instruments for assessing Wages Classification Structure identified competencies. In the first six months of 2002, 586 field staff undertook recognition processes and 8204 competencies were recognised. The RTA began implementing the *Communicating Effectively – Customer Service Training for Registry Services Staff* program in 2002. This one-day competency based program is for the RTA's 1300 registry services staff. On completion of the training, staff are awarded a Statement of Attainment in *Deliver a Service to Clients* from the National Public Services Training Package.

RTA targeted recruitment programs

The RTA targets the recruitment of graduates, trainees, apprentices and cadets, and offers scholarships in a variety of disciplines, designed to meet the RTA's future workforce needs and the Government's Equal Employment Opportunity and Aboriginal policies.

Graduate Recruitment Program (GRAD)

The GRAD Program recruited 29 graduates in 2001–02. The program aims to produce future managers of the RTA. It develops organisational, professional and personal skills while providing an influx of ideas, energy and creativity to aid organisational renewal. Since the program began in 1997, 108 graduates have been recruited with a retention rate of 74%.

Feedback on the program has been positive. It is developing a reputation with graduates and universities for delivering real opportunities to graduates to develop skills while making a significant contribution to a leading public sector agency.

Scholarships

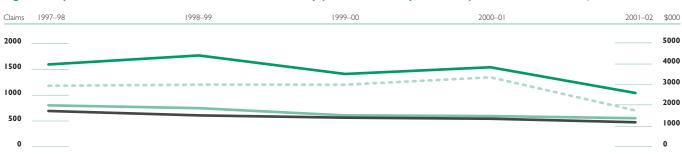
During 2001–02, the RTA established eight new scholarship arrangements with universities in NSW, including the University of NSW, the University of Western Sydney, the University of Newcastle and the University of Wollongong. These scholarships are for engineering students in the first year of a four-year degree. One scholarship targets women and another Aboriginal and Torres Strait Islander students. The program is part of a long-term RTA strategy to meet engineering staffing needs during vacation time and to meet the RTA's commitment to undergraduate engineer training, development and recruitment.

Apprenticeships

The RTA employs 55 apprentices across a range of trade classifications, including carpenters, electricians, plant mechanics and painters. Apprentices are rotated between workshops and worksites across the State to ensure they gain exposure to a broad range of skills. Recruitment of apprentices has increased five-fold over the past three years, with an intake of 22 apprentices in 2001–02.



Est. liability – all claims
 Est. liability – workplace claims
 All claims
 Workplace claims



Traineeships

Trainee recruitment has supported the Government's rural and regional employment strategy with traineeships established in Albury, Newcastle, Parkes, Glen Innes, Dubbo, Lismore, Grafton, Wagga Wagga and Wollongong.

Aboriginal employment has been a focus with the approval of eight ongoing traineeships in metropolitan and regional motor registries and 13 traineeships in the RTA's Newcastle Call Centre.

Since traineeships began in the RTA in 1999, 188 trainees have been recruited, with the majority of placements in regional locations.

Cadetships

The RTA joined the National Indigenous Cadetship Program in June 2002 and employed two Aboriginal students studying civil engineering. The students will complete their cadetships with the RTA.

Staff management development – creating future RTA executives

RTA Management Development Centres are an important component of the RTA's Management Development Strategy for senior managers. The centres are four to five day training activities for managers, designed to develop future executives and build leadership capability in the RTA. Two Management Development Centres were conducted this financial year, with 24 senior managers participating.

Rewarding and recognising our staff

The RTA Staff Awards recognise and reward staff who demonstrate outstanding performance and show initiative in the areas of critical importance to the RTA. Award winners are nominated by peers and colleagues. In 2001–02, most awards were won by teams or were awarded to joint winners. Staff were nominated for awards in 14 categories, including innovation, environmental awareness, urban design and team performance.

19

RTA Spokeswomen Program

The RTA participates in the Spokeswomen Program conducted by the Premier's Department. As part of the program, the RTA has a Women's Liaison Officer and seven 'spokeswomen' who provide support to female staff across NSW.

Under the umbrella of the program, the RTA conducted Network Development Days in 2001 called *Be the Best you can* Be.All women employed by the RTA were invited to attend and the agenda included issues such as training, success stories, community services, improving confidence, setting goals and information about the future of the RTA. There were 14 development days conducted around NSW and about 300 staff attended.

For details on Equal Employment Opportunity in the RTA, see Appendix 10.

Improved access and participation for Aboriginal people

To facilitate greater coordination, and more effective planning under the umbrella of the *Aboriginal Action Plan*, an Aboriginal Program Manager was appointed with a direct reporting line to the General Manager Human Resources. The Aboriginal Program Manager supports the Aboriginal Program Consultants and ensures these officers are responsive to the needs of local and regional staff.

Aboriginal traineeships

Aboriginal traineeships are continuing to be created at the Newcastle Call Centre. The Aboriginal and Torres Strait Islander traineeship is a two-year program based in motor registries. The trainees will be enrolled in a Certificate III in Business Administration and will spend one day a week in formal training.

Aboriginal Road Safety Coordinator

This position has been established for 12 months to develop a strategic plan for the provision of road safety initiatives targeted at Aboriginal and Torres Strait Islander communities.

Members of the RTA's Fleet Services and Tow Truck team (far right) have been recognised for their innovative work to modify the Klemmfix lane-changing conveyer (below left and centre) to address Occupational Health and Safety concerns identified during trials.







/// our performance

20

Indigenous programs

The RTA is providing considerable support to increase the representation of indigenous people in the engineering discipline. During 2002, the RTA will be providing two Civil Engineering Cadetships, for indigenous undergraduate students, to be based in regional NSW.

Construction Policy Steering Committee (CPSC)

The RTA continues to contribute to an inter-agency project sponsored by the CPSC to develop a policy on Aboriginal employment in the construction industry. *Aboriginal Participation in Construction Implementation Guidelines* have been released and are now being implemented.

Contribution to the community

RTA staff make major contributions to the community, both in the course of normal duties and in other capacities. RTA staff, for example, were enthusiastic participants in charity fundraising activities. In times of crisis, RTA staff play crucial roles as illustrated below.

Sydney bushfires

RTA staff played a critical role in managing the hundreds of devastating bushfires which ripped through locations up and down the coast during the 2001–02 Christmas and New Year holiday period. Many RTA staff gave up Christmas family festivities to report at very short notice to various work locations to perform difficult and urgent jobs including:

- Assisting Police with road closures.
- Cleaning debris from roadways and maintaining access routes.
- Keeping communication lines open for the travelling public.

On Christmas Eve, RTA Traffic Emergency Patrols (TEPs) and Traffic Commanders put temporary diversions in place at Lapstone and Glenbrook when the Great Western Highway was closed at short notice. On Christmas Day, road crews, Traffic Commanders and maintenance crews implemented road closures and cleanups in the lower Blue Mountains, Southern Sydney and around the Royal National Park.

Maintenance crews were called out at 2am on Boxing Day to cut back trees and undergrowth which had become a dangerous fire hazard at Mulgoa. This meant Mulgoa Road could be left open as a critical north west emergency access route. Trees and bush were also cleared at Blaxland, Warrimoo and Springwood so that access trails could be kept open and containment lines held. The crisis continued and on New Year's Day, fires took hold in the Sydney's northern suburbs. TEPs and Traffic Commanders closed roads in Pennant Hills, South Turramurra and West Pymble so that emergency services could get fast access to the areas.

The Newcastle Call Centre provided assistance to the Transport Management Centre with road closure information during the NSW bushfire crisis. On Christmas Day, a call went out for volunteers to staff the telephones from Boxing Day. The Newcastle Call Centre provided ongoing support with 20 operators on the phones on 26 December and this situation remained until the crisis eased around mid January. It was soon realised that operational hours needed to be expanded to assist the public from 7am to 10pm daily. The busiest day was 5 January, with calls being received at a rate of 30 a minute. The bushfire crisis phone calls totalled 195,000. Amid the crisis, the centre also carried on with normal services. It was a great effort by all staff.

RTA staff were also enthusiastic participants in the clean-up and recovery after the crisis had lifted.

Future challenges

- Develop and implement the RTA Human Resources Strategic Plan 2002–07.
- Develop and Implement IMS Stage 2 Employee Self Service, OHS, Training and Events Management.
- Continue the implementation of critical workforce and community strategic plans including the *Diversity and Equity Plan*, the *Aboriginal Equity Plan* and the *Occupational Health and Safety Strategic Plan*.
- Expand Management Development to include a two-tier Management Skills Development program targeting frontline supervisors/managers and middle managers commencing early 2002–03.
- Develop and implement the RTA Ethics Plan.
- Complete a program of competency assessments for all wages staff.

THE RTA IS COMMITTED TO PROVIDING A SAFE WORKING ENVIRONMENT THAT PROTECTS THE HEALTH AND WELFARE OF STAFF ///



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

CAROL REYNOLDS — HUMAN RESOURCES OFFICER WITH BRENDON, HER TWO-YEAR-OLD GRANDSON

"Working from the RTA's Gosford telecentre saves me three hours in daily travel. When my daughter-in-law was diagnosed with epilepsy, working from the telecentre allowed me to support her in ways that wouldn't have been possible. It's definitely a family-friendly policy."

Road safety

Strategic outcome

Reduced trauma and cost to the community of road deaths and injuries.



Performance summary

STRATEGIC OUTCOME	MEASURES OF SUCCESS	PERFORMANCE AGAINST THESE MEASURES IN 2001–02
Reduced trauma and cost to the community of road deaths and injuries.	Halve the number of fatalities by 2010, based on 1999 figures.	 Developed and implemented Road Safety 2010 strategy Third lowest financial year road toll (570 fatalities) since 1949–50. Installed additional fixed digital speed cameras, taking the total number of cameras to 62. A further 288 school zones installed at NSW schools. Conducted 105 parent workshops in support of the Graduated Licensing Scheme, concentrating on rural and regional areas of NSW.

SUSTAINABILITY

The economy

The RTA is committed to reducing deaths and injuries due to motor vehicle accidents. It is estimated that the benefit to the community of short-term strategies, such as enhanced police enforcement with targeted public education campaigns, can deliver up to \$3 for every road safety dollar spent. Longer-term road safety strategies tend to deliver around a \$2 benefit for every dollar spent.

The environment

While the road safety program aims to reduce deaths and injuries, there is a positive impact on the environment through lower vehicle emissions in 50 km/h residential areas and 40 km/h school zones.

The community

Significant suffering results from motor vehicle deaths and injuries, particularly for families. Road safety programs seek to reduce this suffering and ease pressure on health and community services and facilities.

Performance in detail

Outcomes

In 2001–02, there were 570 fatalities on NSW roads, 21(4%) more than the 549 deaths in the year to 30 June 2001. However, the 2001-02 road toll was still the third lowest road toll since the financial year ending 30 June 1950 and the 2001 calendar year toll was the lowest on record.

Factors involved in fatal crashes

- A study of the calendar year ending 31 December 2001 revealed that:
- Speeding was a factor in around 43% of fatalities.
- At least 25% of people killed in motor vehicles were not wearing available restraints.
- 19% of fatalities were the result of an incident involving a driver with a blood alcohol level above the prescribed amount.
- Driver fatigue contributed to about 15% of fatalities.
- 10% of motorcyclists killed were not wearing helmets.

Figure 8 on page 26 demonstrates the fatalities for each of these contributing factors.

Community and interagency programs

Enhanced Enforcement program

The Enhanced Enforcement Program is a partnership with the NSW Police to encourage safe road user behaviour by ensuring a higher level of police visibility at strategic times of the year.

The RTA increased funding to \$5.9 million for the financial year to increase enforcement hours by one third over the previous year. Operations targeted speeding, drink driving, fatigue and seat belt and helmet use.

Operation WestSafe was launched on 31 July 2001 in response to a rising trend in fatalities and injuries in Western Sydney, where 61% of Sydney's fatal accidents occurred in the calendar year 2000. WestSafe is a strategic alliance between NSW Police, the Motor Accidents Authority (MAA) and the RTA, with the support of local government. Marketing campaigns targeted young people and were shown in cinemas close to where enforcement operations were occurring. WestSafe had a significant impact on the road toll in Western Sydney, with fatalities reduced by 33% to 94 in the 2001 calendar year (contributing to a saving of 47 lives).

Local Government Road Safety Program

The RTA established an effective partnership with local government through the jointly funded Local Government Road Safety Program (LGRSP), which develops road safety initiatives within local communities. By 30 June 2002, 94 councils across NSW were involved in the program. Of these, 64 were in non-metropolitan areas. Eleven new councils joined the program during the year. The program produced more than 200 community-based road safety education projects.

Community information

The RTA's Community Information Program supports public education initiatives by providing free road safety material. Orders for materials are processed via the toll free telephone number 1800 060 607. In 2001–02, 3792 calls were received and about three million road safety materials were distributed. The road safety information is also generally available on the RTA website free-of-charge.

Safe communities pilot projects

The RTA continued to support the three *SafeCom* pilot projects, jointly funded with NSW Health. The three-year pilots are operating in Gundagai, Kiama and Macleay/Hastings and encourage communities to develop locally-based plans and actions for the prevention of injuries, including those resulting from road trauma.

Other community-based initiatives supported by the RTA include Community Road Safety Groups in the southern and south western RTA regions. Through these groups, communities take ownership of, and responsibility for, local road safety issues. There were nine groups active in NSW.

There are also three RTA-funded Drink Drive Prevention Officers employed across regional areas of NSW, who work collaboratively with local communities, hoteliers, Police, RTA, NSW Health and councils.

Black Spot programs

The State and Federal Black Spot programs target the road network's worst 'black spots' and 'black lengths'. A total of \$14.2 million of State funds were spent in 2001-02 on State Black Spot treatments. These funds allowed a number of improvements to be made across the road network including traffic signal improvements, intersection reconstruction and safety barrier installation. Significant improvements were made to 172 high-risk locations, addressing local community concerns.

The Federal Black Spot Program administered by the RTA constructed 110 new projects, with total funding of \$13.7 million. 'Before' and 'after' crash reduction evaluations have shown that the program produces a significant reduction in road trauma and community costs.

Heavy vehicle safety

Heavy vehicle seat belts

Research conducted in conjunction with the TWU and industry associations found that the wearing of seat belts by truck drivers could potentially prevent around 40-50% of heavy vehicle fatalities. Education campaigns will be further developed to address the issue.

Heavy vehicle driver fatigue

A review was undertaken into heavy vehicle driver fatigue with the National Road Transport Commission, other States and Territories and the heavy vehicle industry. A framework will be developed to address heavy vehicle driver fatigue incorporating:

- Flexibility for drivers to better match their schedules with their need for rest.
- Occupational health and safety.

Road environment & light vehicle standards Rest areas

The RTA constructed eight new rest areas and improved nine existing rest areas to help drivers and motorcyclists avoid fatigue. During 2001–02, the RTA spent \$5.55 million to develop and upgrade rest areas, including improving signage where appropriate. Maps were released showing light vehicle and truck rest areas and are available from motor registries and on the RTA website.

Safety barriers

In 2001–02, CrashLab tested the performance of various safety barriers and other roadside devices used by the RTA. The testing program also examined the crash safety of three types of pedestrian fences.

Australian New Car Assessment program (ANCAP)

The RTA continued its active participation in ANCAP, which has been providing consumers with vehicle safety information for 10 years. The crash test and pedestrian compatibility test program provided updated information on small cars in both November 2001 and June 2002. A utility safety brochure was released in February 2002.

Approved child restraint fitting scheme

The RTA continued to support an approved restraint fitting network of about 150 facilities around the State. This network provides assistance to parents and carers on the correct fitting of child restraints and replacement seat belts.

School and youth programs

Road safety education

This program continued to ensure the delivery of road safety education to every school child in NSW through a mandatory curriculum. The program is supported with road safety education resources developed by the RTA in consultation with educational agencies. These resources are provided free to all schools. Professional development of teachers in the use of the resources is part of the program.

In addition, the RTA consulted educational agencies, the Motor Accidents Authority, Transport NSW, the State Transit Authority and the Bus and Coach Association to develop new school bus safety curriculum resources to support school programs. Communication to parents was enhanced by the release of an information brochure providing key tips to support safe student travel to and from school.

Safety Around Schools

This program was initiated following a Ministerial commitment to improve road safety facilities around schools. It includes:

- 40kmh school zones on all school access points.
- · Enhancement of the school crossing supervisor program.
- Installation of traffic calming facilities on RTA roads near schools.

Safety Around Schools includes the establishment of an independent Safety Around Schools Panel, which reviews RTA decisions at the request of schools and provides advice to the Chief Executive.

At 30 June 2002, 93% of schools had a 40km/h zone with 51% of those being fully zoned for all access points. An additional 37 School Crossing Supervisors were appointed – an increase of 7% over the previous year.

Graduated Licensing parent workshops

Under the Graduated Licensing Scheme (GLS), introduced in July 2000, new drivers are required to pass through three licensing stages over a minimum of three and a half years before obtaining an unrestricted driver licence. The GLS is supported by workshops for parents and supervisors of young drivers. These Statewide workshops are a community-based initiative involving the RTA and councils. The workshops provide participants with practical advice about supervising novice drivers and the importance of supervised on-road experience.

Youth

Communication initiatives to promote road safety for young people have been developed through the Youthsafe injury prevention program. A parent information sheet – *Helping Teenagers Become Safer Drivers* – provides practical advice to parents on supervising learner drivers. Communication on youth safety was enhanced with the development of a youth and new drivers' page on the RTA website. Guidelines for developing and assessing safe driving programs were developed to support RTA regional offices, local government and high schools.

Speed management

Fixed digital speed cameras

The RTA installed 12 additional fixed digital speed cameras during the year, taking the total number in NSW to 62. The cameras were located on the basis of the crash and speeding history of each site, with the criteria for placement developed in consultation with the NSW Police and the NRMA. Research demonstrates the cameras have slowed vehicles and reduced accidents in specific locations.

50km/h urban speed limit

The introduction of the 50km/h urban speed limit aims to reduce the number and severity of crashes in urban areas, particularly for vulnerable road users such as older and younger pedestrians and cyclists. By the end of June 2002, 141 councils and the unincorporated area across NSW (covering more than 96% of the NSW population) were participating in the initiative. All councils in the Sydney metropolitan area were involved.

Seat belts and helmets

Despite very high levels of restraint use compared with overseas, people are still dying on NSW roads because they have not used available seat belts or worn a helmet.

Following the introduction of heavier penalties for passengers as well as drivers not wearing seat belts, a public education campaign was launched to reinforce the penalties. The campaign included advertisements based on the slogan 'No Belt. No Brains'.

Strategy and business development

Road safety strategic planning

In 2001–02, five three-year action plans were developed to provide more detail to underpin the Government's 10-year strategy, *Road Safety 2010.* The plans, which cover the calendar years 2002–2004, are:

- Drink Driving
- Speed Management
- Motorcyclist and Bicyclist Safety
- Pedestrian Safety
- Driver Fatigue (for light vehicles)

The plans were due for publication, in hard copy and on the RTA website, in September 2002. They were the result of extensive consultation, including five workshops involving Statewide organisations and regional public forums in Bathurst, Maitland, Campbelltown, Central Coast and Grafton.

Road user safety

Safer Driver Program

The RTA and other Government agencies, including the Department of Corrective Services, Attorney-General's Department, NSW Police and Motor Accidents Authority, managed a research project to establish a best practice framework for the delivery of an educational and rehabilitation program to serious traffic offenders. *The NSW Safe Driver Program Report* was published and distributed to key stakeholder agencies.

Drink driving

Sober Driver Program

Following recommendations from the *Safe Driver Program Report*, the RTA and other Government agencies and community representatives began developing an educational program targeting repeat drink driving offenders. The NSW Sober Driver Program will be implemented as a whole of government initiative. It will be delivered by the Probation and Parole Service to offenders ordered to attend the program as part of a judicial sentence imposed by local court magistrates. The program will be piloted in urban and rural locations in October 2002.

Alcohol Interlock program

The *Road Transport Legislation Amendment (Interlock Devices) Bill* 2002 was tabled in Parliament. The aim is to provide drivers convicted of certain drink driving offences with an opportunity for rehabilitation.

Participants in the program will have an interlock device installed in their vehicle. An alcohol interlock is an electronic breath alcohol analyser connected to the vehicle's ignition. If the driver's breath sample exceeds the pre-set limit of .02, the ignition locks and the car will not start.

The alcohol interlock program includes a mandatory consultation with a medical practitioner to discuss drinking behaviour and the opportunity for professional alcohol counselling.

Driver fatigue

Driver fatigue public education campaign

The RTA researched driver attitudes and behaviour regarding fatigue. The research demonstrated that the challenge for public education was to convince drivers of the dangers of continuing to drive while fatigued.

In December 2001, a television campaign was launched featuring science communicator Dr Karl Kruszelnicki. The campaign communicated the dangers and often fatal consequences of having a 'microsleep' at the wheel and warned drivers to recognise and act upon the early warning signs of fatigue.

Road safety

Driver fatigue action plan

In December 2001, the Driver Fatigue Problem Definition and Countermeasure Summary was published and distributed to all regional offices, road safety officers and stakeholders. The publication includes an analysis of fatal accidents involving fatigue in NSW from 1996–2000. It describes countermeasure development aimed at reducing the incidence and severity of fatigue-related crashes.

Driver Reviver program

Driver Reviver is a community-based program supported by the RTA. Driver Reviver sites are places for motorists to stop and rest during peak holiday periods. There are almost 100 sites, staffed by volunteer groups including the Lions Club International, State Emergency Service and the Volunteer Rescue Association and sponsored by Bushells Tea.

New Driver Reviver signs were installed on the Pacific and New England Highways. The RTA promoted the use of Driver Reviver through advertising, publicity, variable message signs, the RTA Call Centre and the RTA website.

Motorcycle safety

A paper was prepared and presented at the Motor Accidents Authority Motorcycle Safety Workshop in June 2002. The paper highlighted problems and trends in motorcycle safety as well as the RTA's current strategies and future directions in motorcycle safety.

Pedestrian safety

A Pedestrian Safety Problem Definition and Countermeasure Summary was published. This document outlines the scope of the pedestrian accident problem and details countermeasures being implemented or researched in NSW to reduce the incidence and consequences of pedestrian accidents.

In March 2002, members of the NSW Police Force, Veterans Affairs and the Combined Pensioners and Superannuants met to consider issues for older pedestrians. The information obtained was used to develop a pedestrian attitude survey.

The RTA conducted qualitative and quantitative research into pedestrian safety. Findings from the focus groups helped fine-tune development of a comprehensive attitudinal survey of pedestrians and drivers. The RTA conducted an observational study of older pedestrians at traffic light controlled and uncontrolled pedestrian facilities.

To assist in the development of a Sydney–Wollongong–Newcastle pedestrian safety strategy, a comprehensive review of world best practice was undertaken, together with a pedestrian safety attitudinal survey. A pedestrian safety website was also developed.

A total of 603 people died as a result of crashes on NSW roads in 2000 – 26 more than in 1999. In response, the Minister for Roads established a Road Safety Task Force to review trends and current initiatives and to make recommendations about measures to address the rising road toll. The Task Force included representatives from the RTA, Motor Accidents Authority, NSW Police, NRMA and community representatives.

The Task Force, chaired by the Chief Executive of the RTA, continued to oversee the implementation of the following recommendations from the report released in April 2001:

- A rest area strategy for State roads.
- Development of the Safer Driver Program.
- Implementation of an alcohol interlock program to target drink drive offenders.
- Improve the safety of roads through blackspot programs.

The Task Force also acted as a steering committee for the *Road User Behaviour Study* which was published in 2001.



Hume Highway, Coolac (North of Gundagai).

Future challenges

- Encourage the community to understand that speeding is socially unacceptable.
- Increase the number of Road Safety Officers and School Crossing Supervisors.
- Install 40km/h school zones at all school access points in NSW.
- Increase the number of parent workshops being offered in NSW to support the Graduated Licensing Scheme.
- Expand the road safety information available on the RTA website.
- Build on the success of *Operation WestSafe* by supporting new enforcement operations with targeted public education.
- Develop new three-year Action Plans on Heavy Vehicle Safety (including driver fatigue) and Occupant and Rider Protection.
- Continue development of the alcohol interlock program, and Sober Driver Program.
- Introduce new public education campaigns on driver fatigue, motorcycle safety and pedestrian safety.

Figure 8 – Fatalities in NSW, contributing factors, 2001



26



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

CATHERINE PARKER — LOCAL GOVERNMENT AND COMMUNITY ROAD SAFETY INITIATIVES

"Working together at all levels of government and the community is what it's all about in trying to reduce the road toll. It's a model that works and NSW is really leading the way."

Mobility of people and goods

28

Strategic outcome

Optimal efficiency of the transport system in moving people and goods.



THE RTA'S TRANSPORT MANAGEMENT CENTRE COORDINATES A WHOLE-OF-GOVERNMENT APPROACH TO ROAD TRANSPORT.

Performance summary

STRATEGIC OUTCOME

Optimal efficiency of the transport system in moving people and goods.

MEASURES OF SUCCESS

Maintain average peak travel speeds in Sydney at existing levels

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

Peak travel speeds maintained (see Figure 3, page 11)

SUSTAINABILITY

The economy

This area of the RTA's work supports economic sustainability in NSW by ensuring the road network operates efficiently for all users, including the many businesses who rely on road transport. The data here shows that peak travel speeds have been maintained despite a growth in traffic.

The environment

Environmental benefits arise from consistent traffic flows, particularly the reduction in vehicle emissions and noise. Bus priority measures improve public transport operations and building cycleways makes cycling a more attractive transport option. Electronic toll collection allows easier passage through tollbooths, improving traffic flow and providing environmental benefits by reducing air pollution caused by stop-start motoring.

Performance in detail

During 2001–02, RTA programs succeeded in maintaining consistency of peak travel times on the State Road network in Sydney. Average speeds in 2001–02 for the overall network were 38km/h for the AM peak and 40km/h for the PM peak – similar to speeds over the previous four years and the same as for 2000–01.

On the seven major routes to and from the Sydney CBD, average speeds in 2001-02 were 33km/h for the AM peak and 38km/h for the PM peak.

The trends in average speeds for these major routes are presented, together with the growth in traffic volumes during that same period, in Figure 3 on page 11.

Despite traffic volume growth of around 40% during the past 10 years on the seven major routes, average peak hour speeds have been consistent.

Keeping the traffic flowing

Initiatives in 2001–02 aimed at maintaining consistent travel times for motorists, particularly during peak hours, focused on:

- Responding more efficiently to incidents to minimise disruption to traffic flow.
- Addressing causes of congestion and delay by improving intersections and developing electronic tolling.
- · Helping road users navigate the road system more effectively.

The community

Community benefits of this work include:

- More convenient use of the roads, particularly less congestion and delays.
- Safer roads for all users, including cyclists and pedestrians.
- Enhanced family life through the convenience of teleworking and consistent travel times to and from workplaces.

The community has shown its appreciation of the RTA's Traffic Emergency Patrols on major Sydney roads. The crews provide assistance to motorists who have broken down or been involved in crashes. Community appreciation is demonstrated through hundreds of phone calls, faxes, emails and letters expressing gratitude for the prompt, professional service provided by the patrols.

Reducing traffic disruptions from incidents and special events

The RTA's capacity to manage both planned events and unplanned incidents on the roads was proven during the 2000 Olympic and Paralympic Games. This capacity has been developed since then. Key to these capabilities is the Transport Management Centre (TMC), which coordinates a whole-of-government approach to road transport. Incident management aims to ensure that the road network is available to run to its capacity.

The TMC is responsible for managing special events and unplanned incidents and disseminating information. It is the central point for identifying and directing the response to incidents such as crashes, breakdowns and spills. It passes on information to the public through the media, the call centre and variable message signs.

The TMC is responsible for optimising the operation of traffic systems, including fine-tuning coordinated traffic signal systems and controlling other traffic operations such as:

- Deployment of Traffic Commanders to assume primary responsibility for traffic management around incidents on major roads.
- Deployment of a Traffic Emergency Patrol service for motorists along major routes in Sydney.
- Expansion and operation of the 82 Variable Speed Limit (VSL) signs on the M4 and M5 Motorways to allow speed limits to be adjusted in response to traffic conditions.
- Expansion and operation of the system of 86 Variable Message Signs (VMS) across Sydney's metropolitan area.
- Expansion and operation of the network of more than 300 closed circuit television cameras monitoring roads across Sydney.

Addressing congestion and delay

Intersection improvements

Intersection improvements result in reduced travel times and delays on corridors and at specific locations. Congestion and travel times on the network are monitored to identify routes and locations in need of attention. Improvements implemented include construction of traffic signals, roundabouts and additional lanes, especially in growth areas such as suburban Sydney (for example Menai Road, Mulgoa Road, The Horsley Drive), the Central Coast (Brisbane Water Drive, Terrigal Road, Croudace Bay Road) and regional centres (such as Wollongong, Bega, Tamworth, Coffs Harbour and Bathurst). Construction of intersection improvements at the Fiveways at Miranda was in progress. Work commenced in February 2002 on major public utility adjustments, earthworks and drainage installation. The existing traffic signals on the roundabout approaches were removed on 3 June 2002. The new treatment was due for completion in December 2002.

Traffic signal coordination

Traffic signal coordination is essential in moving traffic efficiently on arterial roads. The Sydney Coordinated Adaptive Traffic System (SCATS) adapts to traffic demand as it happens and coordinates the traffic signal timings to ensure the best traffic flows. An enhanced version of SCATS was installed throughout NSW in 2001–02. The new version is easier for operators to use and features improved data collection and online analysis capabilities, more sites per region, dial-up to remote sites and ease of maintenance. A further major upgrade of SCATS was under development. The RTA-developed system has now been installed in more than 70 cities in Australia and across the globe.

Electronic toll collection

The electronic toll system was installed on the Sydney Harbour Bridge and Tunnel on 14 April 2001 and usage has continued to grow. During the morning peak, 40% of transactions were being recorded on electronic tags. E-only lanes were introduced on the bridge and tunnel and were achieving significant time savings. For example, morning peak motorists with E-toll tags can halve the time for their six-kilometre trip from the start of the Gore Hill Freeway through the Sydney Harbour Tunnel toll plaza (from 16 minutes to seven minutes). Similarly, the eight kilometre trip via the Sydney Harbour Bridge has decreased from 20 minutes to 12 minutes.

Sydney's privately-owned tollways presented additional challenges in delivering an E-toll system that would allow motorists to use one tag on all motorways and receive a single bill. The M5 and Eastern Distributor E-toll tag systems became compatible with the Sydney Harbour Bridge and Tunnel in June 2001. The tags were also made compatible with the Queensland system, extending the convenience of electronic tolling to interstate trips. Sydney's privately owned M2 and M4 motorways and Melbourne's CityLink are working to introduce the standardised E-toll tag system.

Improved signposting

An audit of all guide signs on the State Road network was completed for roads outside the Sydney metropolitan area and the Sydney audit will be completed by June 2003. Market research data and audit findings will enable the RTA to confidently begin to implement a refreshed and reviewed network of guide signs.

In partnership with Tourism NSW and the NSW Council of Tourist Associations, the RTA continues to play a lead role in the development of new tourist signposting strategies.

Encouraging alternative transport use

Bus priority

Bus priority measures improve the efficiency of bus operations and include bus lanes, transit lanes, priority traffic signals and bus bays along existing major bus corridors, as well as rapid bus-only Transitways.

The State Transit Authority (STA) proposed a series of bus priority measures to support its *Better Buses* strategies in Sydney East and Newcastle. Most of the 18 issues raised by STA for Sydney East were minor signal timing and delineation issues and have been addressed. Traffic signals were reconstructed at Elizabeth Street and St James Road in Sydney's CBD to give priority to buses. Suggested re-routing of southbound services from Bourke Street to Baptist Street was implemented. Of the 11 Newcastle proposals, two projects were completed, one was under construction, three were developed to concept stage and five were under investigation.

Private bus operators identified 100 locations in Western Sydney, Newcastle, the Central Coast and Wollongong for the investigation and implementation of bus priority measures. The treatments include support for operations of new services between the Hills District and the Sydney CBD via the M2 Motorway corridor.

In 2001–02, the program of improvements included:

- An increase in the total length of bus lanes by two kilometres, with more increases planned for 2002–03.
- Continued application of red colouring to dedicated bus lanes, including in Oxford Street, the Sydney Harbour Bridge and the Warringah Freeway, to make them easily visible to motorists.
- Trials of a digital camera-based bus lane monitoring system at Oxford and York Streets and the Warringah Freeway.
- Investigation of a Public Transport Information and Priority System for real time traffic signal priority for buses.
- Progress on the Liverpool to Parramatta T-way.
- Improved bus stop facilities throughout rural NSW.

A total of 25.4 kilometres of bus lane have now been coloured red. The red colouring of the inbound bus lane on Oxford Street has led to a 35% reduction in illegal usage. Illegal usage on the Sydney Harbour Bridge was under 2%.

Teleworking

The RTA is working with other government agencies to reduce travel demand especially in urban areas. A key initiative is expanding teleworking within the RTA, promoting its benefits to the community and supporting its expansion in government and business.

An Australian Bureau of Statistics survey in October 2001, assisted by the RTA, showed that 8% of NSW workers had teleworked in the previous three months. Three quarters of these worked in the private sector. Reasons given for teleworking were suitability to job requirements, childcare and family considerations and fewer distractions and greater productivity.

Other ways of reducing car dependency were pursued. The RTA developed and implemented a pilot program to make transport other than by car (walking, cycling, public transport) more attractive for RTA staff relocating to offices in Parramatta. Traveller Information Kits and Transport Access Guides were delivered to staff before the move. Surveys of staff showed:

- A 17% shift from car travel to public transport travel.
- 88% of staff read the kit and retained its information.
- Half of staff spent the same or less time travelling.

The RTA is working with other government agencies to introduce similar programs for office relocations. It is also working with the Sustainable Energy Development Authority to launch a joint brochure on producing and using transport access guides.

Cyclists

Cycling has a significant role to play in improving air quality and the health of the community.

The NSW Government released a 10 year plan, *Action for Bikes* – *BikePlan 2010*, in November 1999. The plan aims to improve facilities and safety for cyclists. It also outlines a masterplan for the construction of a comprehensive cycle network for Sydney by 2010. It puts in place a commitment to build off-road cycleways wherever practicable during the expansion of the network and when new roads are being built.

As a direct result, investment in cycleways has increased significantly. Funding was above the average of \$25 million per year committed in the 10-year plan. Local councils are funded on a dollar-for-dollar basis for local network development and construction. Across NSW, 106 council bicycle projects were funded in the 2001–02 financial year.

Building more and better cycling networks

The length of on and off-road cycleways in NSW increased by 245km in 2001–02. Construction commenced on major cycleways in Sydney including:

- An off-road cycleway along both sides of the M5 East Freeway extension from Beverly Hills to Bexley North (completed).
- An off-road cycleway from Arncliffe to Mascot.
- Improvements to the Orphan School Creek cycleway between Abbotsbury and Canley Vale (completed).
- Wetherill Park to Fairfield cycleway.

Cycleway projects completed in rural and regional NSW included:

- Point Clare underpass on the Central Coast.
- Raymond Terrace to Medowie cycleway.
- Sexton Hill cycleway at Tweed Heads.
- Coffs Hospital shared pedestrian/cycleway link.
- Middleton Drive cycleway at Gundagai.
- Cycleway along North Terrace in Queanbeyan.
- Tuross Heads cycleway linking Tuross Boulevard and Kyla Sport Complex.

Planning and development began for the cycleway along the Parramatta to Liverpool T-way. Planning began for the Prospect to Blacktown cycleway and the cycleway along the Windsor Road as part of the extensive Windsor Road upgrade.

In November 2001, the Government announced that the Western Sydney Orbital project would include a 39km cycleway. A three to four metre wide path is planned for the full length of the motorway. The cycleway will be completely off-road and separated from traffic. Bridges will be provided where the cycleway crosses major roads, ensuring long lengths of uninterrupted cycle travel.

The RTA upgrades facilities for cyclists as part of major road improvements and maintenance works including:

- Signs to support cycling facilities.
- The installation of bicycle-safe grates at critical points.
- The elimination of 'squeeze points' where the lane widths are too narrow for cyclists to ride safely alongside vehicles.

Initiatives in promoting bicycle safety included:

- Bike Week, organised in September 2001 to encourage bicycle use in the local community and to promote bicycle safety.
- Road safety education in NSW schools.
- Publication of the Sydney Cycleways map.
- Promotion of bicycle use and safety at the RTA stand at the 2002 Royal Easter Show.
- Sponsorship of community events that encourage safe cycling including the RTA Cycle Sydney and RTA Big Ride.

The seventh annual RTA Cycle Sydney was held on Sunday 18 November 2001. More than 6500 people entered, an increase of 38% on the previous year.

There were 1275 participants in this year's RTA Big Ride from Manilla to Walcha. The successful event started on 6 April and finished on 14 April. The RTA Safe Cycling Team gave presentations on bicycles and safe cycling to schools along the route and set up displays in selected towns.

Pedestrians

The RTA worked on a number of initiatives to improve pedestrian access and safety.

The authority assisted local councils to develop integrated pedestrian networks through a major initiative – Pedestrian Access and Mobility Plans (PAMPs). The plans aim to develop integrated pedestrian networks that link public transport, key community centres and commercial facilities. The plans identify existing pedestrian facilities and determine where access and mobility need to be improved. To improve consistency in the development of PAMPs, the RTA published an easy guide to their preparation. The guide is a practical manual for council staff, local community groups and others. Fortythree PAMPs had been developed across the State, including 16 completed during 2001–02. Another six were to be developed in 2002–03.

The RTA continued to assist local councils implement pedestrian facilities based on these plans. Works provide access for all pedestrians, especially those with a mobility or vision impairment. New standards apply to new and upgraded pedestrian facilities.

The RTA continued to promote walking as an alternative to private car travel for short trips, through its continued support of the Pedestrian Council of Australia. The RTA sponsored Walk to Work Day in October 2001 and the second Walk Safely to School Day to reinforce safe pedestrian behaviour amongst parents, teachers and children.

Pedestrian facilities

To promote consistency in the development and implementation of pedestrian facilities, new policy and guideline documents were developed. These included Technical Directions with enhanced designs for pedestrian refuges and kerb extensions and guidelines for the implementation of advisory signs on shared paths. The RTA developed a booklet, *Children's Crossings: A Guide to Promoting Correct Use*, which was supported by advertisements, media releases and parent/carer information sheets.

Facilities provided for pedestrians included:

- Pedestrian bridges, partly funded by commercial advertising, with priority given to sites near schools.
- Additional audio-tactile push buttons to assist pedestrians with vision impairment. Sixty-seven per cent of traffic signal sites in NSW are now fitted with these buttons.
- Kerb ramps.
- Pedestrian fencing.
- Pedestrian crossings, such as refuges and new and reconstructed traffic signals. Locations in 2001–02 included Penrith, Rooty Hill, Campbelltown, Shalvey, Milsons Point, Drummoyne, Canada Bay, Summer Hill, Oyster Bay, Gymea, Moore Park, Bega, Glendale, Cowra, Port Macquarie, Coffs Harbour and Tweed Heads.

The pedestrian bridge over The Horsley Drive at Fairfield High and Fairfield Primary schools was officially opened and named the Eva Wesley Stone Pedestrian Bridge on 15 March 2002. A contract was awarded on 3 June 2002 for construction of the pedestrian bridge over The Boulevarde at Strathfield at Santa Maria Del Monte College. Tenders for two pedestrian bridges at Maroubra High School, Anzac Parade, and Cowpasture Road, Bossley Park, were being assessed.

Cahill Expressway at Circular Quay

The Cahill Expressway Improvement Project was announced in March 2002. The \$10 million project will improve pedestrian access from the ground level at Circular Quay to the top of the expressway. A pedestrian bridge will be constructed over Macquarie Street, providing direct access from the Botanical Gardens to the Cahill Expressway walkway. The project involves the widening of the walkway and the viewing area. Other elements of the design include a raised viewing platform, canopy, signage and noise protection barriers. Glass barriers will replace brick walls to give rail users a better view of Sydney Harbour from the elevated Circular Quay railway station.

The project will open up the Circular Quay area for workers and tourists, allowing everyone to enjoy the magnificent vista of Sydney Harbour. The project was programmed for completion in December 2002. A contract for lift shafts was awarded and construction began at the end of June 2002.

Traffic in local streets

A partnership between the RTA and local councils was the cornerstone of local street environment initiatives. These initiatives promote the management and reduction of through traffic in town centres and residential areas where pedestrians are concentrated. Measures to improve these streets included traffic calming treatments, such as roundabouts and slow points. Locations of projects completed in 2001–02 included Concord, Burwood, North Rocks and Dulwich Hill.

Future challenges

- Continuing to maintain consistent travel times by managing transport and incidents on the network.
- Developing and implementing an Intelligent Transport System Strategy to improve traffic flow, tolling and traveller information.
- Designing new network developments that integrate into the road transport system.
- Making public transport, cycling, walking and teleworking more attractive choices.
- Implementing bus priority measures, including the effective introduction of the new T-ways network.



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

STEVE MEAD — TRAFFIC EMERGENCY PATROL

'The most satisfying part of my job is the surprise people get when we turn up – they often don't expect the service we provide.''

ARTHUR KONTALIS — TRAFFIC EMERGENCY PATROL

"Our job is to help people when they break down and get the traffic moving as quickly as possible. Ultimately, we save the community time and money."

Developing the road network

34

Strategic outcome

Develop the State Road network to promote economic growth, access to communities, road safety and use of public transport.



Performance summary

STRATEGIC OUTCOME	MEASURES OF SUCCESS	THESE MEASURES IN 2001–02
The State Road network developed to pro- mote economic growth, access to communi- ties, road safety and use of public transport.	On-time and on-budget completion of major State Road network projects.	79% of major projects delivered within or near budget (% of projects weighted by project cost).
		84% of major projects delivered on or near time (% of projects weighted by project cost).

SUSTAINABILITY

The economy

The major projects described in this chapter have a range of economic benefits in common, including:

- Reduced travel times for business and residents.
- Reduced costs of transport for producers.
- Increased accessibility to areas, thus improving prospects for business.

The M5 East Freeway delivered significant economic benefits to motorists, business and local residents. With truck access to Port Botany much quicker on the M5 East, freight costs have been significantly reduced. Travel times have also been reduced for commuters and businesses, with a 50% reduction in major traffic delays on the Beverly Hills to Botany route. Figures from the Department of State and Regional Development show the M5 East Freeway will create 30,000 new jobs and inject \$500 million into Western Sydney in the next five years.

The Windsor Road upgrade has reduced travel time between residential areas near the route and many workplaces within the area. Further development will also improve access to employment centres at Parramatta and Blacktown.

Upgrades of the Pacific and Great Western Highways are improving access to regional areas, reducing travel times for residents and supporting tourism and other economic activities.

Many of these projects also have road safety benefits, with resulting economic returns. For example, the upgrade of the Pacific Highway from Yelgun to Chinderah bypasses the notorious Burringbar Range where there were about 25 serious casualty accidents per year.

The T-way program (a network of rapid bus only Transitways) supports the NSW Government's objectives for the sustainable economic development of Western Sydney. The construction and operation of T-ways will create employment and the T-way services will improve access of the region's workforce to jobs in key industrial areas and commercial centres.

The environment

Key environmental benefits of these projects include:

- Reducing traffic volumes and noise on local streets.
- Reducing congestion, thus improving air quality through a reduction in vehicle emissions.

The M5 East Freeway encompasses all these benefits. Since it opened, traffic volumes through Bexley have fallen by 40%. There

have been 75,000 fewer vehicles a day on local streets or, in percentage terms, reductions of more than:

DEDEODMANCE ACAINET

- 30% on Moorefields Road, Kingsgrove.
- 15% on Canterbury Road.
- 35% on Bay Street, Brighton-Le-Sands.

Major projects also involve environmental initiatives designed to reduce the impact of construction. For example, the RTA and the National Parks and Wildlife Service worked together to develop a compensatory habitat project for the Yelgun to Chinderah upgrade. The project involves the planting of native plants propagated from local seed collected before construction. About 300,000 square metres of roadside was hydromulched to prevent erosion and control weeds.

Environmental benefits of these projects also include urban design. For example, the Coolongolook to Wang Wauk upgrade of the Pacific Highway provided opportunities to improve the township of Coolongolook. The project, which opened in July 2001, included landscaping, new pedestrian and cyclist facilities, provision of school bus stops and inclusion of murals and Aboriginal artworks on footpaths and underpasses.

The community

Social benefits of the development of the road network are many. Key benefits include:

- Improved safety.
- Easier and quicker travel.
- Employment opportunities.

The opening of the M5 East Freeway has returned local streets to local traffic and improved access in and out of the CBD from Western Sydney. The M5 East Freeway is a benefit for tourism, taking 20 minutes off the trip from Sydney to the Southern Highlands.

The widening of arterial roads such as Cowpasture Road and Old Windsor Road in the fast-developing south-west and north-west sectors of Sydney has delivered significant social benefits to the residents of these areas, with improved access to jobs, education and shopping.

The T-way program supports the NSW Government's objectives for the equitable distribution of services across the metropolitan region by improving transport options in Western Sydney. In supporting the growth of Parramatta and other Western Sydney employment centres, the T-way program will complement the NSW Government's objective of redressing the jobs-housing imbalance that sees a high proportion of Western Sydney residents needing to travel to eastern Sydney for work.

Performance in detail

During the year, 44 major construction projects with individual costs of more than \$1 million each were completed. Total expenditure on these projects was \$1,227.2 million. Project time and budget performance summaries are shown below.

Project delivery	Number of projects	Total expenditure \$ million	% of projects weighted by project cost
Completed within budget or within 10% over budget.	29	968.3	78.9
Completed within planned duration or within 10% over planned duration.	27	1026.3	83.6

Improving access within Sydney

M5 East Freeway

The M5 East Freeway forms part of the Sydney Orbital road network and provides a toll-free link between the end of the M5 Motorway at King Georges Road, Beverly Hills, and General Holmes Drive at Sydney Airport.

The 10 kilometre, four lane divided carriageway freeway, includes a four kilometre tunnel – the longest road tunnel in Australia.

The M5 East Freeway was opened to traffic on 10 December 2001, about six months ahead of schedule and on budget. It has had enormous benefits for local communities, reducing traffic volumes considerably on local streets. It has also provided a significantly improved link between Western Sydney and Port Botany, Sydney Airport and the Sydney CBD.

Cross City Tunnel

The proposed Cross CityTunnel, between Darling Harbour and Kings Cross, will link the Western and Eastern Distributors. The tunnel is designed to ease traffic congestion and improve conditions in central Sydney for pedestrians and public transport.

An Environmental Impact Statement (EIS) was released in August 2000 and the Minister for Planning approved the project in October 2001. The Minister for Roads announced in February 2002 that the Cross City Motorway consortium had been selected as the preferred proponent to finance, construct and operate the tunnel. [The consortium includes Baulderstone Hornibrook Pty Ltd, its German parent company Bilfinger Berger AG and Deutsche Bank, and equity partner CKI Group.]

The consortium proposed some design changes to enhance environmental aspects and improve road safety, transport efficiency and community amenity. Under the amended proposal:

- The eastern end of the tunnel would be located east of the Kings Cross Tunnel instead of at the western end.
- The speed limit would be increased from 70km/h to 80km/h, with an improved alignment for safer travel.
- The need for excavation and traffic disruption in William St would be removed by increasing the tunnel depth.
- The tunnel would be 30 metres deeper at the eastern end, passing under instead of over the Eastern Distributor tunnels.

The tunnel will save time in trips across the city, improve air quality by reducing congestion and improve the streetscape, particularly in William Street. The project is expected to create up to 1600 direct and indirect jobs during construction.

Following public display in August 2002 of a supplementary EIS for the proposed modifications, the RTA will seek an updated planning approval. The tunnel was expected to open to traffic in late 2004.

Lane Cove Tunnel

The Lane Cove Tunnel project between the M2 and the Gore Hill Freeway will complete a link in the Sydney Orbital, connecting the north west sector of Sydney with the CBD.

Journeys from the north-west to the city will be quicker with the Lane Cove Tunnel, which will bypass five sets of traffic lights. Motorists travelling between Falcon Street and the M2 will avoid the Pacific Highway and bypass 26 sets of traffic lights.

The project will also:

- Provide bus priority lanes along Epping Road and Transit Lanes on the widened Gore Hill Freeway from the M2 at the Lane Cove River to the Warringah Freeway.
- Provide new ramps between Falcon Street at North Sydney and the Warringah Freeway to also give access to the Gore Hill Freeway – M2 corridor.

An EIS was placed on public exhibition from 8 November 2001 until I February 2002. About 340 submissions from the public and interested parties were received and assessed. These submissions resulted in some modifications to improve the project and a Preferred Activity Report was being prepared for release in 2002–03.

Subject to planning approval, construction is likely to commence in 2003, with the Lane Cove Tunnel expected to be open to traffic in 2006. Registrations of Interest to finance, design, construct and operate the project as a tollway were received from four applicants and assessment of the bids was in progress.

Western Sydney Orbital

The Western Sydney Orbital (WSO) between the M5 Motorway at Prestons and the M2 Motorway at West Baulkham Hills will form part of the National Highway link through Sydney. It will be a key link to Sydney Airport and Port Botany and will support the industrial and commercial development of Western Sydney.

Funding of the \$1.25 billion WSO is the responsibility of the Federal Government and in January 2001 it made a commitment to provide \$356 million over the next six years, with the remaining funding to be provided by the private sector. The NSW Minister for Planning approved the project, with conditions, in March 2002.

Three shortlisted consortia prepared detailed project proposals, which were being evaluated at the end of this financial year. Construction was expected to begin in early 2003, with the project to be completed in 2007.

T-way

The T-way program is designed to increase the capacity of public transport in the Sydney metropolitan area through the provision of dedicated bus-only roads and priority lanes. A series of routes include the Liverpool-Parramatta T-way and the North West T-way Network.

The Liverpool-Parramatta T-way is designed to significantly improve public transport performance across south-western Sydney. The Planning Minister approved the project in December 2001. A tender for the operation of the bus service has been awarded to the State Transit Authority. The RTA began construction of sections of the T-way on existing roads. Major civil construction contractors were working on the bus-only sections of the road network, building T-way 'stations' and developing and installing an Intelligent Transport System to communicate with buses and gives priority to bus movements. It is anticipated that the 31km-long T-way will begin operating in early 2003.

The North West T-way Network is in the planning stages, with the preferred routes for the two links identified (Blacktown-Castle Hill; Parramatta-Rouse Hill regional centre). Negotiations have commenced with affected property owners. Detailed studies on the preferred routes have begun, with the aim of releasing an EIS for public comment in late 2002.

Other T-way routes in the planning stage included Parramatta-Strathfield, Blacktown-Wetherill Park, Penrith-St Marys and Blacktown-Parramatta.

Urban projects

Windsor Road upgrade

The \$323 million program to upgrade Windsor Road and Old Windsor Road to a minimum of four lanes by the end of 2006 is well advanced. In March 2002, the first major section of the upgrade – dual carriageways between Old Windsor Road at Sunnyholt Road and Windsor Road at Merriville Road – was opened to traffic. This section was delivered by the RTA for \$25 million, a significant saving on the announced estimate of \$34 million.

The contract for widening between Merriville Road and Schofields Road at Kellyville was awarded. It was expected that by the end of 2002 the full length of Old Windsor Road would be completed, along with Windsor Road between Old Windsor Road and Schofields Road, Rouse Hill.

The Windsor Road upgrade will improve the accessibility, safety and reliability of travel to existing and future economic activities in the north west sector of Sydney. By promoting the accessibility of the north west sector of Sydney, such as the future Rouse Hill regional centre, the upgrade will significantly contribute to Western Sydney's economic development.

Bangor Bypass

The Bangor Bypass is designed to relieve pressure on Menai Road and Old Illawarra Road. The proposed bypass consists of a 3.5km east-west link by passing Menai Road between the Woronora Bridge and Old Illawarra Road and a 2.6km north-south link between New Illawarra Road and Alfords Point Road.

This will enable better access between southern Sydney and Bankstown with reduced congestion and improved safety on Menai Road. During the year the RTA displayed an EIS seeking input from residents. A Representations Report including modifications in response to community concerns was lodged with Planning NSW seeking planning approval for the project.

The project will be funded by the NSW Government and was expected to cost approximately 115 million - 70 million for the east-west link and \$45 million for the north-south link.

Subject to planning approval, construction of the east-west link was expected to begin in 2002 and be completed in 2004, with construction of the north-south link to follow.

Mona Vale Road

The upgrade of Mona Vale Road was proceeding. Stage I involved reconstruction and widening from Addison Road to the Baha'i Temple and was completed in December 2000.

Stage 2 was under construction and involved reconstruction and widening from the Baha'i Temple to Manor Road. The realignment of Manor Road began in July 2001 with extensive and complex public utility adjustments progressing in conjunction with the roadworks.

Improving access between cities and regions

The RTA has responsibility for managing the National Highway network within NSW on behalf of the Federal Government, which has responsibility for funding maintenance and improvements.

Pacific Highway upgrade

In 1996, the 10-year Pacific Highway Upgrade Program agreement was signed by the Federal and NSW Governments. It involves annual funding of \$160 million from the NSW Government and \$60 million from the Federal Government.

The \$2.2 billion program has already achieved some important milestones during its first six years, with 20 major projects and 18 minor projects opened to traffic.

Highlights in 2001–02 included:

Tandys Lane Deviation

The \$60 million fully State-funded project was opened to traffic on 19 December 2001. The project provided 5.5km of dual carriageway between Tyagarah and Brunswick Heads, including a major deviation to eliminate a winding section of road and alleviate traffic at the busy Mullumbimby intersection at the northern end.

Coolongolook to Wang Wauk

The final stage of this \$49 million upgrade, jointly funded by the State and Federal Governments, was opened to traffic on 29 July 2001. The project provided 11.7km of dual carriageway, linking the Bulahdelah to Coolongolook Freeway to the Wang Wauk to Bundacree Creek Upgrade. The three sections provide just over 40km of uninterrupted dual carriageways, improving travel times, road safety and traffic conditions.

Karuah Bypass

Construction of the \$123 million bypass, jointly funded by the State and Federal Governments, began in June 2002. The 9.8km dual carriageway bypass of Karuah will eliminate a major holiday bottleneck for motorists. The project is due for completion in late 2004.

Bulahdelah upgrade

Currently in the development phase, the Bulahdelah upgrade will provide 8.7km of dual carriageway north of Newcastle.The preferred route for the project was announced in November 2001.This project is fully State-funded.

Coopernook Bypass

Construction commenced on this \$69 million project in February 2002. Combined with the Taree to Coopernook Upgrade, the 4.2km dual carriageway bypass of Coopernook will improve road safety and travel times. This project is fully State-funded.

Moorland to Herons Creek

Currently in the development phase, the preferred route for the Moorland to Herons Creek Upgrade was announced in March 2002. The project entails a 22km upgrade of the Pacific Highway to dual carriageways, including new bridges and interchanges. The project is fully State-funded.

Halfway Creek

Construction of the \$21.5 million Halfway Creek Realignment, which is fully State-funded, began in March 2002. The upgrade will provide 3.4km of divided dual carriageway with improved intersections, less curves, better sight distance and safer overtaking opportunities. Construction was due to be completed in late 2003.

Brunswick Heads to Yelgun

Currently in the development phase, the Brunswick Heads to Yelgun Upgrade will provide 8.7km of new dual carriageway from south of Brunswick Heads to Yelgun. A modified design for the \$154 million upgrade, jointly funded by the State and Federal Governments, was placed on public display in May 2002.

Yelgun to Chinderah

The \$348 million Yelgun to Chinderah Freeway, jointly funded by the State and Federal Governments, is the largest Pacific Highway Upgrade road project yet undertaken. The 28.5km four-lane dual carriageway has significantly improved safety by removing one of the worst remaining highway blackspots – the notorious Burringbar Range. It also dramatically reduces travel times, particularly for freight, and provides consistent overtaking opportunities. Local communities also benefit from the separation of highway and local traffic, improving conditions in many towns and villages.

An announcement that the project was four months ahead of schedule (to be opened to traffic in August 2002) was made in April 2002.

Princes Highway

Oak Flats Interchange

The project was opened on 29 October 2001. The interchange, which includes four road bridges, has significantly improved traffic flow around the Albion Park/Oak Flats section of the Princes Highway by removing a railway level crossing and nearby traffic signals. The interchange also connects with Shellharbour City Council's East-West Link Road.

Yellowpinch to Millingandi

On 3 June 2002, a \$10 million upgrade of the Princes Highway between Yellowpinch and Millingandi was opened to traffic. This project involved the realignment of a 2.7km section of the Princes Highway to replace a narrow and winding stretch of road.

Great Western Highway

The 12-year, \$360 million Great Western and Mitchell Highways upgrade between Penrith and Orange will deliver four lanes to Katoomba and mostly three lanes to Lithgow. In addition, the Federal Government committed an extra \$100 million towards the Great Western Highway upgrade. The upgrade is designed to improve transport services and options to the people of the Central West, the Blue Mountains and Western Sydney.

The upgrade was progressing with works at Linden Bends Section Five opening to traffic in December 2001. This section was widened to provide four lanes. Upgrading of the section at Soldiers Pinch between Blackheath and Mount Victoria was opened to traffic in June 2002. This section provides a new alignment and an eastbound overtaking lane.

Construction of the four-lane upgrade final stage at Linden Bends (Section Four) began in June 2002. A contract has also been let for the four-lane upgrade at Shell Corner, west of Katoomba, and the Medlow Bath Bridge replacement. Work began on upgrading the section of highway from Lake Lye at South Bowenfels in March 2002.

Planning was underway for the four-lane upgrade at Woodford to Hazelbrook, Hazelbrook to Lawson, Wentworth Falls West, and Leura to Katoomba. Improvements were planned between Churchill Street and Grose Road at Faulconbridge to enhance safety through the Coomassie Shopping Centre precinct. The proposal will reinforce the 60km/h speed limit through the shopping village and improve safety for all road users, including pedestrians and cyclists.

F3 Sydney to Newcastle Freeway

The F3 Freeway is part of the Federally-funded National Highway system and, south of Gosford, operates at maximum capacity, with incidents causing severe delays to road users. Incident management initiatives have been introduced by the RTA, including variable message signs, visual monitoring, emergency median crossovers and mobile emergency patrols. The Prime Minister announced in May 2001 an \$80 million commitment to widen sections of the F3 between Hawkesbury River and Calga. Widening of the first section between Mount White and Calga commenced in June 2002, with the management of this work the responsibility of the RTA. The widening is designed to fit in with the visual and environmental quality of the freeway which has received various design awards. The Federal Government also announced a study of options to connect the F3 to the Sydney Orbital, which began in March 2002.

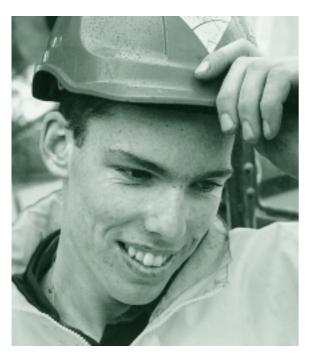
Other significant National Highway projects completed or underway in 2001–02 were the:

- Cumberland Highway widening (The Horsley Drive to Merrylands Road).
- Mittagong subsidence reconstruction.

THE GREAT WESTERN HIGHWAY UPGRADE IS DESIGNED TO IMPROVE TRANSPORT SERVICES AND OPTIONS TO THE PEOPLE OF THE CENTRAL WEST, THE BLUE MOUNTAINS AND WESTERN SYDNEY ///

Future challenges

- Progress the Sydney Orbital road network by commencing construction of the Western Sydney Orbital, awarding the Lane Cove Tunnel tender and completing grade separation of M5/Moorebank Avenue.
- Progress the Pacific Highway upgrade, including Karuah Bypass project.
- Progress the Princes Highway upgrade, including the North Kiama Bypass.
- Progress the Great Western Highway upgrade, including calling tenders for Leura to Katoomba project.
- Continue to implement urban design corridor strategies to ensure a whole of Government approach to land use and transport planning.
- Progress the Windsor Road upgrade by completing the upgrade of Old Windsor Road and exhibiting the EIS for the Windsor Road Flood Evacuation Route.
- Complete the West Charlestown Bypass at Newcastle.
- Progress the construction of the Liverpool to Parramatta T-way.
- Continue to upgrade arterial roads serving the urban release program, such as Cowpasture Road and Hoxton Park Road.
- Implement the Central Coast Transport Action Plan.
- Commence construction of the Bangor Bypass.

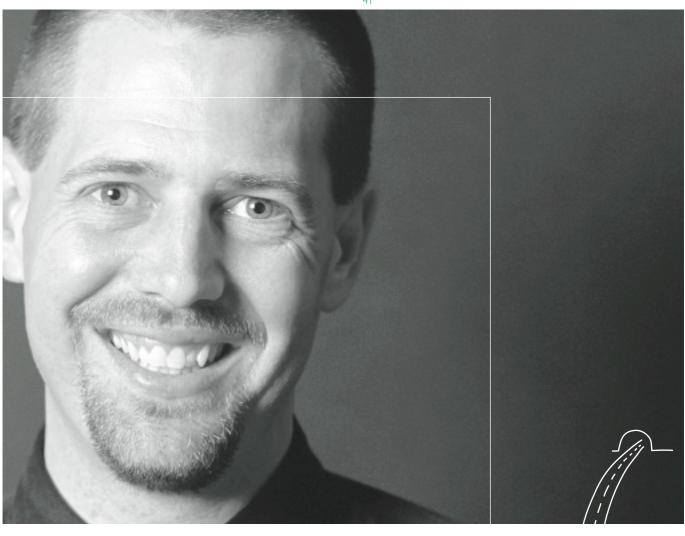


Paul Wildman, the RTA's apprentice of the year, is a fourth year Bridge and Wharf Carpenter apprentice at Goulburn.

"The most satisfying part of my job is when we deliver projects that meet community needs in the best possible way."

STEVE ARNOLD — ENGINEER – SYDNEY NETWORK DEVELOPMENT

/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC



Road system maintenance

Strategic outcome

Roads and bridges maintained at minimum whole of life cost.



Performance summary

STRATEGIC OUTCOME

Roads and bridges maintained at minimum whole of life cost.

MEASURES OF SUCCESS

Ride quality rated 'good or better' for 88% of State Roads.

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

Ride quality rated 'good or better' for 90% of State Roads (see Figure 12 *Ride quality on State Roads*).

SUSTAINABILITY

The economy

Economic sustainability is the aim of this area of the RTA's work, as indicated by the strategic outcome of the maintenance program. The NSW Roads Act focusses the RTA on funding arterial roads and limits the extent to which the RTA can fund local roads. The Act supports sustainable economic development by linking State funds to State arterial roads (with Statewide benefits) and local funds to local roads (with local benefits). Councils fund local roads using both local ratepayers' funds and Federal road assistance grants. The RTA supports economic sustainability by periodically reviewing the system of road classifications for identifying arterial and sub-arterial roads. The RTA then funds the infrastructure on the arterial roads using the Infrastructure Maintenance Program.

Good asset management practice as well as the Action for Transport strategy both require that the RTA manage its infrastructure as a long-term renewable asset, keeping its arterial network as a whole in good working order.

The RTA's maintenance programs have five intermediate outcomes:

- Total Asset Management 2000 systems and procedures to manage the RTA's arterial road network assets on a whole of life basis in accordance with the Government's Asset Management Policy.
- Commitments Financial Assistance Grants to assist local government to manage its arterial road infrastructure assets and management of Government funds for disaster repairs for all RTA and council-managed public roads.
- Safety maintenance of safe standards for the RTA's arterial roads and bridges and traffic facilities (Figure 9).
- Retained value minimisation of risks to the integrity and value of the RTA's arterial road and traffic facility assets.
- Reliability provision of consistent conditions on the RTA's arterial roads, measured by assessments of roughness (Figures 10 and 11) ride quality (Figure 12) and pavement durability (Figure 13).

This approach ensures the economic sustainability of the RTA's maintenance programs.

The environment

The Infrastructure Maintenance Program's management system supports environmental outcomes via a regime of standards, policies and procedures to address environmental concerns and impacts. These systems include formal Reviews of Environmental Factors and, where appropriate, Environmental Impact Statements for all Infrastructure Maintenance Program activities. Smoother roads, as measured by ride quality, create direct environmental benefits by reducing fuel and oil consumption with consequent benefits to air quality and greenhouse impacts.

The RTA is participating with local catchment committees and councils in the preparation of Stormwater Management Plans and funds a Stormwater Quality Improvement Program for RTA assets.

The introduction of the Road Maintenance Reform Package from I July 2000 includes establishing environmental criteria as part of the contracts for maintenance of State Roads with clear standards being implemented for graffiti and litter collection.

In relation to bridges, the RTA has:

- Reviewed the engineering heritage of its timber bridge assets.
- Committed to the ongoing preservation of an agreed list of timber bridges.
- Published a Timber Bridge Management Strategy to demonstrate its management regime.
- Committed to develop and implement Conservation Management Plans for its heritage assets, including the Sydney Harbour Bridge.

The RTA has developed a strategy for preserving Aboriginal heritage and has commissioned a series of paintings on its bridges.

The community

The Government's use of single invitation maintenance contracts improves employment security for rural and regional workforces and relies on benchmarking to drive efficiency rather than competitive tendering (Figure 14).

The RTA's management systems distribute maintenance resources on an equitable Statewide basis between types of works and different roads. They do this by closely monitoring road performance, road condition and the level and nature of usage. The RTA also surveys community attitudes and priorities and liaises with community and stakeholder groups to gain balanced input to these management systems.

The RTA contributes to the security and safety of the community by providing a subsidy to local councils towards the cost of street lighting on arterial roads.

Performance in detail

The NSW road network

The 180,000km NSW road network is a significant public asset providing access across the State for commuters, travellers, business and freight.

The road system is divided into three categories:

- 17,670km of RTA-managed State Roads including 3106 km of Federally-funded National Highways.
- 18,448km of Council-managed Regional Roads, funded primarily with RTA grant funds.
- 142,922km of Council-managed local access roads, funded by both local ratepayers and Federal road assistance grants.

The RTA is responsible for managing:

- 17,670km of the major arterial road network.
- 4588 bridges and major culverts on RTA and Council-managed roads.
- 2887km of Regional and Local Roads in unincorporated NSW.
- 3188 traffic signal sites.
- Nine vehicular ferries.

Maintenance plan

Priorities for the Infrastructure Maintenance Program are established on a risk basis to support safety, retained asset value and reliability of travel on the RTA's arterial roads. These strategic priorities are linked to outputs and service standards using program budgeting and maintenance contracts. The maintenance contracts establish consistent minimum levels of service, including the identification and rectification of defects.

Road Maintenance Reform Package

The Road Maintenance Reform Package, introduced on 1 July 2000, saw a major change in the way that road maintenance is delivered across the State.

A key component of the package was the introduction of single invitation maintenance contracts to create a contractual relationship between the RTA and council maintenance providers. The package continues to progress in a solid collegiate manner, with more than 120 contracts with councils and the RTA's in-house service contractors. These reforms include use of consistent standards, procedures and management systems for worker safety, traffic control and safety, as well as environmental protection and works quality.

The Government's Rebuilding Country Roads Program, part of *Action for Transport 2010,* involves a commitment by the RTA to spend at least \$100 million a year on renewing roads and bridges to the latest standards. In 2001–02, the RTA spent \$121 million on the program (Figure 15).

The first stage of the Rebuilding Country Roads Program is the five-year Country Timber Bridge Program to replace or restore 140 key timber bridges by June 2003. It provides extensive investment across rural NSW, with a large concentration in the North-West Slopes, the North Coast and Tablelands as well as the Hunter region. Thirty-nine bridges were replaced or restored in 2001–02, taking the total number of bridges replaced or restored under the program to 99 (Figure 16).

In recognition of the ageing of the State's arterial road network, the Government announced on 18 December 2001 a variety of increased RTA charges, including a rise in the Sydney Harbour Bridge toll. All of the additional funds, estimated at \$60 million per annum, will be put directly into maintenance of the RTA's arterial roads and bridges, with the majority to be spent on the RTA's rural and regional arterial roads. These funds represent a real increase over the original Rebuilding Country Roads Program commitment and will accelerate the rebuilding program.

Major rural and regional works in progress or planned include reconstruction and widening of:

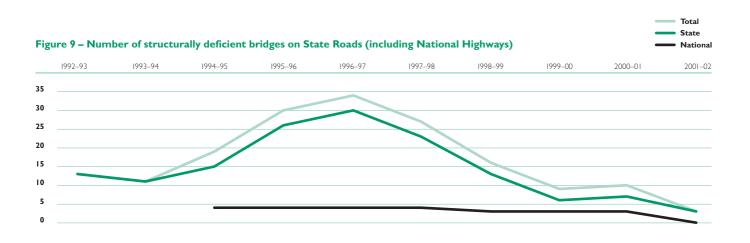
- 49km of the Gwydir Highway between Moree and Glen Innes.
- 19km of the Mitchell Highway west of Narromine.
- 24km of the Kamilaroi Highway west of Narrabri.
- 19km of the Yass to Forbes Road near Boorowa.
- 8km of the Mid Western Highway west of West Wyalong.

Disaster repairs

Disasters cause significant and widespread hardship for the people of NSW, industry and communities.

The State Government provides significant financial assistance to councils to repair roads damaged by declared natural disasters, and also funds repairs to road infrastructure on Crown Roads.

In 2001–02, the RTA managed the provision of more than \$60 million of Government funds to repair damage from flooding and bushfires.



Murray River border crossings

The Government's *Action for Transport 2010* identified eight key crossings of the Murray River that needed to be upgraded. The NSW and Victorian governments published a Murray Crossings Strategy, completed a new crossing at Howlong and are fully funding a new crossing at Barooga-Cobram.

The NSW Government, with the Federal and Victorian Governments, is planning replacement crossings at Corowa, Moama-Echuca and Robinvale, although the extent of Federal funding was still to be finalised.

Graffiti and litter

The RTA has supported Government initiatives to improve removal of graffiti and litter. The RTA's contracts for maintenance of RTA roads require regular RTA inspections and response to graffiti and litter concerns, including those identified by the community. Offensive and highly visible graffiti and litter is required to be removed within one day on highly trafficked roads and within two days on other roads.

Sydney Harbour Bridge

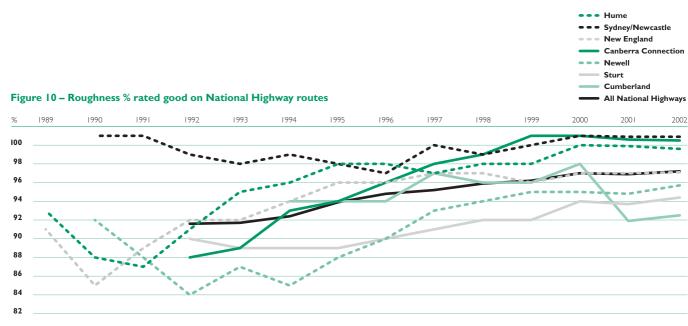
The RTA is implementing a Conservation Management Plan for the Sydney Harbour Bridge. A major repainting program is commencing for the Southern Approach spans.

Tort law reform

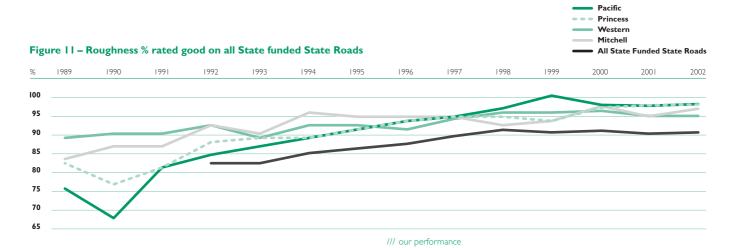
The RTA has provided policy leadership in State and national forums following changes to the common law by the High Court in May 2001. Australian Transport Ministers have endorsed the proposed policy directions, which also coincide with the directions established by the NSW Government's Tort law reforms.

Future challenges

- Complete the Country Timber Bridge Program.
- Continue to implement the Rebuilding Country Roads Program.
- Continue to implement the Government's ongoing accelerated maintenance program for RTA roads using the increases in various RTA charges, including the Sydney Harbour Bridge toll announced on 18 December 2001.
- Continue to work with local government and industry to implement the Road Maintenance Reform Package, including use of single invitation maintenance contracts with 110 councils.
- Complete the Conservation Management Plans for heritage timber truss bridges.
- Review traffic facilities Block Grant funding for rural councils.
- Begin a program to replace all 240 volt globe displays in traffic signals with LED displays (the power savings would translate to a reduction in greenhouse gas emissions of about 15,000 tonnes per year).



Note: Change in 'Cumberland' due to Sept 2000 redefinition of National Highway



45

—	Good
_	Fair
	Poor

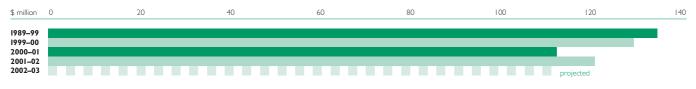
Figure 12 - Ride quality on State Roads (including National Highways)

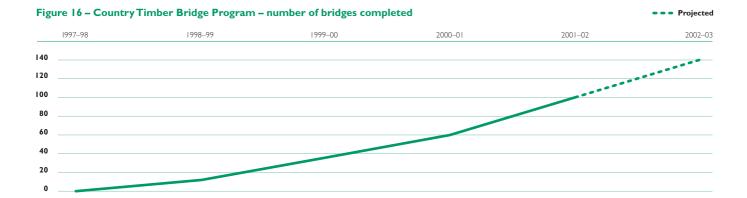
%	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
90														
80														
70														
60														
50														
40														
30														
20														
10														
0														

igure 3 –	Pavement d	urability on	sealed coun	try State Ro	oads (includi	ng National	Highways)			•	Goo Fair Poo
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	200
		_	\sim								
)											

Figure 14 – Average unit rates for rout	ine mai	ntenance o	of State Ro	ads by sing	le invitatio	n maintena	ance contra	acts	_	2000-01
\$	0	200	400	600	800	1000	1200	1400	1600	1800
Asset inspection (per carriageway km)										
Routine pavement (per lane km)										
Routine route management (per carriageway km)										
Routine traffic facilities (per carriageway km)										

Figure 15 – Rebuilding Country Roads Program expenditure







/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

RAY WEDGWOOD — GENERAL MANAGER, TECHNICAL SERVICES AND LONG-TIME BRIDGE EXPERT

"It's the contribution to the long-term infrastructure that I enjoy — the new stuff we build to last and the old stuff we make last longer. It's about durability, strength, performance and reliability."

Road use regulation

48

Strategic outcome

Compliance with driver licensing and vehicle registration requirements.



Performance summary

STRATEGIC OUTCOME

Compliance with driver licensing and vehicle registration requirements.

MEASURES OF SUCCESS

98% of vehicles using the road are registered.

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

In a survey conducted in October 2001, more than 98% of vehicles were registered.

SUSTAINABILITY

The economy

The driver's licence is widely used and accepted in the community as proof of identity. Improved proof of identity requirements for licences assist other institutions in their efforts to prevent credit and other fraud in the community.

Removal of unsafe drivers from the road system and the penalising of drivers for unsafe driving will ultimately reduce the road toll and its associated costs to the community in health care, rehabilitation and insurance.

The environment

The RTA has reduced printing as a result of a review of forms. Learner plates and all *Road Users' Handbooks* are printed on recycled papers.

The community

Compliance with licensing and registration requirements has improved road safety and reduced the potential for identity fraud and vehicle theft and re-birthing. This has a significant positive impact on outcomes for the community, including reducing road deaths and injuries and reducing financial loss for innocent parties.

Performance in detail

Driver licensing

Community based driver knowledge testing

A Community Based Driver Knowledge Testing Program, which helps prepare people for the test, has operated in a number of towns in the west of the State for several years. The scheme is designed to assist people in Aboriginal communities and with low levels of literacy, and those who feel uncomfortable attending a motor registry, to obtain a driver licence.

An evaluation of the program found strong support and the scheme will be extended to another 10 locations (two correctional centres, two juvenile justice centres and six community-based organisations). Six of the new locations were opened by the end of June 2002.

Heavy vehicle driver testing

The heavy vehicle driving test was upgraded in May 2002 to relate more closely to the standards required under the heavy vehicle Competency Based Assessment scheme. The upgraded test includes an offstreet assessment requiring applicants to demonstrate skills such as conducting a comprehensive pre-departure check, load securing and coupling and uncoupling procedures.

Hazard perception testing

A Hazard Perception Test was introduced as part of the new Graduated Licensing Scheme in July 2001. The computerised test, which uses film footage of real driving situations, requires applicants to respond in a timely manner to hazards. Applicants must pass the test before progressing from a provisional P1 to a provisional P2 licence. The test is expected to play a significant role in ensuring that new drivers have the skills to drive safely.

Photo storage

The introduction of the storage of photo images of licence holders in the RTA computer system began in February 2001. This has enhanced the integrity of the licensing system and reduced the potential for fraud in the replacement of licences. The use of the stored photos is strictly controlled in line with the NSW Privacy & Personal Information Protection Act 1998. The RTA developed protocols in consultation with the Privacy Commissioner to ensure that the storage and retrieval of photo images is controlled and meets information protection principles.

New style photocards

The RTA introduced new security features for licence photocards in June 2002. The new features make it more difficult for the cards to be copied and used for fraudulent purposes.

Proof of identity validation

In March 2002, the RTA introduced enhanced online validation of birth and other certificates with the NSW Registry of Births, Deaths and Marriages to help detect fraudulent certificates. The enhancements aim to efficiently validate more types of certificates.

Sleepy driver legislation

In August 2001, the Road Transport (Driver Licensing) Amendment (Suspension of Licences) Regulation 2001 (the sleepy driver provisions) was introduced. Under the new legislation, where death or grievous bodily harm has resulted from a crash and the driver claims to have fallen asleep at the wheel or suffered a loss of consciousness, the RTA will be able to suspend the licence whether or not the criminal trial has yet occurred and whether or not there has been an acquittal. The licence cannot be reinstated without an order by a local court on appeal from the RTA's decision.

Licensing publications

The RTA continues to provide handbooks, brochures and comprehensive information on the RTA website free-of-charge. These include the *Road Users' Handbooks* in English and 10 community languages and a variety of brochures about licensing.

/// our performance

Vehicle registration

Conditional Registration Scheme

The Conditional Registration Scheme was implemented on 20 May 2002. Conditional Registration replaces long-term Unregistered Vehicle Permits (UVPs), issued to approximately 33,000 non-complying vehicles that require limited road access. The types of vehicles issued with UVPs include agricultural and roadwork machinery, historic vehicles, golf buggies, all-terrain vehicles and veteran and vintage vehicles.

Operators receive unique conditional registration number plates, a label, Certificate of Conditional Registration and a Certificate of Approved Operations that provides the registered operator with the full conditions applicable to their vehicle. Unlike the old UVP scheme, renewal notices are sent to customers. Additionally, operators are able to select a common expiry date for all their conditionally registered vehicles if they wish. Stakeholders such as the NSW Farmers Association have welcomed the new scheme.

Centenary of Federation number plates

The RTA issued commemorative number plates from April 2001 to 30 June 2002 to mark the Centenary of Federation. The plates were very popular and nearly 43,000 were sold, producing revenue of \$4.3 million.

European (Euro) plates

The RTA released new European style number plates in April 2002. The plates are designed to fit the recesses of European vehicles and match the style of the vehicles.

Euro plates have black characters on a white reflective background, with a blue coloured panel on the left-hand side and include the St George flag, NSW State Crest and a red waratah.

Heavy vehicle registration charges

The Australian Transport Council (ATC) agreed in May 2001 that heavy vehicle registration charges should be adjusted annually by a formula developed by the National Road Transport Commission. This formula reflects changes in road use by heavy vehicles and an initial adjustment of 3.3% was implemented on 18 February 2002.

Compliance strategy

Safe-T-Cam

Safe-T-Cam is a network of cameras, on strategic highways across the State, that monitors the speed and driving hours of heavy vehicles. On I January 2002, the RTA implemented a new regime of penalties for offences detected by Safe-T-Cam. Each time a vehicle is detected breaking the rules by Safe-T-Cam an offence is recorded against both the vehicle and the driver. If a vehicle or a driver records four offences in a three-year period, the registration or licence may be suspended for up to three months.

In addition, the RTA is taking action on heavy vehicle operators with expired, cancelled or suspended registration. Failure to provide an adequate explanation may result in a court-imposed fine with a maximum penalty of \$2200.

More appropriate fines and demerit point losses are also imposed on drivers engaging in dangerous and illegal behaviour to avoid Safe-T-Cam detection, with fines of up to \$857 and the loss of four demerit points.

Mobile crane GPS trial

In September 2001, the RTA provided a travel-time concession to over-dimensional mobile cranes fitted with a Global Positioning System (GPS) tracking system. The concession gave vehicles up to 2.9m wide the opportunity to travel in clearway times (vehicles are normally restricted to 2.5m). The GPS tracking system gives the RTA confidence that these vehicles are not travelling on any of the restricted routes in NSW (including the Sydney Harbour Bridge).

The RTA is one of the first regulators in the world to use GPS tracking as a compliance tool. The scheme has been a success, with more than 20 vehicles participating and the crane industry suggesting that productivity improvements could potentially be worth tens of millions of dollars.

Review of heavy vehicle checking stations

Heavy vehicle checking stations are strategically located along major transport corridors. These sites check heavy vehicle compliance with RTA regulations, including loading, dimensions, driving hours and roadworthiness. A review of operations determined that a 'risk-based' approach to the inspection of heavy vehicles would better target noncompliant operators and increase operational efficiency. This approach will use both fixed and mobile enforcement resources and a better vehicle selection process. Facilities at stations will be enhanced over the next three to five years to support a risk-based approach.

National Heavy Vehicle Accreditation Scheme (NHVAS)

The National Heavy Vehicle Accreditation Scheme (NHVAS) was implemented on I July 2001 for vehicles with a Gross Vehicle Mass (GVM) of more than 4.5 tonnes. The NHVAS allows heavy vehicle operators to demonstrate through regular audit that their vehicles and drivers comply with regulatory standards. The benefits include no annual inspection for accredited vehicles under the Maintenance Management Module and Higher Mass Limits for vehicles accredited under the Mass Management Module (for vehicles operating on the Newell Highway). There were 30 operators and 2179 vehicles in the Maintenance Management Module at the end of June 2002.

Mobile communications devices for enforcement officers

The RTA trialed the use of in-car mobile computers in 10 RTA inspector enforcement cars. This gave inspectors the ability to obtain real-time information on driver and vehicle details at the roadside and ensure both licence and registrations were valid. The computers also allow inspectors to view Safe-T-Cam reports and compare them to driver logbooks. The trial was a success and the RTA will make an additional 30 units available across the State.

Freight policy

The RTA supervised the trial of a variety of heavy vehicle combinations to identify opportunities for more efficient movement of freight. The RTA also conducted route and safety impact assessments, developed guidelines for the assessment of non-standard loads and issued permits for non-standard vehicles.

Future challenges

- Expand the Community Based Driver Knowledge Test scheme.
- Develop a heavy vehicle ratings scheme to better target heavy vehicle operators not complying with requirements.
- Use of stored photos to help simplify proof of identity processes for replacement of licences.
- Implement a Driver Qualification Test for provisional P2 drivers.



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

LEE TOWNEY — HEAVY VEHICLE INSPECTOR

"I really enjoy the diversity of people who I deal with. I like to take that little extra time in providing quality customer service, especially with people from non-English speaking backgrounds. It's challenging, rewarding and gives me an insight into what makes people tick."

Customer service

Strategic outcome

Increased access to better services.



MARIE-THERESE BARCLAY – A REGISTRY SERVICES OFFICER AT THE WYNYARD MOTOR REGISTRY.

Performance summary

STRATEGIC OUTCOME	MEASURES OF SUCCESS	PERFORMANCE AGAINST THESE MEASURES IN 2001–02
Improved access to services.	90% of motor registry customers rate service as 'good' or 'very good'.	Independent survey in May 2002 indi- cated that 93% of registry customers rated service as 'good' or 'very good'.
Better quality services.	Reduce average waiting time in motor registries to five minutes.	Average waiting time halved to less than seven minutes in recent years with strategies to reduce waiting time as part of a five year strategy.

SUSTAINABILITY

The economy

The development of online services, including renewal of registration and booking of tests, has provided substantial business efficiencies and given customers the opportunity to use alternative services. It is anticipated that online transactions will continue to grow as people realise the convenience of services available.

The RTA plans to offset the annual growth in transaction volume with online services to constrain the overall cost of service delivery. Customers are so pleased with the online system to purchase special number plates that 20% of sales are now online.

Additional revenue from price variations is being used to fund a maintenance program for the State's ageing arterial road network. New pricing structures also contributed to reduced customer waiting times for testing services and since applicants are preparing better, pass rates have increased, resulting in the availability of more test time slots. Significant savings were also made in printing and distribution costs for handbooks as a result of revised charges.

The environment

With enhancements to the network of motor registries and agencies delivering RTA services and the introduction of online services, the number of kilometres travelled to access RTA services has been reduced. The RTA has also developed its website to improve access to information and reduce demands for printed publications, resulting in a 15% reduction in printing requirements.

The community

RTA services must balance regulatory concerns, such as protecting the community from identity theft and vehicle rebirthing, against service delivery issues.

The RTA managed the roll-out of an additional 29 Government Access Centres (to a total of 36) throughout the State to increase access to face-to-face Government services for people in regional and remote areas.

The introduction of online services has reduced the need for people in rural areas to attend a motor registry. With the most widely-used State Government website in Australia, the RTA has successfully improved access to information for people throughout the State.

The RTA's Call Centre provided road closure information during the Christmas bushfire emergency and during floods in northern NSW.

Performance in detail

Customer service in motor registries

The RTA processed 19 million registration and licensing transactions during the year.

In May 2002, an independent survey of customer satisfaction was conducted in the RTA's 130 Motor Registries. A total of 6493 interviews were carried out. The results were pleasing - 93% of customers surveyed rated the service as 'good' or 'very good', an increase of 5% since 1998.

Customers indicated particular satisfaction with the helpfulness, knowledge, speed and efficiency, appearance and communication skills of registry staff.

The RTA upgraded its registration and licensing computer system (DRIVES) in motor registries. These improvements resulted in a 29% improvement in DRIVES average response times from June 2001 to

June 2002. In addition there was a 56% reduction in major outages of DRIVES and a 21% reduction in minor outages. This has resulted in significant improvements in customer service times and systems availability.

Improved access to services

The RTA made improvements at a number of motor registry locations to improve the quality and accessibility of services, including:

- Relocation of the Clarence Street Motor Registry to a larger site above Wynyard Station in Sydney's central business district.
- Commenced construction of a new single level Fairfield Motor Registry with completion planned for the end of 2002.
- Extension of registry services for customers in the Wakool Shire with the opening of a council agency at Barham, removing the need for local residents to make a return trip to Moulamein or Deniliquin.
- A program to install lifts or make other facility improvements for disabled or less mobile customers is due to be completed in 2003.

Government Access Program

The NSW Government endorsed a program for the development of the Government Access Program (GAP). The RTA manages the expansion of the program with support from Attorney-General's Department.

There were 36 Government Access Centres with plans to extend the program. Centres provide 'one stop shops' in rural and regional communities for a range of NSW Government services. The centres are generally based in motor registries and local courts and provide services for up to eight departments and 17 transaction types.

This program received the Gold Award for 'Excellence in rural and regional service delivery' in the 2001 Premier's Public Sector Awards.

Online Registration Renewal

The Online Registration Renewal Service provides a convenient and efficient system for customers to renew vehicle registrations via the Internet or telephone, rather than travelling to a registry. The service is available outside standard business hours. Online registration renewals increased from 3000 to 7000 per month in 2001-02.

E-greenslip

The RTA continued to work with the Motor Accidents Authority and compulsory third party (CTP) insurance companies to introduce electronic greenslips. The largest CTP Insurer, NRMA, joined this service in November 2001. Nearly all cars are now covered by CTP insurers participating in the e-greenslip system. The system enables CTP insurers to transmit greenslip information electronically to the RTA so that customers can renew their registrations online.

e-Safety Check

Vehicles more than three years old require an annual vehicle inspection report (pink slip). Sixteen Authorised Inspection Stations (AIS), the Motor Traders' Association, the Service Station Association and the Institute of Automotive Mechanical Engineers, worked with the RTA in a trial of a new e-Safety Check System. The system allows AIS to transmit pink slips to the RTA using the internet or telephone. Customers who obtain an e-Safety Check pink slip are then able to renew their registration online. The e-Safety Check system will be made available to AIS throughout the State, increasing the availability of online registration renewal from one million to 3.5 million customers. Further work will be undertaken to review the needs of heavy vehicle operators and customers who have registration concessions.

Computerised test booking

A computerised booking system for Driver Knowledge Tests (DKT) and Hazard Perception Tests (HPT) was introduced for use by motor registries and the Newcastle Call Centre in December 2001. The system improves business efficiency for the RTA and ensures that customers have the opportunity to choose from a range of options. The system was expected to be released to the public in July 2002 so they can make bookings online without the need to attend a motor registry.

Dealer On-line system

The Dealer On-Line system was piloted during 2001–02. It allows motor dealers to register new vehicles and transmit details electronically to the RTA. The service provides convenience and flexibility for dealers as there is no need to visit a motor registry to establish registration. The system is being developed to enable dealers to also process trade-in vehicles. This will enable faster service to customers, since transactions can be immediately processed seven days a week.

Improved information for Customer Service staff

The RTA upgraded its information systems for customer service staff. The new *Frontline Help* system was implemented into motor registries to provide electronic access to current policies and procedures. It allows easy access for Customer Service Officers from the counter as well as other staff members accessing the system via the RTA's intranet. This implementation provides staff and therefore customers with higher quality service and accurate information.

Customer Call Centre

The RTA Customer call centre in Newcastle continued to offer valuable support to customers. Operators answer inquiries and undertake a number of transactions for registration, licensing and e-toll services. The centre handled about 60,000 calls per week during the year. The service reduces the demand for motor registry services and therefore reduces waiting times for customers at registries. The Call Centre provides customers with the option to obtain information or undertake transactions on the telephone rather than visit a motor registry.

Future challenges

- Further develop e-business options for customers including:
 - Development of Online Booking System for the public.
 - Expansion of e-Safety Check across the State to enable most motorists to undertake online registration renewal at their convenience.
- Establish another nine Government Access Centres and set up a network of Outreach sites for smaller and more isolated rural communities.



FRANCIS LUI - REGISTRY SERVICES OFFICER

"The new computerised systems mean that registration and licensing are faster and more efficient. The customers are happy because their transaction can be completed very quickly."



The environment

56

Strategic outcome

The natural environment and heritage protected and enhanced.



Performance summary

STRATEGIC OUTCOME

The natural environment and heritage protected and enhanced.

MEASURES OF SUCCESS

Achieve no infringements from State Government environmental regulators.

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

RTA received one Penalty Infringement Notice (PIN) from the Environment Protection Authority (see Regulatory Compliance section in this chapter for a detailed description).

SUSTAINABILITY

The economy

Economic sustainability is built into the RTA's environmental programs and processes. Cost benefit analyses are commonly carried out for environmental proposals. Such an analysis, for example, found that a Solid Fuel Heater Replacement Scheme – part of the M5 East Freeway Air Quality Management Plan – was the most cost-effective measure for reducing particulate matter in the region. Environmental Impact Assessments of projects include analysis of the broad economic impacts and value for money of proposals.

Work in the emerging area of valuing environmental externalities (defining the monetary cost of environmental impacts) is continuing. Such information will help provide economic sustainability through providing the true costs of activities.

Most initiatives in this chapter support economic sustainability including:

- The identification and assessment of contamination on potential RTA acquisition properties, which will allow the appropriate valuations before purchase.
- Reduced energy cost of RTA activities, which frees funding for other uses.
- Maintenance of good water quality in waterways supports the sustainability of fisheries, recreation and other industries.
- The appropriate selection of stormwater management technologies takes long-term maintenance costs into consideration.

The environment

Clearly, the initiatives in this chapter are all designed to underpin the environmental sustainability of the RTA's work – from protecting biodiversity near major road works, to reducing noise impacts of roads and traffic facilities, to preserving Aboriginal heritage.

The RTA has a public commitment to environmental outcomes through its Environmental Policy. Environmental outcomes, defined by legislation, government and the RTA's Environmental Policy, are achieved through an Environmental Management System. In addition to ensuring the environmental sustainability of its major projects, the RTA also seeks sustainability in its internal functioning. For example, the RTA's purchase of Green Power – energy from renewable resources – helps reduce the greenhouse intensity of electricity use. The RTA is updating its Greenhouse Gas Inventory, which will help the authority to better manage and reduce greenhouse gas emissions.

Public accountability also plays a role in the environmental sustainability of the RTA's performance. The authority reports its environmental performance publicly in many ways – from an annual environment report to hourly air quality monitoring data on its website.

The community

The initiatives outlined here contribute to social sustainability on a number of levels:

- They safeguard the environment for the community, protecting areas for future generations.
- They safeguard community health and safety.

Many of these programs have direct impacts on local communities – such as work to improve air quality around the M5 East Freeway and local noise abatement works. Other programs have a broader effect on communities, such as the reduction of vehicle emissions to improve air quality across Sydney, or the RTA's efforts to reduce waste and greenhouse gas emissions.

The RTA also has formal, statutory obligations to protect the community. For example, social sustainability is considered as part of the Environmental Impact Assessment of projects.

The RTA's adoption of energy conservation measures helps to promote the growth of new energy efficiency industries, hence promoting new employment and knowledge growth.

Under the umbrella of its environmental programs, the RTA also seeks to protect those parts of the State's heritage under its care. For example, the authority's oral history program is recording and preserving community memories of important projects and events.

Performance in detail

Environmental Impact Assessment

Environmental Impact Assessments are undertaken in relation to proposed projects to determine the likely impacts on the environment and to develop measures to minimise these impacts. Environmental Impact Statements (EIS) are exhibited for public comment.

During 2001–02, EISs were prepared and exhibited for:

- Pacific Highway, Bundacree Creek to Possum Brush.
- Lane Cove Tunnel.
- New England Highway, Devils Pinch Deviation.
- New Murray River crossing at Echuca-Moama.
- Bangor Bypass.

Reviews of Environmental Factors (REF) consider potential environmental impacts and assist the RTA in deciding whether a proposal is likely to significantly affect the environment. In 2001–02, 472 REFs were prepared.

Environmental Management System

The RTA continues to develop its Environmental Management System (EMS) to help it continually improve its environmental performance.

Key developments in the EMS in 2001-02 included:

- Ongoing review of environmental specifications to be used in construction and maintenance contracts.
- The beginning of a review of the RTA's Quality, OHS and Environmental Audit Package, including a greater risk-based approach.
- Continuing monthly cross-directorate EMS coordination meetings and maintenance of an EMS issues database.
- Publication of the RTA's Environmental Noise Management Manual.
- Production of stockpile site management guidelines.

Air quality

M5 East Freeway Air Quality Management Plan

The Air Quality Management Plan for the M5 East Freeway was published and released in 2002. The plan, a condition of the project's approval, was developed to offset emissions from the M5 East ventilation stack by:

- Identifying key contributors to emissions of oxides of nitrogen (NO_x) and particulate matter below 10 microns in diameter (PM₁₀) [a micron is a millionth of a metre].
- Formulating effective strategies to address these emissions.
- Developing strategies using \$2.5 million in RTA funding over the next five years to improve air quality in the area.

Air quality monitoring

Air quality monitoring is conducted for the M5 East. The M5 East has three RTA monitoring stations plus one community-based monitoring station. The readings from these stations are displayed on the RTA's website, with the M5 East results displayed hourly. No exceedance occurred for PM_{10} or NO_2 on the M5 East, except during the bushfires from late December 2001 to early January 2002 when the entire Sydney basin experienced high levels of airborne pollutants.

Open & Sheltered Valleys Air Quality Study

The Open and Sheltered Valleys Air Quality Study collected additional air quality data in open and sheltered valleys. The data will help determine the potential build-up of motor vehicle pollutants under a range of meteorological conditions. The research will also assist in the modelling of air quality impacts. The final stage of monitoring began in mid 2002.

Vehicle emissions

Motor Vehicle Environment Committee (MVEC)

MVEC is the national body that advises transport and environment Ministers on vehicle related environment issues. The RTA represents NSW on this body.

MVEC has made significant progress in narrowing the gap between the environmental performance of the Australian vehicle fleet and world best practice. More stringent vehicle and fuel standards were introduced that will lead to substantial reductions in emissions from the NSW vehicle fleet.

The Diesel National Environment Protection Measure (DNEPM) was developed by MVEC and specifies a test to identify polluting diesels and a range of programs to reduce emissions from in-service diesel vehicles. With funding from the Commonwealth, NSW is taking a lead role in the implementation of the DNEPM in Australia.

Heavy vehicle emissions testing

Testing on the State Transit Authority (STA) diesel bus fleet began in November 2001 to establish the emissions performance standard of the RTA and STA fleets and to review maintenance practices. By 30 June, 1117 STA buses had been tested. Forty of the RTA's heavy duty fleet of about 120 Sydney based vehicles had also been tested.

Testing has established the potential gains available from improved maintenance. A number of private bus and truck fleets have also volunteered to become involved in the test program and in the development of improved maintenance practices.

Smoky Vehicle Enforcement Program

The RTA conducted intensive enforcement activity as part of the M5 East Freeway Air Quality Management Plan. The purpose is to reduce visible emissions from all types of vehicles

Light Vehicle Emissions Testing

Besides testing for the general public, projects include testing of modified vehicles, smoky vehicles and taxis. Since the introduction of light vehicle testing, 5775 tests have been completed on a range of vehicles. During 2001–02, 2696 tests were conducted. Testing of a sample of the taxi fleet, in partnership with the Taxi Council, was completed in August 2001.

The EPA requires some light petrol and gas vehicles, infringed for emitting smoke, to be tested by the RTA to clear their defect notices. Following random roadside testing of taxis, the EPA referred a number of vehicles to the RTA for testing. Modified vehicles are also referred for testing by the RTA.

Botany and Penrith testing stations

Accreditation for the RTA's test sites was obtained from the National Association of Testing Authorities (NATA) in March 2002. The accreditation underlines the credibility of the RTA emissions test results.

Sydney Natural Gas Vehicle Task Force

The RTA provided secretariat and technical support to the Sydney Natural Gas Vehicle Task Force, which promotes the use of CNG by Sydney fleet managers. The RTA provided Liverpool Council with \$25,000 per annum for five years (1998–2002) to assist conversion of its fleet to natural gas.

During the year, the RTA managed the design and development of a website for the task force (www.sngv.org). Trials of a natural gas-powered vehicle (the NGT Sprinter van) were conducted.

Low emission Natural Gas Vehicle

There are few conversion kits for CNG or LPG accredited for use on Australian vehicles. The RTA is working with StateFleet to develop a suitable conversion kit. One vehicle was converted to LPG and initial testing showed promising results.

Government purchasing policy

Plans have been proposed to improve the fuel efficiency and emissions performance of Government fleets. As lead agency in the Government's Clean Fleet program, the RTA purchased five Toyota Prius hybrid-electric vehicles at the start of 2002.

Conservation of biodiversity

Koala monitoring

The 2001 Annual Report noted that the RTA was examining possible changes to the Pacific Highway upgrade near the Pine Creek State Forest close to Bonville. As a result (after the project had been approved by Planning NSW, NPWS and State Forests) a realignment of approximately 120m of Highway through the Pine Creek State Forest was proposed to minimise the impact on Koala habitat.

Underpass/overpass research

An 18-month project to monitor fauna underpasses at four sites along the Pacific Highway was completed in December 2001. The program began after completion of highway construction at Brunswick Heads Bypass, Herons Creek Deviation, Taree Bypass and the Bulahdelah to Coolongolook Deviation.

The program examined a range of structures designed to provide safe passage for wildlife. The project found that fauna underpasses were being well used by many species of native fauna, including some threatened species. Key findings included that:

- 22 native species used fauna underpasses on the Bulahdelah to Coolongolook project.
- 13 native species used fauna underpasses on the Taree Bypass project.
- Of 28 mammal species in the vicinity of Bulahdelah to Coolongolook fauna underpasses, 22 were using underpass structures.
- Three of four threatened species at Bulahdelah to Coolongolook were using the underpasses (although in low numbers). These were the koala, spotted tailed quoll and long nosed potoroo.

Funding of the Wildlife Information and Rescue Service (WIRES)

The RTA continued to support WIRES, Australia's largest wildlife rescue group. RTA funding of \$50,000 was provided for coordination and management. WIRES is a voluntary, non-profit organisation operating across NSW.

Threatened Species Recovery Plans

The RTA has implemented four Threatened Species Recovery Plans and has contributed funding to a number of others. (see Appendix 3 for further details.) The RTA has a number of policies relating to vegetation management in the road corridor. The implementation of policy, practices and procedures includes revegetation, bush regeneration and relocation of vegetation on both road maintenance and road construction projects. Native seed is collected from the local area for seeding and propagation for replanting following work. Examples in the 2001–02 year include works on the Yelgun to Chinderah Bypass, maintenance of the F3 and works on the M5 East. However, these principles are incorporated into all construction and maintenance works.

Lantana Biological Control Taskforce

RTA contributed \$5500 to the NSW Lantana Biological Control Taskforce in 2001. The Taskforce aims to reduce the incidence and spread of Lantana in the NSW. Lantana is a major weed along roadsides, fencelines and neglected or waste areas of cultivated land.

RTA-funded biodiversity research

The RTA funded a range of studies in 2001–02 including:

- Genetic research into populations of the threatened plant species *Ziera Granulata* near Kiama.
- WIRES and International Fund for Animal Welfare research into the effectiveness of roadside reflectors to discourage native fauna from venturing onto roads. The study's final report is expected in 2002.
- A one-year Australian Catholic University study to assess the usefulness of chemical repellents in managing vehicle collisions with wildlife in rural NSW. Results are expected in 2002–03.
- A University of Western Sydney investigation into the impact of bridges on estuarine habitats including both saltmarshes and mangroves. The principal focus of the study is the Karuah Bypass project.

Contaminated land management

The RTA's Panel of Consultants for Contaminated Site Assessment and Management Services provides high quality technical advice to staff throughout the authority. The panel was utilised in the continued management of contaminated sites that may be acquired or divested and in the management of RTA fixed sites.

Acquisition of land is required for some new road development projects. The RTA utilises the EIA process to identify potentially contaminated sites to be acquired. The panel has been used to provide remediation cost estimates used in valuing acquisition properties. Where potential contamination is identified, site investigation and remediation works are progressed as early in the project process as possible.

During the year, the RTA undertook contaminated site investigation and remediation, where required, on more than 20 of its fixed sites. The works were undertaken for site management and to ensure RTA divestment properties were suitable for their zoned land-use prior to sale.

The RTA received reports for the investigation of contamination at six bridge sites to determine the potential for contamination from previous maintenance practices. The sites were selected on a risk assessment basis. Investigation works for an additional six bridge sites were contracted in 2002.

Government Energy Management Policy (GEMP)

The Ministry of Energy and Utilities reported that the RTA was one of 24 agencies to achieve the Government's 15% building energy use reduction target one year before the 2001–02 target date. RTA building energy use subsequently rose during 2001–02, primarily due to the commissioning of two new major office buildings. This extra energy use has resulted in the RTA only achieving a reduction of 13% and now not meeting the GEMP building energy reduction target of 15% for 2001–02. However, the RTA still has the objective of achieving a 25% reduction in building energy use by 2005–06, as required under the GEMP. A key factor in achieving these further reductions will be the development and implementation of an RTA Energy Management Plan.

The RTA monitors its energy use within office buildings, infrastructure and transport and is required to send an annual GEMP progress report to the Ministry of Energy and Utilities. A summary of the 2001-02 GEMP report findings, along with those for 2000-01, will be provided to the public in the 2002 RTA Environment Report.

Improvements in energy data collection for the 2000–01 GEMP reporting period included:

- Reporting on energy use of traffic lights.
- More comprehensive building energy use figures as a result of improved data collection processes.
- Significant improvement in the collection of data on diesel fuel use.

Energy management initiatives in 2001–02 included the purchase of five hybrid petrol-electric cars for the RTA fleet and the purchase of Green Power – energy from renewable resources.

Greenhouse

Greenhouse Gas Inventory

A Greenhouse Gas Inventory under development in 2002 aims to identify the greenhouse gas emissions resulting directly and indirectly from RTA activities. It identifies greenhouse gas emissions from energy use associated with buildings, fuel consumption from vehicles and plant, and indirect emissions from construction materials including cement, bitumen, steel and lime. It does not include energy use by contractors or energy consumed as part of the transport task, as these are outside the RTA's direct control.

The inventory results had not been finalised in 2001–02. These results will be in the 2002 RTA Environment Report.

Heritage

Major achievements included:

- Continued development of the Heritage and Conservation Register, including completion of a study to identify all RTA heritage assets in its southern region.
- A model Conservation Management Plan (CMP) completed for the Clarencetown Bridge. The model was developed as a guide to managing the complex interaction between conserving important bridge elements and maintaining the bridge to an acceptable standard for modern traffic. This model plan was to be used to guide the preparation of up to 30 other CMPs for timber truss bridges. CMPs were also being prepared for two historic masonry bridges – the Lansdowne and Lennox Bridges.
- A study and heritage assessment of pre-1930 metal bridges was completed, including a supplementary study of iron lattice truss bridges.
- An oral history of concrete pavements was completed and a video produced on the maintenance of heritage timber bridges. The oral history of the construction of Gladesville Bridge was distributed and placed on the RTA's oral history website.
- The Timber Bridge Management Strategy was developed to identify the heritage timber bridges to which the RTA will dedicate ongoing maintenance funding.

The RTA's Aboriginal Heritage Guidelines were completed, as an important part of the RTA Aboriginal Action Plan 2001–2006. The guidelines are designed to:

- Increase awareness of the importance of Aboriginal issues.
- Act as a resource for staff to improve integration of Aboriginal heritage assessment into environmental assessment and project planning.
- Improve the integration of Aboriginal heritage management procedures into asset management.

The RTA received a commendation in the Energy Australia National Trust Heritage Awards 2002 for a project to include indigenous murals on bridges. Responding to a graffiti problem in western NSW, the RTA joined local Aboriginal communities to paint murals on the supporting structures of several bridges. The artwork had not only solved the graffiti problem, but provided an ongoing forum for appreciation of local art.

At the end of 2001–02, there were 149 items on the Heritage and Conservation Register (see Appendix 2 for details).



ENERGY MANAGEMENT INITIATIVES IN 2001–02 INCLUDED THE PURCHASE OF FIVE HYBRID PETROL-ELECTRIC CARS FOR THE RTA FLEET ///

Noise

Environmental Noise Management Manual

The RTA's *Environmental Noise Management Manual* was published in December 2001. The manual is primarily intended as a guide for RTA staff, acoustic consultants and other contractors. It defines the RTA's guiding principles in managing noise and vibration from roads and provides a noise management framework for new, redeveloped and existing roads, individual vehicles and road construction and maintenance works.

Noise Abatement Program

The RTA's Noise Abatement Program is designed to alleviate high noise levels on State and Federal roads. It provides noise mitigation, such as noise walls or mounds, acoustic treatment or low noise pavement, depending on the circumstances. During 2001–02, the RTA funded \$2.4 million in noise abatement for 181 houses and one school on State Roads. About \$58,000 was provided for noise abatement for 42 houses on National Highways.

Roadside environment

NSW Roadside Environment Committee

The RTA continued to fund and support the Roadside Environment Committee. This committee supports councils and other groups who maintain the roadside environment.

The committee undertook a major survey of local government during the first six months of 2002. Results were being collated but it was clear that the committee's work had contributed to greater attention to the roadside environment. The committee used the survey to build up its database on plans, assessments and related materials covering linear reserve management. This material is available to the public and authorities.

Other committee achievements included:

- Establishment of Significant Roadside Area signage in 14 localities (compared to nine last year).
- Establishment of an awards scheme for leaders in roadside environment management.
- Playing a major role in the NSW Litter Advisory Group, in particular ensuring that roadside litter management will be the subject of the EPA grants scheme for 2002–03.



Claudine Pfeiffer – part of the RTA's Environment and Community Policy team.

Waste minimisation

Review of environmental specifications in contracts

RTA maintenance specifications were revised in December 2001 to improve contractor waste management and reporting. Separately, the RTA began a revision of construction specifications to improve waste management and reporting requirements. The review was expected to be completed in 2002.

Waste Reduction and Purchasing Policy

The NSW Government's Waste Reduction and Purchasing Policy (WRAPP) was instigated in 1997 to minimise waste generated across all Government sectors and help increase the market for materials containing recycled content. The RTA submitted its WRAPP Plan to the NSW EPA in 1998.

The 2001–02 financial year was the first in which it was mandatory for the RTA to detail in the annual report its activities to implement its WRAPP Plan. This report is in Appendix 4.

Water quality

Management of water quality is required to meet environmental legislation and community expectations. The principles to meet these requirements are outlined in the *RTA Code of Practice for Water Management – Road Development and Management.* Examples of major water quality programs undertaken in the past year include:

• Stormwater Environment Improvement Program (SEIP)

The RTA works with local councils to prepare Stormwater Management Plans (SMPs) for each of the catchments, districts or local government areas within which the RTA has some responsibility for stormwater management. The RTA has submitted a SEIP to the NSW EPA. The program focused on supporting actions by the RTA and local councils to improve water quality by removing potential pollutants nearest to the source and reviewing activities to reduce environmental impacts on stormwater. In 2001–02, the RTA spent \$1.2 million on the SEIP.

• Sedimentation basin research and development

The RTA contracted the assessment of sediment deposited in RTA stormwater retention basins. The study's purpose was to assess the nature and performance of sedimentation basins and to determine the pollutant concentrations in the deposited sediment. The results provide guidance on the disposal of deposited sediments to meet EPA criteria. The study has also provided recommendations on structural modifications to sedimentation basin design to improve their efficiency. The results are being used as a basis for further research on the treatment of road runoff. The environment

• Environmental specifications review

A review of RTA specifications began as part of the continual improvement of environmental management processes. The review's purpose was to strengthen the RTA's contract management processes and remove ambiguity in the interpretation of the responsibilities of the RTA and contractors. A key outcome has been the development of a separate specification for the management of erosion and sedimentation for construction sites. A detailed communication program will be undertaken to ensure that RTA staff and contractors are aware of the changes.

· Treatment strategies to control road runoff

An investigation was underway to detail best practice in stormwater control measures. The aim is to inform project managers, designers and other relevant staff about stormwater control measures.

Regulatory compliance

The RTA was issued with one Penalty Infringement Notice from the EPA during 2001–02. The incident, on 14 August 2001 at the Tandys Lane project of the Pacific Highway Upgrade Program, occurred during work on a sedimentation basin by a sub-contractor. As a result of an incorrect pump out procedure, a condition of the Environmental Protection Licence was breached.

To ensure the breach is not repeated, the RTA has communicated details of the incident across the State to RTA project managers and environmental staff and relevant staff of RTA environmental contractors. The issues raised by this event have been used to illustrate the importance of adhering to the procedures applicable to these works.

Future challenges

- Improved waste management and reporting requirements within RTA environmental specifications.
- Improved data collection for the RTA's WRAPP and development of a policy to decrease virgin paper products used.
- Completion of research and development projects including the Open and Sheltered Valleys Air Quality Study and the impact of bridges on estuarine habitats.
- Ongoing implementation of the M5 East AQMP strategies and Vehicle Emissions Programs.
- Introduction of additional sustainability initiatives, including a Sustainability Action Plan.
- Improved biodiversity practice and management.
- Further improvements to the management of RTA heritage, both Aboriginal and non Aboriginal, including release of Aboriginal Heritage Guidelines, oral history projects and improvements to the Heritage and Conservation Register.
- Policy review of herbicide and pesticide use by RTA.
- Improved contractor performance reporting.

An oral history of the building of Gladesville Bridge (1960–1964) is available on the RTA website at www.rta.nsw.gov.au.



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

MARIA WHIPP — HERITAGE PROTECTION

'There's always something new around the corner. We're always discovering or rediscovering parts of our heritage that need protection – from historic wooden bridges to the memories of people who worked on significant projects many years ago."

Value for money

Strategic outcome

The best use of resources.



A SECTION OF THE YELGUN TO CHINDERAH PROJECT ON THE PACIFIC HIGHWAY.

STRATEGIC OUTCOME	MEASURES OF SUCCESS	THESE MEASURES IN 2001–02			
The best use of resources.	Performance compared to benchmarks for:	Over \$17 million in productivity savings have been made in 2001–02 from initia- tives in the management of OHS, shared services, IT and the vehicle fleet.			
	• services delivered to the community.	Community satisfaction with the RTA's performance trending upwards. Three out of four people satisfied (ACNeilsen research for the RTA).			
	 client service fees and project management costs. 	Charge-out rates have been retained at previous levels despite increases in input costs. In addition, significant savings in the project management of large projects, including \$1 million for the M5 East, have been achieved.			
	• business support services.	Participated in the benchmarking pro- gram of the National Shared Services Benchmarking consortium. Final report was expected in August 2002. Results will be reported in the next reporting cycle.			
	RTA Operations to achieve specified corporate return and win 10% of Road Services and Fleet Services income from external clients by end of 2003.	RTA Operations exceeded the specified corporate return by more than \$10 mil- lion. External income target already met for Fleet Services. For Road Services, 3.7% of income was from external clients.			

SUSTAINABILITY

The economy

The measures described here support economic sustainability by ensuring the RTA makes the best use of its resources, including its financial resources.

The environment

Value for money is a key goal in many of the RTA's environmental initiatives. The RTA seeks the best value for money in environmental solutions, such as the air quality measures detailed in the environment chapter.

Performance in detail

Value for money across the RTA

The RTA seeks to provide value for money across all of its programs. While this chapter deals mainly with business services and project management and delivery, there are value for money initiatives detailed in many of the chapters of this report.

For example, turn to the **Environment** chapter for details of Environment Impact Assessments. Economic assessment of projects is undertaken as part of the EIA process, and helps to ascertain whether a project will provide value for money to the community by maximising the benefits from the community. Cost benefit analyses are commonly carried out on environmental proposals. Such an analysis, for example, found that a Solid Fuel Heater Replacement Scheme, part of the M5 East Air Quality Management Plan, was the most cost-effective measure for reducing particulate matter in the

The community

The RTA continuously reviews its corporate support services to identify and implement innovative and improved practices, and innovative delivery of core business services. All savings are then redirected into the delivery of core programs.

PERFORMANCE AGAINST

region. The RTA is working in the emerging area of valuing environmental externalities, which aims to define the monetary cost of environmental impacts. This sort of information will help provide economic sustainability through providing the true costs of activities.

- See the **Road safety** chapter for details on how the RTA provides value for money through its safety initiatives.
- See **Mobility of people and goods** for information about how the RTA ensures the road system runs with maximum efficiency.
- See the **Customer service** chapter for details on how the RTA is improving value for customers.
- See Developing the road network and Road system maintenance for further details on the management and delivery of major projects, and their value to the community.

Business improvement and productivity savings

The Chief Executive has established a Business Improvement Program to identify, develop and ensure the implementation of strategic business improvement projects that produce tangible cost savings and/or improved organisational performance. The program is overseen by a steering committee of senior managers, chaired by the Chief Executive. Key Business Improvement projects carried out to date include:

- The review of the surveillance function for maintenance on State Roads under the Single Invitation Contract approach.
- The development of a process to support the cross-directorate management of the road maintenance program.

The Business Improvement Steering Committee is also overseeing the identification of cost savings across the organisation to offset the salary increases agreed by the Government. More than \$17 million in cost savings was identified in 2001–02 from a range of initiatives, including management of OHS, shared services, IT and the vehicle fleet. Work to identify further savings indicates that more than \$28 million will be achieved in 2004–05.

Injury management and Occupational Health and Safety

Effective and efficient work by Injury Management Services and OHS staff resulted in improved value for money with the following results compared to the previous year:

- 31% reduction in claims liability.
- \$415 cost of claims per employee compared to \$609 last year.

During the year, the RTA's excellent performance was rewarded with a workers compensation premium refund of \$3.8 million. The rebate relates to the period 1998–1999.

See the $\ensuremath{\text{Our people}}$ chapter for more details on the RTA's performance in OHS.

Project management and delivery inside RTA

The RTA manages complex projects, with the primary aim of delivering value for money. Core programs of road development, road maintenance, road safety and traffic management amounting to \$1.7 billion were delivered in line with forecasts.

In 2001–02, efficiency measures resulted in:

- Project cost savings of about \$10 million.
- Accelerating development of key programs, resulting in reduced project management costs.

Key efficiency measures included:

- Preparation of best practice business rules to ensure the most efficient delivery of the increasing number of Build, Own, Operate, Transfer projects (major projects built and owned by the private sector, to be eventually transferred to the State).
- Best practices identified as a result of benchmarking the project management function resulted in the accelerated delivery of the M5 East Freeway.
- Improvements in systems to ensure consistency in contractor performance reporting.
- Single Invitation Maintenance Contracts improved to provide better project management and project surveillance. New documentation and a maintenance contract management database have streamlined operations.
- Improvements in materials quality and construction techniques resulted in reduced excavation times and costs.
- Commercial budgeting model was implemented across NSW to ensure consistency of fees for services and enabled delivery of programs to budget.
- Packaging of construction tenders for bridgeworks, saving about 5% due to the combined best value single price and a higher standard of engineering site management.
- GIPSICAM (a photographic record on CD) being used to gather a visual record of major highways. Savings will accrue as the costs of surveillance and travel are minimised.

The RTA's service-delivery arm, RTA Operations, was formed in July 1999. It offers products and services to the RTA and to external clients. RTA Operations is managed under commercial principles and is required to generate income and be competitive in the private sector environment. It exceeded its specified corporate return for 2001–02 by \$10.2 million and won a total of \$24 million of work from external clients. Fleet Services earned 10.4% of its income from external clients and Road Services earned 3.7% outside the RTA. Fleet Services has achieved its 2003 target ahead of time. Road Services is behind the pro-rata target due mostly to a busy year with internal RTA clients reducing its capacity to take on external work. Meeting the needs of RTA clients is the top priority for RTA Operations and the projections for 2002–03 were for continued strong demand from internal clients. Total external work won was expected to grow to about \$35 million.

67

Business support services

The RTA has made considerable savings through shared business support services for all areas of the authority. These services include business processing and administration (such as payroll and accounts payable), injury management, financial and general administration, logistics and facilities and project-based initiatives.

The aim of this work has been to:

- Develop business support services that are competitive and contestable, enabling effective participation in benchmarking studies.
- Drive improvement in quality and consistency of service delivery.
- Ascertain the true cost of providing business support services throughout the RTA.
- Reduce overhead costs through economies of scale and consistency of process and practices.
- Enable directorates to focus their energy on the delivery of core services to the community.

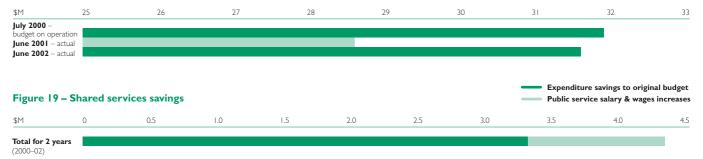
The RTA's achievements in this area have been widely recognised by the Government and private sectors. The RTA's Business Services Group won the CPA NSW Public Sector Organisation Achievement award in 2001. Other achievements include:

- Improved service delivery, evidenced by positive customer feedback.
- Approximately \$3.3 million in accumulated savings in expenditure over two years of operation (see figures 18 and 19 below).
- Reduction in transaction/unit cost resulting in cost savings to core directorates for business support services.
- Acceptance of the Business Services Group to a National Shared Services Benchmarking Consortium to enable benchmarking of support services with public and private sector organisations.

Future challenges

- Continue to identify cost savings and redirect these to services for the NSW community.
- Move to an 'Advanced Market Place' model to further enhance shared service's delivery.
- Continue to refine project management and delivery to ensure maximum efficiency.
- RTA Operations to continue to meet the needs of internal RTA clients, while increasing external work won.

Figure 18 - Shared services expenditure



Consultation and information

Strategic outcome

Effective relationships with the community and key stakeholders.



Performance summary

STRATEGIC OUTCOME

Effective relationships with the community and key stakeholders.

MEASURES OF SUCCESS

Increase in community satisfaction with the RTA as a consultative agency.

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

Overall satisfaction with the RTA is trending upwards, according to research undertaken in the first half of the financial year. The survey revealed mixed messages about consultation, with the community split about the need for extensive consultation. The RTA revamped its communication functions during 2001–02 to provide better and more extensive information to the public.

SUSTAINABILITY

The economy

Collaboration and consultation with communities, Government agencies and the private sector allows the RTA to ensure the best value for money from its activities. The RTA's communication efforts are also designed to enable businesses to plan effectively.

The environment

RTA consultation on major projects seeks community feedback on all aspects of proposals, including environmental concerns. The RTA liaises with Aboriginal communities, for example, on the impact of projects on cultural heritage. The RTA produces an annual environment report detailing its performance. This and other reports are available on the RTA website, saving paper.

Performance in detail

Consultation and collaboration across the RTA

The RTA works extensively with the community, other Government agencies and the private sector. This chapter details consultation on major projects and the RTA's efforts to continually improve the public's access to information about the authority's work. Other chapters of this report detail a broad range of collaborative projects. For example:

- See the Road safety chapter for information about the RTA's work with local councils and communities to reduce the road toll.
- See the **Environment** chapter for information about the RTA's collaborative efforts with local communities to improve the roadside environment.
- See the **Mobility of people and goods** chapter for information about how the RTA's Transport Management Centre brings together a range of government agencies, including Police, to ensure the maximum efficiency of the transport network.
- See the **Developing the road network** chapter for information about the RTA's work with the private sector to deliver major infrastructure projects.

The community

The RTA encourages community involvement in the planning and development of major projects. Information is provided to the community through the media, local public displays and extensive face-to-face communication.

The RTA seeks to communicate widely with communities affected by its work. The RTA also provides information to help people go about their daily business. For example, the RTA's Transport Management Centre is the hub for gathering and distributing information about road conditions, including major delays and changes to traffic conditions.

Consultation on major projects

The RTA is committed to open dialogue with the community and provides opportunities for the community to have input into the decisions which affect them. Through community consultation the RTA aims to develop effective relationships with the community and key stakeholders to increase community satisfaction with projects. The RTA aims to consult widely for all projects ranging from construction of a new roundabout or cycleway, installation of a new pedestrian crossing or bridge through to building new roads or upgrading existing roads.

Community consultation over 2001–02 included a range of communication and feedback techniques such as brochures, newsletters, media releases, websites, telephone information lines, displays, information days, strategic and value management workshops, public meetings and the formation of ongoing community liaison groups.

Bangor Bypass

This project is an example of how community consultation and input can modify a project to better meet the needs of the community. Consultation was intense with the display of the Bangor Bypass Project Outline Report in the local region for six weeks from December 2001 to February 2002. This included the distribution of more than 10,000 brochures to the community, inviting feedback on the proposal. The project's Environmental Impact Statement, Species Impact Statement and summary was widely displayed and available over a six-week period during March and April 2002. During this time, RTA staff held 12 community information sessions at a local shopping centre to answer questions and provide further information on the project. A public information evening was attended by more than 250 people. The meeting provided a forum for the public to have questions answered and issues heard. Brochures outlining key aspects of the EIS and SIS were also distributed to the local community.

A key outcome of the consultation was major modifications to the proposal in response to the issues raised by the community and stakeholders. The community consultation process will continue up to and during the project's construction phase.

Great Western Highway upgrade

Community consultation activities were conducted for sections of this project through the Blue Mountains. More than 30,000 newsletters were distributed to local communities inviting comments on proposals or updating the public on progress. Saturday morning barbecues were also held in shopping centres to encourage the local communities to discuss aspects of the upgrade with the RTA project team and find out more about individual projects. Feedback, including from value management workshops, urban and landscape design planning sessions involving community and stakeholder representatives, resulted in the RTA addressing a number of issues and modifying plans.

The RTA also formed community groups to encourage active public involvement in the design of landscape plans for townships, the formal celebration of the completion of works and the naming of pedestrian bridges.

Project displays, including three-dimensional models, have been exhibited at councils, libraries and community centres and all activities were publicised through local media, posters and letterbox drops throughout the Blue Mountains.

Cross City Tunnel

The main consultation activity for the Cross City Tunnel proposal was the exhibition of the Department of Urban Affairs and Planning Assessment Reports, the RTA Representations Report, the Planning Minister's determination and the RTA Chief Executive's determination.

The reports were exhibited from 17 January to 15 February 2002 in 20 locations, including a staffed display/information centre at William Street, Woolloomooloo. Additional information was available from the project's toll-free information line and the RTA's website. The display/information centre, information line and website are ongoing consultation activities.

M5 East Freeway

A series of events to mark the opening of the M5 East Freeway took place in December 2001. They were the culmination of the RTA's consultation in the planning and construction phases of the project. The key public events were a festival on the roadway and a walk through the tunnel. About 30,000 people attended these events and about \$45,000 was raised for charity during the opening activities.

As well as engaging positively with the community, the RTA also worked collaboratively with a broad range of organisations including:

- The State Emergency Service, which provided 200 volunteers and staffed the tunnel.
- Red Cross, which provided 30 volunteers to assist with first aid and lost children.
- Rotary/Lions, which provided 160 volunteers as marshals.
- NSW Police, which provided 191 officers.

The festival included displays from local councils and a range of government and non-government organisations. The Holden Racing Team was featured and there were rides, amusements and market stalls. Sponsors included Holden Limited, Roselands, Interlink Roads Pty Limited, United Holden Rockdale & Lakemba, VSL Prestressing (Aust) Pty Ltd, Alstom Australia, Hyder Consulting, Radio 2UE, D&D Advertising, Intentional Pty Limited, Coates Hire, Coates Prestige, Interlink Roads Pty Limited (Eway), Hurstville Council, Tooheys Limited, Bankstown Sports Club, Miranda Wines, St George & Sutherland Shire Leader and The Torch.

Pacific Highway upgrade

The Pacific Highway upgrade is a significant project affecting communities all along the fast-developing and environmentally-sensitive NSW North Coast. From the early planning stage through to completion, community input and participation is encouraged.

The RTA has been working closely with communities in the Bulahdelah, Moorland to Herons Creek, Kempsey to Eungai, Coffs Harbour to Woolgoolga and Brunswick Heads to Yelgun areas. Input from these communities has led to improvements in project designs and in RTA consultation processes. For example, the RTA has established Aboriginal liaison groups for the Bulahdelah and Kempsey to Eungai projects. These groups are helping the RTA to plan infrastructure that minimises the impact on Aboriginal heritage and better provides for the needs of local Aboriginal people. On the Brunswick Heads to Yelgun project, the RTA responded to community concerns by modifying the design to reduce its impact on the surrounding natural and built environments. The modified design better reflects community needs, while still meeting the safety and transport efficiency objectives of the Pacific Highway program.

Community access to information RTA website

The RTA website (www.rta.nsw.gov.au) is one of the most visited State Government websites in Australia, providing a wide range of information and online services to the NSW community, and to web users in other States and internationally. In addition to the millions of visits to the website, more than 93,000 online transactions with a value of \$18.2 million were conducted in 2001–02.

Among the many facilities available on the website, the renewing of vehicle registrations and the ordering of personalised number plates are two of the most popular. The RTA processed almost 64,000 motor vehicle registrations and issued almost 27,000 custom number plates online. About 20% of custom plates are now purchased via the internet.

The RTA is working on a revitalised website with improved navigation and additional features to continue the high level of service provided by the RTA in this rapidly growing medium.

Changes to RTA communication

The RTA has revised and modified its communications structures and processes as part of its moves to improve community consultation and information. A Communications and Corporate Relations Directorate has been created to give public communication a higher organisational priority in the RTA. The directorate's key aim is to ensure the community is provided accurate, relevant and timely information across RTA responsibilities. Key priorities include better information to local communities on road projects, improved traffic information from the Transport Management Centre for motorists, increased responsiveness to public inquiries, improvements to RTA printed material and more organisational transparency. Communications priorities and performance will be reviewed on a regular basis.

Traffic information

As part of the revitalised RTA website, real-time traffic information will be made available to the public via the internet. The communications team at the Transport Management Centre is developing a public traffic website.

Telephones are a vital tool for the TMC to receive information from the public about traffic incidents and to provide information to road users. During the bushfires in December 2001–January 2002, the TMC experienced a 50-fold increase in calls received. On 4 January 2002, the busiest day of the bushfires, 33,597 calls were made to the traffic inquiry line 132 701.

Actions taken to manage this demand included:

- Increased staffing. The RTA's Newcastle Call Centre had previously been organised to assist with handling New Year's Eve inquiries, from Boxing Day to New Year's Day. More staff were brought in to handle the extra calls generated by the bushfire emergency.
- Use of pre-recorded messages. Staff at the TMC were able to record road closure information onto an Interactive Voice Response (IVR) system. This was successful as 80–90% of callers were satisfied with the message and hung up without needing to speak to an operator.

Since the bushfire emergency, the TMC has been developing and improving its systems for handling telephone inquiries for both emergencies and daily traffic incidents. A permanent IVR system for the traffic inquiry line has been developed and will be implemented in late 2002.

Community attitudes survey

A survey of the community's attitudes to the RTA was carried out by ACNeilsen Research in September and October 2001. The survey found that three out of four people in NSW were satisfied with the RTA and the way it does business.

Since the RTA conducted the first survey in 1994, there has been a steady upward trend in customer satisfaction across all of the authority's seven core functions. The areas of greatest improvement were expansion and maintenance of the road network and traffic flow management. Those surveyed believed safety should be the RTA's number one future priority.

The survey, the fifth conducted by the RTA, involved 35 minute faceto-face interviews of 1400 NSW households within the RTA's six regional areas. The results provided invaluable information and feedback on community perceptions of RTA activities and identified areas of improved performance as well as areas requiring attention.

Respondents were asked to rate the RTA's various activities in terms of importance and performance. The **top seven community priori-ties** were:

- Reducing accident prone areas or 'black spots'.
- Adequate testing for driving licences.
- Clear road markings.
- · Encouraging safer driving practices.
- Educating parents and children about safe travel to and from school.
- Road safety education in schools and pre-schools.
- Reducing rough road surfaces such as potholes, bumps and cracks.

The RTA's performance was rated **strongest** in the areas of: • Rest areas along major country roads.

- Maintaining Sydney's freeways, tollways and major roads.
- Lowering speed limits in urban and residential areas.
- Keeping traffic lights, road markings and road signs in good condition.
- Managing traffic around special events.

Respondents thought the RTA could do better in:

- Reducing rough road surfaces.
- · Minimising air pollution from vehicle emissions.
- · Ensuring drivers remain competent throughout their driving lives.
- Educating people about traffic control systems.
- Regulating trucks and buses.
- Building and improving country freeways.
- Providing space on country roads for vehicles to pull over.
- · Educating people about road rules and regulations.

Liaising with Aboriginal agencies and communities

RTA Aboriginal Program Consultants liaise with a range of organisations and communities, including the Aboriginal Police network, the Local Government Aboriginal network, State Aboriginal and Local Land Councils, the Department of Corrective Services, Department of Juvenile Justice, the Department of Education and Training and the National Parks and Wildlife Service. The liaison enables a smooth working relationship between all agencies and the exchange of important information for Aboriginal staff.

RTA Aboriginal Program Consultants continued to liaise with NSW Local Aboriginal Land Councils regarding environmental and cultural concerns, including heritage. In 2001–02, extensive Aboriginal community consultation occurred on Pacific Highway projects and other road construction projects.

The naming of the Kamilaroi Highway in North Western NSW was a significant moment for the RTA and the local Aboriginal communities. The Sandy Creek Bridge was renamed the Wangaaupuwan Bridge during the \$20 million upgrade of the Kidman Way in the Western Region. A bridge on the new Taree bypass was named after prominent Aboriginal woman Ella Simon.

Ethnic communities

See Appendix 12 for information about the RTA's work in communicating with people from non-English speaking backgrounds.

Future challenges

- Continued effective consultation with communities affected by RTA projects.
- Launch of a revitalised RTA website.

ID-OJ RTA CONSULTATION ON MAJOR PROJECTS SEEKS COMMUNITY FEEDBACK ON ALL ASPECTS OF PROPOSALS, INCLUDING ENVIRONMENTAL CONCERNS ///



/// ENVIRONMENTAL /// SOCIAL /// ECONOMIC

LAKSHMY MULAVANA — ENGINEER – INFRASTRUCTURE PROJECTS

"Our focus is to provide an excellent service to the community. When we develop new projects, two-way communication with the community is crucial to explain the project and address any concerns."

Informed and accountable management

74

Strategic outcome

Planning, organising, leading and controlling the organisation to achieve outcomes.



STRATEGIC OUTCOME

Planning, organising leading and controlling the organisation to achieve outcomes.

MEASURES OF SUCCESS

Integrated Management Systems Stage I implemented by March 2002.

PERFORMANCE AGAINST THESE MEASURES IN 2001–02

Implemented Integrated Management System Stage I successfully. New RTA Strategic Plan, *The Journey Ahead*, Jaunched.

SUSTAINABILITY

The economy

The initiatives outlined in this chapter help the RTA to improve the efficiency of its business and delivery of services and products. The planning processes, particularly development of the strategic plan, provide strategies to achieve economic sustainability. Improved management processes have provided efficiencies, freeing up resources to be focused on the RTA's core business.

The environment

The planning processes, particularly development of the strategic plan, provide the strategies to achieve environmental sustainability. Electronic data flow developments enable information to be shared across the organisation electronically, reducing paper use and eliminating the need for travel.

The community

The RTA's strategic planning framework ensures that appropriate priority is given to Government and community priorities including accessibility, diversity, and equity.

Performance in detail

Good management across the RTA

While this chapter deals mostly with strategic planning and the RTA's management systems, action is taken across the authority to ensure informed and accountable management.

- See the **Environment** chapter for details on how the Environmental Impact Assessment process provides management with information about the likely impacts of proposed projects and how to minimise these impacts.
- See the **Mobility of people and goods** chapter for information about how the RTA's Transport Management Centre gathers information and uses it to ensure the most efficient use of the road network.
- See the Value for money and Road system maintenance chapters for information about how management systems and procedures, particularly relating to contracting, are contributing to management knowledge and accountability.

Strategic planning

The RTA's Strategic Management Framework provides a structure for strategic decision-making and the formulation of vision, strategies and initiatives for implementation to achieve the community and business outcomes of the organisation. At the core of the framework is the RTA strategic plan, *The Journey Ahead*. *The Journey Ahead* outlines the RTA's vision and mission and sets out a broad organisational direction. The plan also reflects the NSW Government's *Action for Transport 2010, Road Safety 2010* and *Action for Bikes 2010*.

The Journey Ahead provides the strategic framework around which all other strategic and business plans in the organisation are built. The authority has a suite of linked strategic and business plans to provide direction and communicate and ensure delivery of organisational outcomes.

This annual report is structured around the strategic outcomes contained in *The Journey Ahead.*

Diversity & Equity

The RTA's Diversity & Equity Plan 2002–2007 was launched on 12 April 2002. The plan builds on the significant strengths of the RTA's Disability Action Plan, Equal Employment Opportunity Outcomes Framework, Ethnic Affairs Priority Statement & Plan and the Aboriginal Action Plan.

It is the umbrella document which sets directions and influences everything the RTA does for its staff and customers, such as providing services and products to customers with diverse needs. It also provides for employment and staff development in the workplace where the RTA is committed to diversity and equity, and prevention of discrimination and harassment. The plan sets out aims and objectives relating to diversity and equity for the RTA's operations.

Aboriginal and Torres Strait Islander people

The RTA's revised Aboriginal Action Plan (AAP) was launched by the Director General of the Department of Aboriginal Affairs, Ms Linda Burney, on 18 September 2001. The AAP clearly sets RTA priorities with regard to Aboriginal issues, including Aboriginal Reconciliation, licensing in Aboriginal communities, and road safety.

Improving business efficiency

The RTA implemented an e-Business Program to improve business effectiveness and efficiency. The RTA has achieved outstanding success in its endeavours, and is now seen as an e-Business leader among NSW Government agencies. The RTA was awarded the Premier's Gold Award for its online registration e-business transaction service (see **Customer service** chapter for more details).

Phase I of the Integrated Management System Project was delivered this year. It is an integrated Finance, Human Resources, Project Management and Logistics system. It provides a standard and flexible computer environment, configured to support the RTA's current and future business information requirements. Stage one of this project was implemented on time and within budget.

The Integrated Management System has replaced a number of business systems that were no longer viable, including the corporate financial systems and the HR/Payroll system. It provides a single common business 'language' across the RTA.

The Integrated Management System is being introduced over two stages. The first stage saw the implementation of the core HR, Finance, Payroll and Logistics functionality and was rolled out in March 2002. The second stage will introduce workflow and advanced HR functionality, including Employee Self Service, OHS and advanced Training & Events Management. It was expected that implementation would be completed by June 2003.

A number of initiatives designed to substantially spread the use of e-commerce and the internet throughout Government departments and agencies have been launched by the NSW Government. E-business provides the technology and platform to support these initiatives and allows for online services, while enabling continuous improvement of the RTA's business processes. Information technology security policies, procedures and tools were established to minimise risks to the RTA's business and to improve security for all IT activities.

The Niku project management system was implemented to improve the RTA's capacity to deliver information technology projects on time and on budget and better inform clients of the status of their project.

Future challenges

- Develop a new RTA Strategic Plan.
- Implement Integrated Management System Stage 2 Employee Self Service. Occupational Heath and Safety and Training and Events Management.

O-O THE RTA'S STRATEGIC PLANNING FRAMEWORK ENSURES THAT APPROPRIATE PRIORITY IS GIVEN TO GOVERNMENT AND COMMUNITY PRIORITIES ///



^{///} ENVIRONMENTAL /// SOCIAL /// ECONOMIC

"It's quite simple – I enjoy the working environment and friendly colleagues. I also try to provide the best analysis possible to help decision-making."

FRANK PERRY — ECONOMIC AND FINANCIAL EVALUATION MANAGER

"I get great satisfaction out of seeing projects that we have evaluated up and running and knowing that they're providing value for money."

BAOJIN WANG — ECONOMIC ANALYST