## O3 POSITIVE ENVIRONMENTAL AND URBAN DESIGN OUTCOMES

## **INTERMEDIATE RESULTS**

Impacts on the natural, cultural and built environments are minimised.

#### STRATEGY

Encourage use of alternative transport.

Lead best practice infrastructure planning and road works.

### STRATEGY

Implement policies that contribute to a reduction in vehicle emissions.

Hyde Park 1943

#### **STRATEGY**

Use fewer natural resources and produce less waste.



#### ALTERNATIVE TRANSPORT

#### **BUS PRIORITY**

#### Review of bus services

The RTA has been working with other transport agencies to respond to the NSW Government's Review of Bus Services. The review identified 43 strategic bus corridors in Sydney. Sixteen of these were a high priority for the introduction of bus priority measures, and are focused on the key centres of Parramatta, Bankstown, Hurstville and Burwood. The RTA is responsible for the introduction of bus priority measures on the network of strategic bus corridors identified for Sydney, Wollongong, Newcastle and the Central Coast.

The NSW Treasury has allocated an additional \$90 million to the RTA's budget over the next three fiscal years (2005-06 to 2007-08) to implement bus priority measures on these corridors. The funding is in addition to the RTA's \$15 million annual bus priority allocation.

The RTA has begun developing packages of works to improve priority for buses on these corridors. Bus priority measures improve the efficiency of bus operations and include bus lanes, priority traffic signals and enforcement measures.

#### Technology to enhance bus priority

Testing of the Public Transport Information Processing System (PTIPS) on the busy Route 400 between Bondi and Burwood (via Sydney Airport) has demonstrated significant benefits in terms of bus travel times and on-time running.

The PTIPS system uses global positioning systems and radio data communications to deliver information about each bus and its location. This information is used to forecast the arrival time of the bus at traffic signals ahead.

PTIPS is able to alter traffic signal timing to:

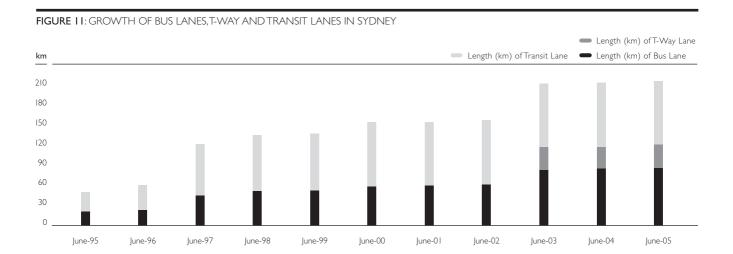
- Allow the bus to maintain its scheduled timetable.
- Give bus passengers a more reliable service.
- Allow bus operators to schedule their buses more efficiently.

#### Warringah road project

Work is well advanced on the Warringah Road bus priority project. The project aims to improve access and priority for buses entering Warringah Road and at locations where buses experience delays along the corridor. Measures include bus 'queue jump' facilities at intersections and bus-exclusive right turns.

#### Growth in bus and transit lanes

The growth in bus, T-Way and transit lanes in recent years is illustrated in Figure 11.



#### Reducing illegal use of bus lanes

To ensure bus lanes are effective, it is essential that illegal use is kept to a minimum. The RTA has developed new enforcement cameras specifically for use in bus lanes. Illegal use of bus lanes increases bus travel times and operating costs. The RTA has taken several measures to improve motorists' compliance with bus lane rules, including public education campaigns and colouring all of Sydney's bus lanes red to increase their visibility.

Enforcement strategies have also been developed, but policing has generally been difficult because of the limited availability of safe roadside areas for police to pull over drivers. Camera technology does not have the same limitations and a trial has been undertaken to detect and automate an infringement process for illegal bus lane use.

In mid 2005-06 the first package of 13 enforcement systems on bus lanes in North Sydney and Glebe and on the Liverpool to Parramatta Transitway will be implemented. Later in the financial year more cameras are planned for key bus corridors within the Sydney CBD.

#### **TELEWORKING**

The RTA continued to provide advice and assistance to government agencies and businesses on teleworking. This work contributes to the RTA's aim to reduce vehicle kilometres and car dependency and improve air quality. RTA staff members were also supported in teleworking at home or at RTA telecentres in Gosford and Penrith and at hot desks at Parramatta.

#### TRAVEL DEMAND MANAGEMENT

The RTA continued to assist government agencies and other organisations to produce and use their own transport access guides. Transport access guides provide customised travel information on sustainable, low energy forms of transport such as walking, cycling and public transport for people travelling to and from a particular site. Information about transport access guides is on the RTA website www.rta.nsw.gov.au/transportaccessguides.

#### University of Newcastle initiative

During 2004-05, the RTA worked with the University of Newcastle to implement parts of the Ourimbah Campus Transport Access Plan. The plan aims to reduce car dependency and encourage and facilitate sustainable transport access to the campus. Customised transport information was developed and published, including on the campus transport access website www.ccc.newcastle.edu.au/visitors/.

A transport information package was issued to 200 new students travelling to the campus during Orientation Week in February 2005. The package aimed to influence behaviour of new students before they had established regular travel patterns. It contained a travel behaviour survey, information on public transport including timetables and free bus tickets for a week, concession card forms, walking and cycling brochures, maps, a transport access guide brochure, a water bottle badged with sustainable transport logos, a wallet and a pedometer. A transport information display stand

was staffed by local bus companies, the student union, the university and the RTA.

Results of transport surveys conducted in 2005 indicated the majority of people travelled to the campus by car. However compared to the 2004 survey results, bus usage doubled and train usage increased by 18 per cent in 2005. While the number of people cycling and walking to the campus remained comparatively small, the percentage of people using these modes almost doubled in 2005.

#### Green business program

The RTA conducted a trial Green Business Program at Five Dock Motor Registry. The program trialled environmental improvements that could be implemented for all motor registries across the State. The trial resulted in reductions in energy and water usage, increased recycling, improved waste management and pollution prevention and increased sustainable transport use by car pooling, walking and cycling. Five Dock staff used a pedometer to record the number of steps they walked during the trial and collectively recorded 23 million steps – the equivalent of walking around Australia with a side trip to Alice Springs. The Mayor of Canada Bay presented the RTA with a Gold Award in the council's 2004 Green Citizens Awards in the Green Business Category.

#### **CYCLISTS**

Cycling is a healthy and environmentally friendly alternative to the car for middle distance trips and is particularly efficient for short trips. Increased bicycle travel has the potential to improve air quality and the health of the community.

In 1999, the Government launched its long term Action for Bikes - BikePlan 2010 to promote cycling and outline the development of an integrated network of cycling facilities. In 2004-05, the RTA continued to implement strategies outlined in the plan and promoted cycling as a healthy, affordable, flexible and environmentally friendly form of transport.

The length of cycleways in NSW increased by 185 km in 2004-05. This figure included 85 km of off-road cyclepaths and 100 km of onroad cycleway. More than 1100 km of off-road shared pathways are now in service across NSW for the use of cyclists and pedestrians and there are more than 2100 km of on-road dedicated cycle lanes.

This year, the RTA completed many off-road cycleways including:

- The western section of the route between Fairfield City Farm and the Parramatta to Liverpool Rail Trail at Guildford.
- Parramatta to Fairfield along Randle Street and from Railway Terrace to Boomerang Street, Granville.
- M5 East Cycleway the completion of sections along Coward Street, Mascot.
- Mascot to Darlinghurst Cycleway completion of missing section between Mascot and Paddington.
- Fernleigh Track Cycleway completion of Stage 2 construction between Kahibah and Whitebridge.

During the 2004-05, the RTA provided more than \$5.3 million dollars to councils on a dollar for dollar basis, to develop and construct local cycleway networks. Eighty nine local bicycle network projects were funded at a combined cost of \$10.8 million.

The RTA continued to support community events that encourage greater use of cycling, including the RTA Big Ride and the RTA Cycle Sydney. More than 6000 people participated in the RTA Cycle Sydney on 30 November 2004.

The RTA organises Bike Week every September to encourage riding in local communities and promote bicycle safety. The RTA provided seed funding to local councils, Police Citizens Youth Clubs and bicycle user groups to promote bicycle events. About 50 events were held around the State, including bike skills sessions, various rides and information seminars for older people.

In February 2005, the Department of Infrastructure Planning and Natural Resources (DIPNR) released the document – *Planning guidelines-walking and cycling*. DIPNR and the RTA worked with professionals and community groups to develop the guidelines. The guidelines help land use planners and related professionals to consider cyclists' and pedestrians' needs in all aspects of their work and particularly when developing sustainable neighbourhoods and cities.

The RTA is keen to improve the skills of its staff involved in planning, designing and building bicycle and pedestrian facilities. The RTA has developed two training courses about bicycle and pedestrian facilities: a one-day course for senior officers, decision makers and road related project managers and a two-day course for road transport engineering and planning practitioners. Five sets of these courses were delivered to a total of 139 RTA staff. These courses are now also available to councillors and council officers.

#### **PEDESTRIANS**

In 2004-05 the RTA has undertaken a number of initiatives to improve pedestrian access and safety. Facilities provided for pedestrians included:

- Pedestrian bridges at Leichhardt, East Gosford and Epping. Planning is well advanced for Canterbury, Wiley Park, Auburn and Yagoona.
- New and reconstructed pedestrian traffic signals at Ultimo, Coogee, Glebe, Kensington, Kingsgrove, Moore Park, Telarah, Wollongong, Albion Park, Thirroul and Long Jetty.

- Pedestrian crossings and refuges.
- Additional audio-tactile push buttons to assist pedestrians with vision impairment.
- Kerb ramps.
- Pedestrian fencing.

To develop integrated pedestrian networks, the authority helped local councils prepare Pedestrian Access and Mobility Plans (PAMPs). Sixty five PAMPs have been developed across the State, including I I completed during 2004-05. The RTA supported councils in building the pedestrian facilities in these plans. PAMPs aim to improve safety, convenience and mobility for links between public transport and other key centres of pedestrian movements.

The RTA continued to promote walking as an alternative to private car travel for short trips. The RTA continued to support the Pedestrian Council of Australia Limited, particularly the council's annual Walk to Work Day in November 2004 and its Walk Safely to School Day in May 2005. The events reinforce safe pedestrian behaviour amongst parents, teachers and children.

#### INFRASTRUCTURE PLANNING AND ROADWORKS

#### ENVIRONMENTAL IMPACT ASSESSMENT

As required by Part 5 of the *Environmental Planning and Assessment Act 1979*, the RTA ensures preparation of Environmental Impact Assessments (EIA) for various road infrastructure projects. Reviews of environmental factors (REFs) consider potential environmental impacts of road construction or maintenance projects. REFs help the RTA decide whether a proposal is likely to significantly affect the environment and therefore require an Environmental Impact Statement (EIS).

In 2004-05 three EISs and 375 REFs were prepared. The three EISs published this financial year were all projects on the Pacific Highway upgrade – the Bulahdelah Bypass, the Moorland to Herons Creek upgrade and the Tugun Bypass (in association with the Queensland Department of Main Roads).

An RTA EIA Toolkit was released in August 2004. The toolkit aims to streamline the preparation and approval of environmental assessments in a 'whole of government' approach. Its intent is to clarify whether an EIS is required, and if so, to provide a more focused scope EIS.

TABLE 8: RTA NON COMPLIANCES WITH ENVIRONMENTAL LICENCES

Licence No.	Licence Name	Date Non-compliance Issued	Licence Condition	Reason/s
1530	Bellambi Depot	13 Oct 2004	UI	Pollution Reduction Program - certain aspects of environmental controls (Part 2) could not be completed by 31 Dec 2003.
7512	Sydney Harbour Bridge	20 Nov 2004	R4.5	Failure to submit quarterly waste tracking report.

#### **ENVIRONMENTAL MANAGEMENT SYSTEM**

The RTA maintains an Environmental Management System (EMS) to assist in continually improving environmental performance of its operations. Key developments in the EMS for 2004-05 included release of an EMS Brochure, development and release of the Environmental Incident Reporting Policy and Procedure and report form, approval of the RTA Quality, OHS and Environmental Audit Package, release of seven Environmental Directions, and release of the Environmental Training nomination form.

#### **ENVIRONMENTAL EDUCATION AND TRAINING**

The RTA provides formal and informal environmental training opportunities to staff. A central register developed in 2003-04 has assisted in informing staff of the environmental training courses available. Over the past year approximately 2,900 hours of formal environmental training was undertaken, attended by more than 140 staff. The environmental training courses included environmental awareness when undertaking road maintenance activities, erosion and sediment control training and waste water management.

#### **ENVIRONMENTAL COMPLIANCE**

The RTA currently holds 10 Environmental Protection Licences (EPLs) under the *Protection of the Environment Operations Act 1997*. The EPLs were issued for various activities such as waste generation and storage for the Sydney Harbour Bridge, freeway/tollway construction for the F5 widening and vehicular ferry vessel construction and maintenance at Mortlake slipway. In the past year two non-compliances were issued for two separate EPLs held by the RTA (see Table 8 on page 43). No Penalty Infringement Notices (PINs) were received from the Department of Environment and Conservation (DEC) during 2004-05.

#### CONTRACTOR ENVIRONMENTAL PERFORMANCE

Contractors play an important role in delivering RTA projects. To ensure superior and improved delivery in projects, contractors undergo a performance assessment. Construction contracts

valued at more than \$200,000 and single invitation contracts (SIMC) valued at more than \$50,000 are assessed three times a year and following significant milestones. Contractor performance is assessed against 13 performance criteria including timely delivery of work, management of occupational health and safety and environmental performance.

During the year 241 performance reports were undertaken. Of these 18 per cent were internal service provider construction contracts and 82 per cent were external contracts. For maintenance contracts, 306 performance reports were undertaken. Of this total, 77 per cent were council reports and 23 per cent were internal service provider reports. Environmental contractor performance for construction and maintenance in 2004-05 is represented in Figure 12 below. Environmental performance has remained steady since last financial year.

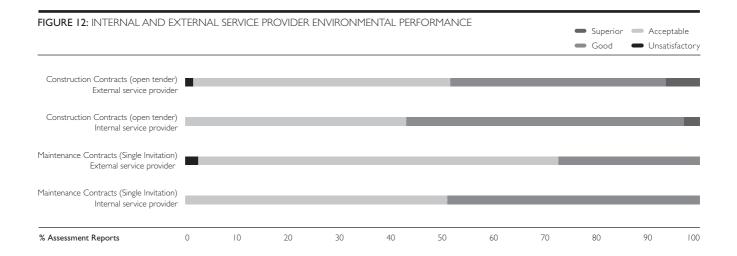
#### AIR QUALITY

#### M5 East Freeway air quality

The Air Quality Management Plan (AQMP) was released in 2002 for the sub-region of the M5 East Freeway ventilation stack to meet one of the M5 East Freeway conditions of approval. The \$2.5 million program, primarily introduced to identify opportunities to improve air quality in the sub-region, is due for completion in 2007.

The AQMP Steering Group, comprising representatives from NSW Health, DIPNR, DEC and the RTA, developed strategies for the AQMP. Table 9 includes the actions implemented in 2004-05.

Ambient air quality monitoring continued for the M5 East Freeway. Monitoring data and reports are available on the RTA's website. No air quality goals were exceeded due to operation of the M5 East Freeway stack. However in January 2005, an above goal reading was recorded for particulate matter (PM<sub>10</sub>). DIPNR and DEC were advised of the reading. A CSIRO report to the DIPNR concluded that the reading at one monitoring station on 13 January 2005 was due to a false instrument reading.



Program	2004 - 05 Progress	
Solid fuel heater buy back program	■ As of June 2005, 179 solid fuel heaters were acquired and 330 applications for this program had been approved with more applications expected during winter:	
	• The program has been promoted with advertising, displays at council offices and heating outlets, and letterbox drops. A display has been established at the Sydney Building Information Centre.	
M5 East Smoky vehicle enforcement program	At the end of June 2005, DEC had served infringement notices on 56 vehicles reported by RTA officers to be failing to comply with vehicle exhaust requirements.	
Travel demand management	Transport Access Guides were developed in conjunction with 12 major trip generators to encourage people to use more environmentally sustainable transport.	
	Bus priority measures were reviewed with State Transit Authority and private bus operators. Potential projects are under consideration.	
Community education	■ A draft community education plan was prepared for review by the steering group.	
	■ The Environment Australia brochure, Hot Tips, which provides education on correct use of solid fuel heaters, has been reproduced and distributed to residents throughout the area. Translation into four community languages is proposed.	

#### **HERITAGE**

#### Aboriginal culture and heritage

Development of the Aboriginal Liaison Protocol has continued during the year. The protocol is an internal staff procedure which specifies Aboriginal liaison requirements. New consultation requirements issued by the DEC have been incorporated into the protocol which is expected to be finalised this year. Once complete, the protocol will form part of the RTA's Aboriginal Heritage Guidelines.

#### Heritage and Conservation Register

The RTA has a responsibility to identify and manage the items of heritage in its ownership or control. These items are predominantly bridges but also include vehicular ferries, property assets, movable collections and archaeological items.

The RTA has undertaken a range of studies to assess the heritage significance of various items. In 2004-05 a study was completed on the pre-1948 concrete beam bridges in the southern half of NSW. Further studies awaiting completion or due to commence include pre-1948 concrete beam bridges for the northern half of NSW and archaeological sites.

To assist heritage management and to meet its statutory obligation under \$170 of the Heritage Act 1977, the RTA continues to develop and maintain a Heritage and Conservation Register. In accordance with Section 170A of the Heritage Act 1977, the RTA is required to provide a statement on the condition of items on its register in the annual report (see Table 10 and Figure 13). There are 290 items on the RTA's Heritage and Conservation Register and 35 of those are State Heritage listed. Progress on the management of heritage items is displayed in Table 11.

During the year the RTA advised the NSW Heritage Office that the following items would be removed from the Heritage and Conservation Register:

- Dangar Bridge over the Barwon River 5 km west of Walgett in Walgett Shire (Register No. 4300143) - replaced by a new bridge.
- Old Coramba Bridge over the Orara River at Coramba, Coffs Harbour City Council area (Register No. 4301093) - transferred to Coffs Harbour City Council.
- Spring Creek Bridge on State Highway No. 6 near Evans Plains (south west of Bathurst) in Bathurst City Council (Register No. 4309520) - replaced by a new bridge.
- Sydney Harbour Bridge Ganger's Timebook (Register No. 4300705) – returned to lender.

#### State Heritage Register

The RTA controls 35 items listed on the State Heritage Register. The NSW Heritage Council has approved applications under Section 60 of the Heritage Act 1977 for the following work on State heritage items:

- The proposed rehabilitation and strengthening works on Junction Bridge over the Tumut River, Tumut (approved on 12 May 2005).
- The proposed rehabilitation and strengthening works on Monkerai Bridge over the Karuah River, Monkerai (approved on 24 December 2004).
- The proposed rehabilitation of the St Albans Bridge over the Macdonald River, St Albans (approved 16 June 2005).

TABLE 10: CONDITION OF TOTAL RTA HERITAGE ITEMS

Condition	Number of Items
Good	130
Fair	72
Poor	65
Not known/NA	23
Total RTA Heritage Items	290

Heritage asset management strategy

46

The recently released *State Agency Heritage Guide* requires all State agencies to develop heritage asset management strategies. A RTA Heritage Asset Management Strategy is being prepared which will have several components to assist the management of groups of heritage items. The Strategy will simplify Conservation Management Plans for individual items and make those documents more easy to use for asset managers.

#### National trust heritage festival

The RTA participated in the National Trust Heritage Festival 2005, including the provision of a plaque for Peats Ferry Bridge, in partnership with Engineers Australia. In addition, the latest in a series of nine self-guided tour brochures was released – *Bridging the Hawkesbury River - Hornsby to Gosford*. These brochures are all available on the RTA's website.

#### Oral history program

The RTA has a rich heritage of road and bridge engineering, infrastructure change and development. The Oral History Program began in 1996 under the guidance of the RTA Heritage Committee. Oral history work over the past year includes:

- Completion of an oral history on the planning and community consultation phases of the Lawrence Hargrave Drive reconstruction project. The project yielded 23 hours of interviews, a double CD compilation and a summary report. During the second stage of this oral history, further interviews will be conducted during the construction phase and opening ceremony.
- Completion of 13 interviews on the planning and construction of the Armidale Bypass. This material will be used in an oral history compilation about the bypasses of three selected towns.
- Commencement of a project examining the history of Remembrance Driveway and its governing committee, with special reference to the Victoria Cross Rest Areas along the route.

#### 'From the skies': Historic aerial photographs made public

The RTA has preserved and made public a collection of very high quality aerial photography taken in 1943 covering the entire Sydney metropolitan area. The photo collection has been preserved by the RTA's Photographic and Geo Information Unit, and selected photos have been developed into an exhibition by the RTA and the NSW Historic Houses' Trust.

The exhibition – From the skies: aerial photography of Sydney in 1943 – focuses on 10 diverse areas ranging from Mascot to Port Botany, Baulkham Hills to Homebush Bay. The 1943 photographs are displayed with aerial photography from 2000–2004 and are accompanied by additional photographs and text highlighting the differences and similarities between the areas.

A navigable CD was developed to allow the entire collection to be searched by suburb name. Users are able to find and 'zoom' in on the any area covered by the 1943 photos.

More than 5000 people visited the exhibition at the Museum of Sydney from its opening on 21 May to 30 June. By developing a partnership with the Historic Houses' Trust, the RTA was able to reach a wide audience for the photographs, which are of interest to historians and the general public. The exhibition was continuing into the latter half of 2005.

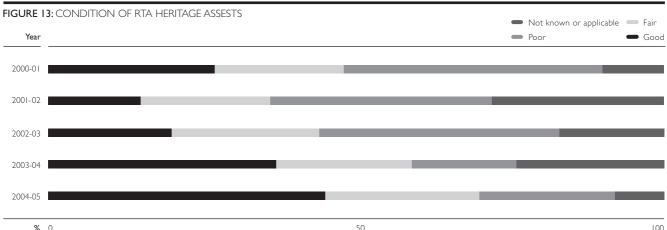
#### **NOISE MANAGEMENT**

#### Noise policy development

The RTA is contributing to the DEC's development of a new Construction Noise Policy and the review of the Environmental Criteria for Road Traffic Noise. Outcomes of the review will assist in the current review of the RTA's Environmental Noise Management Manual.

#### Northern pacific highway noise taskforce

Work continued this year to implement noise mitigation strategies following the August 2003 report of the Northern Pacific Highway Noise Taskforce. Initiatives included:



- Road resurfacing for low noise pavement at Saphire/Korora/Kororo was completed.
- Continuing architectural treatment of homes and investigations into noise treatments for the heavy vehicle rest areas between Yelgun and Chinderah, with more than 90 per cent of work complete.
- Finalisation of a concept design for a noise wall at Newrybar.
- Construction beginning on noise treatments for Newrybar/Knockrow/Tintenbar and Ewingsdale to Tyagarah. Architectural treatments to homes are more than 50 per cent complete.
- Continuation of architectural treatment of homes at Tandy's Lane, with more than 80 per cent of work complete.

#### PROTECTING BIODIVERSITY

The RTA has many mechanisms in place to protect biodiversity including EIA guidelines, stringent environmental specifications, regular environmental audits and inspections of construction sites and environmental awareness training for RTA staff and council workers. An outline of RTA projects to protect biodiversity this year is included in Table 12.

#### Threatened species

The RTA contributed to a number of Threatened Species Recovery Plans (TSRP). TSRPs are prepared by the DEC in accordance with Part 4 of the *Threatened Species Conservation Act 1995*. **Appendix 2** lists full details on the RTA's involvement in these plans. In addition to the plans, the RTA also undertook various other biodiversity initiatives listed below.

#### Green and Golden Bell Frog, Arncliffe

The RTA monitoring program for the Green and Golden Bell frogs along the M5 East Freeway continued. Initial results indicated an increase in the frog population this year after a decline in frog numbers during the 2002 drought. In January 2005, the eastern breeding pond at Arncliffe was drained and relined with clay.

#### Woolooware Shorebird Lagoon

Negotiations between DIPNR and DEC (NPWS) are progressing in regard to the long-term management of the Woolooware Shorebird Lagoon. The RTA has continued monitoring the site and no issues have been identified.

#### Translocation of threatened species

With the assistance of DEC, the RTA rehabilitated key habitat and translocated Purple Copper Butterflies (*Paralucia spinifera*) within the road reserve of the Castlereagh Highway near Lithgow.

#### Biodiversity offsets

The RTA participated in a working party with DIPNR and DEC to examine ways to improve the determination of biodiversity offsets for residual impacts of road projects on key habitat. Issues discussed include improving processes to increase cost-effectiveness.

#### Vegetation management

#### Cooks River/Castlereagh Ironbark Forest

Work continued on the Cooks River/Castlereagh Ironbark Forest Bush Regeneration project at Beverley Grove, as part of the compensation related to the M5 East Freeway. The National Trust of Australia (NSW) has been engaged by the RTA to regenerate bush over five years until June 2007. The native flora, both planted and naturally regenerating, has benefited from more favourable climatic conditions over the spring and early summer period. All plants in the revegetated areas are growing well with many flowering for the first time. Where weeds have been kept to a minimum, native regeneration from the core zones is expanding into the intermediate zones. Native fauna has also increased and constant monitoring of bush regeneration techniques continues.

#### **Duffys Forest Endangered Ecological Community**

Through consultation with DEC, the RTA has commenced rehabilitation of a degraded portion of the Duffys Forest Endangered Ecological Community on RTA managed land at Frenchs Forest. This work is being undertaken in association with the construction of a bus turning lane on Wakehurst Parkway.

TABLE	II: PROGRE	ess updati	f for Hfri	TAGE ITEMS

Heritage Item	2004-05 progress
"Thalia", 281 Great Western Highway, Lawson (Item 4309662)	The house was relocated slightly due to adjacent roadworks. Due to its heritage significance to the local community it is currently undergoing extensive restoration, including the restoration of original features such as the picket fence and the replanting of the rare cherry tree in the grounds.
Carrathool Bridge over the Murrumbidgee River at Carrathool (Item 4300165)	A Statement of Heritage Impact for was prepared for a proposed timber pile replacement.
Coorei Bridge over the Williams River at Dungog (Item 4300177)	A Statement of Heritage Impact was prepared for the proposed monorail installation.
Beckers Bridge over Webbers Creek at Gresford West (Item 4300128)	A Statement of Heritage Impact was prepared for the proposed monorail installation.
Sydney Harbour Bridge (Item 4301067)	Work was undertaken on the Sydney Harbour Bridge under Section 57(2) of the Heritage Act 1977 to erect a temporary security mesh fence.

#### ROADSIDE ENVIRONMENT

The RTA continued to fund and support the Roadside Environment Committee (REC), which supports councils and other groups (such as the Rural Lands Protection Board and Greening Australia) who maintain the roadside environment. Key achievements of the REC included:

- Delivery of seven training courses and assistance to private training providers to supply another eight courses.
- Distribution of 80 'Significant Roadside Area' signs to five localities.
- Completion of its role in the NSW Litter Advisory Group, including the endorsement of the DEC grants scheme, production of an advertising campaign and completion of research.
- Keynote presentation at the 2004 Local Government Engineers State Conference.
- Distribution of the REC information bulletin 'Weeds on Roadsides' in July 2004.
- Assistance in resolving issues over clear zones and minimum clearance widths along council controlled roads.
- Helping rail authorities to develop a biodiversity strategy to identify and manage areas within the buffer area of rail corridors.

- Provision of assistance in completing the first stage of the Central West Corridor Project, which covers
   1500 km and 14 Council areas involving direct seeding and over 100,000 plantings.
- Facilitated development of the Department of Education's 'world first' accredited training course in roadside conservation.
- Received a grant from the NSW Environmental Trust to manage a three year project – 'Linear Reserves as NSW Environmental Framework'. This project will both support and extend the current program.

#### **URBAN DESIGN**

The RTA is committed to good urban design outcomes in all of its projects. The following are examples of achievements in urban design in 2004-05. The documents mentioned are all available on the RTA website.

#### Shotcrete design guidelines

Shotcrete is the term used for spraying concrete and mortar onto a surface at high velocity. The use of shotcrete in road corridors has recently come under scrutiny and as a result, the RTA issued guidelines which address the issue of the visual impact of shotcrete. The guidelines are aimed at avoiding the use of shotcrete in the first instance, and at minimising the impacts and improving the appearance of shotcrete where its use is unavoidable. The document

TABLE	12: B	IODIVERSITY	PROJECTS
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Activity	Progress in 2004-05	
Management of wildlife on RTA roads	RTA invited to present at WIRES Central Coast meeting on measures used to minimise road impacts on native biodiversity.	
	RTA contributed \$28,300 to the third and final stage of a three-year university postgraduate study into the effectiveness of odour repellents in managing vehicle collisions with wildlife. The results from the captive trials in 2004-05 have indicated that the repellents are effective in deterring Red-necked Wallabies. Field trials have commenced.	
Koala population research (Pacific Highway)	Surveys were undertaken at Bonville in August 2004 to measure koala population size. Koala faecal pellets were collected within the Highway's vicinity. DNA was extracted from these pellets. It was confirmed that a breeding colony exists in the Pine Creek area and that new animals inhabit the site. At Yelgun to Chinderah, all monitoring collars have now been removed and the final monitoring of the overpass structures was conducted in August 2004. The two remaining females collared in the Eviron Quarry site were in good health when released and had not moved from their known home ranges within the quarry site. A Koala has been recorded using the concrete box culvert underpass at Eviron.	
Underpass and overpass fauna monitoring (Yelgun to Chinderah section of Pacific Highway)	A contractor continued monitoring designated fauna crossings between February and April 2005. The monitoring was the final instalment in a three year monitoring program of fauna underpasses. Monitoring was undertaken by using sand traps. Fauna scats and roadkill in the vicinity of the dedicated fauna crossings were also recorded. A total of 4852 recognisable tracks from 26 categories of fauna were recorded in the monitoring period. The five most abundant species sampled in sand traps were the Swamp Wallaby, Cane Toad, Snake, Rat and Water Dragon. Threatened species recorded from sand traps include Koala and Spotted Tailed Quoll. Little Bent-Wing Bat and Southern Myotis were recorded from culverts.	
The effect of bridges on vegetation growth and invertebrates	The RTA is facilitating a study to investigate the factors limiting the growth of plants under road bridges and the associated impact of this lack of vegetation on invertebrates.	
The effect of bridges on estuarine environments	The RTA provided \$73,436 for university research into the post construction/operational impacts of bridges on estuarine habitats, including saltmarshes and mangroves.	
Edge effects and compensation due to road construction and operation	The RTA provided \$11,363 to investigate edge effects of road construction and operation to determine requirements for compensation.	

targets RTA development and project managers and their geotechnical and urban design advisers, as well as industry.

#### Noise wall design guidelines

The RTA has prepared draft noise wall design guidelines. This sets down a philosophy and approach intended to achieve good design outcomes from noise walls. The draft guidelines have been developed from an RTA research project and have been extensively trialled over the past year. Improvements in noise wall design have already been seen.

#### Corridor urban design

The RTA issued an urban design framework for the Pacific Highway corridor from Hexham to Tweed Heads. To achieve a common corridor vision, the framework is being applied across all projects in the options investigation, design development and procurement stages. Corridor urban design strategies were completed to guide the future upgrade of key urban arterial corridors including Camden Valley Way and Richmond Road.

#### F3 Freeway widening

The recently completed F3 Freeway widening from Jolls Bridge to Calga is the outcome of an integrated engineering and urban design process. The widening is noteworthy for the way that it preserves the original form and scenic quality of the route (recognised as a good example of urban design in the State Government's Urban Design Charter of October 2000), and for preserving the signature 'mohawk' rock forms and the dramatic sandstone rock cuttings.

#### **REDUCING VEHICLE EMISSIONS**

The RTA has built a solid research foundation and fostered strategic partnerships in the vehicle emissions field by working with key government agencies and the transport industry. RTA achievements in 2004-05 are outlined below.

#### **SMOKY VEHICLE ENFORCEMENT**

The RTA continues to support the DEC's Smoky Vehicle Program. RTA inspectors report smoky vehicles to the DEC. During 2004-05, the RTA observed 84 vehicles failing to comply with visible smoke regulations resulting in the issue of 56 penalty infringement notices.

#### IMPLEMENTATION OF THE DIESEL NEPM

The diesel National Environment Protection Measure (NEPM) provides a range of measures that States can implement to reduce emissions from diesel vehicles. The RTA's work means that NSW is leading Australia and the region in the management of diesel emissions. The following initiatives have been implemented as a result of the diesel NEPM.

#### Diesel emission testing

One of the most cost-effective ways of targeting vehicle emissions is to ensure that diesel operators properly maintain their vehicles. The RTA has conducted an extensive testing program for diesel vehicles, using the DT80 test to check emissions from nearly 3,000 trucks and

buses in a voluntary program with private and government fleets.

#### Clean Fleet program

By repairing the worst performing vehicles and then retesting them, the RTA has been able to identify the major links between engine maintenance and performance. The RTA has converted these findings into the Clean Fleet program – a practical program for transport operators. The voluntary program ensures vehicles produce the least amount of pollution possible through operators applying best practice maintenance standards. As well as the economic benefits associated with best practice fleet management and maintenance systems, the program also provides recognition and promotional branding benefits for operators.

The RTA has worked closely with the transport industry to ensure that the Clean Fleet program is effective and practical, with 12 fleet operators currently participating in the pilot. It is anticipated the full program will begin in late 2005.

#### Diesel emissions awareness TAFE course and CD-ROM

The RTA continued to promote maintenance procedures that help minimise diesel emissions through a 'How to Reduce Truck Emissions' course at TAFE. The free course provides truck drivers, operators, diesel mechanics and fleet managers with practical measures to reduce truck emissions and improve profitability. The RTA intends to expand the delivery of this course throughout NSW. The RTA is also producing an educational CD-ROM, containing similar practical advice on how to reduce diesel vehicle emissions, for smaller fleet operators and workshop mechanics.

#### Diesel testing infrastructure

The RTA has purchased sophisticated diesel vehicle emissions testing equipment using funds from the Department of Environment and Heritage. This equipment will allow the RTA to conduct vehicle emissions audits for the Clean Fleet program, investigate new emissions management technologies and promote the use of cleaner vehicles and technologies.

Research increased the accessibility of previously expensive and lengthy diesel emission testing conducted in laboratories. Simplifying the test has allowed the RTA to take the equipment to fleet depots and administer the test in a very short time. Now the RTA is involved in the research and evaluation of a prototype briefcase system – a more compact and affordable emission test system that offers accurate and reliable tests which will allow fleet operators to purchase their own unit.

#### NSW Diesel Retrofit Demonstration Program

The RTA is working with the DEC on the NSW Diesel Retrofit Demonstration Program. This project involves fitting of particle traps or diesel oxidation catalysts to a number of trucks and buses, and the assessment of the effect on emission levels and vehicle operation. New fuel standards advocated by NSW have made the use of this technology feasible.

#### **BIODIESEL TRIALS**

The RTA undertook a vehicle testing program comparing exhaust emissions, fuel consumption and power tests on light, medium and heavy duty diesel engine vehicles using a number of diesel and biodiesel fuels. Biodiesel is manufactured from oils such as canola oil or waste cooking oil. Similar to previous biodiesel trials last year with DEC, Camden Council and Newcastle City Council, the results were positive with a reduction in particulate and smoke emissions.

#### **CLEANER CARS**

The RTA continued to provide voluntary emission testing of light vehicles at its emission testing stations at Penrith and Botany motor registries. As well as providing voluntary testing for the general public, these facilities have been used to test modified, smoky and LPG vehicles. Since the introduction of light vehicle testing in 1998, 11,094 tests have been completed. The RTA conducted 2,057 tests in 2004-05.

The RTA joined the DEC and Fairfield Council in the Blue Sky project, which aims to improve air quality in the Fairfield Local Government Area by tuning and maintaining vehicles built before 1993. The RTA provided emissions testing for 59 vehicles before and after the tune up was carried out to establish the benefit of the program.

#### **CLEANER NSW GOVERNMENT FLEET**

The Cleaner NSW Government Fleet project is a NSW Government initiative to reduce the emissions of the Government car fleet. The RTA assisted the Department of Commerce in developing systems to enable procurement of cleaner vehicles. These included the online tools, Clean Car Calculator and Clean Car Modelling, which enable fleet emission performance to be calculated and quantified. 'Guidelines for Fleet Managers' help fleet managers administer the required changes to their fleet.

The RTA's Motor Vehicle Clean Fleet Improvement Plan 2005-07 was drafted this year and will be effective from July 2005. Strategies have been developed to make the RTA motor vehicle fleet cleaner without impacting on operational and business needs. Under the program, the RTA will annually assess the fleet and provide a performance score.

#### **NOISE EMISSION STANDARDS**

The new noise standards, Australian Design Rule (ADR) 83/00, for light and heavy vehicles came into effect from 1 January 2005. The new standards introduced more stringent noise limits for new vehicles sold in Australia and has meant new cars are 3 dB quieter, while new trucks and buses will be between 4-7 dB quieter than previous standards.

#### HEAVY VEHICLE ENGINE BRAKE NOISE

Excessive noise from engine brakes is a major source of complaint from the community, yet remains largely unregulated. The National Transport Commission (NTC) has undertaken extensive research to fill the knowledge gaps and, with the RTA's assistance, has drafted a

Regulatory Impact Statement (RIS) which provides a framework for addressing engine brake noise.

The RTA has also been assisting the NTC with testing and research to establish a robust test method for measuring engine brake noise and to determine whether certain mufflers can reduce noise. This work will assist in the development of a regulatory approach to engine brake noise and the results will inform the recommendations of the RIS.

#### **NOISE CAMERA**

The RTA has also been trialling a prototype 'noise camera' system developed by Transport South Australia. The 'noise camera' has been deployed to a number of locations along the Pacific Highway on the mid-North Coast. The sample engine brake noise data will be analysed to assist with the development of an engine brake noise test procedure and will enhance the level of understanding of the potential to use noise cameras in enforcement or research.

#### TRUCK SIGN STRATEGY

This initiative aims to encourage heavy vehicle drivers to avoid using compression brakes in residential areas. During the year, truck signage on major truck routes was assessed by the RTA and \$110,000 was provided for installation of 48 compression brake signs across NSW.

#### NOISE ABATEMENT PROGRAM

The RTA's Noise Abatement Program continued to alleviate high noise levels from road traffic on State and Federal roads. The program funds the provision of noise mitigation treatments such as noise walls or earth mounds, architectural acoustic treatments and low noise pavement.

During 2004-05 the RTA funded approximately \$5.49 million in noise abatement for 221 houses on State Roads and approximately \$400,000 was provided by the Federal Government for noise abatement of 13 houses near Federally-funded road development projects.

Residents concerned with road traffic noise are able to register for the Noise Abatement Program. Complaints are assessed, verified and considered against several determining factors under the Noise Abatement Program. In 2004-05, 477 complaints were received, with 303 received within the Sydney metropolitan region. Since last year total complaints have increased by 12 per cent, with an increase in residential complaints received in regional areas of NSW.

#### Noise Abatement Program Geodatabase

A geodatabase was developed in June 2004 to capture and efficiently manage the information gathered on several facets of the Noise Abatement Program (NAP). The NAP Geodatabase applications allow the user to visualise the extent of noise wall development, identify buildings that have received architectural treatment, and identify historical noise complaints and noise monitoring site locations.

### NATURAL RESOURCES AND WASTE

#### WASTE

The RTA has a statutory requirement under the *Waste Avoidance and Resource Recovery Act 2001* to report within the annual report on the implementation of the Waste Reduction and Purchasing Policy. Details are found in **Appendix 3**.

In summary, it is estimated that for 2004-05:

- The proportion of construction and maintenance materials reused or recycled was 85 per cent of vegetation waste, 65 per cent of concrete, 85 per cent of fill/virgin excavated natural material and 96 per cent of asphalt.
- The proportion of items purchased with recycled content materials for construction and maintenance activities was 87 per cent of landscaping material, 90 per cent of concrete and 40 per cent of asphalt contained recycled content.
- For RTA offices, 13.9 per cent of printing and publications paper,
  9.9 per cent of A4 paper and 99.4 per cent of envelopes
  purchased contained recycled content.

#### **GREENHOUSE AND ENERGY**

#### Australian building greenhouse rating

The Premier's Memorandum No 2004-4 requires agencies to obtain an accredited Australian Building Greenhouse Rating (ABGR) and improve the greenhouse performance of office buildings and tenancies over 1,000  $\text{m}^2$ . Three of the 11 RTA offices requiring ABGRs under this memorandum met or exceeded the rating targets. Eight RTA offices require assessment and implementation of measures to meet the memo's rating targets by 1 July 2006.

#### Government Energy Management Policy

The Government Energy Management Policy (GEMP) commits NSW public sector agencies to achieve and sustain reduced greenhouse gas emissions and significant energy cost savings. This commitment extends to all aspects of Government energy use. The

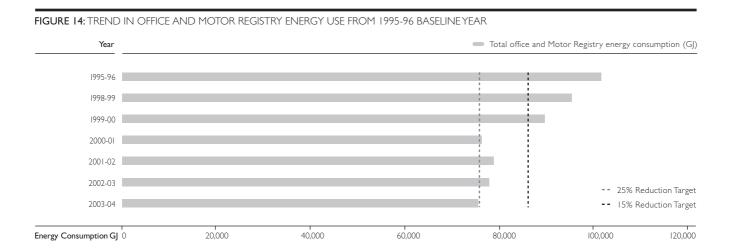
GEMP has two building energy reduction targets: a 15 per cent reduction by 2001-02 and a 25 per cent reduction by 2005-06 (compared to a 1995-96 baseline year).

RTA office and motor registry energy use reduced by 25.5 per cent, from 101,319 gigajoules in 1995-96 to 75,492 gigajoules in 2003-04 (see Figure 14). A gigajoule is a unit of energy that is relevant to both natural gas and electricity, which are both used in RTA buildings. Data for 2005-06 will be available later in the year.

The RTA aims to achieve the GEMP's 25 per cent energy reduction target by 2005-06 and implemented the following key measures during 2004-05:

- RTA-wide rollout of energy-efficient computers within motor registries.
- Replacement of old cathode ray tube (CRT) computer monitors with more energy efficient flat panel monitors has commenced and will occur over the next four years. These durable new monitors will reduce monitor energy consumption by 60 per cent.
- A trial of environmental measures was undertaken at the RTA's Five Dock motor registry. The measures will be assessed for potential implementation in other registries.
- Use of energy efficient Light Emitting Diode (LED) technology at newly-signalised intersections. An \$18 million project to replace older incandescent traffic signal lamps with LED lamps is expected to save costs and reduce greenhouse gas emissions.
- The number of petrol-electric hybrid vehicles in the RTA fleet was maintained at 21.
- Ongoing purchase of Green Power.

The RTA monitors energy use within office buildings, infrastructure and transport and is required to submit an annual GEMP progress report to the Department of Energy, Utilities and Sustainability.



#### Energy use and emissions reduction plan

The RTA has drafted an internal Energy Use and Emissions Reduction Plan. This plan is in response to the RTA Greenhouse Gas Inventory undertaken in 2000-01 which assessed the levels of greenhouse gases emitted by RTA operational activities and their source. The draft plan includes numerous actions for the RTA to undertake and investigate, all of which link to the draft NSW Greenhouse Plan.

#### Solar powered traffic lights

The RTA has commissioned a study investigating the feasibility and environmental benefits of using solar powered traffic lights. The study examined the latest global developments in solar power technology. The report also incorporates guidelines for the infrastructure requirements, cost, safety and environmental implications of implementing solar powered traffic lanterns.

#### Construction and maintenance site assessment study

The RTA Greenhouse Gas Reduction Plan Working Party commissioned a report into the ability of the RTA to monitor and report on greenhouse gas emissions during construction and maintenance activities. The draft report recommended that the RTA review the current reporting requirements for greenhouse emissions and review and amend the specifications to ensure reporting mechanisms are in place.

#### Indirect emissions study

The RTA commissioned an investigation of the embodied greenhouse gas emissions associated with different road pavement types. The embodied energy of a particular material is the sum of all energy inputs during its development. This project examined literature relating to Life Cycle Assessment of the embodied emissions comparing conventional and alternative road construction materials with recycled content. The study recommended practical ways for the RTA to reduce its greenhouse gas emissions and explored the feasibility of increasing the use of alternatives to cement in pavement materials.

#### LAND AND WATER

#### The blue book

Development of the new volume 2 of 'Managing Urban Stormwater – Soils and Construction' (the 'Blue Book') continued in 2004-05. The new volume will provide State policy and guidance in erosion and sediment control for a range of developments including major highway and infrastructure projects. The RTA has liaised with the DEC on project planning, documentation and technical elements of this chapter.

#### Managing erosion and sedimentation

The RTA Erosion and Sedimentation Risk Assessment Procedure was developed during the year. Project managers and environmental staff use the procedure at a project's concept phase to ensure environmental risks are acknowledged early and are cost-effectively managed throughout the project.

One of the requirements of the procedure is to engage a specialist soil conservation consultant where a project is determined as having a high risk of erosion and sedimentation. A panel of specialist soil conservationists has been established through the RTA Registration Scheme for Construction Industry Contractors and is now available to provide advice and management.

An Erosion and Sedimentation Training Strategy is being developed to ensure RTA staff and contractors continue to receive training and to ensure that best practice techniques are implemented for all RTA construction activities. Erosion and Sediment Control Training has been undertaken by about 120 staff this year:

#### Environmental improvement program

Environmental improvement works at eight sites were undertaken during the year at a cost of \$1.2 million. Projects included upgrades to the Broken Hill Depot vehicle washbay facilities and stormwater drainage improvement works at Waratah, Dubbo and Enfield depots. Remediation works included the removal of underground storage tanks and soil and groundwater remediation works at the Goulburn Works Centre. Contamination assessments were also carried out at Yass, Gundagai and Tumut depots.

#### Stormwater Environment Improvement Program

The RTA continues to support local councils with the management of stormwater runoff through the Stormwater Environmental Improvement Program (SEIP). In 2004-05 the RTA provided approximately \$490,000 for the program, which involved a number of projects including the installation of a Litter Boom in South Creek at St Marys. The boom is located where the Great Western Highway meets South Creek and its purpose is to capture the highly noxious weed Salvinia. It also captures floating gross pollutants such as litter. A Nettech was installed at Mona Vale within the Pittwater Council Area. The Nettech is a net to capture pollutants from a 450 mm pipe outlet.

Another valuable project was the development and implementation of RTA spill trailers. Three spill trailers have been provided at the St Marys, Lindfield and Rockdale depots. The spill trailers are used to respond to spills on roads, including fuel or chemical spills that are the responsibility of the RTA.

#### Contaminated land

Contaminated sites are usually the result of polluting practices from commercial, agricultural or industrial land uses, or may also include sites that have previously been filled with contaminated material. The RTA Guideline for the Management of Contaminated Land has been developed in consultation with key RTA and DEC stakeholders. The guideline addresses the management of contaminated land in accordance with NSW legislation and policy. It provides a process to ensure that the RTA meets statutory environmental and community responsibilities during the acquisition, management and divestment of property. The guideline describes the contaminated land assessment process so that property managers and project

managers can anticipate the requirements for each project. The process for contracting and managing consultants is also detailed within the guideline.

#### Acid sulphate materials

RTA Guidelines for the Management of Acid Sulfate Materials: Acid Sulfate Soils, Acid Sulfate Rock and Monosulfidic Black Ooze were released earlier this year. The guidelines replace the Acid Sulphate Soil (ASS) Guidelines (1996) and Acid Sulphate Soil - Policy and Procedures (1995). The new guidelines provide advice to RTA planners, project managers, environment staff, geotechnical staff and contractors on the management of Acid Sulfate Materials encountered during works.

#### **FUTURE CHALLENGES**

- Implement continuous improvements in bus priority on the strategic corridors identified in the Government's Review of Bus Services.
- Developing a network of facilities to make choosing cycling and walking more attractive.
- Further develop and implement programs to reduce noise, noxious gas emissions and greenhouse emissions from vehicles.
- Investigate the retrofitting of devices to reduce emissions from buses, trucks and plant machinery to support the introduction of new standards for diesel fuel in Australia.
- Build a greater emphasis on preliminary environmental assessment and early consideration of environmental issues in project development.
- Better address Aboriginal cultural and heritage issues with road and bridge projects through development of Heritage Asset Management Strategies and adoption of the RTA Heritage Action Plan and Aboriginal Liaison Protocol.
- Complete the RTA Heritage and Conservation Register.
- Finalise the Energy Use and Emissions Reduction Plan.
- Implement measures to exceed the Government Energy Management Policy building energy reduction target.
- Implement the new Australian Building Greenhouse Rating (ABGR) Government Policy by improving the official greenhouse gas performance ratings for the RTA's larger offices.
- Improve cost-effectiveness of fauna protection measures.
- Develop and implement the RTA's Water Conservation Strategy.
- Continue the training of staff in erosion and sedimentation management for road works.
- Increase recycled content within material purchases and find high-value reuses for excess materials resulting from construction and maintenance activities.
- Reduce the environmental impact of office purchasing and waste management.
- Work collaboratively with the DEC to develop the NSW Construction Noise Guideline and the Environmental Criteria for Road Traffic Noise.
- Continue to train relevant RTA staff in the use of the RTA Contaminated Land Management Guideline.

# 04 VALUE FOR MONEY

## **INTERMEDIATE RESULTS**

Quality frontline customer service functions are delivered at minimum cost.

A committed, high performance and flexible workforce.



Maroubra Beach 1943

### INTERMEDIATE RESULT

Opportunities to improve the way the RTA does business are implemented.

### **INTERMEDIATE RESULT**

Governance and risk management systems

### INTERMEDIATE RESULT

Business partners, industry and the community contribute to positive road transport outcomes.

#### **CUSTOMER SERVICE**

#### **CUSTOMER SERVICE IN MOTOR REGISTRIES**

The RTA has a network of 131 motor registries, a customer call centre at Newcastle, eight Government Access Centres that provide RTA services and 37 agencies. Services are also provided at 43 itinerant sites in remote areas. The distribution of the network ensures that people have easy access to services in metropolitan and regional areas.

Motor registry hours of operation are generally 8:30am to 5pm Monday to Friday, and more than 50 per cent of registries are open for Saturday trading between 8:30am and 12 noon.

The majority of motor registries are wheelchair accessible. The RTA has an ongoing program of upgrading registries to include disabled access and facilities. For people with hearing impairment, the RTA provides audio loop facilities in motor registries and telephone typewriter access to the call centre.

The RTA completed about 19 million registration and licensing transactions in 2004-05 for the 4.4 million drivers and 4.8 million registered vehicles in NSW.While the majority of these transactions are delivered face-to-face in motor registries, customers also have access to an increasing range of RTA services provided through the call centre and over the internet.

In May 2005, an independent survey of customer satisfaction was conducted in the RTA's motor registries. A total of 6500 interviews were carried out, with over 94 per cent of customers rating the service as 'good' or 'very good'.

#### Improved access to services

The RTA improved a number of motor registries including:

- Opening of new registries in Lightning Ridge and Walgett which extend services available to remote communities.
- More service counters at the City South registry.
- The reconfiguring of work space at the Blacktown registry.

#### CUSTOMER CALL CENTRE

The RTA customer call centre in Newcastle continued to offer valuable support to customers. Operators answer enquiries and undertake a number of transactions for registration, licensing and

e-toll services. The centre answered 3.4 million calls during 2004-05 (about 65,000 calls per week). The call centre provides customers with the option to obtain information or undertake transactions on the telephone rather than visit a motor registry. The service also helps prepare customers to undertake transactions in registries.

#### **GOVERNMENT ACCESS CENTRES**

The RTA manages the Government Access Program (GAP) in collaboration with the Attorney-General's Department. The GAP is a whole-of-government initiative to improve access to Government information and services for people living in remote and rural NSW.

There are 67 Government Access Centres (GACs) across the State, generally located in either a motor registry or a local courthouse or provided in community venues on a pre-determined visiting or outreach schedule. GACs provide a range of transaction-based services for a number of Government agencies including applications for birth, death and marriage certificates, applications for some housing services, processing of speeding and parking fines, issue of recreational fishing licences, renewal of business name registrations and contractor licences and renewal of recreational boat licences.

GAC services were incorporated into the two new RTA motor registries opened in Walgett and Lightning Ridge in January 2005.

#### ONLINE SERVICES

The RTA continues to be a leader in the delivery of online government services. During the year, the usage of the RTA's online services continued to increase and more than 460,000 transactions were processed via the myRTA website.

The RTA also continued to maintain its very popular website which was the most frequently visited State Government site in NSW and the fifth most frequently visited government site in Australia.

After developing the online services under the myRTA.com brand, and promoting these services to the community through relevant campaigns, the services have grown rapidly. Through myRTA.com, customers can perform a range of transactions including registration renewal, booking a licence test, changing their address and checking their demerit points' balance. Increasing online transactions continues to be a key focus for the RTA as it provides customers with a

convenient alternative to visiting a motor registry. Online services offer improved customer access and service while reducing costs to the RTA.

Marketing campaigns promoting online services continued throughout the year, raising awareness and increasing usage for all services.

- Visits to the myRTA.com web page increased by 31 per cent during the year.
- The number of online registration renewal transactions increased by 83 per cent and the proportion of people using the online option, compared to other registration options, increased by 36 per cent.
- More than 600,000 demerit points balance checks were performed.
- Total myRecords transactions (including demerit points balance check, notice of disposal, vehicle check and order of driving record) increased by 148 per cent.

The RTA continued to expand the number of services that customers of the RTA can perform online.

Two new services are in the process of being delivered to the RTA's business customers, including the Council Online Forms application (which enables customers to submit funding requests and other documentation online) and the Vehicle Compliance Certification System (which allows authorised signatories to process compliance certificates online to certify that modified vehicles meet vehicle standards).

#### Dealer Online

Following a successful trial, the Dealer Online (DOL) system was implemented by the RTA in October 2004. The internet-based system enables selected large volume motor dealers to register new vehicles, process plate transfers, submit notice of disposal details, transfer registrations and exchange plates between vehicles. Dealers using the system are able to improve work practices and customer service. More than 40 dealers from the Sydney, Gosford, Wollongong and Newcastle areas are participating in DOL.

#### E-safety Check

Vehicles more that three years old require an annual inspection report (also known as a pink slip). The RTA introduced the e-Safety Check system in August 2002 to enable Authorised Inspection Stations (AIS) to transmit pink slip information electronically to the RTA. Customers who obtain an e-Safety Check are then able to renew their registration online or by telephone. During the year, additional AIS were accredited to the program and more than 1200 inspection stations across NSW now participate in this service. The e-Safety Check system benefits customers by providing a reliable, immediate update to the RTA of their vehicle's details. An electronic report is provided to the customer as a record of the inspection.

#### Internet kiosk

The RTA completed a trial of an internet kiosk at Wynyard Motor Registry. The kiosk allowed customers at the registry to use the RTA's online services — myRTA.com. Attendants were available to assist customers unfamiliar with transacting over the internet. Following the trial, the RTA commenced implementing kiosks at seven metropolitan locations.

#### Increasing online access for rural agencies

The RTA conducted a trial of technology to provide a more cost-effective way of directly connecting offline agencies to its computerised registration and licensing database (DRIVES). This will remove the need for paper-based transactions to be reprocessed at an RTA motor registry. The RTA commenced implementing this system at four council agencies, providing faster update of records and more efficient service for customers.

#### myREGO - Registration charges calculator

The RTA added the registration charges calculator to the myRego online renewal service in November 2004 to enable customers to calculate the cost of registration. At the end of the financial year, more than 26,000 transactions had been processed.

#### NEW PHOTO LICENCE EQUIPMENT

In February 2005 a Statewide upgrade to a new digital camera system was conducted to improve the overall quality of photographs included on NSW driver licences.

#### REGISTRATION REBATE FOR APPRENTICES

The RTA administers the apprentice registration rebate, introduced by the NSW Government to address serious skill shortages in the traditional trades by helping make apprenticeships more attractive to young people. A rebate of \$100 is available on new vehicle registrations and registration renewals paid from 1 July 2005. Only first and second year apprentices registered with the Department of Education and Training are eligible for the rebate.

#### INDIAN OCEAN TSUNAMI

In response to the Indian Ocean tsunami on 26 December 2004, licence concessions have been offered to customers who needed to replace a licence lost, stolen or damaged in the disaster.

#### IMPROVING OUR BUSINESS

#### MAJOR BUSINESS REFORM PROGRAM

A major program was initiated in October 2004 to reform the way business is conducted within the RTA. The five themes of the reform agenda are simplicity, integration, accountability, efficiency and ongoing improvement.

The business reform program will strengthen the RTA's focus on external customers, improve integration across programs to ensure better outcomes for the community and drive increased efficiency by simplifying business and administrative processes and systems. The program will clarify and strengthen accountabilities, push down

delegated authority and ensure that the RTA's structure and resources are aligned to meet current and future needs. Strong mechanisms will be put in place to ensure a continuous focus on improvement and cost savings within the organisation.

The program is expected to run for several years.

During the year a number of business reform projects were initiated to identify opportunities for improvements to key business functions including the environment, technical services and the delivery of major infrastructure. These projects are well underway and will set a new direction, highlight priority risk areas and identify the skills and capabilities required in the future.

A project is currently underway that will improve planning processes and guidelines to attain the best value for money from the RTA's investment in infrastructure. The project will also ensure a more integrated approach to planning to achieve better outcomes for the safe, sustainable and efficient movement of people and goods.

Other initiatives undertaken during the year sought to simplify administrative and financial processes and systems to reduce the cost of internal transactions and paperwork.

#### RTA OPERATIONS AND SERVICES

The RTA's commercial delivery arm, Road and Fleet Services (RFS), was formed following the creation of the Operations and Services Directorate on I March 2005. With the creation of the new directorate, the previously separate, but complementary, Road Services and Fleet Services branches were integrated into one group, RFS. The group delivers comprehensive road, bridge, traffic and fleet services to the RTA, supplemented by works for external clients principally in the government sector.

RFS exceeded its specified corporate return for 2004-05 by \$12 million and earned a total of \$24 million in revenue from external clients. This exceeded the target by around \$5 million and confirmed a sound base in government agency work. At \$559 million, the total value of all works delivered increased by 16 per cent compared with 2003-04. The Fleet Services unit of RFS continued to develop as a provider of road making plant to all levels of government, with a turnover of \$47 million.

The adoption of the alliance model for delivery of maintenance and minor works will mean a fundamental change to the way RFS works and its relationships with its clients. Coupled with a greater emphasis across government and the RTA on major cost reduction and productivity improvements, RFS acknowledges the need to adapt quickly to the new operating environment and deliver what its clients need.

RFS continues to look closely at its private sector competitors to learn lessons from how they operate and as a way to benchmark its practices. RFS is committed to developing its capabilities as an integrated business, a committed partner to its clients and a valued supplier to the RTA.

#### PROJECT DELIVERY

The RTA introduced a range of initiatives this year to enhance business processes and provide value for money in the delivery of projects.

#### Contract initiatives

The RTA has introduced a number of initiatives in contracts to improve efficiency and save costs. They include:

- The Sydney Harbour Bridge Alliance. This was the pilot of a new process for project delivery. The 'Alliance' approach is a flexible way to establish and maintain relationships between clients and contractors and is expected to result in improved productivity and project delivery. The Alliance model is a cooperative approach that involves the creation of teams at various levels within the RTA, from senior management to local work-based teams. This approach was first piloted for maintenance work on the Sydney Harbour Bridge with the Alliance commencing in December 2004. The result has been an improved output and reduced cost of painting the Bridge. An agreed target date and cost for painting the southern approach has been established together with targeted reductions in management to further reduce unit costs.
- Increased use of Design and Construct contracts for bridge packages resulting in better matching of design solutions to contractor's resources and innovative cost saving design solutions.
- Packaging of several like or nearby works (eg Brewarrina/ Dangar and four bridges on the Midwestern Highway) into a single construction contract, achieving savings through economies of scale and improved efficiencies for contract management and surveillance.
- Packaging of Professional Services Contracts into a single contract for project development for a series of projects (six projects each in Northern and Western regions) resulting in reduction of management time and costs and increased flexibility.

#### Technology improvements

The RTA has introduced a range of innovations to improve services and project delivery including:

- Integration of Road Safety Crash Database with ARCMap (GIS) to improve accuracy and efficiency of basic data requests. The task of retrieving crash data for basic reports using the newly developed module has now been reduced to 10 minutes, representing a substantial increase in productivity for each request. Time for basic requests has been reduced by 33 per cent.
- Improvements to construction method of trusses through standardised design and use of prefabrication for timber truss strengthening at Wee Jasper Bridge.

- Implementation of measures to protect concrete works from cold weather on the New England Highway at Duval Creek, allowing works to continue through winter months.
- Application of latest scientific studies to the Oxley Highway project site, resulting in substantial savings by reducing the size of compensatory habitat required in the Port Macquarie area.
- Alternate use of treated waste materials as a topsoil replacement on the Cudgera Creek realignment and widening project thereby eliminating the need to purchase or import topsoil.
- Implementation of geotechnical deep in situ seals on the Princes Highway project (North of Bateman's Bay to Burrell Lake) thereby extending the life of the pavement and deferring the need for rehabilitation for at least four to six years.
- Implementation of land use Geographic Information System database for improved recording and reporting on development applications, land use plans and proposals.
- Use of High Pressure Water Blasting technology to treat road surfaces, achieving estimated savings of 25 per cent over traditional treatments.
- Replacing incandescent traffic lights with LED lamps, which consume less electricity, are cheaper to maintain and lower capital replacement costs as LEDs have a longer life than incandescent lights.
- Development and type approval of a new generation of traffic signal controller compatible with the new SCATS-2 system to enable improved traffic system coordination.

#### **ELECTRONIC SERVICE DELIVERY**

For information about the RTA's online services, go to the **Customer service** section of this report on page 55.

#### RESEARCH AND DEVELOPMENT

The RTA's work benefits from a broad program of research and development. See **Appendix 23** for details.

#### **GOVERNANCE AND RISK MANAGEMENT**

#### THE EXECUTIVE

The Chief Executive manages the affairs of the RTA and is accountable to the Minster for Roads and Parliament for the RTA's overall performance and compliance. The RTA Executive is responsible for supporting the Chief Executive in ensuring the effective governance of the authority. The RTA Executive has collective responsibilities for key functions related to organisational strategy, conformance and performance. The Executive consists of all Directors, the General Managers for Environment and the Office of the Chief Executive and the Corporate Counsel.

The RTA Executive fulfils it responsibility through formal monthly policy and strategy meetings as well as weekly operational meetings and various committees. Committees include:

- Audit and Risk (see page 59)
- Finance Strategy
- Workforce Capability
- Occupational Health and Safety
- Technology and Innovation
- Business Reform (replaced Business Improvement during the year)
- Operations Review
- Business Services Advisory
- Road Safety Executive
- Major Projects Review

These committees will be reviewed in the coming year. For external committees in which the RTA participates, see **Appendix 4**.

#### 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. See **Appendix 5** for senior executive performance statements for this year.

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 | October each year.

#### STRATEGIC AND BUSINESS PLANNING

During the year, the RTA reviewed its strategic direction by developing a new corporate framework. Details can be found on pages 6-7 of this report.

#### Performance indicators

To align with the corporate framework, a major review of RTA strategic performance indicators was initiated this year. A discussion paper is being prepared and a suite of strategic indicators is expected to be endorsed and implemented in 2005-06.

#### Business continuity plan

The RTA finalised a business continuity plan in December 2004. The plan details how the RTA will respond to a major incident, including how it will restore key business activities as quickly as possible. The plan includes a number of individual contingency plans brought together under an overarching management plan.

#### RTA asset strategy

During the year, the strategy was prepared for submission to the Minister for Roads and the Treasury. The strategy includes strategic plans for capital investment, maintenance and disposal and office accommodation. The document is a new Treasury requirement for agencies to develop a more strategic approach to physical asset planning and management and for assets to be clearly aligned to service priorities.

#### Planning performance guidelines

These guidelines were drafted to establish and maintain effective planning and performance reporting systems. These systems are fundamental to corporate governance and a key mechanism for providing clear leadership and sound management. The guidelines are expected to be released in 2005-06.

#### CORPORATE CARD AND PURCHASING CARD

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

#### **RISK MANAGEMENT**

RTA takes fraud and risk seriously, demonstrated by the fact that there is a dedicated Audit and Risk Committee and an internal team continually identifying and assessing allegations and risk. Control Management Services (CMS) Branch provides a reasonable level of assurance to the Chief Executive and senior management that the operations of the RTA exist in an appropriately controlled environment. To achieve this, the branch coordinates and integrates a range of functions including internal audit investigations and a variety of risk management initiatives.

A major achievement during the year was the development of an Investment Decision Framework which facilitates the risk-based assessment of program funding across the RTA's core programs. It allows funding to be more formally and transparently prioritised according to risk and value for money.

Other significant developments included:

- The development and implementation of a corruption risk assurance program directed at strengthening the direct control of corruption risks by line management in RTA businesses/functions.
- The further refinement of the organisation's strategic risk management framework.
- The continued implementation of more formal business risk management processes within selected areas of operation.
- The further strengthening of the RTA's processes to manage risks associated with the long-term operational phases of its private infrastructure projects.

All of the above initiatives reinforce the Chief Executive's requirement for senior managers to focus on, and take responsibility for, managing risks facing the areas of operation for which they are responsible.

The organisation has now built a strong base on which to continue to build its risk management framework and address the risks that it faces now and in the future.

#### Risk insurance

The RTA has a Principal Arranged Insurance program (for works and third party liability) for all construction and maintenance contracts, covering the RTA, its contractors and their sub-contractors.

Purchase of this cover was extended during the year to provide low cost insurance for the RTA's construction projects and Road Infrastructure Maintenance Program. This strategy locked in favourable rates at a time when insurance has continued to be difficult to purchase and premiums are escalating.

During the year a Principal Arranged Insurance program to cover vehicular ferries was renewed with alternate insurers which resulted in substantially reduced premiums of 74 per cent - a saving of \$290,000 over similar covers. In addition the reduction in premiums has helped the RTA to negotiate new contracts with ferry operators.

#### Commercial risk

Contemporary financial and economic evaluation techniques were applied by staff and independent consultants to assess infrastructure and business asset investment proposals. These techniques ensured 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 fulfill their obligations.

#### Interest rate risk

Interest rates on the RTA's debt are a mix of fixed and floating rates. The NSW Treasury Corporation (TCorp) advises on and manages the RTA debt portfolio.

A new Memorandum of Understanding was recently signed with TCorp, to take effect from 1 July 2005. A feature of the MOU is that it allows TCorp to focus on a medium-term horizon when managing RTA debt. The ability to look at longer-term rate cycles rather than the short-term direction of interest rates should assist in lowering debt service costs to the RTA.

#### Audit and risk committee

The RTA continued to operate a committee which meets every three months to consider progress of the audit program, generally oversee the direction of the audit function and consider the adequacy of the organisation's risk/control environment. It also reviews the RTA's year-end financial statements. The 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.

#### Internal audit

The internal audit function focuses on four areas of high risk to the organisation: licensing and vehicle management, IT, engineering and financial and operational aspects.

Operational risk management and internal audits for the Licensing and Vehicle Management business arm continued. The review of the risk framework continued, ensuring the risks reflect current business practices and that controls remain appropriate and effective. Internal audits focused on compliance with policies and procedures, including ensuring that processes are efficient and effective in meeting the

demands of service delivery. Audits performed during the year included contract management and monitoring, external organisations' access to information, customer service at motor registries, call centre operations and back office processes supporting licensing and registration.

Through the year, auditing also continued to focus on general IT, IT security and e-commerce, an IT Risk Assessment Facilitation Service and the provision of risk/control advice via membership of a range of steering committees. General IT audits cover systems purchased and installed, systems under development and systems in production. IT security and e-commerce audits focus on operating systems (eg access and permissions security). Risk assessment for new IT system purchases and developments was also undertaken. Steering committees cover corporate governance of new systems, IT security management and IT products.

Financial and operational audits include the RTA's support functions and certain aspects of the road safety and traffic and transport businesses. A range of systems and activities identified as medium to high risk were targeted during the year. Reviews included aspects of payroll and other expenditure processes, computer equipment management, revenue collection, vehicle management, traffic management, real estate management, fleet workshops management, and financial and administrative support functions conducted at selected regional administration centres.

Major engineering programs and systems continued to be reviewed. The overall effectiveness of systems was assessed, including policies, procedures and compliance. Significant opportunities for improvement to current practices were identified in consultation with line management. Major reviews were completed for slope stability remediation, the Great Western Highway, the OHS risk management process in the design phase of network construction, sign-posting of rest stops and traffic management policies and guidelines.

#### Investigations

The RTA undertakes various internal corruption and external fraud investigations. Where appropriate, matters of staff corruption are investigated and outcomes forwarded to RTA senior management to consider whether disciplinary action is required. Recommendations are made to line management to address any weaknesses or areas of concern relating to policies, procedures or controls.

Fraud committed by members of the public which impacts the RTA's licensing and vehicle management business is also investigated. Outcomes from these matters are primarily referred to the NSW Police for investigation and prosecution. Where appropriate, these matters are also referred to RTA senior management to address any policy, procedure and control issues identified by the investigations. Matters referred by law enforcement agencies, such as identity fraud and motor vehicle rebirthing, are also investigated.

#### Corruption risk management

The RTA implements various initiatives which focus on minimising the risk of corrupt activity by RTA staff. Highlights during the year included:

- The implementation of a corruption risk assurance program to strengthen the direct control of corruption risks by RTA line management. Rollout of this strategy is ongoing and feedback from staff has been very positive.
- Conducting seminars with new and existing staff as part of induction and at other appropriate times. These seminars reinforce the corruption-resistant culture of the RTA.
- The provision of corruption information through the RTA's intranet and quarterly updates to staff.
- Providing advice to staff and management on a broad range of corruption risk, ethical, probity and policy issues.

#### Strategic and business risk

To facilitate their management, risks are identified and broken down into two categories: 'organisational strategic' and 'business'. In regard to 'organisational strategic' risks, the RTA has developed and implemented a framework to monitor and report to executive management on how these risks are being managed. For 'business' risks CMS is working with the various functions to identify major strategic and operational risks and establish a control environment to address these risks.

#### Code of conduct and ethics

The RTA developed an interactive, one-hour Code of Conduct and Ethics awareness session for staff. Approximately 6,700 staff attended a session, which outlined RTA processes and focused on how the code empowered staff to act and protected their rights.

The RTA had revised the code in 2003-04 and decided that the sessions would:

- Provide staff with a copy of the code.
- Provide face-to-face delivery of the main messages including a comprehensive explanation of key elements, scenarios and compliance requirements.
- Integrate with and reference other key programs such as the Grievance Network and the Harassment, Discrimination and Workplace Bullying Prevention Policy and workshops.
- Engage staff by presenting an interactive session.

Line managers were accountable for supporting the messages being delivered and for ensuring that their team/s attended sessions. An evaluation survey indicated that staff responded well to the style and content of the sessions.

In 2004-05, all staff conduct policies in support of the Code of Conduct and Ethics were revised and updated including the Conflict of Interest Policy, Community and Political Participation Policy, Bribes, Gifts and Other Benefits Policy, Grievance Policy and Harassment, Discrimination and Workplace Bullying Policy.

#### **OUR STAFF**

#### **EMPLOYMENT STATUS**

The RTA staffing profile has remained constant over the past two years. Regional employment is a feature of the RTA's diverse operations and services. About 45 per cent of RTA staff are employed in country locations; one third of regional employees are wages staff and two thirds are salaried staff. Permanent part-time work is a feature of staffing arrangements for RTA motor registry and call centre employment.

For more information about the RTA's staff numbers and status, see **Appendix 6**.

#### A SAFE AND HEALTHY WORKPLACE

#### Chief Executive's Occupational Health and Safety Statement

Nothing is more important at RTA workplaces than the health and safety of our workforce. We recognise that we need to work in partnership with staff and managers to achieve this. To drive this key message, during 2004-05 the Executive OHS Committee met monthly at different locations around NSW to review OHS performance. By meeting locally the Executive is able demonstrate leadership and support for managers and staff in their implementation of the RTA's OHS policies and improvement initiatives.

#### Policy and commitment statement

The RTA OHS Policy statement is reviewed annually and displayed prominently throughout RTA workplaces. The statement commits the RTA to developing a safety culture based on communication and awareness, reporting of hazards and incidents, continuous learning from experience and flexible decision-making in managing workplace risks.

The key corporate initiatives set out in the OHS Strategic Plan 2003-2008 are:

- Achievement of a partnership arrangement with WorkCover to manage regulatory compliance.
- Annual self-assessment against the RTA OHS management standard.
- Integration of OHS improvement plans in directorate business plans.
- Adoption of best practice for consultation and communication with staff and contractors on OHS.
- Compulsory OHS training for RTA staff.
- Claims management strategies to identify high claims business units.

#### Injury and disease reduction targets

The RTA has a range of ambitious targets for improvement in OHS. During the year the RTA achieved a 5 per cent reduction in all compensable injuries and a 3 per cent reduction in lost time injuries.

The Premier's 'Taking Safety Seriously Strategy', which began in 1997-98, required agencies to achieve a 10 per cent reduction in claims' frequency and a 13 per cent reduction in claims' costs by 30 September 2005. At 30 June 2005, the RTA had achieved a 32 per cent reduction in claims and a 20 per cent reduction in claims cost.

#### OHS management

Risk management is at heart of the RTA's OHS management. During 2004-05 these processes continued to be refined through the implementation of the Ensite program in the RTA's road construction and maintenance operations. This program promotes the integration of OHS risk management at the planning stage of projects by involving employees and supervisors in site-based risk assessments before work begins.

The Ensite process augments existing risk management processes including safe work method statements for high risk activities, toolbox meetings to ensure all safety measures are working and understood and site inspections to check on implementation.

During 2004-05, the OHS Hot Spots program focused on providing mentoring and coaching for team leaders, supervisors and project engineers to assist them to demonstrate OHS leadership.

The OHS Incident Helpdesk continues to help manage workplace incidents, including near misses, in a timely manner. The ease of reporting also assists in promoting a reporting culture within the RTA. During 2004-05 there was a 3 per cent increase in reported incidents.

Managers are provided with monthly reports which summarise incidents reported, claims lodged for workers compensation, cost of claims, lost time injuries and incident investigations completed.

#### Contribution by employees

The RTA actively supports the involvement of employees in OHS management. More than 30 OHS committees provide opportunities for managers and staff to formally review OHS performance. Committees are also actively involved in regular workplace inspections and the review of incident investigation outcomes.

#### OHS training and staff induction

OHS induction is included in the formal orientation for new employees at the RTA. Employees and contractors working in road construction and maintenance must be able to demonstrate compliance with WorkCover requirements for OHS construction induction before commencing work on a construction site.

During 2004-05, more than 1800 RTA staff previously deemed to have these requirements were assisted in providing evidence to WorkCover of their eligibility for the new WorkCover construction induction card.

In line with our current focus on the role of managers and supervisors, two new training programs were piloted during 2004-05 – one focusing on due diligence for OHS and another focusing on the development of supervisory styles to lead OHS.

#### OHS programs and initiatives

#### Safety culture and performance reporting

The RTA is striving to develop a strong culture of safety. To achieve this, a Safety Culture Manager was appointed to drive programs such as Safety Awareness For Everyone (SAFE) which seeks to promote communication between managers and staff.

OHS performance reporting was refined to streamline its delivery to managers and to provide rolling average reports so that managers can gauge their performance relative to the preceding 12 months.

Following a pilot program in 2003, approval has been granted for a five year program to promote healthy lifestyles as an extra dimension to the RTA's safety culture.

#### OHS program delivery

OHS program delivery involves considerable cooperation between the OHS Branch, our regionally based OHS Facilitators and line managers and their staff. A Safety Summit for Road Services Managers has resulted in a comprehensive action plan for OHS improvement through better incident management, a focus on the role of line managers and supervisors and the adoption of a set of lead indicators for OHS. Measuring the extent of OHS management system implementation through audits and inspections continues to be a key role for the OHS Branch.

#### Contractor safety

The RTA continues to work with its contractors to achieve high standards of safety. Contractor safety performance is closely monitored through site inspections and systems audits and a monthly review of OHS performance indicators by the RTA Executive OHS committee.

#### OHS awards

The RTA was a joint winner in the 2004 Treasury Managed Fund OHS Award. The award recognised the maturity of the RTA's OHS management system and its benefits.

An independent audit of the RTA's OHS management system, commissioned by WorkCover and undertaken by Noel Arnold and Associates, rated the RTA as best practice on each of the 12 management system elements.

#### OHS improvement in the civil construction industry

The RTA continues to work with local government to improve OHS standards in road construction and maintenance. A series of

workshops with local councils began in 2004-05 to promote better understanding and compliance with requirements for traffic control around road works.

## Details of injuries and prosecutions under OHS ACT OHS incidents

Working in traffic continues to be the most significant risk to RTA employees and contractors. One employee was seriously injured during 2004-05 when hit by a vehicle at a road work site. This incident resulted in a review of traffic control arrangements. The RTA has also begun a trial of truck-mounted attenuators (trailers protected with rubber padding) as an additional measure to protect road workers and motorists from collisions with road plant at road work sites.

#### Prosecutions

There were no prosecutions for breaches of the OHS Act during 2004-05.

#### Planning, design and procurement

The RTA has been an active participant in WorkCover's Safe Design Advisory Committee during 2004-05. This forum is exploring regulatory and non-regulatory approaches for government agencies to provide leadership in safe design through better planning and procurement processes.

#### ATTRACTING, DEVELOPING AND RETAINING STAFF

#### Targeted recruitment programs

The RTA's employment programs target the recruitment of trade apprentices, trainees and graduates, and provide support to undergraduate university students. These initiatives are designed to meet the RTA's future workforce needs.

#### **Apprentices**

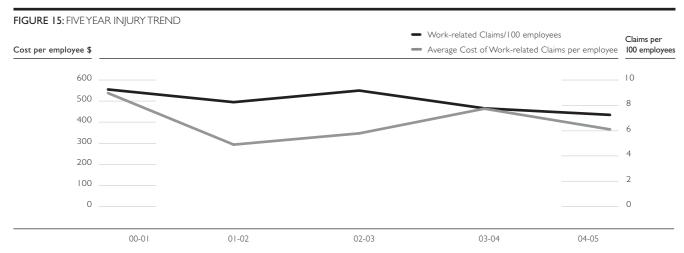
The four—year trade apprenticeship program is designed to rotate apprentices between workshops and worksites across NSW. This ensures that they gain exposure to a broad range of skills and experiences. In 2004–05 the RTA recruited 15 apprentices across a range of trade classifications including electricians, painters, bridge and wharf carpenters and plant mechanics. At June 2005, the RTA had employed 53 trade apprentices.

#### Traineeships

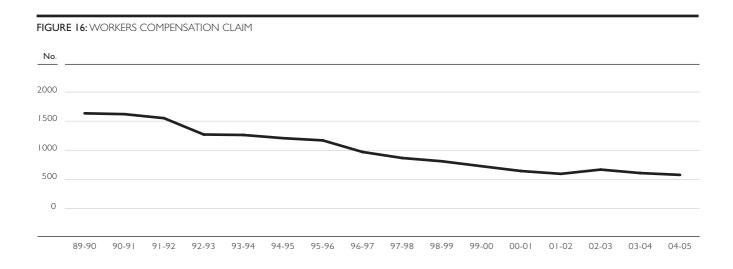
The RTA recruited 64 trainees in 2004–05. The trainees are working towards a variety of Vocational Educational and Training (VET)

TABLE 13: OHS STATISTICAL INDICATORS

Performance Indicator	2003-04	2004-05	Change
Incidents reported	2130	2194	3% increase
Number of compensable injuries	608	577	5% reduction
Lost time injuries	301	291	3% reduction
Total Claims costs	\$4.2m	\$3.2m	24% reduction



Work-related injuries exclude journey claims, lunchtime injuries away from the workplace and claims declined by the insurer.



qualifications. Three traineeship placements were created for people with disabilities, and 15 were created for people of Aboriginal and Torres Strait Islander descent. Traineeships are located in the Newcastle Call Centre, regional offices, administration centres, motor registries and other RTA workplaces. At 30 June 2005 the RTA had employed 153 trainees.

#### Graduate Recruitment and Development (GRAD) Program

Fourteen graduates from a range of disciplines were admitted to the RTA's GRAD Program during 2004–05. The RTA has a high graduate retention rate both 'on program' (95 per cent average) and 'post program' (75 per cent average). At 30 June 2005 the RTA had 74 graduates participating in the GRAD Program.

#### Undergraduate Scholarship Program

The RTA's Undergraduate Scholarship Program encourages undergraduates from universities throughout NSW to consider careers in the roads industry. At 30 June 2005 the RTA had 29 undergraduate scholarship holders in the scheme. Nine of these

are women studying disciplines such as Civil Engineering, Mechanical and Electrical Engineering and Surveying. Two of the 29 scholarships target undergraduate students from rural areas.

#### STAFF TRAINING AND EDUCATION

The RTA is committed to developing staff capability through inhouse and external training programs, and encouraging non-training experiential development. Capability development is part of a holistic approach to assist the RTA in meeting organisational goals.

#### Non-technical training

The RTA's management development framework provides training options for managers at team leader, middle management and senior management level. The managers' toolkit is an information package designed to assist RTA management to meet their responsibilities as supervisors of RTA staff. Customer service training continued for motor registry staff in 2004-05. A total of 6,700 staff members

attended the Code of Conduct and Ethics training, meeting a requirement of the RTA's workforce capability plan. The Orientation workshop continued for new RTA staff and this was supported by the computer-based induction program 'Ignition'.

#### Technical training

The Technical Development Learning Advisory Group, which includes representatives from all directorates, meets regularly to address development options for high-risk technical disciplines. This has included the analysis of technical skills and knowledge needed in a number of key technical areas. Seventeen new internal technical programs were developed in 2004-05.

#### Traffic control training

The RTA's Traffic Control Training program aims to improve the knowledge and safety of people working on or near NSW roads. The program comprises four specialist courses delivered to RTA personnel and external customers.

Sixty licensed trainers deliver more than 2,450 training events to approximately 25,000 participants across the State every year.

To address the challenges of the changing road environment, these courses have been revised to ensure current safety knowledge is delivered in appropriate ways.

In line with RTA management principles, each licensed trainer is audited annually to ensure they comply with the licence agreement, including accurate delivery of the RTA training packages.

#### Sponsored programs

The RTA sponsors selected applicants in postgraduate study. In 2004-05, 52 staff members attended sponsored programs including the Master of Engineering in Pavements, Master of Technology in Pavements, Graduate Certificate in Project Management, Advanced Certificate in Transport and Traffic Management, Executive Development Program, Executive Master of Public Administration, Graduate Diploma in Public Administration and Top Steps.

#### Wages classification structure assessment project

The RTA successfully completed implementation of its Wages Classification Structure Assessment Project. At the end of the project 94 per cent of wages staff covered by the Wages Classification Structure (WCS), who were assessed in their nominated grade, had met the required competency criteria. The project has resulted in a number of benefits for staff including streamlined classifications and clearer career paths.

The percentage of wages staff who have met the criteria for their classification is as follows: Business Services Group 72 per cent, Fleet 100 per cent, Rural Line-marking 86 per cent, Technical Services 100 per cent, Hunter Road Services 95 per cent, Northern Road Services 97 per cent, South-West Road Services 97 per cent, Southern Road Services 98 per cent, Sydney Road Services 89 per cent and Western Road Services 93 per cent.

The benefits to the RTA of the new wages structure include:

- A reduction from 300 classifications to 30 consistent pay points for similar positions across the State.
- Clearer career paths.
- The majority of grades are aligned to national competencies applying in the civil construction industry.
- Transparent range of skills needed to meet contemporary industry, OHS and environmental standards.
- Progression opportunities are linked to skill enhancement that supports business efficiency.
- Skill gaps have been identified and competency-based training and assessment delivered where necessary.

#### STAFF RETENTION

The following table shows separation rates for salaried, wages and casual staff only.

TABLE 14: SEPARATION RATES

Financial year	Separation rate
2002-03	5.39%
2003-04	6.39%
2004-05	5.99%

#### STAFF PRODUCTIVITY

#### Workforce capability

The RTA continues to implement the priorities of the Workforce Capability Plan 2003-08.

A major undertaking for 2004-05 was the review and refinement of job design in the RTA. A move to more generic, capability-based position profiles will provide greater emphasis on the skills required rather than the tasks to be completed. It will provide greater flexibility and more effective use of the skills of staff.

The RTA developed a third Workforce Profile, which presents a snapshot of the organisation through the analysis of a range of indicators including unscheduled absence, age, gender, recruitment, turnover and part time employment. It also included the first stages of workforce forecasting to develop age and gender profiles of the RTA. The Workforce Profile is a resource to assist in the development of strategies to enhance workforce capability.

A Planner's Guide was updated for the second year to help managers and business planners incorporate the requirements of the Workforce Capability Plan into their business plans. The guide includes fact sheets on workforce planning, work and development plans, mentoring and job rotations.

In 2004-05, managers were required to develop Work and Development Plans (WDP) with their staff. WDP are an ongoing requirement, however as this was the second year of implementation,

staff and their supervisors were encouraged to identify ways to improve/refine the process from the previous year.

Staff and managers are responsible for identifying, implementing and evaluating development opportunities within the RTA. Alternatives to classroom training include on-the-job training, job rotation programs, temporary appointments, external secondments, mentoring, acting arrangements, project assignments, conferences, field visits and networking opportunities.

In 2004-05 upward feedback was evaluated and introduced across the RTA for all managers who were direct reports to general managers.

#### Diversity

The Disability Action Plan, Diversity and Equity Plan and Ethnic Affairs Priority Statement and Plan were reviewed. Relevant Government agencies were consulted and consent was received to incorporate these documents in a single plan to be developed in 2005-06. This will improve reporting and allow ease of implementation.

Responsibilities for diversity and EEO outcomes are included in the performance agreements of Directors and general managers.

Detail on EEO statistics and activities can be found in the Appendix 7 of this report. Other relevant appendices include Appendix 8: NSW Action Plan for Women, Appendix 9: Ethnic Affairs Priorities Statements and Any Plans, and Appendix 10: Disability Plan.

#### PARTNERSHIPS

#### CONSULTING WITH THE COMMUNITY

The RTA is committed to consulting with the community to improve outcomes. This year the RTA established an Infrastructure Communication and Community Involvement Branch, in recognition of the fundamental importance of communities to planning and building road projects and the impact of this infrastructure on communities.

In 2004-05, more than 150 RTA projects across the State involved local communities. RTA staff worked to help communities understand and contribute to these projects.

The RTA uses a range of tools to engage the community, including:

- Landowner discussions.
- Study area tours, field investigations and inspections.
- Workshops.
- Community liaison groups.
- Displays and feedback forms.
- Public information evenings.
- Convening specific issue groups (eg a flood issues discussion group).

- Business surveys.
- Community access centres.
- Websites.
- Attending specific groups such as ratepayers' associations.
- Council presentations.
- 1800 info lines and other mechanisms for receiving /submissions from the public.

In 2004-05, for example:

- Approximately 50 community liaison groups were in progress.
- Approximately 75 different community newsletters and updates for infrastructure development were distributed to more than one million people.
- Approximately 400 community meetings/ workshops were held.

#### Windsor Road - Boundary Road to Level Crossing Road

There has been an exceptionally positive response from the community on this construction project, mainly as a result of a team working hard to resolve each and every local community concern.

The development of the Community Involvement Plan was a joint effort between the contractor and the RTA. Significantly, this collaborative process resulted in one strategy for the RTA and the contractor. The contractor's community relations manager and the RTA's communications and community involvement team then worked together to implement this strategy.

People affected by property adjustments and acquisitions were identified and then brought into the consultation process at the earliest stage. The RTA also ensured it well understood existing community concerns, including issues from nearby construction works. Actions were developed to proactively manage each issue. Residents were divided into primary, secondary and temporarily affected. Those residents directly affected by the project were visited before the project commenced and are routinely updated on progress through personal visits and communications material.

RTA communications staff are involved in the induction and ongoing education of all construction staff.

All community comments are logged and dealt with immediately within one hour of being received. If a resident is identified as being directly affected they are visited within two days.

For the wider community, more than 400 people were contacted such as emergency services, commuter groups, local schools and service clubs. Posters on buses and at local train stations and shopping centres provide contact details for the project team. Written community updates can be found at libraries, shopping centres, service stations and other locations.

#### Pacific Highway

In October 2004, six new projects were announced to locate a preferred route for an upgraded highway. The announcement was to ensure public certainty about the future location of a high speed carriageway. Discussions with the community included:

- Self nominated community liaison groups.
- Community updates about the study area.
- Progress updates in local papers describing fieldwork.
- Community information centres, staffed part-time, have been set up for some projects.
- Website information.
- Stakeholder and resident discussions.
- Special interest focus groups on issues such as potential agricultural impacts.
- Meetings with local government.
- Participation of community representatives with the RTA and other government agencies in value management discussions (these discussions examine the value of different route and project options).

Constraints mapping has been undertaken vigorously by these communities who share the RTA's objective to find the best possible upgrade location. Constraints mapping looks at all constraints on projects — economic, social and environmental. These constraints might include, for example, engineering and planning issues or heritage considerations.

#### Stakeholder magazine

The RTA produced a new corporate magazine, Access, to take people behind-the-scenes and below the surface of the RTA.

A contemporary publication, Access was distributed to key stakeholders and business partners in the public and private sectors – including local councils, State and Federal government agencies, industry organisations and peak groups – to provide them with information about the RTA's work and responsibilities.

The 28 page issue featured articles on infrastructure projects, road safety, heavy vehicles, urban design, air quality and heritage. A special feature also examined the development of Sydney's road network from the earliest days and into the future.

#### LEADERSHIP

#### Austroads and ATC

The RTA continued to play a strong role in Austroads – the association of Australian and New Zealand road and traffic authorities. Austroads undertakes research on behalf of road agencies and provides expert advice to government transport ministers through the Australian Transport Council (ATC).

The RTA provided input to a review of Austroads' national performance indicators. The RTA also contributed to ATC discussion and initiatives on issues such as transport security, the Australian Design Rules, a national identity scheme for heavy vehicles and national roads funding and policy.

#### Vehicle emissions and standards

The RTA has played a leading role in the development of national standards for vehicle emissions. See page 49 of this report for details. The RTA also contributes to national initiatives on heavy vehicle safety. See page 36 for more information.

#### OTHER PARTNERSHIP INFORMATION

This annual report contains much more information about the RTA's work in partnership with others.

For example, the RTA's work with the Aboriginal community can be found in the chapters on Positive road safety outcomes and Positive environmental and urban design outcomes.

Information about the RTA's work with private sector partners to provide much-needed road infrastructure can be found in the chapter on **Positive economic outcomes**. The RTA supports numerous community activities and groups. Details of some of this support can be found in **Appendix 21**. The RTA also produces a broad range of publications, many of which are designed to inform and educate customers, stakeholders and the general public. Full details of RTA publications can be found in **Appendix 17**.

#### **FUTURE CHALLENGES**

- Expand the range of transactions available for customers via the Newcastle Call Centre and the internet.
- Enhance the security of customer information.
- Simplify business processes to improve efficiency and customer service.
- Ensure the quality of data, in particular, proof of identity for RTA customers.
- Achieve cost savings and operational efficiencies while improving organisational outcomes.
- Continue business reform projects to drive improvements to organisational performance.
- Implement the alliance approach to the delivery of State-funded works.
- Develop a stronger commercial framework built on internal alliances.
- Implement an improved suite of strategic performance indicators.
- Further develop and integrate internal business processes, plans, frameworks and reporting to improve linkages with State Government priorities.
- Continue to deliver the Workforce Capability Plan priorities with a focus on building a high performance organisation.
- Develop a workforce planning model.
- Continue to roll-out the capability based position profiles.
- Meet the targets of the new public sector OHS and Injury Management Improvement Strategy for 2005-2008.
- Manage injured workers back to work and explore new initiatives to facilitate early intervention.
- Manage the hazards of working on the road network to protect workers in the face of increasing traffic.
- Achieve consistency across the State in our principles and fundamentals of community consultation.
- A greater emphasis on website and electronic media as a tool for information and feedback.
- Ongoing assistance to project managers across the
  State in their processes of negotiation with communities.
- Greater use of plain English materials.