



Transport

RTA result: The road transport system supports reliable and efficient movement of people and goods

The NSW road transport system

The transport system is crucial to the economic prosperity and wellbeing of the NSW community. The RTA's role was to maintain, develop and operate the major road network to meet the needs of a growing population. This included the day-to-day transport requirements of individuals and the growing freight task. In this role, the RTA managed a major program of new road and bridge works, from the inner suburbs of Sydney to the far corners of NSW.

The RTA also promoted alternatives to motor vehicle travel – such as public transport, cycling and walking – through the provision of infrastructure and a range of innovative programs to encourage sustainable methods of transport.

A key RTA role was the management of traffic on the road system. The RTA led the world in technology to promote the efficient movement of traffic. The RTA also took the lead in managing traffic during major planned events and unplanned incidents.

This chapter outlines the RTA's management of the road transport system over the 1 July to 31 October 2011 period. It is divided into three main sections:

Development – major projects and developments on motorways and other roads.

Alternatives – buses, bicycles and pedestrians.

Traffic – speed and traffic flow.

Development

Pacific Highway Upgrade Program

The NSW and Australian governments are jointly upgrading the Pacific Highway, which is part of an integrated network of land transport links of strategic national importance known as the National Land Transport Network. Significant developments in the reporting period are outlined below.

Tintenbar to Ewingsdale

The contract for the design and construction of the Tintenbar to Ewingsdale Upgrade was awarded on 28 October 2011 to Baulderstone. The project will upgrade about 17km of the Pacific Highway and will connect to the completed Ballina Bypass. It is the missing link in what will be a full, four-lane divided highway between Ballina and the Queensland border. The upgraded road should open to traffic by mid 2014.

Devil's Pulpit

On 13 July 2011 John Holland Pty Ltd won the construction contract to build the Devil's Pulpit Upgrade. The project should open to traffic by mid 2014. It will include the duplication of more than 7km of highway and installation of about 3km of wire rope safety barriers.

Glenugie Upgrade

On 31 October 2011 a major traffic switch on the Glenugie Upgrade opened a section of new four-lane road on the northern section of the project. Traffic was also switched onto the southbound carriageway for work on what will be the new northbound carriageway. The upgrade is scheduled for full completion in early 2012.

Warrell Creek to Urunga

The NSW Minister for Planning and Infrastructure granted planning approval for the Warrell Creek to Urunga Upgrade on 19 July 2011. The project will involve an upgrade of the existing highway to four-lane divided highway (an 8km section at Macksville is currently the subject of a technical review).

Kempsey Bypass

Initial construction of the bridge over the Macleay River and floodplain started on 21 July 2011, with work on the main bridge structure starting on 18 October 2011. When completed, the bridge will be the longest in Australia.

Safety improvement at Martells Road

A range of safety improvement projects are either underway or completed, including the Martells Road widening project, south of Urunga. Work involved improvements to the shape of the road, the widening of the approach to the intersection, installation of traffic signs and installation of a 1m wide median strip. Traffic has been using the widened road since 2 August 2011.

Woolgoolga to Ballina

A refined concept design for the 155km section was placed on display for public comment on 5 October 2011. The project starts around 6km north of Woolgoolga (north of Coffs Harbour) and ends about 6km south of Ballina.

Tyndale to Maclean

A decision on the refined preferred option for the Pacific Highway between Tyndale and Maclean, north of Grafton, was announced on 22 August 2011. The route originally proposed followed the current highway over this section of around 10km. Concerns from the sugar industry prompted a review and the route was moved around 1km to the east, reducing impacts on higher quality sugar cane land. This section forms part of the Woolgoolga to Ballina project.

Princes Highway

Bega Bypass

Tenders for the bypass were called on 26 October 2011. The bypass will be around 3.5km long and use an existing road corridor to the west of Bega. Major construction work is expected to begin in 2012.

Great Western Highway

Wentworth Falls East

Two-way traffic switched onto the new westbound carriageway of the Great Western Highway between Dalrymple Avenue east and Station Street on 14 September 2011.

Lawson Upgrade

The new town centre carpark opened on 17 August 2011, marking the completion of all works in the Lawson Stage 1 project.

Bullaburra West

The contract for construction of the highway upgrade to four lanes between Genevieve Road, Bullaburra and Tablelands Road, Wentworth Falls was awarded to Darracon Constructions on 13 September 2011.

Bullaburra East

Tenders were invited for construction of the highway upgrade to four lanes between Ridge Street, Lawson and Genevieve Road, Bullaburra on 10 October 2011.

Woodford to Hazelbrook

The new pedestrian bridge at Hazelbrook was opened on 23 September 2011. It forms part of the highway upgrade to four lanes between Woodford and Hazelbrook.

Hume Highway

Woomargama Bypass

Before its anticipated opening in early November 2011, the local community had an opportunity to inspect the \$265 million Woomargama Bypass on 22 October. Project construction was fully funded by the Australian Government.

Hoxton Park Road

The project upgraded Hoxton Park Road from a two-lane road to a four-lane divided road between Cowpasture and Banks roads. It opened to traffic on 28 October 2011.

Holbrook Bypass

Construction on the \$247 million bypass started in May 2011. Works included construction of a new interchange on the existing Wagga Road alignment where it crosses the bypass, necessitating a temporary diversion via Pinnabar Road. This occurred on 23 September 2011 and will remain in place until the opening of the Wagga Road overbridge in mid 2012.

Motorways

Realignment of the M4 at the old toll plaza

Work on the realignment of the M4 lanes at the old toll plaza started on 17 October 2011 and will be completed by April 2012.

M5 East air filtration trial

The M5 East tunnel air filtration trial ended in September 2011. Documentation will be submitted to the Department of Planning and Infrastructure in 2012 in accordance with planning approval conditions for the trial when the CSIRO has submitted its final peer reviewed reports.



Sydney area

Erskine Park Link Road

NACE Civil Engineering Pty Ltd began construction of the Erskine Park Link Road on 25 October 2011. The road links Lenore Lane and Old Wallgrove Road and, most importantly, connects the Western Sydney Employment Area to the M7 and M4 motorways.

Alfords Point Bridge northern approach

The RTA removed the tidal flow at the northern approach to Alfords Point Bridge and opened two lanes in each direction to traffic on 25 August 2011. The change was made possible by road widening that removed the need for tidal flow arrangements on Alfords Point Road between Alfords Point Bridge and Clancy Street, Padstow Heights.

Camden Valley Way, Bernera Road to Cowpasture Road

The new four-lane section of Camden Valley Way between Bernera Road, Prestons and Cowpasture Road, Horningsea Park opened to traffic on 8 July 2011.

Construction of the Narellan Road to Cobbitty Road section started in August 2010 with completion expected in mid 2012.

Hunter Region

Hunter Expressway Alliance

The \$1.7 billion Hunter Expressway is a 40km, four-lane-freeway between the F3 Freeway, near Seahampton and the New England Highway, west of Branxton. The Australian Government has committed \$1.5 billion and the NSW Government is contributing \$200 million to the project, which is being constructed in two sections. The western 27km section is being built under a design and construct arrangement with Abigroup. Due to the complex greenfields terrain, the eastern 13km section between the F3 Freeway and Kurri Kurri is being built by an alliance between Roads and Maritime Services, Thiess Pty Ltd, Parsons Brinckerhoff and Hyder Consulting.

Over the reporting period a concrete casting yard was established and began casting deck segments for the columns and decks for the viaducts in the Sugarloaf Range. Drilling and grouting of old mine voids is nearing completion. Major earthworks are continuing. Construction of the bridges at the Buchanan and Newcastle interchanges is continuing and piling at most sites is now complete. The alliance has made good progress at the Newcastle interchange with the erection of Super T girders for the bridges over the F3 Freeway during October 2011.

Hunter Expressway – western section

Half of the bulk earthworks are on track for completion by the end of November 2011. Construction on 14 of the 22 bridges is well underway, including the Loxford and Allandale interchanges, the Camp Road underpass at Greta, Wine Country Drive overbridge and bridges over the northern railway line near Branxton. Vegetation removal is complete on almost all of the alignment. The RTA has switched traffic to side tracks where the project intersects with the local road network at Tuckers Lane, Greta and Old Maitland Road, Sawyers Gully.

Hunter Expressway – South Maitland

South Maitland rail connection work, part of the Hunter Expressway project, was completed on 14 October 2011. The project involved the construction of the new rail bridge and realignment of around 900m of railway line. The first train crossed the new bridge on 15 October 2011.

Thornton Bridge

The bridge contract was awarded to Seymour Whyte Constructions on 29 July 2011 and work began on Longworth Lane on 29 August 2011. The project will involve construction of a new two-lane bridge over the Great Northern Railway. Salvage works by Aboriginal archaeologists are continuing in accordance with the Aboriginal Heritage Impact Permit.

Central Coast

Central Coast Highway, Wisemans Ferry Road intersection upgrade

The Central Coast Highway is the major road link between the F3 Sydney to Newcastle freeway and Gosford, Erina and surrounding coastal suburbs. The planned upgrade at Wisemans Ferry Road will improve traffic flow and reduce delays and crashes at this important intersection.

The concept design for the upgrade was completed on 29 July 2011 and the Review of Environmental Factors determined on 31 August 2011. The final road design is expected in early 2012. Construction of a commuter carpark at the corner of the Central Coast Highway and Kangaroo Road is scheduled to begin in early 2012.

Terrigal Drive and Bellbird Avenue intersection improvement works

These intersection improvements, which opened to traffic on 23 September 2011, address safety and traffic capacity concerns at this location. As part of the work, a roundabout and a raised boardwalk link a new bus bay with the existing footpath on the northern side of Terrigal Drive.

Ourimbah Street to Glen Road

There is currently only one travel lane in each direction between Lisarow and Ourimbah. The Pacific Highway Upgrade Stage 3A (Ourimbah Street, Lisarow to Glen Road, Ourimbah) will create two lanes in each direction, separated by a median. A Review of Environmental Factors determination for this route was signed on 31 October 2011.

Northern Region

Additional Clarence River crossing

Roads and Maritime Services is planning to identify a preferred route for a second crossing of the Clarence River at Grafton, a project which the local community has long advocated. Project objectives are to:

- Enhance safety for all road users.
- Improve traffic efficiency between Grafton and South Grafton.
- Support regional and local economic development.
- Provide value for money.
- Minimise impact on the environment.

The *Preliminary Route Options Report – Part 1* was released in August 2011 and describes the existing environment and potential issues relevant to an additional crossing. Following its release the RTA held community information and feedback sessions to allow locals to drop-in and talk one-on-one with the project team.

The *Preliminary Route Options Report – Part 2* was released in October 2011. It assesses the 25 preliminary route options identified from the June 2011 feasibility assessment and all community suggestions against the project objectives. A community update was released in late October 2011.

South West Region

Barton Highway, Gounyan Curves

The safety of the Barton Highway improved significantly with completion of the \$22 million project at Gounyan Curves 42km north of Canberra. The new road of 4.5km removes five bends in the highway, gives traffic a 1.2km southbound overtaking lane and forms one carriageway of a future duplication of the Barton Highway.

A community tree planting day was held on Sunday 23 October 2011 with project staff and volunteers from Greening Australia which resulted in the planting of 2,000 trees.

Due to productivity savings on the project, additional works were approved for both ends of Gounyan Curves and is expected to open to traffic in early 2012.

Snowy Mountains Highway, Adelong Creek Bridge award nomination

The Adelong Creek Bridge replacement project was nominated in the public domain category of the Cement and Concrete Association Awards and also in the Engineers Australia, Engineering Excellence Awards 2011. The nominations note the aesthetic blending of the bridge with the surrounding environment; the innovative use of LED lights; the use of spread voided pre-stressed concrete planks; and the provision of a separate, but complementary pedestrian bridge.

Southern Region

Victoria Creek

Construction began in July 2011 on the \$45 million project to replace the bridge over Victoria Creek, provide new overtaking lanes in both directions and link the new and old highways.

Alternatives

Bus corridors

2011–12 is the last of the seven-year, \$295 million Bus Priority Program which aims to improve travel time reliability. A total of 137 bus priority projects had been completed on strategic bus corridors at a cost of \$277 million by 31 October 2011. Bus priority treatments, established in close consultation with neighbouring residents and businesses, include intersection improvements, bus priority 'B' signals at traffic lights, road widening and the installation of bus lanes. Since the program began, the length of priority bus lanes has increased from 78km to 150km.

Supporting cycling

The RTA has sponsored major community cycling events, including NSW Bike Week and the 2011 Spring Cycle to encourage more people to cycle,

NSW Bike Week was held from Saturday 18 September 2011 to Sunday 26 September 2011. The RTA provided funding assistance to organisers and helped promote their events. Additionally, the RTA invited NSW primary and secondary schools to participate to encourage awareness of bicycle safety throughout the week. A total of 10,500 people took part in 48 events held across the State.

The Spring Cycle presented by Bicycleinfo, the NSW Government's cycling information website, attracted more than 8,000 riders.



Pedestrians

The Pedestrian Facility Program aims to improve safety, mobility and access, particularly in areas of high pedestrian activity. Typical projects include preparation of pedestrian access and mobility plans and provision of kerb ramps, new crossings at signalised intersections and new traffic control signals for pedestrians.

The completion of traffic signals on the Oxley Highway at Belmore Street, Tamworth in October 2011 finalises the program to upgrade 59 pedestrian crossings on multi-lane State roads.

Seventy-three pedestrian infrastructure projects to a value of \$6 million are being delivered on the State road network in 2011–12, of which six had been completed by 31 October 2011. A further 61 projects were being undertaken on regional and local roads in local government areas around the State, with councils matching dollar-for-dollar an RTA contribution of \$1.2 million.

Two major pedestrian bridge projects are being developed this year. The Marsfield Bridge on Epping Road is under construction. The Anzac Parade Moore Park project is in the initial scoping stages with residents and stakeholders whose input, along with a comprehensive pedestrian and cycle study, will contribute to the final design.

Traffic

M7 travel times

A travel time information system was launched on the M7 motorway on 24 September 2011. Since then 12 electronic message signs on the 40km M7 motorway from Baulkham Hills (M2) to Prestons (M5) have displayed live travel time messages 24 hours a day, seven days a week.

The signs show the estimated time to reach upcoming motorway exits based on the current traffic flow. The estimates, which are updated for accuracy every minute, are also displayed on the Live Traffic NSW website at livetraffic.com.

Pinch point strategy reduces travel times

The network management or pinch point strategy aims to improve traffic flows at key congestion points on 23 of Sydney's major arterial road corridors. It targets peak hour traffic pinch points and develops and implements treatments to maintain travel speeds, provide reliable travel times and improve the information available to Sydney motorists. Strategy funding of \$100 million over the five years ends in 2011–12.

To 31 October 2011 a total of \$87 million had been spent, including \$17 million in 2011–12.

Corridors treated in 2011–12 included the Princes, Cumberland, Pacific and Hume highways and Campbelltown and Old Windsor roads. These projects continue to reduce travel delays, especially during weekday morning and afternoon peak periods.

Asset

RTA result: The condition and value of the road network meets acceptable standards

The road asset

The RTA managed 18,028km of State roads, as well as 2,970km of regional and local roads in NSW. The RTA was also responsible for 5,130 bridges and a range of other assets such as traffic signals and tunnels.

The RTA was tasked with maintaining this enormous network to acceptable standards, in the context of an increasing population and increasing number of commuter and freight vehicles using roads. The network is crucial to communities across NSW – in many ways it is the social and economic lifeblood of the State. This chapter details the work of the RTA to maintain the system, and shows what performance levels were reached in the 1 July to 31 October 2011 period.

NSW is also a major gateway to Australia for goods coming in and leaving our shores. For this reason, the road network's role in assisting freight transport is essential. This chapter details how freight access was managed across the road network in the face of continuing strong growth in the freight task.

This chapter outlines the RTA's management of the road network to ensure its condition and value meet acceptable standards. It is divided into two main sections:

Access – sustainable access for freight.

Maintenance – management of roads and infrastructure.

Access

Oversize and overmass heavy vehicle exemptions

In July 2011 the RTA introduced an exemption for vehicles transporting baled wool to allow loads to exceed the statutory width limit of 2.5m and measure up to 2.7m. In August the same concession was extended to loads of baled hay and straw.

The exemptions were introduced to accommodate loads which have a tendency to expand once loaded, making it difficult for the operator to comply with the statutory limit. Loads up to 2.6m are not subject to any additional conditions, however, drivers with loads between 2.6m and 2.7m in width must observe a number of road safety conditions, including travel restrictions and warning device requirements. The exemption applies only to the load and not the vehicle, which must not exceed 2.5m in width.

Intelligent Access Program

The Intelligent Access Program is a multi-jurisdictional initiative that allows road agencies to use satellite-based technology to track heavy vehicles and ensure they are only using approved routes for vehicle and load limits. An example of national road transport reform, the program shows that territory, State and Australian governments can adopt a strategic vision and work collaboratively.

From 27 June 2011 the program was extended to mobile cranes and from 5 October 2011 it became compulsory for all high risk mobile cranes to be enrolled in the program as a condition of access to approved roads in NSW. This includes mobile cranes registered in NSW and other states or territories that operate in NSW. As at 31 October 2011 there were 631 vehicles and 278 cranes enrolled in the program.

High risk mobile cranes are defined as:

- All cranes wider than 2.5m.
- All cranes up to 2.5m wide that exceed the mass limits in the Class 1 Special Purpose Vehicle Notice 2011.
- All cranes with a forward projection exceeding 5.5m.



Performance Based Standards

Performance Based Standards (PBS) is a nationally agreed regulatory framework that focuses on how well a heavy vehicle 'performs' on the road, rather than its dimensions and mass limits. Performance is assessed against an agreed set of safety and infrastructure protection standards. This approach achieves community benefits, such as improved productivity, safer performance and the least possible impact on the road infrastructure, as well as allowing innovation in the transport industry.

At 31 October there were 107 PBS vehicle design combinations with permits to operate in NSW and 120 vehicle designs approved by the National Transport Commission's PBS review panel. The decision to allow PBS trucks with four or five-axle trailers at Higher Mass Limits access to NSW roads will improve their productivity by up to 38 per cent.

Top 30 livestock centres

A project is in place to improve road freight access to livestock saleyards, feedlots and abattoirs by approving freight vehicles with Higher Mass Limits (HML) to use roads to and from livestock centres in NSW. The particular focus is the top 30 NSW livestock centres (based on livestock volume). At 31 October HML vehicles had approval to use 18 council roads to access livestock centres other than the top 30.

Notice removal

On 9 September 2011 the RTA removed the requirement to carry the Class 2 B-double Notice 2010. Vehicles to which the notice applies must still operate only on the routes it identifies but the notice itself no longer has to be carried in the vehicle. This initiative helps to reduce the compliance burden on industry.

Maintenance

Road asset inventory

The NSW road system managed by the RTA included the following at the end of October 2011:

- 18,028km of RTA-managed State roads, including 4,323km of the National Road Network, for which the Australian Government makes a funding contribution, and 147km of privately-funded toll roads.
- 2,970km of RTA-managed Regional and local roads in the unincorporated area of NSW.
- 18,231km of council-managed Regional roads, which receive significant State grant funds administered by the RTA.
- 145,565km of council-managed local access roads, funded by local ratepayers and Australian Government programs such as the Financial Assistance Grants and Roads to Recovery Program.

The RTA was also responsible for maintaining and operating:

- 1,423 school zone flashing light signs.
- 3,878 traffic signal sites.
- 9,800 street lights.
- 5,130 bridges and major culverts and 23 tunnels.
- 5 automated tidal flow systems.
- 56,000km of longitudinal linemarkings and other pavement markings.
- 2 million reflective raised pavement markers.
- 71,698 guide signs for major structures and 84,192 parking, 66,018 regulatory and 39,181 warning signs.
- 9 vehicular ferries.
- Intelligent traffic systems including 251 variable message signs, 135 variable speed signs and 824 CCTV cameras.

The RTA faced considerable challenges in maintaining and renewing NSW road and bridge infrastructure to ensure it is safe and reliable, both now and into the future. Strong risk management, practical planning and robust assessment of the likely future usage and performance of the road network were essential. Currently in excess of 41 per cent of road pavements are more than 30 years old and 78 bridges are more than 100 years old.

Customer satisfaction survey

In 2010–11 the RTA commissioned research to develop a survey instrument to measure the public's satisfaction with maintenance of NSW State roads, including road pavement, bridges and road corridors.



Now complete, the first phase explored customer language, knowledge, attitudes and level of satisfaction regarding NSW State Roads, including road pavement, bridges and corridor asset maintenance. Responses were sought at 12 focus groups involving a total of 106 participants. Two focus groups were conducted in each of the following locations: Bella Vista, Coffs Harbour, Harris Park, Newcastle, Narranderra and Orange. Two groups each were conducted with heavy vehicle drivers and motorcyclists. Car driver groups were structured by age and gender.

Participants identified the most important aspects of road maintenance as those which contributed most strongly to the safety of road users. Typically, these were road surface (smooth and pothole free) and road markings (clear and visible in many conditions), although some participants also mentioned roadside vegetation control, drainage and safety barriers as being important factors. Road width and road grip also rated mentions as important to road safety.

These initial findings have already improved understanding of customer satisfaction and dissatisfaction and influenced decisions on maintenance priorities and funding. The aim of the next phase of the project is to identify and pilot interview methodologies (online, face-to-face and on-road) for possible use in a subsequent large-scale quantitative customer survey.

Road management

The extended wet weather this calendar year impacted the RTA's capacity to complete planned resurfacing, rebuilding and upgrading works. During the four months to the end of October 2011, the RTA spent \$378.4 million (28.2 per cent) out of the total sum of \$1.3 billion of State and Federal funding allocated for road asset management.

Over this period the RTA completed a review of long-term road maintenance risks and needs and submitted an updated Strategic Asset Management Plan to Transport NSW as part of the annual Treasury Total Asset Management process.

Road pavement maintenance

From July to October 2011 the RTA spent \$113.4 million on road pavement maintenance. Work delivered included:

- 0.367 million m² of asphalt resurfacing.
- 1.48 million m² of sprayed bitumen resurfacing.
- 0.244 million m² of road pavement rebuilding, including widening. Among projects was the widening of the Pacific Highway at San Remo to four lanes.

Pavement management system

The development of a new pavement management system progressed in the reporting period. A preliminary validation of maintenance treatments recommended by the system identified areas for further improvement. The system is being developed in a phased approach and will support improved decision-making.

Road corridor maintenance

From July to October 2011 the RTA spent \$64 million on road corridor maintenance. Work included:

- Routine maintenance of roadside assets, including vegetation, drainage, slopes, rest areas, noise walls, safety barriers and fencing.
- Preliminary planning and design for the rehabilitation of 43 road slopes.
- Remediation work on rock cuttings adjacent to Heathcote Road and the stabilisation of slopes along the Alpine Way.
- Risk assessment of around 2,000 of the 70,000 culverts to identify priority remediation works. The RTA also began implementing a rehabilitation program for culverts and table drains.

Bridge maintenance

Maintenance spending on State bridges totalled \$48.7 million over the July to October 2011 period. Significant milestones are detailed below.

Timber Truss Bridge Heritage Strategy

In July the RTA released a strategy for conservation of the timber truss bridges it manages and called on local communities for comment. At the September deadline the RTA had received 106 submissions, all of which were carefully considered. Roads and Maritime Services is currently preparing a report on the final strategy.

ANZAC Bridge

The first major maintenance program for the ANZAC Bridge, which opened in 1995, started in October 2011. The program includes installing permanent access systems for hard-to-reach areas of the bridge, modifying the bridge's cables, replacing the fence along the shared pathway on the northern side of the bridge and installing a new fence along the southern side of the bridge. The work will be carried out in stages and take 26 months to complete.

Hampden Bridge

Major rehabilitation work on Hampden Bridge, a historic suspension bridge in Kangaroo Valley, included:

- Replacing the entire timber deck.
- Reinforcing the abutments on both sides of the bridge.
- Refurbishing the four bridge bearings.

A community open day celebrated completion of all work in October. The \$4.8 million project will ensure retention of the bridge's functionality and heritage value well into the future.



Dunmore Bridge

The work on a capacity upgrade of the Dunmore Bridge over the Paterson River started in August 2011. The \$8.3 million upgrade will involve completely rebuilding all three truss spans and the approach span, constructing a new abutment on the Woodville side and installing new stress laminated timber decks and barriers.

Windsor Bridge

On 4 August 2011 the NSW Minister for Roads and Ports announced the preferred option for the upgrade of the Windsor Bridge over the Hawkesbury River – replacement of the existing bridge with a high level crossing 35m downstream. Community consultation on the upgrade, including staffed displays and workshops, began the same month.

Funding assistance to local councils

Regional road block grant and REPAIR programs

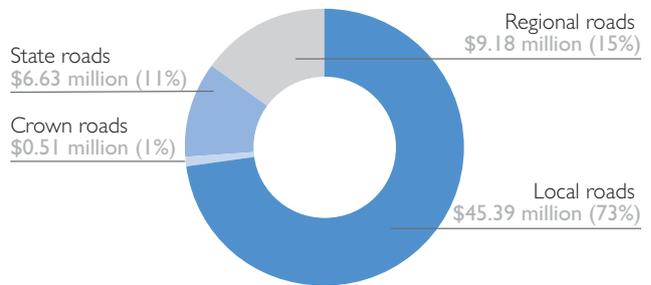
Following the NSW State Budget, funding allocations of \$135.3 million and \$27.8 million were confirmed for 2011–12 under, respectively, the Regional Road Block Grant and Repair and Improvement of Roads (REPAIR) programs. These funds will be disbursed quarterly to the 152 NSW councils as a contribution towards the maintenance and upgrade of Regional roads within their local area. The RTA made an advance first quarter payment to councils in July 2011 to enable planning and programming of works for 2011–12 to proceed.

Natural disaster repairs

The NSW Government funds repairs to RTA-managed State roads damaged by declared natural disasters and allocates significant funding to local councils to bring their roads and bridges back to pre-disaster condition. Due to an unprecedented number of natural disasters throughout much of NSW, 95 local government areas were declared natural disaster areas in 2010–11.

Between 1 July and 31 October 2011 councils received \$61.7 million to repair damage arising from declared storms and floods, with the RTA carefully assessing each claim for financial assistance to ensure compliance with the RTA's Natural Disaster Guidelines and the Australian Government's Natural Disaster Relief and Recovery Arrangements.

FIGURE 3. NATURAL DISASTER EXPENDITURE
1 JULY – 31 OCTOBER 2011



Major expenditure was on works to rectify damage caused by:

- Seven North Coast floods between February 2009 and June 2011 – \$10.5 million.
- Western NSW floods in December 2010 – \$30.1 million.
- Riverina floods in March and October 2010 – \$8.2 million.

The extensive nature of many of these disasters means that restoration works will continue well into 2011–12 and, in some cases, later years. Current forecasts of expenditure for 2011–12 exceed \$240 million.



Safety

RTA result: The safety of the road environment, vehicles and road user behaviour is maximised

The RTA and road safety

The continuing decrease in road fatalities results can be attributed to the RTA's implementation of the 'Safe Systems Approach' to road safety and, in particular, to the delivery of the Road Toll Response Package announced in March 2010.

The 'Safe Systems Approach' recognises that human error is inevitable and requires vehicles, roads and roadside environments that are forgiving of road user error.

The Road Toll Response Package was developed in response to the 2009 road toll increase in consultation with NSW road safety stakeholders and community groups. With funding of \$170 million over five years, the Road Toll Response Package includes a number of initiatives to improve safety on NSW roads.

This chapter outlines the RTA's management of safety issues in the road transport system over the 1 July to 31 October 2011 period.

It is divided into four main sections:

Fatalities – data, trends and key factors.

Roads – better safety of roads.

Vehicles – better safety features in vehicles.

Users – better safety for road users.

Fatalities

During the first 10 months of 2011 there were 297 people killed on NSW roads, 45 fewer fatalities than the same period in 2010 and the lowest January to October fatality total since the early 1930s.

Strategy development

The Centre for Road Safety (the Centre) began development of a new NSW Road Safety Strategy for 2012–2021. Action included extensive consultation within the RTA, with external groups including the heavy vehicle industry on 18 October, the Road Safety Advisory Council on 20 September and vulnerable road user groups on 20 October 2011. Feedback will inform the final strategy to be released in mid 2012.

Under the Road Toll Response Package the Centre collaborated with motorcycle stakeholders to develop a draft Motorcycle Safety Strategy and started work on a repeat offender strategy, completing a literature review and initial data analysis. Both strategies will align with the new NSW Road Safety Strategy.

Crash data

On an opt-in basis, the Centre began issuing additional crash data to local councils relating to fatal crashes in their area. Fifty-three per cent of councils have chosen to receive the information to date.

Roads

Speed zone audit

Stemming from the NSW Government's election commitment to audit speed zones, the Centre developed a new website (saferoadsnsw.com.au) to facilitate community feedback on speed limits and speed limit signs. The new site received 27,000 hits and 2,600 submissions during the July to October period. Submissions received to mid October were analysed to identify the top 100 roads for speed zone reviews by the end of March 2012.



Completion of these reviews (and any subsequent speed limit changes) in 2012 will mark the end of the audit, although the website will remain open for community comment on speed zones and help guide ongoing speed zone reviews as needed.

As part of the audit the Centre published the revised *NSW Speed Zoning Guidelines* in October 2011 to support a simpler speed limit regime and reduce the number of speed limit changes.

The Centre also conducted an initial audit of 12 road corridors, with the outcomes announced on 21 August 2011. RTA regions have since begun to implement any ensuing speed limit changes.

Road Toll Response Package

The full program of engineering safety works was established for 2011–12 and the implementation of 65 projects across NSW began. The Centre also completed a statewide crash cluster analysis which will be used to prioritise programs for 2012–13.

Road safety audit guidelines

The Centre published new guidelines for road safety audits along with supplementary information sheets.

Newell Highway

The 110km/h speed limit on the Newell Highway was re-instated from 31 July 2011, with the exception of six lengths previously identified for retention of the 100km/h limit: a 4km section south of Forbes, an 8km section south of Peak Hill, the 33km between Tocumwal and Finley and three lengths between Finley and Jerilderie. All zones were assessed using criteria from the *NSW Speed Zoning Guidelines*. Associated signage was installed by 31 July 2011.

The RTA's South West Region began clear zone works to improve road safety by removing or protecting hazards in the road corridor. The works require a detailed environmental assessment, including an iterative design of the clear zone width that balances ecological and engineering requirements. Extensive vegetation clearing, culvert widening works and shaping will proceed in 2011–12 under the program. Vegetation mapping and aerial photography in 2010–11 of the Newell Highway from Tocumwal to Marsden defined the extent of vegetation removal within the clear zones. Work on the area from Tocumwal to Corobimilla began in October 2011.

Bucketts Way intersection

Safety improvements were completed on the Pacific Highway between Bucketts Way and Talbotts Trail, Twelve Mile Creek on 31 July 2011. A roadside wire rope safety barrier was installed northbound from 350m north of Bucketts Way to 1.3km north of Bucketts Way along with a median wire rope safety barrier from 1km to 1.3km north of the road. Raised profile line marking and curve advisory signage were installed from Bucketts Way to Talbotts Trail in both directions.

Restricted access assessment

In September 2011 the Centre, together with Engineering Technology, assessed the Kamilaroi Highway for road train access east of the Newell Highway.

SpeedLink database

The Centre has developed a new database to capture all speed zone information across NSW. Training in the new system began in July 2011.

Vehicles

Used car safety

In conjunction with partners, the Centre released the *Used Car Safety Ratings 2011 Update* in July. The brochure draws on records from more than four million vehicles in police-reported road crashes in Australia and New Zealand.

Rear occupant injuries

The Centre for Road Safety co-sponsored research with Neuroscience Research Australia on rear occupant injuries which included a comprehensive investigation of rear seat restraint systems, 'submarining' and the effectiveness of potential countermeasures. The study showed that rear seat safety has improved far less than front seat safety.

Vehicle standards

The new *National Code of Practice for Light Vehicle Construction and Modification for NSW* (Bulletin 14) was implemented over the reporting period with help from the Centre. The Centre also worked with partners in developing the manual, *Means to Demonstrate Compliance with Third Edition Australian Design Rules*, which is currently awaiting approval for release. It advises on practical alternatives that can be used to demonstrate compliance with Australian Design Rules for modified, individually constructed and imported vehicles.



Vehicle testing

Through Crashlab, the Centre conducted four research tests, four commercial tests and seven Australasian New Care Assessment Program (ANCAP) tests, the results of which it announced in media releases.

ANCAP roadmap

Centre involvement with the ANCAP board and Technical Working Group continued. Outcomes included the development of the *ANCAP Rating Road Map 2011–2016*, which sets the criteria for achieving future star ratings for front occupant protection and pedestrian protection in new cars.

RTA/NSW Police Force cooperation

The RTA and the NSW Police Force combined to stage Operation SAFERIDE, a joint enforcement program targeting taxi safety. In total 78 vehicles were inspected and 22 defect and defective vehicle related infringement notices were issued by police.

Further collaboration and improved compliance should flow from discussions by the two agencies on a combined approach to speeding and other offences. These discussions have already led to the establishment of a police program focussing on speed management.

Vehicle Safety Compliance Certification Scheme

Work progressed to replace the current Engineering Certification Scheme with the Vehicle Safety Compliance Certification Scheme. The latter will ensure that only people licensed under the scheme can assess modified, individually constructed and imported vehicles and certify compliance with applicable vehicle standards. The new scheme is scheduled to begin in December 2011.

Chain of responsibility

Under chain of responsibility everyone in the supply chain has obligations under road transport laws, including operators, consigners and consignees, and loaders and drivers. If one party's actions, inactions or demands cause or contribute to road safety breaches, then each party in the chain may be held legally accountable.

The RTA could investigate anyone on the supply chain and the corporate chain of command, including managers and directors. At 31 October 2011 there were 21 investigations underway relating to fatigue, mass, load restraint, false declaration and speed. These focused on both on and off-road supply chain parties. Some of the investigations involve fatal heavy vehicle crashes and multiple mass and fatigue offences.

In order to raise industry awareness of chain of responsibility, the RTA made presentations to the following industry groups:

- Concrete and Aggregate Association.
- Livestock and Bulk Carriers Association.
- Logistics Council of Australia.
- Waste Management Association of Australia.

Users

Speed cameras

The Centre responded to the NSW Auditor General's inquiry into the effectiveness of speed cameras in NSW with a submission that included extensive data analysis, evaluation, reporting and program management details. The inquiry report, tabled in NSW Parliament on 27 July, found that the overall impact of speed cameras has been positive in reducing road trauma. Implementation of the report recommendations has begun.

Following release of the report, the Centre began a safety review of 38 decommissioned camera locations to identify safety issues and develop alternative treatments where appropriate. The reviews involved the RTA regions, NSW Police Force, NRMA and local government undertaking location inspections and community engagement activities.

Driver attitudes to speeding and speeding behaviour

The Centre engaged an independent research organisation to conduct qualitative research on driver attitudes to speeding, including more than 1,500 interviews with a representative sample of NSW drivers. The research found significant support for speed cameras, particularly in school zones. However, almost one in four drivers still report speeding all or most of the time.

Annual vehicle speed surveys were completed in September. These will provide data on vehicle speeds across the road network.

Point-to-point speed cameras

The rollout of point-to-point speed cameras for heavy vehicles continued, with five locations covered during the July to October period.



Safe school travel

Translations of the *Move Ahead with Street Sense* package went out to all NSW primary and secondary schools in September. The package, now available in 23 community languages, includes brochures on travelling safely to and from school, safety on wheels and school bus safety.

School zone flashing lights

Together with the RTA's Network Services Directorate the Centre began development and implementation of the new \$13 million School Zone Flashing Lights Program over four years. Over the reporting period, flashing lights were installed in 57 school zones.

Alcohol Interlock Program

The Centre conducted a tender evaluation process to engage program manager/s for the NSW Alcohol Interlock Program, selecting Guardian Interlock Systems Australasia Pty Ltd and Draeger Safety Pacific Pty Ltd as the preferred tenderers. The interlock is an electronic device fitted to a car that tests the driver's blood alcohol concentration (BAC) and only allows the car to start if the recorded BAC is below 0.02. The Alcohol Interlock Program is available to courts as an option in sentencing drivers of certain serious drink driving offences.

P plate drivers

The 'P' driver project was launched in NSW at the Blacktown campus of the University of Western Sydney on 18 October 2011. It involves trialling a behaviour-based program with 27,000 provisional drivers aged 17 to 22 in NSW and Victoria to determine its effectiveness in reducing crashes involving provisional drivers and improving their behaviour. Participants will complete eight hours of behaviour change oriented education. The project partners are the Australian, NSW and Victorian governments plus a number of private organisations, including NRMA Insurance, the Royal Automotive Club of Victoria and the Federal Chamber of Automotive Industries.

There are two project components, a quantitative trial in metropolitan Victoria and a qualitative trial in NSW that focuses on program delivery, largely in regional areas.

The NSW trial is being held in four regions including:

- Dubbo/Forbes.
- Lismore/Tweed Heads and surrounding areas.
- Tamworth/Armidale.
- Western Sydney (from around Blacktown to Emu Plains).

Young drivers

The Auditor General released the performance audit report, *Improving Road Safety: Young Drivers*, on 19 October 2011. It highlighted the 50 per cent reduction of young driver fatalities in the 10 years since the RTA's introduction of the Graduated Licensing Scheme. The Centre is now working with partners to address the report's 12 recommendations, which concern learner drivers, provisional licence drivers and reduction of risk-taking.

Legislative change

A Bill was introduced to NSW Parliament on 20 October 2011 amending the *Crimes (Sentencing Procedure) Act 1999* to create an aggravating factor where a child under 16 is a passenger in a motor vehicle. The traffic offences include drink driving, drug driving, failing to undergo breath analysis or engaging police in a pursuit.

School zones inquiry

On 26 August 2011 the Joint Standing Committee on Road Safety (Staysafe) established a parliamentary inquiry into NSW school zones to determine whether current measures are effective and if more could be done to optimise safety. The RTA contributed to a whole-of-government submission.

Road safety technology

The Centre continued to develop an Intelligent Speed Adaptation smart phone application. Prototype development and testing were carried out over the reporting period.

Trial of a new smart camera to help reduce pedestrian trauma continued in Wollongong. The cameras automatically detect pedestrian and vehicle crashes and near crashes. The outcomes of the trial will inform the development of countermeasures.

The Zero Fatalities project started in October 2011 and will identify strategies to reduce RTA employee risk on the job. Analysis of RTA Ensafe data began, with a focus on car-related injuries.



Electronic work diaries for heavy vehicle drivers

NSW law requires drivers of heavy trucks, when travelling 100km from base, to record their hours of work and rest in a work diary. National heavy vehicle fatigue laws allow the use of an electronic work diary as an alternative to a written work diary.

A pilot of electronic work diaries is underway, managed by the RTA Freight Branch with funding, input and support from the Centre for Road Safety. Funding of \$5 million over three years is under the NSW Government's \$170 million Road Toll Response Package. The pilot is in partnership with the Australian Government and National Transport Commission together with the road and police agencies of Queensland, Victoria, South Australia and Western Australia.

After engagement of Transport Certification Australia to carry out the pilot, Stage 1 began in July 2011 and included nine transport operators, 27 vehicles and 10 suppliers of pilot systems. NSW and Victorian enforcement personnel will conduct testing over six months on key routes to ensure that drivers are gathering accurate data and determine the enforcement capabilities needed in the field.

Supporting the pilot is a website (ewd.gov.au) with comprehensive information for heavy vehicle stakeholders, including media releases, frequently asked questions and links to the jurisdictions and organisations participating in the pilot. The website, which the NSW Minister for Roads and Ports launched in August, also outlines how operators can participate in Stage 2.

Enforcement operations

Between July and October 2011 the NSW Police Force undertook 71 additional operations, valued at around \$3.6 million, through the Enhanced Enforcement Program run in partnership with the RTA. Statewide Operation Slow Down was also conducted with an enhanced budget of \$500,000.

NSW Local Government Road Safety Program

The pilot for a new program delivery model was completed at the end of July 2011. It involved 14 NSW councils carrying out 13 local road safety projects. An experienced road safety expert has been engaged to evaluate the pilot.

Trucking safety

The NSW Government, through its Road Toll Response Package, has allocated \$500,000 over 2010–11 to 2011–12 to investigate the feasibility of a Five Star Trucking Safety Rating System designed to encourage best driving practice and reward those operators who foster safe driving. To progress investigations the Road Freight Advisory Council formed a Five Star Trucking Safety sub-committee which is jointly chaired by industry and the Transport Workers Union. To date the industry led sub-committee has completed research into existing accreditation schemes and industry codes of practice and examined the potential risks and benefits of implementing safety rating systems.



Environment

RTA result: Impacts on the natural, cultural and built environments are minimised

The RTA and the environment

The RTA aimed to minimise the impact on the natural, cultural and built environments in all of its activities. Work ranged from improving the organisation's environmental footprint, to reducing emissions from vehicles and protecting threatened species and biodiversity during roadwork. The RTA also had statutory responsibilities to assess the environmental impact of its infrastructure projects as part of the planning process.

This chapter outlines the RTA's measures to minimise impact on the environment over the 1 July to 31 October period. It is divided into three main sections:

Infrastructure – environmental initiatives related to construction and maintenance of roads and bridges.

Organisational – internal measures to improve the RTA's use of resources.

Emissions – cutting down emissions from vehicles.

Infrastructure

Heritage policy review

The RTA updated its Procedure for Aboriginal Cultural Heritage Consultation and Investigation in response to amendments to Aboriginal heritage legislation. The revised procedure presents RTA policy on engaging Aboriginal knowledge holders and community members in making decisions about impacts to their heritage during development projects.

An Unexpected Finds Procedure, to come into effect in November 2011, was developed to guide the management of Aboriginal and non-Indigenous heritage found during road construction works. Such discoveries can disrupt construction and also pose risks to archaeological heritage. The procedure guides operational staff on how to meet statutory requirements most efficiently and ensure effective management of archaeological heritage.

Noise abatement

The Noise Abatement Program focuses on homes, schools, hospitals, churches and other noise-sensitive buildings exposed to high levels of road traffic noise using, most commonly, acoustic architectural treatments.

The RTA engaged a contractor to measure the traffic noise levels at four residential buildings before and after architectural treatment under the program for quality assurance purposes. The results will help improve treatments and achieve maximum noise reduction benefits.

Environmental performance

Efforts by the RTA to improve the environmental performance of contractors centred on a combination of environmental inspections, audits and performance reviews. Between 1 July and 31 October 2011 regional environment staff undertook almost 300 separate environmental inspections on a range of construction and maintenance projects across the State. The reports generated from these inspections were analysed for the RTA's Executive Environment Committee. Feedback then went back to contractors on their environmental performance and reports were prepared on statewide performance.



Environment protection licences

The *Protection of the Environment Operations Act 1997* requires the RTA to hold environment protection licences for certain activities. In the reporting period the RTA held 13 such licences for the following activities:

Project/site name	Licensed activity
Mortlake slipway	Marinas and boat repair facilities
Ashby dry dock	Marinas and boat repair facilities
Rockdale depot	Transport of waste
Mewburn's gravel quarry	Hard rock gravel quarrying
Erskine Park Link Road*	Road construction
F5 widening	Road construction
Wagga depot	Transport of waste
Central Coast Highway	Road construction
Hunter Expressway	Road construction
Unanderra waste processing facility	Waste management

* The environment protection licence for Erskine Park Link Road was transferred to NACE Civil Engineering Pty Ltd on 19 October 2011. For the period the RTA held the licence, there were no non-compliances reported.

Monthly reporting on other projects, where required, found four non-compliances with licence conditions between July and October 2011. These are being addressed through the audit and inspection process to prevent recurrences and improve environmental performance.

Penalty notices

To 31 October 2011 the RTA had received one penalty notice from the Environment Protection Authority. This was for polluting waters during a channel clearing project in Southern Region in July 2011.

Protecting biodiversity

Biodiversity is the variety of life forms, including different plants and animals and the genes they contain and the ecosystems in which they live. Australian ecosystems contain many species found nowhere else in the world, with roadsides often containing important biodiversity that is rare in the surrounding landscape. The RTA was committed to the protection of biodiversity in roadsides and considered biodiversity issues carefully during route selection and road design for all infrastructure projects.

Biodiversity protection is achieved through the development, review and implementation of environmental impact assessment policies, guidelines and procedures and stringent environmental specifications; regular environmental inspections of construction sites; and environmental awareness training for RTA staff and council workers. The table below outlines how the RTA protected and enhanced biodiversity during the reporting period.

TABLE 9. BIODIVERSITY PROJECTS

Activity	Purpose	Progress
Develop measures to minimise road impacts on biodiversity.	Manage wildlife on roads.	The RTA investigated potential options to reduce roadkill in Pittwater and Warringah local government areas. The July 2011 <i>Northern Beaches Roadkill – Advice on Reduction Options Report</i> evaluated short and long-term measures. Some short-term measures have been implemented.
Develop biodiversity guidelines for protecting biodiversity during construction and maintenance works.	Provide best practice guidance and encourage consistency across NSW in protecting biodiversity during construction and maintenance work.	Biodiversity guidelines for protecting and managing biodiversity on RTA projects were published in September 2011 and made available on the RTA internet in October. Training based on the guidelines continues in all RTA regions.
Monitor the effectiveness of measures to allow threatened squirrel gliders to move across the Hume Highway.	Minimise impacts on biodiversity.	The RTA continued to support a joint research project with VicRoads and the University of Melbourne to determine the effectiveness of fauna crossings for roads. Results to date, which indicate crossing use by squirrel gliders, will inform the design of crossing structures for other RTA projects.



Roadside environment

The RTA continued to support the Roadside Environment Committee, funding its secretariat and meeting costs over July to October 2011. The committee aims to achieve the best possible environmental management of roadsides and other linear reserves such as rail corridors, travelling stock reserves, crown reserve and utility easements in NSW.

Its member organisations are:

- Catchment management authorities.
- Essential Energy.
- Institute of Public Works Engineering Australia.
- Land and Property Management Authority.
- Livestock Health and Pest Authorities.
- Local Government and Shires Association of NSW.
- Nature Conservation Council.
- Office of Environment and Heritage.
- RailCorp.
- Roads and Traffic Authority of New South Wales.
- Rural Fire Service.
- TransGrid.

Key committee achievements for July to October 2011 included:

- Sponsoring a pilot roadside environmental training program for local council staff that was implemented under the Hunter and Central Coast Regional Environmental Management Strategy.
- Identifying and mapping NSW local councils using roadside vegetation management plans.
- Presenting on linear reserve environmental management and the Roadside Environment Committee's role at a meeting of the Central West Local Government Reference Group held at Wellington involving 14 local councils and the Central West Catchment Management Authority.
- Holding a regional committee meeting with Bathurst Regional Council to review local roadside vegetation management plans, engage further with local stakeholders, inspect local linear reserves and discuss ways to improve linear reserve environmental management in the district.
- Sponsoring and assessing applications for the inaugural Excellence in Local Government Roadside Environmental Management Award in the Excellence in Local Government Awards.

Bridge timber recycling

In October 2011 the RTA started approving private companies to undertake environmentally sound recycling of bridge timbers, ending seven years of timber stockpiling across NSW. This situation had resulted from the potential contamination of bridge timbers and uncertainty on acceptable treatment methods. Timbers will now be safely treated and sold to the private sector, generating a positive return for the NSW Government while preventing waste.

Training

Biodiversity training rollout

The internally developed one-day training course on managing and protecting biodiversity was delivered to all RTA regions in 2010–11. The training assists RTA staff and contractors in managing biodiversity throughout road and maintenance projects.

From July to October 2011 training was delivered at:

- Grafton.
- Newcastle.
- North Sydney.
- Parkes.
- Wollongong.
- Woy Woy.

Organisational

Waste reduction

In August 2011 the RTA submitted a progress report to the Office of Environment and Heritage on the implementation of its Waste Reduction and Purchasing Policy. Table 10 summarises the results.

Overall the RTA has already met or exceeded the 2014 recovery targets for vegetation and construction and demolition waste, except asphalt. Actions have been put into place to improve asphalt recovery. These include amending RTA construction specifications to permit higher levels of reclaimed asphalt pavement to be used and negotiating a new asphalt resource recovery exemption with the Environment Protection Authority to facilitate the re-use of asphalt.



TABLE 10: WASTE REDUCTION PERFORMANCE AGAINST NSW GOVERNMENT TARGETS

Waste type	RTA waste recovery % rates (2010–11)	NSW Government waste recovery % targets to be met by 2014
Vegetation	85	76
Concrete	92	76
Steel	88	76
Asphalt	90	95
Virgin excavated natural material	96	95

Some of the waste recycling initiatives since the last progress report included:

- The earmarking of timber cleared for the Pacific Highway Upgrade in the Hunter for future use on Roads and Maritime Services heritage bridges.
- Planned use of about 200,000 tonnes of fly ash or bottom ash as a grout ingredient in the mine filling operation in the Stage 2 construction of the Hunter Expressway. This represents a substantial reuse of a waste product from electricity generation.
- Conduct of a trial with Boral on the use of high slag content cement on the Woomargama Bypass. The trial started in August 2011 and will use 100 tonnes of Boral's proprietary product, which contains around 50 per cent less Portland cement than traditional mixes.

Emissions

Reducing vehicle emissions

The vehicle emission enforcement system seeks to improve air quality by detecting and taking enforcement action against vehicles in the M5 East tunnel which continuously emit smoke for longer than 10 seconds. A replacement of system components has resulted in a significant improvement to overall performance. Further gains are anticipated when the RTA proposal for system improvement finalised over July to October 2011 receives approval.

Expansion of the system to other tunnels or on-road sites is under consideration. An air quality report commissioned by the RTA will be available in November to inform the expansion strategy.

Diesel Retrofit Program

The RTA continued to work with the Office of Environment and Heritage to improve the emissions performance of heavy diesel vehicles by fitting after-treatment devices to vehicle exhaust systems to filter out particulate matter.

The Phase 4 program, under which the vehicle operator paid half of the cost of installation of an exhaust after-treatment device, was completed in late September. In total 165 devices were installed. The Phase 5 program for non-road vehicles continues and, as at 31 October 2011, 31 devices had been fitted.

The RTA also funded a separate diesel retrofit program to fit devices to heavy vehicles accessing Port Botany, Port Kembla, Port of Newcastle and Cooks River Rail Yard to help the NSW Government meet national air quality goals. At 31 October 2011 58 devices had been fitted.

Action on climate change

The RTA's Climate Change Action Plan included a range of measures to:

- Reduce the RTA's carbon footprint.
- Help reduce the carbon footprint of NSW road transport.
- Adapt the RTA road transport system to the impacts of climate change.
- Manage the RTA's transition to a low-carbon economy.

Key actions in the reporting period included:

- Submission of the annual report on RTA greenhouse emissions from fuel and electricity use to the NSW Government. In 2010–11 the RTA's greenhouse gas emissions were 107,649 tonnes of carbon dioxide equivalent or CO₂e. This 1.9 per cent reduction on 2009–10 levels was primarily due to an 8.8 per cent reduction in petrol use by the RTA light vehicle fleet and a 3.7 per cent reduction in traffic signal energy use.
- Completion of Stage 2 of the RTA Road Corridor Carbon Landscape Project. Stage 2 involved developing a carbon stock inventory for state and regional roadside corridors and assessing opportunities to reduce the RTA's carbon footprint through landscape management initiatives.
- Introduction of new eco-driving scoring criteria for driver licence testing to support the eco-driving information previously added to the *Road Users Handbook*.



Services

RTA result: Meeting community needs

The RTA's services

The RTA worked to meet the needs and expectations of its broad range of customers and stakeholders, such as those who use its licensing and registration services and those who are affected by the RTA's roadwork and management of the NSW road system.

The RTA provided its services in many ways, including through an extensive network of motor registries which are the central point for licensing and registration transactions. This network also provides important information to the community about issues such as the comparative safety of new and used cars and the safety and ease of use of child restraints.

This chapter outlines how the RTA has worked to meet the needs of the people of NSW over the 1 July to 31 October period. It is divided into two main sections:

Customers – accessible, high quality, data integrity and identity management.

Stakeholders – a focus on effective consultation, communication and partnerships.

Customers

Online service improvements

In August 2011 RTA system changes allowed electronic processing of vehicle inspection reports for heavy vehicles and unregistered light vehicles. As a result customers no longer have to attend a motor registry to complete these transactions. The same month also saw the implementation of the Online Replacement System, which enables customers to order a replacement certificate of registration or renewal notice for their vehicle online.

Livestock loading calculators

The RTA worked with the livestock transport industry to improve their productivity, focusing in particular on helping operators load their vehicles so they can reliably meet regulatory limits. One of the outcomes to date has been the publication on the RTA website in July 2011 of the Livestock Loading Calculator. A tool to assist operators to comply with mass limits, the calculator is for working out cattle or sheep loads on 6-axle single trailer combinations and 9-axle B-double combinations.

Live Traffic NSW

Motorists can use the Live Traffic NSW website (livetraffic.rta.nsw.gov.au) to look up information about incidents, roadwork and major events and view images from 66 live traffic cameras updated every 60 seconds. From 1 July to 31 October 2011 there were 889,568 visits to the website.

To extend its reach, the RTA launched the Live Traffic NSW iPhone app and mobile site in July 2011. In the reporting period 84,542 road users downloaded the free app. A free data licence was later created to let members of the public use the information from Live Traffic NSW to develop apps for other formats such as Android and BlackBerry phones. Information from Live Traffic NSW is also available on Facebook and Twitter. All these initiatives are designed to make travel as hassle-free as possible by giving road users the latest information via the latest communication technology.

Safer Roads website launch

Launched in July 2011, the Safer Roads website (saferroadsnsw.com.au) allows road users to record their concerns with existing speed limits and signs and access information on speed management-related topics.



Phase 2 of the site, which went live in October 2011, extended interactivity by enabling them to sign up for emails about changes to permanent speed limits in chosen regions. To date the site has notched 27,000 visits, collected 2,600 submissions about speed limits and signs and signed up 643 people for email notifications.

Aboriginal information

Information for the Aboriginal community became easier to access on the RTA website in August through links to specific areas of the site covering road safety, licensing and registration, cultural heritage management, service delivery and employment.

Online customer satisfaction survey

A new online customer survey launched in October is enabling the RTA to gather improved customer feedback on their online experience. An average of 4,200 customers per month are completing the survey after an online transaction, with around 96 per cent giving the RTA a positive satisfaction rating.

Botany rider training facility

An upgrade of motorcycle rider training facilities at Botany was completed at the end of September. While the previous facilities allowed training for around 1,200 applicants per annum, the new upgraded venue will be capable of training more than 5,000 applicants per annum. It will operate seven days a week.

Road and Fleet Services

The RTA's Road and Fleet Services (RFS) completed a number of projects with significant customer and public benefits during the July to October 2011 period, including:

- Delivery of a resurfacing workshop at Coffs Harbour with local councils and the private sector to discuss best practice and technologies for bitumen sealing.
- Completion of major repairs to the historic Hampden Bridge in Kangaroo Valley with positive public feedback on the way the project was managed.
- Achievement of a significant milestone on the Kariiong Underpass project with a traffic switch to the new carriageway.
- Promotion of safety first by stopping all RTA asphalt works across NSW for one day in late August to allow contractors to 'Stop and Reset' their safety systems following a serious incident.

In commercial work for other government agencies, RFS began highly specialised reconstruction of a dam wall at Wingecarribee Dam for the Sydney Catchment Authority and built and delivered two state-of-the-art line-marking vehicles to the Queensland Department of Transport and Main Roads.

Improving E-Toll customer service

The RTA embarked on a comprehensive 12-month program to improve the customer experience when accessing E-Toll products and services online, by phone or in motor registries. From July to October 2011 the agency:

- Addressed frequent phone inquiries about account statements by removing confusing wording on statements to make them easier to understand.
- Simplified the log-in to myE-Toll to make customer access quick and convenient.
- Identified the top 10 customer inquiries handled at the motor registries and provided staff with simpler processes and ready reference cards for assisting customers.
- Developed a Customer Commitments document for staff to emphasise the organisation's dedication to meeting and exceeding customer expectations.

Stakeholders

Prosecutor education

The NSW Police Force has offered RTA court advocates the opportunity to participate in the 12-month Police Prosecutor Education Program designed to strengthen legal knowledge and advocacy skills. Participation will enhance their ability to undertake complex prosecutions of camera detected offences, administrative appeals and heavy vehicle matters in the Local Court. On completing the program court advocates will receive the highly regarded Police Prosecutor Education Program Certificate. The first RTA participant began training in October 2011. Further places in the program will be offered in 2012.

Regional road safety consultation

Infrastructure Communication partnered with the RTA's Southern Region to engage Braidwood residents and Kings Highway users in sharing their ideas on roadside hazards. The RTA compiled all the responses received during the submission period through the online forum – the first run regionally on road safety – and via email, telephone and post and the community workshop. An issues report was then released for comment.

Private sector developments

In August 2011 the RTA published a new private developments fact sheet on the Road Projects website to answer commonly asked questions about managing private developments that include roadwork on State roads and traffic control signals on all roads. The fact sheet serves as a resource for RTA land use and development staff, the development industry and interested community members.



Governance

RTA result: Aligning our investment and people to our vision

Governance of the RTA

The RTA was one of Australia's largest asset managers and services providers, with a multi-billion-dollar budget servicing millions of customers, communities and stakeholders. For this reason, the RTA sought to uphold the highest standards of organisational governance, which included sound strategic planning and performance management across its business.

This chapter outlines how the RTA has worked over the 1 July to 31 October period to strengthen organisational governance. It is divided into three sections:

Financial – business opportunities, accountability and performance.

Organisational – executive, strategic and business planning, business improvements, audit/assurance and risk management.

Our people – including developing a high performance culture, workforce capability, diversity and equity and occupational health and safety (OHS).

Financial

Financial strategy

The strategy continued to focus on enhancing business efficiency and risk management across all RTA operations while the Finance Strategy Committee controlled the direction of funding allocations, and review of program and resource budget performance.

The following key reporting and review activities supported the financial strategy:

- **Financial reporting:** Reform of the RTA's financial reporting framework continued with the goal of enhancing the ability to meet the information requirements of all stakeholders as well as accurately describing the day-to-day activity undertaken to achieve community and business results. The RTA's financial dashboard provided important business information to the RTA Executive and senior management.

- **Policy and procedure review:** Accounting processes were reviewed to enhance the integrity of financial data supporting RTA decision-making.
- **Corporate framework:** The RTA monitored expenditure against the *NSW 2021* goals for which it was a lead or partner agency, tracking funding budgets and budget movements together with the reasons for any changes. Actual expenditure was closely monitored.
- **Strategic investment:** With oversight from the Finance Strategy Committee, the RTA's Commercial Services Directorate pursued business opportunities to improve services and generate additional resources for investment in road and service delivery programs.

Corporate and purchasing cards

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



Financial performance

Details of the RTA's financial performance for the four months ending 31 October 2011 appear in the Financial Statements (see page 44).

Pink plates sponsorship extended

In October 2011 the RTA extended its sponsorship of the McGrath Foundation until June 2012. The sponsorship donates part of the proceeds of the sale of all pink number plates to the McGrath Foundation, which places breast cancer care nurses in communities across Australia and promotes breast cancer awareness. To support the sponsorship, myPlates ran a 'Pink Your Ride' campaign in October, which was Breast Cancer Awareness month. The RTA has raised more than \$150,000 for the McGrath Foundation since becoming a sponsor in April 2009.

The myPlates business also supports the Prostate Cancer Foundation through the sale of blue number plates.

Rental car tolling

In September 2011 the RTA partnered with Thrifty Car Rentals to trial the RTA's rental car tolling solution, which gives customers seamless and easy access to motorways across Australia for a modest fee. Tags installed in Thrifty vehicles ensure that customers in the trial will not receive toll or associated fee notices for their travel. Thrifty benefits through the elimination of administrative costs for handling toll notices. The trial follows the successful partnership between Avis/Budget and the RTA, which has given Avis/Budget customers the same tolling solution for more than 12 months across 35,000 vehicles nationally.

Organisational

Executive

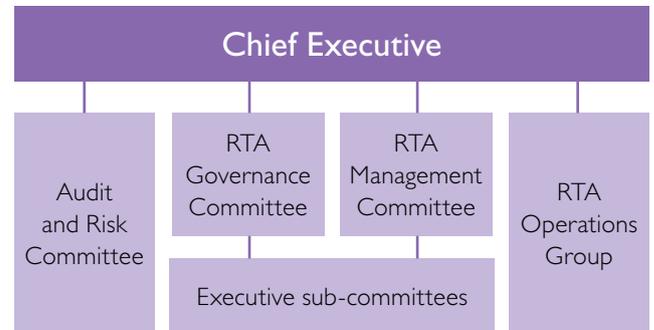
The RTA Chief Executive managed and controlled the organisation's affairs subject to the direction of the Minister for Roads and Ports, or the Minister for Transport, and any directions by the Director-General of the Department of Transport. The Chief Executive was accountable to the Minister for Roads and Ports and NSW Parliament for the RTA's overall performance and compliance.

Executive framework

The management of the RTA received support over the reporting period from the newly established RTA Governance Committee, the RTA Management Committee and a range of executive committees.

Under the new approach to governance instituted in 2010–11 there were a number of innovations to ensure the flow of appropriate information to these committees. Figure 4 below shows the relationship between the organisation's peak committees.

FIGURE 4. RTA COMMITTEE STRUCTURE



For more information about organisational governance, including the organisational structure, see pages 10–11.

Governance

The Governance Branch continued to lead implementation of the governance framework in close partnership with the Executive and operational staff. The framework identifies the elements central to managing and monitoring the RTA. It was continually improved in response to the findings of an annual governance survey of the RTA Executive and senior management.

Risk management

The RTA had a well-established, enterprise-wide risk management framework based on ISO 31000 but tailored to the organisation. An annual report was prepared for the Audit and Risk Committee to demonstrate the effective implementation of the framework and its alignment with ISO 31000. This report also provided evidence to support the statement of compliance with NSW Treasury's TPP 09-5: Internal Audit and Risk Management Policy for the NSW Public Sector.

The RTA undertook an annual high level risk assessment as part of its business planning cycle, which informed the organisation-wide risk profile presented to the Audit and Risk Committee and the Executive for endorsement.

Audit and Risk Committee

The Committee met at least four times each year and provided independent assurance to the Chief Executive that the RTA's risk and control frameworks were operating effectively and that related external accountability requirements were being met.



Internal audit/assurance

Department of Transport

As part of integrating with the Department of Transport, the RTA was involved in new transport-wide initiatives in audit and assurance. Projects included:

- Piloting coordinated shared audits across the Department's operating entities.
- Implementing a new audit and risk database in cooperation with the Department to facilitate consistent audit and risk-related reporting.

Engineering

A major slice of the RTA's operations was engineering-related. The Engineering Assurance Group undertook independent assessments of civil engineering operations based on the development and implementation of a risk-based audit program covering the organisation's major engineering programs, projects, systems and products.

A major review was carried out in the reporting period of the Central Coast Region's road program. The review made a number of recommendations including a more formal needs analysis of the region's road network for strategic project planning, additional program status reporting to senior management and assessment of contract packaging options to ensure that value for money is achieved.

Audits were prioritised on the basis of identification of major operational risks and assessment of the controls in place to address these risks. In consultation with line management, audits resulted in the identification and implementation of a range of improvements to engineering operations.

Customer and regulatory services

The RTA regularly monitored motor registry operations, other service delivery channels and back office functions supporting customer and regulatory services. Lessons learned were incorporated in the risk management program.

Information technology

IT audit staff maintained membership of a range of internal steering committees and working parties, which enabled them to focus on critical IT issues. They advised on projects identified as high risk and also worked closely with business units on risk assessments of new IT initiatives, system purchases and developments. Major reviews over the reporting period included a review of the Special Number Plates Program and post-implementation reviews, for example, of the Westpac Integrated Banking Server.

Finance and operations

Key audits for the reporting period included:

- Employee self-service timesheets and leave administration.
- Superannuation remittances.
- Procurement audits: themes and trends.
- Sydney Traffic Services procurement.
- Infrastructure communication procurement.
- Corporate communication procurement.
- Traffic management procurement.
- Newcastle Administration Centre.
- Sydney Business Service Centre accounts payable.

Corruption and fraud investigations

The RTA's Corruption and Fraud Investigations Section managed the organisation's relationship with the Independent Commission Against Corruption, undertaking or overseeing internal corruption and fraud investigations, as well as investigations into serious maladministration and serious/substantial waste. It also oversaw the RTA's corruption and fraud control framework.

Key achievements for the reporting period included:

- Detailed assessment and investigation of allegations.
- Meeting of legislative obligations under the *Independent Commission Against Corruption Act 1998*.
- Meeting of legislative requirements under the *Public Interest Disclosures Act 1994*.
- Delivery of corruption prevention training to new staff.



Internal audit and risk management attestation statement

End of agency report for the Roads and Traffic Authority, NSW (July to October 2011)

I am of the opinion that the Roads & Traffic Authority, NSW has internal audit and risk management processes in place that are, in all material respects, compliant with the core requirements set out in Treasury Circular NSW TC 09/08 *Internal Audit and Risk Management Policy*. As a consequence the senior management of the Roads & Traffic Authority are able to understand, manage and monitor the organisation's risk exposures.

I am also of the opinion that the Audit and Risk Committee for Roads & Traffic Authority is constituted and operates in accordance with the independence and governance requirements of Treasury Circular NSW TC 09/08. The Chair and members of the Audit and Risk Committee are:

1. Greg Fletcher, independent chair
2. Dr Elizabeth Coombs, independent member
3. Michael Ellis, independent member
4. Peter Wells, Director Regulatory Services, internal member
5. Geoff Fogarty, Director Infrastructure Services, internal member

In addition, I note the following as per Section 1.2.8 of TPP09/05:

The department head or governing board of the statutory body is required to set out which service delivery model for the Internal Audit function has been established in the department or statutory body, including the reasons for establishing that model, in the annual Attestation Statement required by the Policy.

In this regard the RTA's Governance Branch has adopted a 'co-sourced' service delivery model, as defined in the policy, ie:

...co-sourced service delivery with in-house management, where the department or statutory body provides and manages internal audit services through a combination of in-house resources and contracted services delivered by an appropriately qualified third party provider.

A major reason for this is related to the diverse nature of the RTA's operations, ie they include a strong focus on large infrastructure projects as well as a strong front-line community presence in regard to, for instance, the licensing of road users and registration of vehicles for use on the roads. In conjunction with the current climate of rapid technological change this means that, to effectively manage its major risks, a wide range of technical engineering, financial and ICT audit and risk expertise is required. My view is that a co-sourcing model is the most effective and efficient way to procure this.

Peter Duncan
Chief Executive

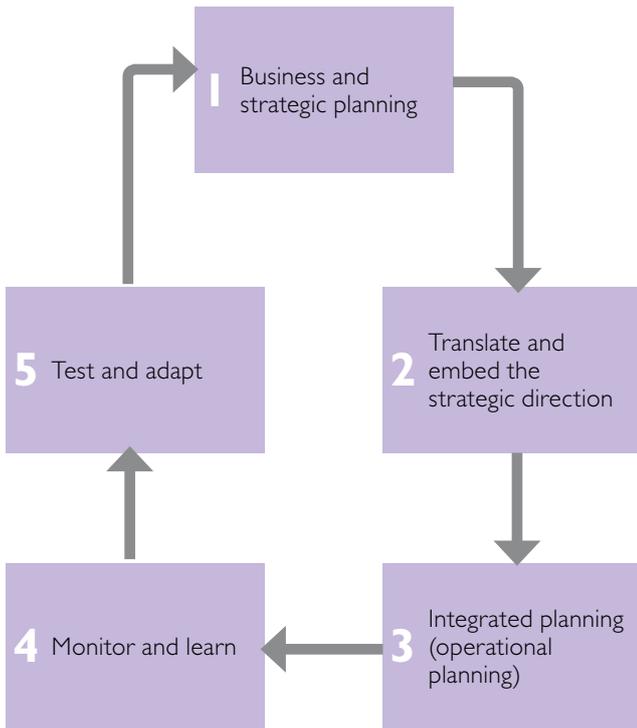


Delivering priorities

The RTA planning and performance cycle

The RTA used a cyclical approach to planning and performance, as shown in Figure 5, to deliver integrated planning, drive improvements in performance and ensure a focus on continual improvement. This approach was consistent with the Department of Transport performance cycle.

FIGURE 5. RTA PLANNING AND PERFORMANCE CYCLE

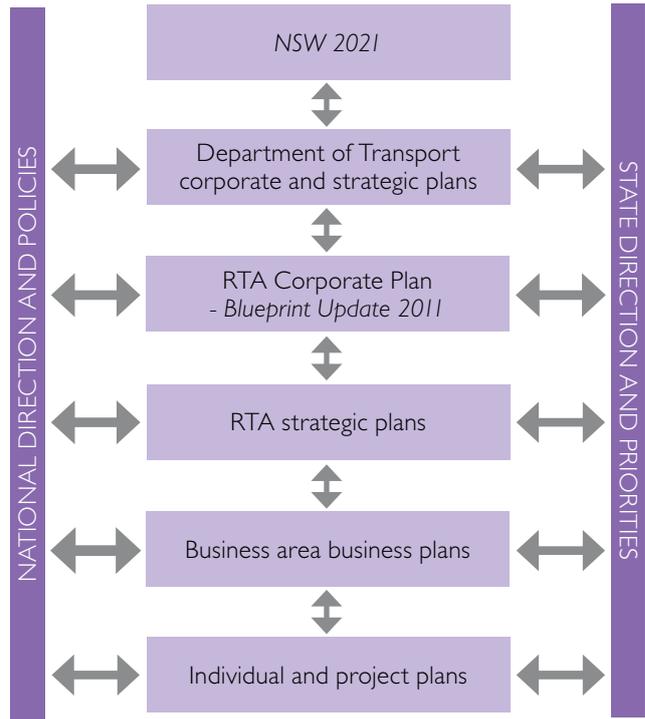


Integrated planning

Integrated planning ensured that the RTA's strategic direction was cascaded through the organisation to establish clear lines of accountability and delivery. As shown in diagram 6, the RTA developed its corporate plan in the context of the NSW Government's overarching 10-year plan, *NSW 2021*, and Department of Transport plans. Priorities then flowed down to business areas and project plans.

The RTA's strategic direction and planning was also driven through the corporate framework (see pages 8-9), which defined the RTA's high level results and priorities, and was an integral component of the corporate plan. It set the strategic direction that was filtered through layers of integrated plans to ensure a focus on achieving the RTA's results. The RTA corporate plan, business plans, operational plans and some individual plans were linked through the common language of the RTA's results.

FIGURE 6. RTA SUITE OF INTEGRATED PLANS



NSW 2021

The RTA had clear accountabilities under *NSW 2021*: reduce travel times, grow patronage on public transport by making it a more attractive choice, improve road safety, invest in critical infrastructure. Progress towards goals was measured by achievement of targets which had linked priority actions.

Our people

Recognising achievement

RTA staff shone in the short period covered by this report at:

- The NSW Service Medallion Ceremony where 82 RTA staff members received the award for meritorious service in excess of 40 years.
- The 2011 RTA Staff Awards, which recognised staff who have made an outstanding contribution to the organisation.
- The Asia Pacific Successfactors Conference where the RTA Human Resource Strategy Metrics Team won the 2011 Return on Integration Award.



Recruitment and employment

Graduate recruitment for 2012 was finalised in September 2011. The RTA recruited a total of 45 graduates from various disciplines including engineering, public policy, finance and accounting and computer science.

The RTA Aboriginal Employment Strategy and Aboriginal Employment DVD were launched during NAIDOC week on 7 July 2011.

Occupational health and safety

The table following shows the RTA's performance against statistical indicators over the reporting period.

TABLE II. OHS STATISTICAL INDICATORS

Performance indicator	2008–09	2009–10	2010–11	% change on previous year	1 July–31 Oct 2011
Near misses reported ⁽ⁱ⁾	419	760	2,721	258	1,089
Lost time injuries	156	193	165	-15	56
All other injuries (incl. first aid only)	800	888	1,113	25	362
Other incidents reported (excl asset/property damage)	93	99	111	12	28
Total incidents reported	1,468	1,940	4,110	112	1,535
Near miss: injury ratio	0.44	0.7	2.21	216	2.6
All compensable injuries (incl. journey claims)	377	470	423	-10	130
Total claims costs (\$ million)	2.7	3.2	2.2	-31	0.7
Compensable workplace injuries	352	418	357	-15	109

(i) The reporting of near misses identifies hazards before they can potentially cause injury. The RTA continued the 'Our Safety' campaign to reinforce the need for staff to report near misses, and the increase in near misses reported can be attributed to this.

Prosecutions

Between July 2011 and 31 October 2011 there was one prosecution for breach of the *Occupational Health and Safety Act 2000* for an incident on 14 October 2008 on the John Foord Bridge. The RTA entered an early plea of guilty and was fined \$175,000.