

Customer

The customer is at the centre of everything we do

RMS provides a range of services to customers such as vehicle and vessel registration and licensing, supplying up-to-date and accurate travel time information, and delivering traffic alerts and updates. RMS strives to engage with customers and the community to understand their needs and consider these when making decisions that impact them.

Keeping customers informed

Providing real time travel time information

The travel time information service that displays real travel time information to road users on variable message signs was expanded in 2011-12 to the Westlink M7 and Western M4 motorways in Sydney.

As a partnership initiative with the Transport for NSW Transport Management Centre, the service allows motorists to monitor travel flow and make informed decisions on route choice during their journey.

Live Traffic NSW

The Live Traffic NSW website (www.livetraffic.com) provides road users with the latest traffic information about incidents, road works, major events, fires, floods and alpine conditions. Access to camera images, travel times and trip planning helps motorists plan their journeys and make informed travel decisions. The latest communication technologies are utilised for Live Traffic NSW, with the mobile version of the site and iPhone application gaining in popularity. Twitter and Facebook pages for the site also keep the public up-to-date about road conditions and events

During the NSW floods in March 2012, the website proved invaluable to motorists with site visits reaching almost 900,000 for the month.

Since November 2011, total visits to Live Traffic NSW have exceeded three million.

Road Projects website

In 2011-12, there were around 1.9 million page views by 185,000 unique visitors to the Road Projects section of the RMS website, which provides roads project and maintenance information. The site now publishes more than 15,000 documents, images and multi-media assets.

Online presence was increased over the past 12 months through projects involving innovative social media tools, including:

- A live webcast for the Pacific Highway upgrade program.
- · An online guestbook, 'Tell us your story', for Sydney Harbour Bridge 80th anniversary.
- An interactive community issues mapping tool for the Kings Highway Safety Review.

Boating weather information

RMS provides a weather forecast telephone service on 131 236. This initiative is part of the RMS boating safety objective to raise boaters' awareness of the need to check the weather and to check it often. A total of 17,568 calls were received between 1 November 2011 and 30 June 2012.

Maritime alerts

RMS' Maritime Alert system helps boat owners and rock fishermen in their trip planning and preparation. The free online email subscription service delivers weather alerts and expiry date reminder emails for important safety gear such as marine flares, emergency position indicating radio beacons and inflatable lifejackets.

As at 30 June 2012, 1482 people had subscribed to the Maritime Alert service to receive weather alerts. and 22 people had subscribed to receive alerts about the expiry dates for their safety equipment or other important renewals.

Responding to customers

Maritime Infoline

The Maritime Infoline operates seven days a week, including public holidays. It provides important services to the public, including boating and weather information, customer service feedback, payment of renewals and map purchases.

The call centre responds to calls for assistance from the general public, police and volunteer marine rescue, and supports on-water Boating Safety Officers via two-way radio. It also allows RMS to respond quickly to feedback and on-water issues to support a culture of safe

and responsible boating. There was a decrease in the number of calls taken during 2011/2012, which can be attributed to the improvement and ease of online transactions.

Newcastle Contact Centre - Info Line

Last year the Newcastle Contact Centre Info Line helped more than 3.7 million customers over the phone and by email with registration, licensing, freight, tolling and traffic information. The centre's results this past year reflect an ongoing commitment to customer focus.

Media enquiries

Between 1 July 2011 and 30 June 2012, RMS responded to around 1500 roads media inquiries and prepared around 2000 proactive releases. These figures are exclusive of preparation of issues notes, event management documents, Q&A charts, speeches, parliamentary briefing notes and media strategies.

The Media Unit provided support for internal and external event management, milestone and campaign launches. Members played an integral role in the success of communication campaigns including the two-weekend closure of the Sydney Harbour Bridge for critical road surfacing and waterproofing work.

From 1 November 2011 to 30 June 2012 there were more than 530 maritime-related media actions, which included responses on issues and delivering information through the media to promote a culture of safe, responsible and enjoyable boating in NSW.

Wayfinding signage

In January 2012, RMS released updated guidelines to ensure that brown and white tourist signposting is clear in guiding visitors to their destinations and communicating information on key attractions and services.

RMS worked with Destination NSW and key stakeholders to develop a strategy to provide a range of local and regional information at key rest areas on the Pacific Highway. The successful pilot of the visitor information sign at Paddy's rest area, near Macksville in December 2011, will see this strategy expanded to 10 new locations on the Pacific Highway by the end of October 2012.

RMS online services

RMS continually updates and expands its online services in response to customer feedback and requirements.

Online transactions

www.myRTA.com

As the leading transactional government website in NSW, myRTA.com allows customers to access a range of services and complete transactions online. Transactions completed online

through myRTA.com significantly reduce RMS operational costs associated with manually processing transactions in registries.

An online video to assist customers to complete online transactions was implemented in 2011 and a further three videos were introduced in June 2012. This has resulted in a considerable increased use of services

In November 2011, a new online service was implemented enabling customers to replace a lost or stolen driver licence or photo card without having to go to a motor registry. By the end of June 2012 approximately 1500 replacement cards had been ordered.

This year 44.9 per cent of eligible transactions (up from 40 per cent in 2010-11) were completed through myRTA.com. This figure represents 4.5 million transactions and \$1.3 billion of payments. The operational saving of transactions completed online rather than in registries in 2011-12 is estimated to be \$5.5 million.

www.maritime.nsw.gov.au

In the last year, 95,521 maritime transactions and \$5.92 million maritime payments were completed through GLS-Online (licence.nsw.gov.au), which is 15 per cent of eligible transactions.

Table 10. RMS website statistics 2011-12

Website	No. of page views	Average length of time on site	Top five pages viewed
Maritime	3.8 m	5 minutes, 18 seconds	Home, boating quiz, How to get a boat licence, Vessel registration, Boating maps
Roads	82.5 m	3 minutes, 3 seconds	Home, myRTA-home, Driver Knowledge Test, myRTA renew\transfer registration, Licensing (car)

E-Toll website upgrades

In March 2012, a new E-Toll website (myetoll.com.au) was launched to make it easier for customers to transact with RMS and find products and services that suit their travel needs. The site now provides more relevant information that customers are asking for, and includes easy-to-use, frequently asked questions to answer common queries.

Maritime web cameras

RMS has 15 webcams installed at coastal bar entrance locations to assist boaters with trip planning. This year RMS began a review of the existing camera network with a view to improving the service for the boating community. In 2012, the webcams attracted 390,376 page views.

Driver Reviver Program goes online

The Driver Reviver Program is a key road safety initiative coordinated by RMS with volunteers from local service groups. The program provides information on driver fatigue and offers free refreshments, provided by major sponsors Bushells and Arnotts, at more than 80 driver reviver sites across NSW.

In April 2012, an interactive statewide driver reviver map was launched online. The map provides road users with improved access to information on the location of rest areas and driver reviver operating times to assist them in planning their journey. The information is updated with current times for each set of public holidays and public school holidays.

Restricted Access Vehicles map

On 5 June 2012, RMS launched the new online Restricted Access Vehicles map, providing heavy vehicle customers with an online iourney planning tool. Stakeholder consultation was carried out for the development of the map, including presentations of the service to the Road Freight Advisory Council and the Transport Operations Liaison Group. The interactive map provides an active depiction of the location of road network restrictions to assist the heavy vehicle industry plan journeys complying with approved routes. From its launch to 30 June 2012, the map service received more than 2000 visits. Delivering our services.

Delivering our services

From November 2011 to June 2012 we carried out the following activities:

- Completed a pedestrian underpass in November 2011 on the Central Coast Highway connecting the new high school at Kariong with the residential area, eliminating the need for children to cross the highway directly. The design was modified to improve visual appeal and public feedback has been positive.
- Replaced the Lawrence Ferry on the Clarence River to ensure we continue to reliably get our customers where they want to go.
- Supported the efficiency of Sydney Buses operations by completing major bus depot reconstructions that suit the needs of their fleet.
- Partnered with Transport for NSW (TfNSW) to deliver timely and responsive incident management services for more than 14,000 road incidents.

• Established a new facility just north of the Hawkesbury River to provide a full-time incident response service for the F3 Freeway, including two traffic commanders, light and heavy tow trucks, and shared access for emergency services.

Providing selected maritime services at RMS motor registries and Government **Access Centres**

All RMS motor registries and Government Access Centres provide selected maritime services, including boat licence knowledge tests and the receipt of payment for boat licences, moorings and vessel registrations. During the year, 32,606 renewal transactions and 2503 licence tests were conducted at these centres.

Heavy Vehicle Knowledge Tests

A project to merge the Heavy Vehicle Knowledge Tests was successfully implemented in May 2012. Ten different knowledge tests for the various heavy vehicle licence classes were merged into four tests, simplifying the knowledge tests for drivers and instructors, and resulting in cost savings for RMS and road users.

'Fair go for Safe **Drivers' initiative**

As an election commitment, the Premier announced that safe drivers who have a driving record free of an offence for at least five years would be eligible for a 50 per cent discount on their licence renewals. Work was progressed for the 'Fair Go for Safe Drivers' initiative that was implemented on 1 July 2012. Eligible customers renewing on or after 1 July 2012 receive a discount on renewal of a licence.

Document Verification Service

The Document Verification Service was successfully piloted at Liverpool Motor Registry in May 2012. The service allows the validity of Australian Passports and citizenship documentation to be confirmed online by registry staff, providing a more efficient service to customers. Additional sites for the service are planned for the first quarter of 2012-13.

Grain auger permits

On 29 June 2012, it was announced that grain auger permits would be extended from one month to 12 months for machinery operating on Western Region roads. The existing one month permits for augers above 25 metres in length did not offer flexibility to deal with delays in grain harvest due to prolonged wet weather. This reduces the need for repeated applications for date changes, which means less red tape and reduced costs for farmers and grain harvest contractors.

Motor registry upgrade program

A number of motor registry upgrades were carried out throughout 2011-12 to refresh and refurbish existing registries. Registries upgraded included Campbelltown Motor Registry (April 2012), Grafton Motor Registry (April 2012) and Muswellbrook Motor Registry (June 2012).

Simplifying tolling services

In response to customer feedback, RMS simplified its tolling products to just three tags and one new pass, known as the electronic motorway user (eMU) pass. In December 2011, the eMU pass was successfully rolled out across hundreds of participating petrol stations and convenience stores along major routes into Sydney. The eMU pass helps make travelling through Sydney as simple as possible for regional motorists and tourists by allowing them to travel hassle-free for up to 30 days.

Easier number plate personalisaton

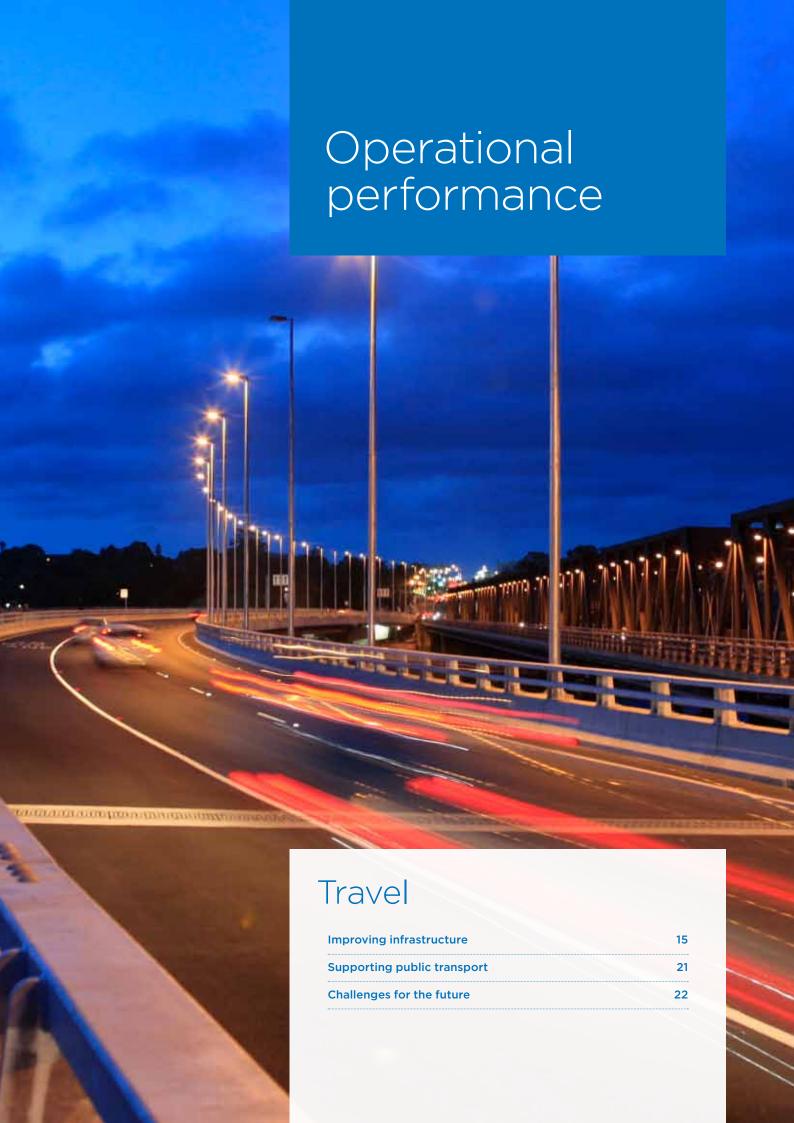
myPlates launched a new 'Bright Lights' range and expanded the options available to heavy vehicle drivers to improve choice. RMS has also reduced the number of different prices for number plate products, released an iPhone application, and updated the website to make it easier for customers to find the number plate that suits them.

New Year's Eve event on the Cahill Expressway

RMS hosted a family-friendly ticketed event on the Cahill Expressway to view the fireworks over Sydney Harbour. During the event the road deck is transformed into a festival village with catering stalls, entertainers and a family atmosphere.

Challenges for the future

- · Develop and implement a replacement brand for myRTA. com to make it easier to interact with us and increase the number of online transactions.
- Review and improve the Live Traffic website to allow the travelling public to register to receive personalised email alerts for hazards on defined journeys.
- Develop an SMS, digital and social media strategy, recommendations and implementation plan.
- · Consolidate maritime customer service centres with motor registries.
- Extend the real time travel time information services on the F3 Freeway and the Sydney Motorway Orbital network, including the M2 Hills Motorway, Lane Cove Tunnel, Gore Hill Freeway, Eastern Distributor, Southern Cross Drive, M5 South-West Motorway, and the Hume Highway between the M7 Motorway and Narellan Road.
- Progress the introduction of a standard route marking system.
- Expand tourist information at rest areas.
- Provide data to Transport for NSW and support them in delivering Integrated Traffic Information System improvements, to enable:
 - Two smart phone apps.
 - A publicly accessible real time bus status data feed for use by smart phone app developers to provide new options for getting trip time information.



Travel

The door-to-door movement of people and goods is efficient and reliable

RMS delivers a range of travel solutions to optimise the movement of people and goods throughout the road and maritime networks. This includes enhancing the existing networks, improving on these networks by putting new infrastructure in place, and by working to optimise the operations of these networks. This includes supporting road-based public transport solutions to move people by the most efficient and sustainable means.

Improving infrastructure

Motorway projects

M2 Motorway Upgrade

The M2 is one of Sydney's busiest road corridors, providing an important link in the Sydney Orbital Network between the M7 Motorway and the Lane Cove Tunnel. It carries around 100,000 vehicle trips and more than 17.000 bus passengers a day.

In 2011-12 works included:

- Excavation for the eastbound M2 Tunnel widening was completed in May 2012.
- · Construction of the new west-facing on and off ramps at Windsor Road was substantially completed and the ramps were opened to traffic in July 2012.
- Construction of the new on and off ramps at Herring Road and Christie Road, Macquarie Park are 70 per cent complete with opening to traffic planned for late 2012.

Other motorway projects

The NSW Government has committed to commencing the next Sydney motorway project by early 2015.

The draft Long Term Transport Master Plan identifies the following Sydney motorway missing links, which are all multi-billion dollar projects:

- M5 East duplication.
- M4 Extension (plus an inner West bypass).
- F3 to M2 Link.
- F6.

Infrastructure NSW is assessing the next priority Sydney motorway and will provide recommendations to Government in the State Infrastructure Strategy in October 2012. Government will consider these recommendations before announcing which motorway will proceed.

Pacific Highway Upgrade Program

The Pacific Highway links Sydney and Brisbane and is part of the National Land Transport Network. The Australian and NSW governments have been jointly funding upgrading of the Pacific Highway since 1996.

The Pacific Highway Upgrade is being delivered in three stages:

- Priority 1: Hexham to Port Macquarie, Raleigh to Woolgoolga and Ballina to the Queensland border.
- Priority 2: Port Macquarie to Raleigh.
- Priority 3: Woolgoolga to Ballina.

The Pacific Highway Upgrade experienced significant wet weather during the 2011-12 financial year. RMS project teams planned for an average of 50 wet weather days (about 23 per cent) across each of the Pacific Highway construction sites. However, extensive wet weather meant an average of 79 of the 214 available working days (or about 37 per cent) were lost.

Priority 1:

Hexham to Port Macquarie, Raleigh to Woolgoolga and Ballina to the Queensland border

Ballina Bypass

The \$640 million Ballina Bypass project was jointly funded by the NSW and Australian governments. The final section of the 12 km bypass was opened to traffic in May 2012. This was ahead of the estimated mid 2012 target despite 95 days being lost to wet weather during 2011-12.

Bulahdelah Upgrade

Construction is well advanced on the 8.6 km bypass of Bulahdelah. The \$315 million project is jointly funded by the NSW and Australian governments.

Major construction started in August 2010. The Myall River bridges were completed in June 2012 and are in use by construction traffic. The steel truss bridge providing access to Alum Mountain was opened in June 2012. A total of 112 days were lost to wet weather during 2011-12. Extensive wet weather has meant the project is now scheduled to open by Easter 2013.

Herons Creek to Stills Road

Construction of the 3.5 km upgrade of the northbound carriageway between Herons Creek and Stills Road started in March 2011. The \$60 million project is jointly funded by the NSW and Australian governments. Key activities completed in 2011-12 include clearing and excavation, drainage and bridge works.

Extensive wet weather and the discovery of contaminated soil significantly and unexpectedly delayed the project. In late March 2012, a construction worker required medical attention and others reported feeling unwell while spreading excavated material from a cutting on the project site. RMS and its contractor initially placed exclusion zones around the areas where the material was found and being placed while investigations were carried out. On 8 May 2012, the construction site was closed in the interests of worker safety while RMS and its contractor investigated the contamination. The site was reopened on 31 May 2012 except for the exclusion zones. RMS and its contractor engaged independent contamination specialists and are working with government agencies to identify and remediate the areas of contamination.

The Minister for Roads and Ports asked Mr Brian Gilligan to review the handling of contaminated materials at the site. His report of 9 May 2012 on preliminary findings was posted on RMS' Roads Project website.

A total of 141 days were lost to wet weather including the period in which the contaminated soil was investigated. The project is expected to be completed in mid 2013.

Coffs Harbour (Sapphire) to Woolgoolga

Major construction for the 25 km Sapphire to Woolgoolga Upgrade on the growing northern beach suburbs of Coffs Harbour started in August 2010. The \$705 million project is jointly funded by the NSW and Australian governments.

Traffic was switched to a new bridge over Cunninghams Creek in December 2011. Detailed design was completed in March 2012. A total of 105 days were lost to wet weather during 2011-12. The project is expected to be completed in 2014.

Tintenbar to Ewingsdale

Early site establishment work has started on the project, which will provide 17 km of four-lane divided carriageway between the Ballina Bypass and the Ewingsdale interchange (Byron Bay turnoff). The project includes the provision of twin tunnels to avoid the steep grades of St Helena Hill. Current work includes service relocations, fencing, environmental measures and establishment of site compounds.

A working party was established to look at interchange options at Bangalow. In December 2011, three access options were displayed for community comment. A revised concept design was announced in May 2012. Substantial construction is expected to start in the second half of 2012.

Banora Point

Construction started in December 2009 on the \$359 million highway upgrade at Banora Point. Jointly funded by the NSW and Australian governments, the project will upgrade about 2.5 km of highway at Sextons Hill.

Southbound traffic was switched through Sextons Hill in April 2012 and northbound traffic was switched through Sextons Hill in May 2012. A total of 42 days were lost to wet weather during 2011-12. The project is expected to be completed in late 2012.

Priority 2: Port Macquarie to Raleigh

Kempsey Bypass

Major construction on the \$618 million Kempsey Bypass started in June 2010. The 14.5 km project is funded by the Australian Government and includes a 3.2 km bridge crossing of the Macleay River and floodplain. Once completed, the bridge will be the longest in Australia.

In February 2012 the Crescent Head Road overbridge was opened and concrete paving work started. Piling work for the floodplain bridge was completed in May and a traffic switch at the Frederickton interchange was opened on 16 June 2012. A total of 99 days were lost to wet weather during 2011-12. However, the project is now expected to be opened to traffic by Easter 2013, a further three months earlier than the June 2013 date announded

Oxley Highway to Kempsey

Planning for the Oxley Highway to Kempsey Upgrade began with registrations of interest for detailed design work invited in November 2011.

The upgrade is jointly funded by the NSW and Australian governments and will provide 37 km of four-lane divided highway between the Oxley Highway and the Kempsey Bypass.

Work has continued on detailed geotechnical investigations, detailed design and land acquisition to prepare the project for construction.

Frederickton to Eungai

The Frederickton to Eungai Upgrade is stage two of the 40 km Kempsey to Eungai upgrade and will provide 26 km of four-lane divided highway from the Kempsey Bypass to Eungai. The project is jointly funded by the NSW and Australian governments.

Registrations of interest for the design and construction of the upgrade were called in November 2011. Ground survey work and geotechnical investigations neared completion by June 2012. Acquisition of land progressed and tenders for the design and construction of the upgrade were invited from a shortlist of contractors in March 2012. The main construction is expected to begin in the first half of 2013.

Nambucca Heads to Urunga

The 20 km Nambucca Heads to Urunga Upgrade is part of the larger Warrell Creek to Urunga project. Planning for the upgrade is jointly funded by the NSW and Australian governments. A draft report on the technical review of an alternative alignment for an 8 km section between Warrell Creek and Nambucca Heads near Macksville was published for community comment in March 2012.

Registrations of interest for the design and construction of an upgrade between Nambucca Heads and Urunga were called in January 2012, with tenders invited from a shortlist of contractors in June 2012. Detailed survey work was completed in June 2012 and geotechnical investigations and land acquisition were carried out to prepare the project for construction, which is expected to begin in the first half of 2013.

Priority 3: Woolgoolga to Ballina

Glenugie Upgrade

The \$60 million Glenugie Upgrade, south of Grafton, is jointly funded by the NSW and Australian governments. The final section of the 7 km upgrade was opened to traffic in February 2012.

Devils Pulpit

Construction started in December 2011 on the \$77 million Devils Pulpit Upgrade. The project is jointly funded by the NSW and Australian governments and will provide 6 km of new divided carriageways and another 3 km of median wire rope safety barriers. The project is expected to open to traffic in mid 2013 (weather permitting).

Woolgoolga to Ballina Upgrade

The Woolgoolga to Ballina project is made up of four previous Pacific Highway planning projects:

- · Woolgoolga to Wells Crossing.
- · Wells Crossing to Iluka Road.
- Iluka Road to Woodburn.
- · Woodburn to Ballina.

The project does not include the recently completed Glenugie Upgrade or the Devils Pulpit. Upgrade (which is currently under construction). RMS and its project teams are preparing the 155 km of highway for construction. The environmental assessment, land acquisitions and geotechnical investigations are being progressed. Detailed design work has also started on a 31 km section of highway between Woolgoolga (end of Sapphire to Woolgoolga Upgrade) and recently opened Glenugie Upgrade section in March 2012.

Additional crossing of the Clarence River at Grafton

RMS is carrying out investigations to identify a preferred route for a second crossing of the Clarence River at Grafton. A shortlist of six options (from a list of 26 feasible options) was announced for further evaluation in January 2012. A preferred option is planned to be identified by the end of 2012.

Princes Highway

Bega Bypass

The Australian Government is funding construction of the Bega Bypass on the Princes Highway, which will be approximately 3.5 km long and use an existing road corridor to the west of Bega. The contract for construction of the Bega Bypass on the Princes Highway was awarded in March 2012 and initial construction activities began in May 2012. The project is expected to be opened to traffic in mid-2014.

South Nowra Kinghorne to **Forest Road**

Upgrading 6.3 km of the Princes Highway to four lanes will improve traffic flow and efficiency through South Nowra. Work was suspended in November 2011 as a result of finding endangered Green and Golden Bell Frogs within 200 m of the project. RMS received approval from the Australian Government's Department of Sustainability, Environment, Water, Population and Communities to continue construction in February 2012.

Gerringong Upgrade

A design and construct contract for the Mount Pleasant to Toolijooa Road section of the Princes Highway was awarded on 22 December 2011. Detailed design is underway with major construction on the \$310 million upgrade expected to start in the second half of 2012.

Victoria Creek realignment

Major construction is well underway on the \$40 million upgrade of the Princes Highway between Narooma Road (the Old Princes Highway) and Corkhill Drive at Central Tilba, 13 km south of Narooma. The highway upgrade includes a new bridge replacing the narrow bridge (built in 1935) over Victoria Creek and new overtaking lanes in both directions.

Nangudga Lake Bridge replacement, Narooma

Construction work began in March 2011 for the \$3.7 million replacement of Nangudga Lake Bridge, on the Princes Highway south of Narooma. The bridge was completed and opened to traffic in December 2011.

Great Western Highway

Lawson Upgrade

Construction work is underway to realign and widen the highway to a four lane divided road between Ferguson Avenue, Hazelbrook and Bass Street, Lawson. Work includes a new bridge over the railway and 600 m long rail realignment. The new rail alignment was opened in January 2012, facilitating Stage Two of the upgrade.

Bullaburra West, Genevieve Road to Tablelands Road Upgrade

Construction began in December 2011 to widen the existing two-lane highway to a four-lane divided highway between 400 m west of Genevieve Road, Bullaburra and Tableland Road, Wentworth Falls.

Kelso Upgrade

The upgrade at Kelso, from west of the Stockland Drive intersection to east of Ashworth Drive, will widen the highway to four lanes, improve intersections and separate opposing directions of traffic. The project Review of Environmental Factors was finalised in May 2012.

Wentworth Falls East

Construction work continued to widen the highway to a four lane divided highway between Tablelands Road and Station Street. Wentworth Falls. The project is jointly funded by the NSW and Australian governments and is expected to be completed and opened to four lanes in late 2012.

Woodford to Hazelbrook

Construction work continued to widen the highway to a four lane divided highway between Station Street, Woodford and Winbourne Avenue, Hazelbrook. The project is jointly funded by the NSW and Australian governments.

A new contractor was appointed in June 2012 to complete the works after the previous contractor ceased work in February 2012 due to financial difficulties. The project is expected to be completed in 2014.

Bullaburra East

The detailed design has been completed for the highway upgrade between Ridge Street, Lawson and Genevieve Road, Bullaburra. A pedestrian bridge over the highway linking to Bullaburra railway station has also been included after community consultation was held in March 2012. The project is the final section to complete the highway upgrade to four lanes between Emu Plains and Katoomba. Funding to begin construction of this project was announced in conjunction with the 2012-13 NSW Budget in June 2012.

Hume Highway

Woomargama Bypass

The \$265 million, 9 km bypass was opened on 7 November 2011. It was built to the west of Woomargama and joins the existing Hume Highway divided carriageways to the north and south of the village. The project was funded by the Australian Government.

Tarcutta Bypass

The 7 km, \$290 million Tarcutta Bypass was built to the west of Tarcutta, joining the existing Hume Highway divided carriageways to the north and south of the village. The project was funded by the Australian Government and was opened to traffic on 15 November 2011.

Holbrook Bypass

Substantial construction of the Holbrook Bypass began in July 2011. The bypass, which is expected to be opened in mid 2013 will be approximately 9.5 km long and run from 4 km north of Holbrook to rejoin the existing dual carriageway 2 km south of Holbrook. When the bypass is opened the entire route between Sydney and Melbourne will be a minimum four lane divided highway.

Sydney roads

M4 Motorway lanes realignment at old toll plaza

The realignment of the M4 Motorway at the old toll plaza was completed in April 2012 and delivered significant traffic and safety improvements for 137,000 motorists daily.

Work completed on a 1.5 km length of motorway between James Ruse Drive and Silverwater Road included road resurfacing, line marking. signage and the installation of crash barriers. A review of the speed limit was conducted, resulting in an increase to the speed limit to 90 km/h along this length and improved travel times for motorists.

Galston Gorge over-length vehicle restrictions

Galston Gorge is a narrow and winding route for vehicles travelling between Galston in Sydney's north and Hornsby Heights. Although this route was restricted for overlength vehicles, non-compliance of route restrictions resulted in the need to close the gorge on several occasions for extended periods to remove longer vehicles unable to use the route.

In March 2012, RMS implemented a \$5 million project of traffic engineering solutions to prevent the access of over-length vehicles to this route. The installation of physical restrictions at entry points to the gorge included the placement of traffic detectors, electronic warning signs and enforcement cameras to monitor the site.

Windsor Road and Norwest Boulevarde intersection

Norwest Boulevarde is a key route between Windsor Road and Old Windsor Road in Baulkham Hills and provides access into Norwest Business Park, in Sydney's northwest. To improve business park access, RMS completed a \$2 million project to upgrade the intersection of Windsor Road and Norwest Boulevarde.

The upgrade significantly improved access to and from the business park during peak periods, with improved traffic conditions for vehicles travelling between Windsor Road and Old Windsor Road.

Spit and Military roads

In 2011-12, RMS completed a four-year program of traffic improvement initiatives between Balgowlah and Neutral Bay on the Spit Road and Military Road

corridor. The program involved three projects at a cost of \$3.8 million and delivered improved travel time reliability, safety and traffic flow along the corridor. The projects were:

- Tidal flow scheme (AM) on Spit Road between Awaba Street and Ourimbah Road.
- Upgrade Spit Road and Parriwi Road to improve entry/exit to the Spit West carpark.
- · Military Road and Spit Road safety improvements including light pole relocation and upgraded street lighting to meet the current street lighting standards.

Other improvements included traffic signal operation, communication upgrades and tidal flow arrangements to provide significant benefits during peak travel times.

Alfords Point Bridge, northern approach

RMS has been working to reduce congestion, improve travel times and improve road safety on Alfords Point Road in southern Sydney. The Alfords Point Bridge northern approach was completed in November 2011 and widening of the southern approach is currently in development.

F5 Freeway widening, Brooks Road to Narellan Road

The final section of F5 Freeway widening between Brooks Road and Narellan Road was opened to traffic in March 2012. The project was jointly funded with the Australian Government. It provides four lanes in each direction between Brooks Road and Raby Road and three lanes in each direction between Raby Road and Narellan Road.

Camden Valley Way, Cobbitty Road to Narellan Road

The four-lane divided carriageway between Cobbitty Road (Oran Park Drive) and Narellan Road was opened to traffic in June 2012.

Camden Valley Way, Cowpasture Road/Bringelly Road to Cobbitty Road/Oran Park Drive

In June 2012, funding was committed to allow completion of the four-lane upgrade of this final 10.7 km length between Prestons and Narellan in 2015. Construction will be carried out in three stages. Detailed design for the first stage between Ingleburn Road and Raby Road was completed in December 2011 and a contract for construction of this stage was awarded in June 2012

Bringelly Road, Camden Valley Way to The Northern Road

To support the NSW Government's urban land release strategy for the South West Growth Centre, RMS plans to upgrade Bringelly Road between Camden Valley Way, Leppington and The Northern Road, Bringelly, from a two-lane road to a four-lane divided road with a wide median.

A review of environmental factors and a revised concept design for the widening of Bringelly Road were displayed for community comment in November 2011.

Richmond Road

In November 2011, RMS displayed the proposed concept design and a review of environmental factors for the Richmond Road Upgrade between Bells Creek, Colebee and Vine Street West, Marsden Park. Funding to construct this section of the Richmond Road Upgrade was announced in conjunction with the 2012-13 NSW Budget in June 2012.

Schofields Road new rail bridge

The construction of a new rail bridge to facilitate the future extension of Schofields Road was completed in November 2011 in conjunction with the new railway station at Schofields.

Schofields Road Upgrade

Detailed design for Stage One of the Schofields Road Upgrade between Windsor Road and Tallawong Road at Rouse Hill was completed in March 2012 and tenders for construction closed in June 2012

Hunter region roads

The Hunter Expressway

The \$1.7 billion Hunter Expressway is a 40 km, four-lane freeway between the F3 Freeway near Seahampton and the New England Highway west of Branxton. Construction of viaducts began in July 2011 and, by November 2011, 50 per cent of earthworks were completed.

In February 2012, road pavement works began on the eastern section and the first girder of Viaduct 3 Bridge (western-most) was launched. In March the first launch of the bridge over the F3 Freeway was launched and mine void filling was completed in April. The first girder of Viaduct 2 Bridge (middle) was launched in June 2012.

In November 2011, 50 per cent of earthworks were completed on the western section of the expressway and an Aboriginal Heritage Impact Permit approval was gained for Zone 4, west of Black Creek. Road pavement works began in February 2012. Mine void grouting works were 50 per cent completed in April 2012 and the first girders for the bridge over the main north railway line at Branxton on the New England Highway link road were positioned in May 2012.

The Hunter Expressway project was impacted by 90 days of wet weather in 2011-12. However, it is still anticipated that the Expressway will be open to traffic by end 2013.

New England Highway, Scone Railway Level Crossing

RMS is managing an options and feasibility study of upgrade options for the New England Highway (Kelly Street) rail level crossing at Scone. The study is funded by the Australian Government, under the Regional Infrastructure Fund. An options report was published on the RMS website in May 2012. A preferred solution is expected to be finalised during 2012-13.

Central Coast roads

F3 Sydney - Newcastle Freeway

The Wyong Road interchange is being upgraded to relieve congestion. The works include a new ramp for traffic travelling from Wyong Road to the F3 northbound. Construction began in April 2012 and is expected to be completed during 2013.

Central Coast Highway Upgrade, **Brisbane Water Drive and Manns** Road intersection

RMS has completed the detailed design for the upgrade of the Central Coast Highway and Brisbane Water Drive/Manns Road intersection at West Gosford.

The upgrade will improve traffic and safety conditions at these intersections. The main feature of the project includes the widening and realignment of Brisbane Water Drive and Manns Road between Kulara Avenue in the south and Stockyard Place in the north to form a single at-grade intersection with the Central Coast Highway.

Pacific Highway, Narara to **Lisarow Upgrade**

RMS is investigating route options to identify a preferred route for the Pacific Highway between Narara and Lisarow. Four route options were on display for comment between March and May 2012.

Pacific Highway, Ourimbah Street to Glen Road

RMS has developed a preferred design for the upgrade of the Pacific Highway between Lisarow and Ourimbah to four lanes. The review of environmental factors was determined in October 2011.

Pacific Highway, Wyong **Town Centre**

The Pacific Highway through Wyong is currently a single lane in each direction. A revised preferred option was displayed for community comment in November 2011.

In January 2012, an independent review of cost estimates for all through-town and bypass options for the future upgrade of the Pacific Highway at Wyong was announced. A contractor has been appointed to carry out an independent review of the cost estimates of options and the review is expected to be completed in 2012.

Western region

Golden Highway

Construction began in March 2012 in turning lanes at the Ballimore section to improve traffic flow and safety. The lanes are scheduled for completion by the end of August 2012.

Olympic Highway

The preferred option for the realignment of the Olympic Highway at Kapooka near Wagga Wagga was announced in December 2011. A major part of the project is the construction of a new bridge over the Sydney to

Melbourne railway line. This bridge will replace the existing bridge which is the only restriction to higher productivity heavy vehicles on the Olympic Highway between Albury and Cowra.

The new bridge alignment will see the Olympic Highway located to the east of the current bridge and improve the speed environment from the current right angle corners to a consistent 100 km/h speed. This will improve travel efficiency for all vehicles.

Northern region

Oxley Highway

The 6 km upgrade of the Oxley Highway between Wrights Road and the Pacific Highway at Port Macquarie was officially opened to traffic in February 2012, completing a four-lane highway between the Port Macquarie central business district and the Pacific Highway

Project delivery

Appendix 1 contains details of progress on all major works.

Supporting public transport

Strategic Bus Corridor Program

In 2011-12, RMS completed the seven year, \$295 million commitment to deliver integrated bus priority infrastructure and intelligent transport solutions on 43 strategic bus corridors in NSW. The program has delivered 151 bus priority infrastructure projects and installed 157 km of bus lane on the Sydney road network. In 2011-12, the program delivered 17 projects at a cost of \$31.7 million.

Public Transport Information and Priority System

The Public Transport Information and Priority System (PTIPS) uses satellite technology to identify late-running buses and communicate with the Sydney Coordinated Adaptive Traffic System (SCATS) to give priority to those buses at traffic signals. More than 1000 traffic signals on the road network can give priority to late-running buses and around 3060 buses are now equipped to operate with PTIPS, including all State Transit buses in Sydney and Newcastle, and some private buses. PTIPS also provides real-time bus status information to support the SMS Real Time Bus Information Service.

Optimising transport operations

Speed and traffic volume trends

Between 2009-10 and 2010-11, overall travel speeds increased for the AM peak period and decreased for the PM peak period.

For the AM peak:

- · There was an increase in the overall average speed from 29 to 30 km/h from 2010-11 to 2011-12. Speeds were higher on four of the seven routes, by up to 4 km/h.
- The M4 corridor was up from 25 to 27 km/h, following further improvements at the former toll plaza.
- The Princes Highway, M5/ Eastern Distributor and F3/Pacific Highway corridors improved.
- The M2/Lane Cove Tunnel/ Gore Hill Freeway corridor was unchanged at 36 km/h, with this route continuing to be affected by road works.

 Victoria Road and Pittwater/Spit/ Military Roads, both recorded slight decreases by 1 km/h.

For the PM peak:

- The overall average speed was down from 42 to 40 km/h from 2010-11 to 2011-12.
- The M2/Lane Cove Tunnel/Gore Hill Freeway corridor, accounted for about half of this decrease. Its average speed declined from 60 to 52 km/h, due to road works and speed limit changes in the outbound direction were more pronounced than for the previous year. However, the average trip on the corridor was just five minutes longer and it is still the quickest of the seven routes.
- Travel speeds also decreased on four of the other routes, by between 1 and 3 km/h. The corresponding increases in travel times ranged from 2 to 4 minutes (or less than 9 per cent).
- Victoria Road was unchanged at 31 km/h and the M4 corridor was up slightly from 39 to 40 km/h.

Since September 2011, RMS has also reported on the average travel times of more than 100 roads in the Sydney, Newcastle, Central Coast and Wollongong areas, based on GPS data received from probe vehicles travelling on the network throughout the year. As a baseline for future reporting, the average speed on a selected route in the AM peak for 2011-12 was 50 km/h and in the PM peak was 51 km/h. This takes into account both directions on each route. This speed is higher than the average for the seven major routes due to the inclusion of higher speed routes such as the Sydney-Newcastle Freeway and the M7 Motorway. Another factor contributing to this higher speed is that the results are derived from data gathered across the entire year rather than concentrated on short survey periods.

Traffic information and systems

The Sydney Coordinated Adaptive Traffic System (SCATS) is a computerised traffic management system developed and maintained by RMS. SCATS continues to be the premier intelligent transport system in the world and is now used in more than 263 cities in 27 countries, controlling more than 35,531 intersections.

SCATS was recently upgraded to match the latest improvements in failover and disaster recovery infrastructures. The NSW Transport Management Centre, VicRoads, Department of Planning, Transport and Infrastructure (South Australia), and Brisbane City Council are all including the SCATS upgrade as part of their disaster recovery planning.

Managed motorways

RMS and Transport for NSW are collaborating on the implementation of the NSW Managed Motorway Strategy. The strategy focuses on the Sydney Greater Metropolitan Region, which includes more than 470 km of the motorway network comprising the Sydney Orbital; the Western Motorway (M4); the Sydney-Newcastle Freeway (M1); The Hume Highway (M31) to the Southern Highlands; and the Princes Motorway (M1) to Wollongong.

This strategy will provide advanced traffic management control systems, infrastructure and information to road users through coordinated ramp signalling, variable speed limits, lane use management and variable message signs. The benefits are improved reliability, efficiency and safety of the motorway and surrounding arterial road networks.

In 2011-12, RMS secured a \$17 million funding investment from the NSW and Australian governments to develop the M4 Managed Motorway scheme to include concept design and environmental assessment. The scheme is estimated to be completed in June 2014.

Pinch Point Program

The 'pinch point' strategy aims to improve traffic flow during peak travel times on 23 of Sydney's busiest road corridors. The strategy targets peak hour traffic 'pinch points' and implements minor traffic improvement works to maintain travel speeds and improve travel time reliability.

In 2011-12, the strategy completed 16 projects at a cost of \$32.4 million.

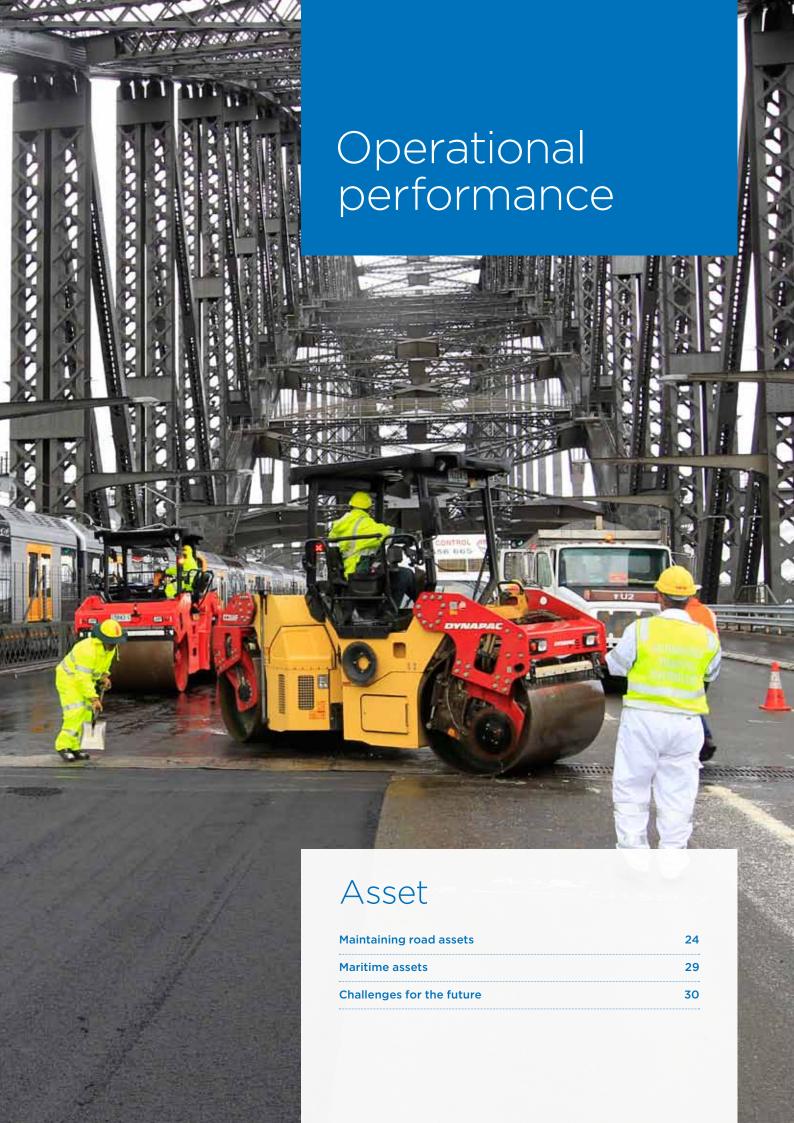
Key projects included:

- Widening exit ramps at the M4/Cumberland Highway interchange, South Wentworthville.
- Widening the on-road ramp at the F3 at Pacific Highway, Wahroonga.
- Roundabout improvements at Campbelltown Road/Raby Road.
- Extension of turn bays at key intersections on the Cumberland Highway, Elizabeth Drive (Liverpool), Hume Highway, Pacific Highway and Princes Highway.

In 2011-12, RMS completed a five-year, \$100 million program of targeted traffic improvement initiatives to improve peak hour travel. Work included minor infrastructure works and operational improvements, such as traffic signal optimisation, changes to parking restrictions, tidal flow arrangements, and investment in communication technology to improve incident management.

Challenges for the future

- Partner with Infrastructure NSW and Transport for NSW to support the next major motorway project.
- Deliver \$224 million infrastructure development program relating to Sydney's roads to improve efficiency.
- Finalise the memorandum of understanding between the Australian and NSW governments for completing the upgrade of the Pacific Highway.
- Apply new clearway or parking restrictions on key State corridors in Sydney on weekdays and weekends to improve traffic flow during peak periods.
- Provide arterial road upgrades to support residential and employment growth areas.
- Deliver key infrastructure projects across the state, including planning, constructing and opening to traffic.



Asset

Transport infrastructure meets acceptable standards

RMS delivers maintenance and upgrade programs to ensure that infrastructure and assets are maintained in a sustainable, safe manner and to an appropriate standard. This includes regulating the access to our networks to provide balanced, sustainable outcomes for all users.

Maintaining road assets

Managing a large asset base

The 184,851 km NSW road network is a significant public asset, providing access across NSW for commuters, travellers, business and freight.

The road system can be divided into four categories:

- 18,031 km of RMS-managed State roads including 4323 km of the National Road Network, for which the Australian Government provides a funding contribution, and 147 km of privately-funded toll roads.
- 2970 km of RMS-managed Regional and local roads in the unincorporated area of NSW.

- 18,231 km of council-managed Regional roads, which receive significant State grant funds administered by RMS.
- 145,619 km of council-managed local access roads, funded by local ratepayers and Australian Government programs such as the Financial Assistance Grants and the Roads to Recovery Program.

RMS is also responsible for maintaining and operating:

- 1423 school zone flashing light signs.
- 3867 traffic signal sites.
- 9800 street lights.

- 5190 bridges and major culverts and 23 tunnels.
- 5 automated tidal flow systems.
- 56,000 km 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 ferry crossings.
- Intelligent traffic systems including 251 variable message signs, 135 variable speed signs and 824 CCTV cameras.

Figure 4. Pavement age profile for all State Roads (including National Network) as at 30 June 2012

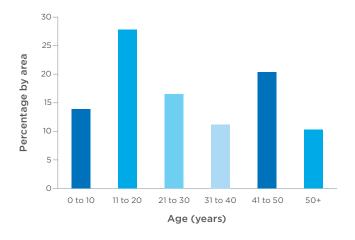
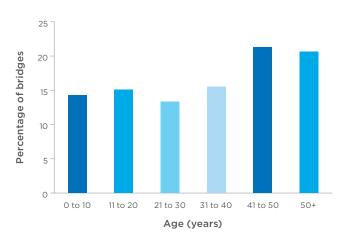


Figure 5. Age profile all bridge size structures as at 30 June 2012



RMS faces considerable challenges in maintaining and renewing NSW road and bridge infrastructure to ensure it is safe and reliable. Currently, close to 42 per cent of road pavements are more than 30 years old (Figure 4). Seventy-eight bridges are more than 100 years old and a further 991 are more than 50 years old. (Figure 5).

Road asset management achievements

The extended wet weather this year impacted a number of road maintenance programs. Additional funding was redirected to heavy patching works during the year to keep roads open and safe. Total expenditure on road maintenance in 2011-12 was \$856.6 million, which is more than in any previous year, excluding the \$217.6 million spent on restoration of natural disaster damage on State, local and Crown roads.

Maintenance of State bridges, including 36 major repairs and the replacement of Boree Creek Bridge on the Orange to Parkes road, accounted for \$192.5 million. A further \$142.7 million was spent on corridor maintenance. RMS also managed \$217.6 million of NSW Government funds to repair road damage from storms and floods across 94 council areas.

Other achievements in road asset management in 2011-12 included:

- Completion of pilot studies for customer surveys on road maintenance issues and priorities.
- Finalised a maintenance strategy for the long-term maintenance of the Sydney Harbour Bridge.
- A public consultation process on the long-term conservation strategy for Timber Truss bridges in NSW. A submissions report detailing the outcome of the public consultation process, and RMS' response was submitted to the Heritage Council.

Monitoring road infrastructure condition and performance

RMS has historically used the following to look at the condition of the infrastructure it manages:

 Ride quality - Measured using vehicle-mounted laser technology. Smoother roads provide a more comfortable ride and reduce the damage caused to the road by heavy vehicles. Smoother roads also cause less damage to vehicles and save fuel. The NSW 2021 Plan has a target of 93 per cent travel on smooth roads by 2016.

 Pavement durability – This measures the amount of surface cracking on the road. Cracks let water in, which can soften the underlying road pavement and lead to premature deterioration. Cracking is measured at highway speed by automated technology using the RMS road crack vehicle.

Figures 6 to 9 show ride quality and pavement durability performance for different types of roads.

The overall ride quality on State roads has remained effectively stable in the past year.

During 2011-12, extensive wet weather impacted the ride quality of State roads. Water flooding or soaking into the pavements caused the pavement structure and its surface to weaken, which accelerated destabilisation caused by heavy vehicles. The weather also delayed significant amounts of pavement rebuilding and resurfacing, which improve ride quality if carried out. The balance between wet weather and works carried out has generally resulted in minimal change to ride quality across the State.

Figure 6. Ride quality on State roads

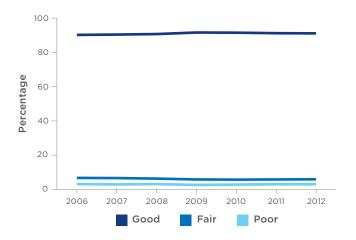


Figure 7. Ride quality on Sydney State roads

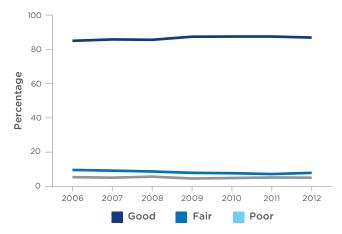
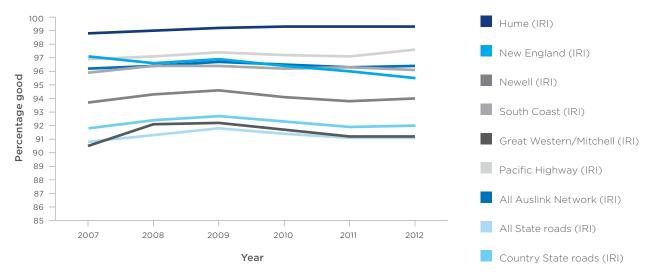
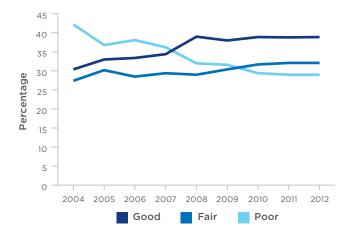


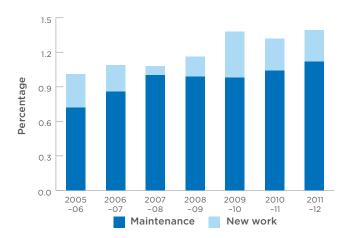
Figure 8. Road surface roughness per cent 'good' on selected State roads



Note: Measurements for Figure 8 according to International Roughness Index (IRI).

Figure 9. Pavement durability (cracking) - urban State roads Figure 10. Rebuilding of road pavements





In 2011-12, RMS allocated an additional \$40 million for reactive pavement maintenance works and an extra \$50 million for pavement rebuilding works in response to prolonged wet weather. RMS carried out significant works on the State Road network that contributed to the smoothness of roads. This included:

- 48 km of new carriageway.
- 313 km of rebuilding or upgrading works.
- 148 km of asphalt resurfacing.
- 1196 km of spray seal resurfacing.

Pavement durability (figure 9) on the rural network has been relatively stable over the past eight years with the extent of road cracking remaining at very low levels. Greater attention is required to minimise cracking on rural roads, which are more susceptible to variations in moisture.

Urban roads, in general, display a higher level of cracking than rural roads but tend to be more resilient as they are made of manufactured materials such as asphalt. RMS has recently increased its funding and focus on urban roads and has achieved a significant improvement in road condition, with the level

of 'poor' cracking dropping from a high of 42.2 per cent in 2004 to a low of 29 per cent in the current year.

In 2011-12, road pavement rebuilding (Figure 10) was at the highest level in over a decade with 1.39 per cent of the State Road network being rebuilt. This included 313 km of maintenance rebuilding and a contribution from new infrastructure works of 48 km. The need for road rebuilding funding will continue to rise due to increasing freight demands and an ageing network, of which 42 per cent is older than 30 years (Figure 4).

Bridge maintenance

RMS spent \$192.5 million on bridge maintenance and the rehabilitation of State bridges. Program delivery included:

- Completion of 36 bridge rehabilitation projects.
- Replacement of Boree Creek Bridge on the Orange to Parkes road.
- · Completion of the major rehabilitation of Hampden Bridge in the Kangaroo Valley.
- Repaint of Deepwater River Bridge at Deepwater.
- Building a new ferry for bluff Point Crossing.

Sydney Harbour Bridge

For the first time in the Sydney Harbour Bridge's 80 year history, the road surface was stripped back to the original concrete deck to carry out essential maintenance. A full bridge closure was carried out over two consecutive weekends to apply a waterproofing layer and a new road surfacing layer. The work extended from Fitzroy Street on the north to Cumberland Street in the south. In spite of wet weather the bridge was opened ten hours ahead of schedule on 22 January 2012.

Around 15,600 m² of the bridge was repainted in 2011-12. Work carried out included the complete removal and repainting of 9200 m² of southern approach spans and maintenance painting of 6400 m² of the main arch.

A communications campaign was implemented to advise customers of closures and help them identify alternate travel routes as well as public transport options.

Anzac Bridge

Maintenance work started on the Anzac Bridge in November 2011 and will take around two years to complete.

Permanent maintenance walkways have been installed along both sides of the southern span of the bridge. Work is now underway to install the maintenance walkways along the middle span of the bridge.

In April 2012, work started to improve the bridge's stay cables. A specially designed robot is currently being used to apply a spiral rib to the outside of the stay cables. This will help prevent the cables vibrating in wind and rain. In early May the newly repaired maintenance gantry was reinstalled to the underside of the bridge deck.

Higher Mass Limits bridge assessments

RMS continues to evaluate the load carrying capacity of its bridges to determine which structures can safely take specific heavy vehicle types. As a result of these ongoing assessments a further 35 structures were made available for Higher Mass Limits (HML) access, resulting in opening up a further 34 km of road network for HML access.

Spit Bridge Upgrade Program

An upgrade of the Spit Bridge drive system began in January 2012 and was completed in July 2012. This \$10.6 million project involved installing new electrical cables and a new drive system - motor, brake and gearbox - to improve the longevity and reliability of the operating system that opens and closes the bridge. This will minimise the potential for traffic delays caused by a breakdown of the lift equipment.

Timber Truss Bridge Conservation Strategy

A Submissions Report detailing the outcome of an earlier consultation process on the strategy to manage and conserve State-owned timber truss bridges and RMS' response was submitted to the NSW Heritage Council. The revised strategy proposes to retain 26 bridges and replace 22 remaining timber truss bridges. The NSW Heritage Council endorsed the RMS Timber Truss Conservation Strategy in August 2012.

Road corridor maintenance

RMS spent \$104.5 million on the routine maintenance of roadside assets, including vegetation management, maintenance of drainage systems, slopes, rest areas, noise walls, safety barriers and fencing. Continued heavy rainfall throughout the year led to the rapid growth of roadside vegetation, contributed to slope failures and an increase in asset damage from road incidents, blocking of culverts with debris and several culvert failures.

Other work carried out on road corridor assets includes:

- · Replacement of 10.5 km of obsolete chain-wire fence with steel guardrail safety barriers.
- Upgrading of facilities at six rest areas including toilets, water tanks and playgrounds.
- Remediation of noise walls at City West Link and James Ruse Drive in Sydney.

The total expenditure on corridor assets (including capital works) in 2011-12 was \$142.7 million.

Slope stability

RMS remediated 45 road cuttings, embankments and retaining walls at a cost of \$20.9 million to stabilise road slopes which failed, or were identified at risk, during regular inspections. The work included the completion of repairs of slopes that caused five lane closures and two speed restrictions. Three slopes continued to remain under repair, and landslips occurred at four new sites during the heavy rains between December 2011 and April 2012 on the North Coast of NSW, causing additional speed restrictions.

Two major slope failures occurred during the year:

- Wet weather in March 2012 caused a slip on the Snowy Mountains Highway at Brown Mountain. RMS rebuilt the road embankment behind a new mass block retaining wall. This solution had the shortest timeframe for installation and allowed the road to reopen within 35 days.
- In April 2012, a landslide on the Kings Highway, East of Braidwood, brought rocks and trees down onto the roadway. RMS responded by removing the material and installing a temporary replacement for the rock-fall fence. Assessment of the stability of the slope allowed the road to be re-opened within six days.

At the end of June 2012, slope failures accounted for one lane closure on the Oxley Highway, and six speed restrictions on the Pacific Highway, Oxley Highway, Bruxner Highway, Waterfall Way and Summerland Way. Risk assessments were carried out on 178 slopes across the State in order to inform the slope stability remediation program.

Culverts

The program to assess the condition of culverts on the State Road network was progressed with 3762 of the highest priority culverts being given a risk assessment.

A total of \$13.2 million was spent on the rehabilitation of culverts and drains at 132 locations to ensure their functionality and durability. This included the completion of major drainage system upgrades in Joyce Drive, Mascot and the start of works at Railway Road, Sydenham and George Street, Newcastle.

Road pavement maintenance

Road pavement maintenance resulted in:

- Rebuilding or upgrading of 313 km of carriageway (1.12 per cent of the total network).
- 148 km of asphalt resurfacing (3.5 per cent of the asphalt surfaced network).
- 1196 km of spray seal resurfacing (8.5 per cent of the sealed network).

Implementing more efficient paving methods

RMS implemented the first foam bitumen stabilised pavement in NSW at Farlows Flat. This method of paving had previously been used in small trials and shows it is suitable for use in other projects. The resulting longer asset life at a reduced cost improves efficiency.

Road maintenance delivery

RMS is continuing to examine ways to improve the efficiency of road maintenance delivery. The internal maintenance delivery arm of RMS (Road and Fleet Services) has continued to assess which activities can be better outsourced, with 40 per cent of work subcontracted in 2011-12.

RMS has provided a range of recommendations to government on how to further improve the contestability in road maintenance delivery. This may lead to further changes in future delivery arrangements.

RMS continues to work with 78 rural councils currently carrying out the maintenance of sections of State road in regional NSW under Road Maintenance Councils Contract arrangements. System improvements to the management of these contracts were developed during 2011-12 and will be rolled out in 2012-13.

Funding assistance to local councils

RMS offers full or partial funding to councils under a range of programs.

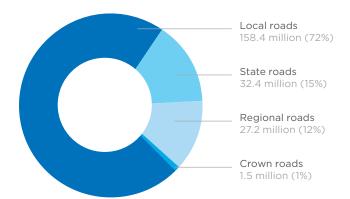
RMS provides ongoing funding to councils for roads classified as Regional roads in their area by way of the Regional roads Block Grant which provides every council with an entitlement grant for use according to their priorities. In 2011-12 Block Grant expenditure was \$134.5 million.

Under the Repair and Improvement of Roads (REPAIR) programs, councils can also apply for additional assistance on a 50:50 funding basis for major rehabilitation and development works on Regional roads. Projects are selected for funding on the basis of merit through the Regional Council Consultative Committee process which comprises groups of councils in RMS regions. In 2011-12 REPAIR Program expenditure was \$26.8 million.

Table 11. Major expenditure on works to rectify flood damage

Flood area	Date	Expenditure
Mid western NSW	December 2010	\$78.3 million
Riverina	March and October 2010 and February 2011	\$24.3 million
North Coast	January and June 2011	\$24.7 million
Northern NSW	November 2011 and January-February 2012	\$18.4 million
Southern NSW	February 2012	\$38.3 million
South Coast	March 2012	\$9.9 million

Figure 11. Natural disaster expenditure 2011-12



Natural disaster repairs

The NSW Government funds repairs to RMS managed State roads damaged by declared natural disasters. It also provides significant financial assistance to local councils to bring their roads and bridges back to their pre-disaster condition.

Since late 2009, there has been an unprecedented number of natural disasters throughout NSW, with some communities impacted on a number of occasions by separate disasters. In 2011-12, 94 of 152 local government areas experienced natural disasters.

During the year RMS allocated \$217.6 million of NSW Government funds to repair damage arising from declared storms and floods. Each claim required careful assessment to ensure compliance with RMS' Natural Disaster Guidelines established with local government. as well as with the Australian Government's Natural Disaster Relief and Recovery Arrangements.

The extensive nature of many of these events means that restoration works will continue into 2012-13 and, in some cases, later years. At 30 June 2012 it was estimated there were more than \$280 million in outstanding damages remaining to be restored.

Maritime assets

Wharf safety audit

RMS is responsible for the inspection of public ferry wharves and to monitor wharf safety. There are around 240 public wharves statewide including the Sydney Harbour ferry commuter wharves, and wharves used by smaller commercial operators, such as charter or dive vessels in regional NSW. Within Sydney Harbour some 50 commuter wharves are owned, inspected and maintained by RMS. During 2011-12, verification inspection of 15 of these wharves indicated a high level of safety compliance.

A further 170 ferry wharves are located throughout the State. During 2011-12, inspection was carried out on 19 ferry and charter wharves owned by council or other agencies, with warning letters issued in respect of defects for 10 wharves.

Wharf maintenance program

RMS continued implementation of its wharf maintenance program for ferry and charter wharves to ensure these facilities remain safe for use by customers. This program involves regular inspections of more than 100 maritime structures

located in Sydney, Newcastle and Port Kembla harbours, together with necessary maintenance work. In 2011-12, \$5.5 million was spent on scheduled works in the maintenance program.

Significant maintenance works completed in 2011-12 include repairs to concrete decks and timber piles, girders and headstocks at the Circular Quay wharves, repairs to shelter structures at Abbotsford Wharf and Cabarita Wharf, repairs to timber stairs at Darling Point Wharf and Birchgrove Wharf, and timber pile repairs at Manly East Wharf.

Rozelle Bay maritime precinct

Sydney Superyacht Marina (SSM) submitted a Part 3A Development Application. Sydney Boathouse is an approved dry stack boat storage facility for 670 boats, which will include waterfront retail, workshop, office space and a marina component that has already been substantially completed. The total cost of works is estimated to exceed \$55 million. During 2011-12, RMS undertook with the developer to revise the land-based development phasing to enable works on the Western Boat Store, which has a 270 boat capacity, to begin during 2012-13.

Dredging and remediation, south arm of Hunter River, Newcastle

As the holder of development consent for the Extension of Shipping Channels within the Port of Newcastle, RMS negotiates dredging licences within the south arm of the Hunter River to ensure dredging activities are carried out in accordance with the planning approval.

Newcastle Coal Infrastructure Group completed development, which enabled its coal terminal capacity to increase from 30 mtpa (million tonnes per annum) to 53 mtpa.

Port Waratah Coal Services (PWCS) is evaluating the development of a fourth coal terminal (known as T4) in the Port of Newcastle. During the year it began work on the feasibility study phase to further define the project. RMS is currently negotiating a dredging licence with PWCS whose proposed works are within the footprint of the approved area.

Maritime seabed leasing

Domestic leasing

RMS administers around 1500 domestic waterfront leases primarily for private jetties, mooring pens and other boating-related facilities. A program is in place to replace all existing expired leases with new leases for terms of three or 20 years. At July 2012, 872 new domestic leases had been drafted for tenants in Sydney Harbour and Botany Bay.

The method of rental pricing for domestic leasing across NSW was reviewed by the Independent Pricing and Regulatory Tribunal during 2011 and final recommendations were handed down in December 2011. The Government will adopt all 36 recommendations made.

Key recommendations included changes to the way the rate of return component of the rent formula is determined and introduction of an administration fee of \$400 per annum for each tenancy. The overall impact of the changes will be a reduction in rental revenue for RMS of approximately \$3.3 million in the 2012-13 financial vear, with most RMS domestic waterfront tenants receiving a reduction in rent payable.

Commercial leasing

RMS is the land owner of Sydney Harbour and supports the development of marinas, clubs and other boating infrastructure to facilitate continued growth in commercial and recreational boating. New commercial leases were negotiated for the expansion, upgrade or retention of existing facilities at Smith's Spit Boatshed, Blues Point Slipway, Sydney Rowing Club Abbotsford, Royal Sydney Yacht Squadron Kirribilli, Sydney Flying Squadron Milsons Point, and the Australian 18 Foot Sailing Club at Double Bay.

Marine surveys

RMS continued its program of cadastral surveys and identification of mean highwater and former mean high water mark boundaries. The general purpose of these plans is for the subdivision, consolidation and redefinition of RMS foreshore lands.

RMS reviewed and endorsed 16 subdivisions to facilitate the long-term lease of privately owned marine structures (including boathouses, jetties, ramps, pontoons and piles for vessel moorings) and mean high water mark boundary endorsements. Although the majority of surveys conducted were related to domestic property development, the number of large and complex subdivision plans for large-scale commercial development in the ports of Newcastle and Port Kembla increased.

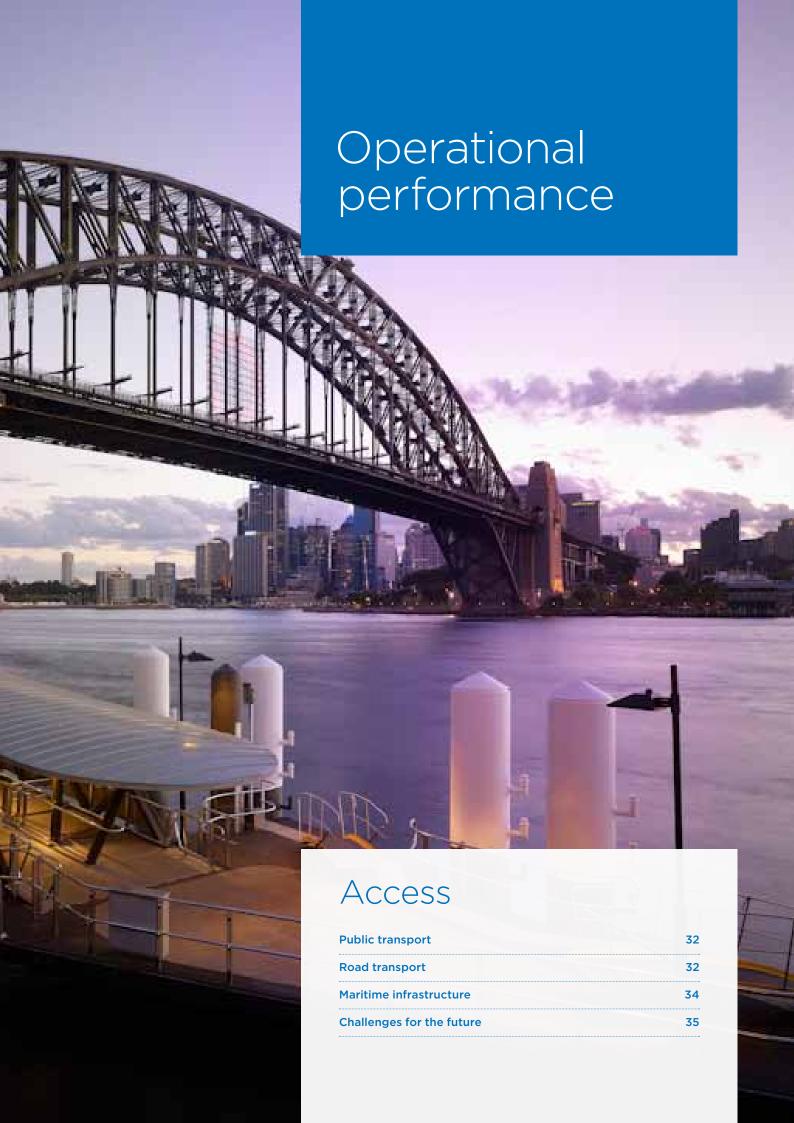
Two large, complex subdivisions managed by RMS were completed and registered at the Land and Property Information Office during the reporting period. They were DP 1151746 creating 16 lots at the Rozelle Bay maritime precinct, and DPs 1162896 & 1162898 at Berrys Bay, defining the former 'Woodleys' and 'Quarantine' sites respectively.

Hydrographic surveys for the purpose of monitoring seabed depths to ensure safe navigation were carried out at many locations including the Parramatta River, Swansea Channel, Black Neds Bav. the Batemans Bay entrance bar, Port Hacking and Georges River.

A significant bathymetric and side scan sonar survey was completed at Windsor on the Hawkesbury River in conjunction with investigations into the duplication of the Windsor Bridge. A bathymetric and foreshore topographic survey was also completed on the Murrumbidgee River near Yass in support of a maritime incident investigation.

Challenges for the future

- · Continue to examine new technologies and treatments that can more effectively extend the life of road assets.
- Identify opportunities to reduce costs through more effective and efficient maintenance processes.
- Deliver the \$176 million Pavement Rebuilding Program for 2012-13.
- Improve our road maintenance plans and practices to deliver demonstrable savings of \$10 million in line with efficiency and savings targets.
- Deliver the \$238 million program of works for 2012-13 to address the impacts of previous natural disasters throughout NSW.
- · Identify the next suite of bridge upgrades to facilitate wider HML access.



Access

The accessibility of transport options is aligned to the needs of the community and economy

RMS delivers initiatives to support access to public transport solutions such as buses, taxis, walking and cycling. RMS also works to ensure our infrastructure meets the needs of customers, such as by providing suitable access for mobility impaired travellers.

Public transport

Bicycle infrastructure

There are more than 10,055 km of cycleway in NSW. This year the cycleway network was improved with the completion of Stage 1 of the northern section of the Prospect to Blacktown cycleway. The 147 km of cycleway cost of \$27 million and consists of a shared path on Waterloo Road, Macquarie Park and a shared path on the southern side of the M4, between Merrylands and Holroyd. An integral part of the annual cycleway program is the 50:50 partnerships with Local Government which in 2011-12 delivered 110 cycleway projects in 76 local government areas across NSW.

Major road infrastructure projects also contributed \$6.3 million to the provision of shared paths as part of the Great Western Highway (Wentworth Falls East), Hoxton Park Road, Alfords Point Bridge (northern approach) Camden Valley Way (Cobbity to Narellan) and Thornton Railway Bridge (Maitland) infrastructure projects.

RMS has continued to improve the NSW Government cycling information website (www.bicycleinfo.nsw.gov.au). In 2011-12, the website was updated to provide access to Sydney-based bicycle use data and video footage for rides into the Sydney CBD.

Pedestrian program

The aim of the Pedestrian Facilities Program is to improve the safety, mobility and access of pedestrians in NSW. It includes activities such as the preparation of Pedestrian Access Mobility Plans, improvements to pedestrian facilities and construction of pedestrian bridges to improve safety. In 2011-12, the program delivered 65 pedestrian infrastructure projects at a cost of \$3.9 million on the NSW State Road network. An integral part of the program is the 50:50 partnership programs with Local Government, which improved pedestrian safety on regional and local roads through the delivery of 61 projects at a total cost of \$2.9 million.

Road transport

Intelligent Access Program

The Intelligent Access Program is a multi-jurisdictional initiative and an innovative solution to Australia's growing freight task, which allows road agencies to use satellite-based technology to monitor heavy vehicles. It ensures operators are only using approved routes for vehicle and load limits, while improving road safety, asset management and environmental outcomes.

As at June 2012, there were 684 vehicles and 442 cranes enrolled in the program, which provides enhanced route access to vehicles operating above statutory limits in NSW. This includes vehicles operating under Higher Mass Limits, restricted access vehicles and high risk mobile cranes

Tri-axle dolly with full mass

NSW road train mass rules have changed to improve the productivity of the NSW road transport industry. From 1 July 2012, Type 1 and Type 2 road train combinations, using tri-axle converter dollies fitted with certified road friendly suspension, are able to operate on each appropriate road train network west of the Newell Highway at full regulatory axle mass limits. The new mass limits bring NSW into line with Queensland. Western Australia and South Australia

Oversize loads of baled agricultural commodities

In NSW, vehicles carrying loads of baled hay, straw, wool and cotton may exceed the statutory width limit of 2.5 metres to a maximum of 2.7 m. This initiative took effect in July 2012 to facilitate the transportation of these loads by allowing for some irregularity in the size of the bales, which tend to expand once loaded onto a vehicle and also during travel. The exemption was developed in close consultation with the Australian fodder, wool, cotton and farming industries. The Class 3 Baled Agricultural Commodities Load Exemption Notice 2012 applies to vehicles transporting baled wool, hay and straw. It also applies to rectangular bales of cotton that have been baled at a cotton gin but does not apply to round cotton bales and modules.

Tunnel access for mobile cranes

Previously, all oversize vehicles including mobile cranes wider than 2.5 m have been restricted from travelling in all tunnels. The NSW Crane Industry Association requested that mobile cranes up to 2.9 m wide be provided with this access in order to decrease travel in urban areas. A trial in the Cross City Tunnel and the Lane Cove Tunnel was conducted to gain a better understanding of the movement of these oversize vehicles in tunnels. Both trials were successful and. as a result, mobile cranes up to a maximum width of 2.9 m are now permitted access to tunnels.

This concession is being provided as part of the Urban Access Concession which is available to eligible cranes enrolled in the Intelligent Access Program and was implemented and available to operators from 14 May 2012.

Cranes at 12 tonne per axle on 445 mm (16 inch) wide tyres

Under NSW Road Transport Law, mobile cranes are permitted to operate at 12 tonne per axle, provided the axles are fitted with single tyres at least 525 mm (20.5 inch) wide. Since 2006 the NSW Crane Industry Association (CIA) has requested concessions for increased axle mass limits and reduction in tyre widths.

From 14 May 2012, this exemption has been applied to All Terrain Cranes, up to and including five axles, with a maximum total mass limit of 50 tonnes. It is estimated that 25 per cent of the crane fleet are All Terrain Cranes, meaning this exemption will apply to approximately 250 NSW registered cranes. It is being provided through an update to the current Intelligent Access Program Mobile Crane permits.

Kamilaroi Highway - modern road trains

On 1 May 2012, the Kamilaroi Highway from Narrabri to Gunnedah Saleyards was opened to modernised road trains, B-triples and AB-triples. This change is delivering real benefits to the livestock and grain transport industries by providing growth to regional industries and economic benefits, improved trade, investment and employment opportunities to local communities. The opening of this section of the highway to modernised road trains was possible following the completion of the agreed safety improvements in partnership with Gunnedah and Narrabri shire Councils and the NSW Government. About \$150,000 in safety work, including the installation of a number of wire rope safety barriers, was carried out on the 90 km stretch of highway.

Oversize and overmass heavy vehicle policy

The number of heavy vehicles accessing the NSW road network increased in 2011-12 with approximately 22,500 oversize/overmass permits issued. This represents a 60 per cent increase in permit applications for oversize/overmass loads since 2001. A permit is required if a restricted access vehicle exceeds statutory mass or dimension limits and/or requires access to the road network that is outside the scope of an oversize and/or overmass notice.

Over the past 12 months, RMS managed several high risk movements, including two 143 tonne autoclaves that required transportation between Sawtell and the Port of Brisbane. This movement required extensive planning and consultation between the RMS regions, the manufacturer, the transporter and other stakeholders before a permit authorising movement was issued.

Removal of requirement to carry Notices

A heavy vehicle drivers' 'requirement to carry' five Notices was removed at the Australian Trucking Convention in May 2012.

The Notices are:

- 19 Metre B-Double Mass Limit Notice 2010
- · Class 2 Road Train Notice 2010.
- Class 2 Controlled Access Bus Notice 2010.
- Class 2 Converter Dolly Combination Notice 2011.
- Class 2 Car Carrier Combination Notice 2011.

The five Notices were published in the NSW Government Gazette on Friday 18 May 2012. The removal eliminates paperwork for truck drivers and means they will no longer be fined for not carrying the notices.

Maritime Infrastructure

Better Boating Program

The RMS Better Boating Program provides grants for recreational boating infrastructure for the benefit of the boating community on NSW waterways. The current Better Boating Program began in 2009 and provides a commitment of \$25 million over five years.

This year a total of \$4.96 million in grants awarded for 64 projects across NSW, including the provision of public wharves/jetties, boat ramps, car/trailer parking, public sewage pumpout facilities, dinghy storage and related feasibility studies.

Regional infrastructure grants

RMS works in conjunction with councils during the year as part of River and Estuary Management Committees, local boating user groups or through Boating Safety Plans to identify opportunities and issues on waterways, including improvement to boating facilities.

In 2011-12, a total of 68 applications for Regional Infrastructure Grants were received for regional NSW. which resulted in 54 grants totaling \$3.1 million being offered.

Sharing Sydney Harbour Access Program

The Sharing Sydney Harbour Access Program grants are administered through the Department of Planning and Infrastructure, with funding for water based projects and technical assistance provided by RMS. Six grants were offered in 2011-12, totaling \$345,968.

Sydney Harbour boat ramps

The upgrade of boat ramp facilities in Sydney Harbour has been restricted in the past due to the limited availability of foreshore land for upgrades or new facilities. The fully funded Sydney Harbour Boat Ramps program aims to address the availability of boat launching access in Sydney Harbour.

Grants for four boat ramp projects were awarded full funding in 2011-12 to the value of \$1.5 million. During the year major upgrades began at:

- Lyne Park, Rose Bay.
- Davidson Park, Middle Harbour.
- · Margaret St, Woolwich.
- Blaxland Rd. Rhodes.

Sydney Harbour commuter wharf upgrade program

RMS is delivering a program to upgrade Sydney Harbour's commuter ferry wharves. The program is delivering better access for customers who use mobility aids and increasing the speed at which customers can embark and disembark from ferries. Customers will also benefit from the improved safety and amenities.

The completion of the wharves at Neutral Bay and Rose Bay will raise the level of compliance for disabled access on commuter wharves from 31 per cent to 35 per cent. During the year, the design for the upgrade of Balmain (Thames St) Wharf was completed and a community information session was held at the Balmain Town Hall on 16 May 2012. The design for the upgrade of Huntleys Point Wharf was also completed and designs for Double Bay and McMahons Point wharves are in progress.

Neutral Bay Wharf upgrade

Work began on the \$8.3 million upgrade of Neutral Bay Wharf in February 2012. Work includes the demolition and removal of the existing wharf and construction of an entirely new ferry wharf in the same location and is due for completion in August 2012.

Rose Bay Wharf upgrade

Work also began on Rose Bay Wharf in April 2012. The work, to be completed at a cost of \$6.3 million, includes the retention of the existing wharf which will be converted into a charter vessel facility, demolition and removal of the existing public jetty to the north, and construction of an entirely new ferry wharf in place of this public jetty. The new Rose Bay Wharf is expected to be opened in September 2012.

Maritime precincts

Berrys Bay

Following a series of meetings with North Sydney Council and a local residents group in early 2012, RMS and the State Property Authority (SPA) agreed to defer a decision to sign an Agreement for Lease for the Berrys Bay maritime precinct until further studies and analyses had been completed.

RMS commissioned an independent scoping study and an independent review study, which began in May 2012. During the year, the SPA carried out further studies relating to the preparation of an Expressions of Interest document for both the RMS and the SPA sites within the former Berrys Bay quarantine depot.

Balls Head

A number of redevelopment options have been prepared for the Balls Head Wharf ranging from full demolition to full restoration of existing structures. In January 2012, a make-safe wharf maintenance program resulted in the removal of some 55 tonnes of timber superstructure and loose material. An ecological assessment of the wharf site was completed in May 2012. Following a workshop in April 2012 with North Sydney Council and community representatives, RMS has deferred further consideration of the redevelopment of this site pending the development of North Sydney Council's proposed Waverton Peninsula Strategy update.

Blackwattle Bay

On 19 April 2012, Blackwattle Bay Marina Pty Ltd (BBM) received Department of Planning and Infrastructure requirements for a development application for its major works component to develop RMS dry land at the southern end of Blackwattle Bay, for a maritime commercial/retail development and a permanent home base for charter vessels.

The major works component is a State Significant development in accordance with State Environmental Planning Policy (State and Regional Development) 2011. On 12 May 2012, BBM submitted a development application for its marina works, which comprise the permanent installation of pontoons, access ramps and piles for 19 charter vessel berths.

Circular Quay Wharf 1 pontoon replacement

In December 2011 the existing floating pontoon at Circular Quay Wharf 1 was replaced at a cost of \$1.8 million. The new pontoon has been designed with increased capacity and additional safety features to provide an improved facility for customers.

Challenges for the future

- Implement a collaborative model to improve access for higher productivity vehicles to achieve economic gains balanced with safety and asset sustainability.
- Establish a program for overheight vehicles including implementing an information and awareness campaign for height restricted infrastructure.
- Ensure existing concessions, exemptions and access declarations by way of notices and permits are maintained by participating in the Local Productivity Initiative Project Group.
- Develop strategies to promote boat storage and safe access to waterways.
- Deliver upgrades to Neutral Bay, Rose Bay, Balmain Thames Street and Huntleys Point commuter wharves



Safety

The safety and security of the transport system is maximised

RMS manages important compliance schemes and initiatives to promote safe behaviours of users on our networks and to deliver safe transport outcomes.

Incidents and fatalities

Roads

Provisional data for 2011-12 indicate there were 396 fatalities, 8 per cent more than the provisional figure for 2010-11, but the third lowest number for a financial year since 1944-45.

Analysis of the provisional fatal crash data for the financial year ending 30 June 2012 revealed that:

- · Speeding was a factor in around 38 per cent of fatalities.
- At least 12 per cent of fatalities were the result of a crash involving a driver or rider with a blood alcohol level above the legal limit.
- At least 13 per cent of people killed in motor vehicles were not wearing available restraints.

- · Driver fatigue contributed to around 18 per cent of fatalities.
- · At least 14 per cent of motorcyclists killed were not wearing helmets. Motorcyclists accounted for 15 per cent of fatalities.

Since 2002, fatalities have decreased in NSW by 32 per cent while fatalities for the rest of Australia have decreased by 21 per cent. Compared to the road toll improvements for the rest of Australia, it is estimated that NSW has saved 530 lives since 2002.

With 376 recorded fatalities in the 2011 calendar year (provisional figure as at 1 January 2012), NSW achieved the second lowest annual figure since 1944 (with 371 fatalities). The lowest annual figure since 1944 occurred in 2008 (with 374 fatalities).

During the twelve months ending June 2012, provisional data indicated that there were 396 fatalities on NSW roads, the third lowest financial year outcome since 1944-45 (with 368 fatalities).

The NSW fatality rate per 100,000 population in calendar year 2011 was 5.1 (provisional figure), down from 5.7 in 2010, the lowest figure since records began in 1908. Table 12 shows the comparison with fatality rates in other regions.

Figure 12. Trends in road fatalities, NSW compared to rest of Australia 2001-2011

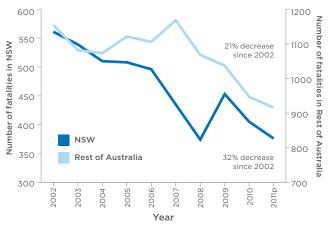


Figure 13. Fatalities, NSW, 12 months ending June 1944-45 to 2011-12



^{*} Provisional figures as at 1 July 2011 and 1 July 2012 respectively

Table 12. Fatality rates per 100,000 population in 2011

Region/country	Fatality rate per 100,000 population
NSW	5.1
Australia	5.7
France	6.4
Italy	6.8
New Zealand	8.6
United States	10.7
Sweden	2.8
United Kingdom	3.1
Netherlands	3.2

^{*} Provisional figure

The NSW 2021 Plan outlines a primary road safety target of 4.3 per 100,000 population by 2016. The draft NSW Road Safety Strategy outlines targets based on the National Road Safety Strategy objective of a 30 per cent reduction in the number of fatalities and serious injuries from 2008 to 2010 baseline levels to be achieved by 2021. Based on expected population growth and a 30 per cent reduction in fatalities, the specific objective under the draft NSW strategy is to achieve 3.2 fatalities per 100,000 population by 2021.

Marine

RMS recorded 330 boating incidents for the year, which involved both recreational and commercial vessels. The number of incidents was a 12 per cent increase from the previous period (294) and 9 per cent less than the 10-year average of 363.

Table 13 provides a summary of incident data for 2011-12 compared with the results for 2010-11. The table shows that:

- 73 per cent of all incidents (240) involved recreational vessels.
- 18 per cent of all incidents (60) involved commercial vessels.
- 9 per cent of all incidents (30) involved both commercial and recreational vessels.

The types of injuries reported during 2011-12 were:

- 19 fatalities. This was up 72.5 per cent from 11 in 2010-2011 and is 23.3 per cent higher than the five year average of 15.4.
- 63 serious injuries. This was up 58 per cent from 40 in 2010-2011 and is 21.1 per cent higher than the five year average of 52.

- 63 minor injuries. This was down 41 per cent from 107 in 2010-2011 and is 26.9 per cent lower than the five year average of 86.2.
- 15 fatal incidents. This was up 50 per cent from 10 in 2010-2011 and is 2.7 per cent higher than the five year average of 14.6.

Preliminary analysis indicates that drowning was the cause of death in the majority of fatalities. Of the fatalities, thirteen were the result of incidents involving a vessel capsizing or a person falling overboard, three fatalities resulted from a collision with a fixed object, and one was due to a propeller strike. The remaining two fatalities appear to be the result of the victims sustaining heart attacks while operating or being towed by a vessel. Lifejackets were only worn by two of the deceased and both of these victims died in high-speed incidents where lifejackets would have offered limited protection.

The statistics continue to show that in the vast majority of boating fatalities there has been a failure to wear a lifejacket during a period of heightened risk. Most of the deaths may have been prevented had a lifejacket been worn.

Table 13. Summary of maritime incident data (2011-12 and 2010-11)

	2010-11				2011-12			
Vessel type	Recreational	Commercial	Commercial/ recreational	Total	Recreational	Commercial	Commercial/ recreational	Total
Incidents	215	47	32	294	240	60	30	330
Fatalities	9*	2	0	11*	17	2	0	19
Serious injuries	30	7	3	40	47	12	4	63
Minor injuries	77	27	3	107	50	13	0	63

^{*} One fatality that occurred in the 2010-2011 financial year was not reported to Roads and Maritime Services until after the 2010-2011 Annual Report had been compiled and does not appear in that document.

Delivering safer roads

In 2011-12, RMS invested \$103.7 million on engineering treatments specifically targeting road safety. This included the Federal and State Black Spot Programs, the Road Toll Response Package, the Heavy Vehicle Safety and Productivity Program, and implementation of road safety reviews on Picton Road and the Newell Highway.

Black Spot Program

A total of \$21 million was spent on the Australian Government's Nation Building Black Spot Program with projects completed at 97 regional and metropolitan locations across NSW. A diverse range of treatments were implemented, including barrier fencing on the F3 Freeway, new and upgraded traffic signals, roundabouts, road realignment and shoulder widening.

This year the NSW Government has continued to fund its base program of \$23 million for treatments at more than 90 locations with a high crash risk. Examples of this include a response to the increasing number of crashes on the Pacific Highway at Urunga. In addition, the NSW Government has continued its commitment to a number of supplementary programs specifically targeting issues or routes where road safety outcomes can be improved.

Pacific Highway - interim priority black spots

Interim safety works have been delivered under various programs. Seven projects totalling around \$21.5 million have been substantially completed. A safety review of the Frederickton to Nambucca Heads section has been finalised with some linemarking and signposting changes implemented as a result.

Road Toll Response Package

The road safety engineering aspects of the Road Toll Response Package are programs to install safety barrier fencing and pedestrian fencing, implement the findings of highway safety reviews and fund identified works on roads managed by Local Government Councils. The total expenditure for 2011-12, which was the second full year of a five-year program, was \$29.5 million.

Heavy Vehicle Safety and Productivity Program

The Heavy Vehicle Safety and Productivity Program is a joint initiative of the Australian and State governments. It includes new and upgraded rest areas and bridge-strengthening to address fatigue and access issues for the freight industry.

In 2011-12, total expenditure on rest areas was \$13.5 million. To date in the first two rounds of the program, 63 of the 68 rest area projects have been completed. The Australian Government has announced that Round 3 of the program will begin in 2012-13.

Newell Highway safety works

In 2011-12, RMS completed the Newell Highway Safety Review three year, \$30 million program of safety works along the approximately 1060 km length of the highway. The road strategy for the Newell Highway was developed following the Newell Highway Safety Review 2009 and Road Toll Response Package 2010.

During the three year program, RMS worked closely with the Newell Highway Taskforce with representation from local government, NRMA, Members of Parliament, truck operators and transport groups.

The strategy delivered key road safety interventions to improve safety along the route including road realignment and widening, intersection upgrades, hazard removal, installation of safety barriers and a review of speed zones. This implementation of safety works was supported by enhanced enforcement by both the NSW Police Force and Heavy Vehicle Inspectors.

Picton Road safety works

In 2011-12, the Cordeaux Dam junction on Picton Road was upgraded, Stage 1 widening and barrier works west of Mt Keira Road were completed and a significant amount of widening and barrier work was completed on the 2.5 km length between NRE and Cordeaux Collieries. This safety initiative has delivered 10 km of central barrier along the route which is having a direct positive impact on reducing the occurrence of head-on crashes.

Improving road user safety

Railway Crossing Program

The Level Crossing Improvement Program is aimed at improving the safety of railway crossings.

In 2011-12, major railway crossing upgrades were completed at Bathampton Road, Wimbledon; Amaroo Road, Amaroo; Mackays Road, Coffs Harbour; and Hoddle Street, Robertson. Public education campaigns in local media, site specific education and enforcement increased community awareness of safety issues at railway crossings. This year, \$7.4 million was invested in improving safety at railway crossings in NSW.

As part of this program, RMS released the Railway Crossing Safety Series 2011. This provided the criteria for one hundred railway crossings on RMS-controlled roads to be assessed for safety and the development of a forward program of minor works improvements.

School Crossing Supervisor Program

The School Crossing Supervisor Program is a key road safety initiative to improve the safety of primary school children using supervised pedestrian facilities to access their local school. The program is coordinated by RMS and employs more than 1100 school crossing supervisors on a statewide basis

In November 2011, the program completed the Occupational Health and Safety Drive-through Project, which investigated the frequency and cause of reported drive through incidents at supervised school pedestrian crossings across the State.

Consultation with interstate and international jurisdictions with similar programs was carried out to determine interventions that would positively influence driver behaviour and improve community awareness to reduce the number of drive through incidents. A number of recommendations and associated costs to improve the safety at supervised school crossing facilities have been identified.

School zone flashing lights

Flashing lights were installed at 138 school zones in the Sydney metropolitan area and 43 regional area zones, bringing the total to 182 for the year. The flashing lights warn motorists to slow down as they enter 40 km/h school zones and improve safety for school children.

Combating speed

Point-to-point cameras

Point-to-point cameras are being introduced to enforce restrictions on heavy vehicle speeding in NSW. This technology can enforce speed limits over long stretches of road. It is on these longer stretches that heavy vehicle speeding is of greatest concern.

Between December 2011 and June 2012, eight enforcement lengths were fully operating. The rollout of point-to-point average speed cameras for heavy vehicles had delivered 16 operational lengths by June 2012. A total of 24 lengths are planned to be rolled out, six by the end of this calendar year and the remaining two by June 2013.

Red light speed (safety) cameras

Safety cameras are installed to make intersections safer by enforcing both speeding and red-light compliance. At June 2012, 105 red-light speed cameras were operating at 91 intersections. The program was reviewed from July 2011 to June 2012, following the release of an Auditor-General report. During 2011-12, it was announced that the Red Light Safety camera installation program would recommence after the recommendations of the Auditor-General's review of speed camera programs were published.

Mobile speed cameras

Mobile speed cameras were reintroduced in July 2010 in response to an increasing road toll. Their purpose is to produce a sustained change in driver behaviour through anywhere, anytime enforcement to reduce fatalities and injuries on roads. At June 2012, the program had already delivered 930 hours of enforcement per month.

The program was reviewed from July 2011 to June 2012, following the release of an Auditor-General's report on cameras. On 1 June 2012, Stage II of the program was announced and will deliver 7000 hours of enforcement per month by June 2013.

Heavy vehicle compliance and enforcement investigations

In early 2012, RMS investigators led a series of operations targeting the speed management practices of four major transport companies. The operations were initiated following a triple fatality resulting from a B-Double colliding with a light vehicle near Menangle on 24 January 2012.

The operations involved enforcement staff targeting heavy vehicle compliance at various RMS heavy vehicle inspection stations and through inspection of vehicles. Following this, search warrants were produced with directions to produce information and records. This resulted in the detection of a number of contraventions of speed limiter requirements and chain of responsibility obligations to prevent heavy vehicle speeding. More than 1000 Court Attendance Notices were prepared throughout the operation with ongoing legal assistance and advice.

Slow Down Road Show

The Slow Down Road Show aims to deliver messages to the community about the consequences of speeding. It is an interactive display that features two crashed cars one crashed at 60 km/h and the other at 100 km/h, to highlight the differences in impact at higher speed.

Between November 2011 and July 2012, the Slow Down Road Show reached more than 250,000 members of the community. Locations included the NSW 2012 Royal Easter Show.

NSW SpeedBlitz Blues sponsorship

This was RMS' 10th year as major sponsor of the NSW men's cricket team. The sponsorship aims to change driver attitudes towards speeding by making the behaviour socially unacceptable. This was the first year of a two-year contract extension, valued at \$1.21 million for the two-year term. This is RMS' last year as major sponsor, as the contract transfers to Transport for NSW for the 2012-13 season.

The Slow Down Pledge, a Facebook initiative designed to encourage drivers and passengers to take the pledge to slow down on our roads, continued to be a key call to action. At 30 June 2012, 3375 people had taken the pledge.

A number of NSW SpeedBlitz Blues players travelled with the 'On the Road' Road Show, an interactive educational road show. The event reached 7370 students across 46 secondary schools, including 10 regional areas and four metro areas.

Electronic work diaries

NSW law requires drivers of heavy vehicles, when travelling 100 km 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 two-stage pilot of electronic work diaries is underway. 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 Government and National Transport Commission together with the road and police agencies of Queensland, Victoria, South Australia and Western Australia

Stage 1 of the pilot was conducted from July 2011 to March 2012 and included 27 drivers and 10 transport operators using a range of in-vehicle electronic work diary options. It was a small scale pilot to test processes and systems and prepare for Stage 2.

Stage 2 began in March 2012. The purpose of Stage 2 is to build on the findings from Stage 1, resolve key legal and policy issues necessary for electronic work diary implementation and operation, and finalise the technical performance specifications for electronic work diaries. The field work in Stage 2 includes coordinated intercepts in NSW, Queensland, Victoria and South Australia. Supporting the pilot is a website (www.ewd.gov.au).

'P' Driver Project

The 'P' Driver Project is a behaviour-based program that is being trialled to determine its effectiveness in improving behaviour and reducing the number of crashes involving provisional drivers. It is a collaborative project between 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.

The first NSW 'P' Driver project session was held in western Sydney in January 2012. Further program sessions were held in other NSW trial regions (Dubbo/Forbes/Parkes, Armidale/Tamworth, Lismore/ Tweed Heads) during February and March 2012.

Vehicle Safety Compliance Certification Scheme

This scheme was introduced in December 2011, replacing the Engineering Certification Scheme. It ensures that only people licensed under the scheme can assess modified, individually constructed, and imported vehicles and certify compliance with applicable vehicle standards. As at 30 June 2012, there were 56 active licensed certifiers in the new scheme.

Maximising boating safety

Boating safety compliance

The number of vessel safety compliance checks carried out by RMS Boating Safety Officers in 2011-12 was 48,448, an increase of some 7000 checks over the previous period in 2010-11. A total of 2067 Penalty Notices were issued across NSW during the period for a range of offences. Non-compliance with safety equipment regulations (including lifejackets) accounted for 1019 or 49 per cent of Notices issued, which is a significant increase from 33 per cent in the previous period. This is attributed to the lifejacket reform that took place on 1 November 2010 with the focus of campaign activities shifting from education to compliance in 2011.

Excessive speed accounted for 374, or 18 per cent, of penalty notices. Non-compliance with safety of navigation regulations made up 13 per cent which includes offences such as not complying with distance off or towing requirements. The remaining notices were issued for a range of offences, including non-compliance with licence, registration and navigation light requirements.

Statewide and regional education and compliance campaigns

For the 2011-12 boating season, RMS scheduled nine statewide education and compliance campaigns. Campaigns were spread over longer periods than the normal one weekend to accommodate poor weather, resources, and cover larger geographical areas. Each campaign had a specific primary focus, with all campaigns including a lifejacket and safety equipment compliance component. A wide range of activities including boating checks, skipper education, safety equipment maintenance, navigation education and commercial vessel safety compliance was covered. There was a general increase in the number of checks conducted during these campaigns when compared with 2010-11. This was mainly attributable to increasing the length of the campaigns. Lifejacket education still appears to be a major challenge.

Lifejacket education

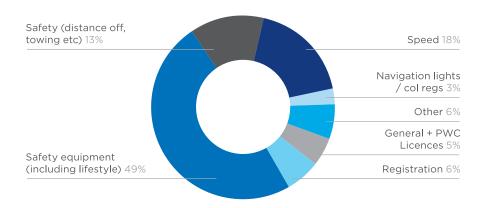
Lifejackets remained the primary boating safety message for the year and was a theme of all campaigns. From November 2011, Boating Safety Officers applied a stricter approach to compliance, following a 12 month "education" period after new lifejacket lawas were introduced in November 2010.

National maritime safety reform

A National System for Commercial Vessel Safety is expected to begin in all states and territories in January 2013. It will replace 50 state and territory laws and will combine eight commercial vessel regulatory systems into one. RMS has established a project team to coordinate implementation in NSW.

RMS has mapped the impact of the new system to its processes, systems and resources and is in the process of making the necessary changes to become compliant with the new requirements when they are introduced.

Figure 14. Individual types of boating penalty notice according to percentage of total penalty notices issued



Alcohol and drug testing

More than 13.143 random breath tests were carried out on vessel operators by the NSW Police Force. A total of 41 vessel operators were charged for being over the 0.05 prescribed alcohol limit. RMS continued its public education on the risks associated with boating under the influence of alcohol and drugs.

Aids to navigation

RMS maintains 3418 aids to navigation, of which 1544 are lit, on NSW navigable waters. In the period 1 November 2011 to 30 June 2012, RMS replaced 206 aids to navigation due to age, damage or floods, including:

- 66 lights.
- 22 PVC markers replaced aged steel pipe markers.
- 4 timber poles.
- 35 small agua-buoys.
- 29 medium size buoys.
- · 40 large size plastic buoys.
- 5 courtesy mooring buoys.
- 5 hi-flow trial buoys.

New capital installations and major upgrades were also completed, including Corrie Island Lead, Clarence River lights, Lake Albert buoys, Wallis Lake piles and buoys, Port Hacking buoys, Georges River buoys, Brisbane Waters piles and Botany Bay synchronised lights.

A total of 607 maintenance notifications were issued for works required. The aids to navigation maintenance contractor achieved a 100 per cent compliance rating for meeting key contract performance targets during 2011-12.

The aids to navigation in the Ports of Yamba and Eden were transferred to Sydney Ports Corporation on 30 November 2011.

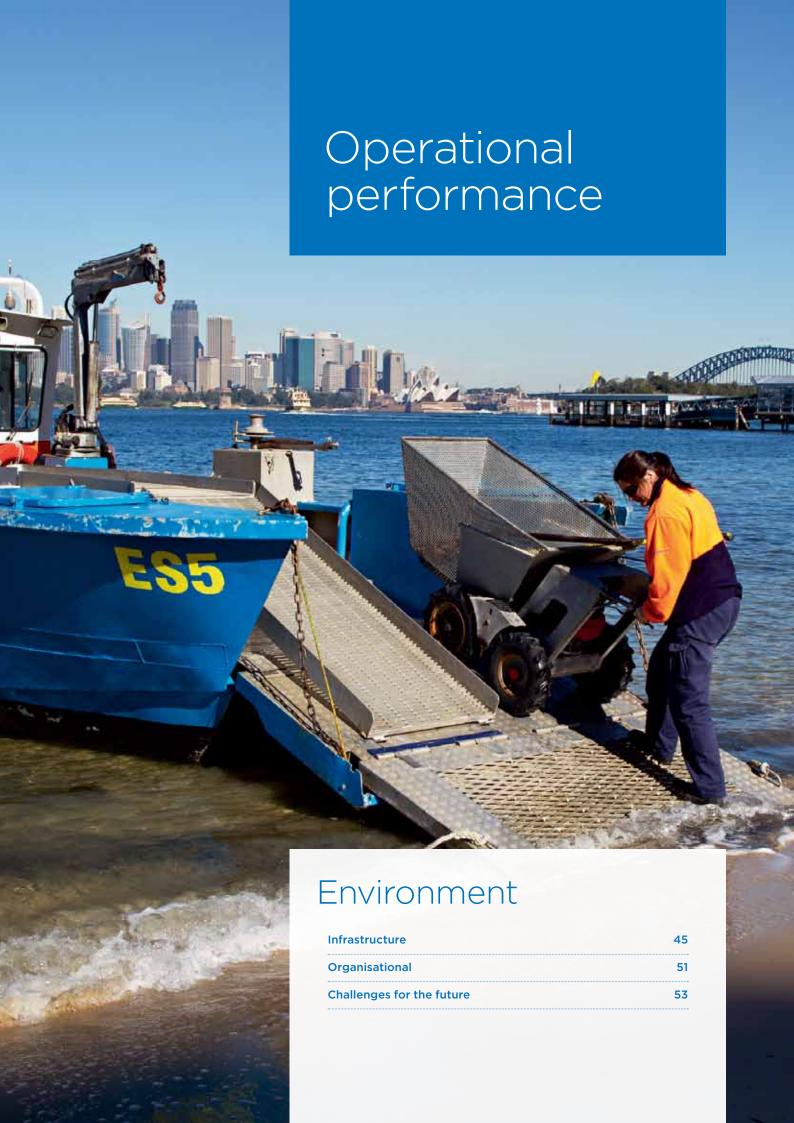
Maritime investigations

RMS conducted 25 investigations into marine accidents, and three investigations into fraud related offences (vessel rebirthing and registration forgery). These investigations resulted in nine infringements being issued, and one court prosecution which resulted in a record fine of more than \$15,000 to the offending individual.

One officer also attended a Coronial hearing to give expert evidence into a fatal incident. Several of the investigations conducted resulted in safety recommendations being made to the vessel operators.

Challenges for the future

- · Deliver road safety related compliance schemes including point-to-point cameras and mobile speed camera enforcement.
- Review policies and procedures relating to on-water compliance to ensure appropriate efficiency and effectiveness.
- Develop a three year plan and deliver 'year one' education activities to promote safe and responsible boating, with an emphasis on personal responsibility and lifejacket use.
- Implement the National Maritime Safety Regulator service delivery agent arrangements.
- Continue to work collaboratively with the NSW Centre for Road Safety and key stakeholders to ensure alignment to strategic direction and understanding of stakeholder needs.
- Deliver the \$36 million State and Federal Black Spot Programs to improve the safety of infrastructure at key locations.



Environment

The impact of transport on the environment is minimised

RMS supports and drives sustainable and compliant environmental management practices and behaviours to ensure that the impact of our works on the environment is minimised.

Infrastructure

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. RMS is committed to the protection of biodiversity in road reserves and considers biodiversity issues carefully during route selection and road design for all infrastructure projects.

Biodiversity protection is achieved through the following:

- Regular environmental inspections of construction sites.
- · Development, review and implementation of environmental impact assessments.
- · Policies, guidelines and procedures.
- Environmental specifications.

· Environmental awareness training for RMS staff and council workers.

Table 14 outlines how RMS protected and enhanced biodiversity during the reporting period.

RMS contributed to a number of Threatened Species Recovery Plans prepared by the NSW Office of Environment and Heritage in accordance with Part 4 of the Threatened Species Conservation Act 1995. Refer to Appendix 2 for full details.

Table 14. Biodiversity projects

Activity	Purpose	Progress
Contribute to the NSW Wildlife Council	Manage wildlife on roads.	RMS provided \$25,000 to the NSW Wildlife Council, which coordinates wildlife carer groups and advises carers on wildlife management policy.
Develop biodiversity guidelines for protecting biodiversity during construction and maintaining connectivity.	Provide best-practice guidance and encourage consistency across NSW in protecting biodiversity during construction activities and maintenance works.	A best practice note on biodiversity assessment for road projects was published. A consultants' briefing on the use of the best practice note was held in March 2012.
Monitor the effectiveness of measures to allow threatened squirrel gliders to move across the Hume Highway.	Minimise impacts on biodiversity.	RMS continued to support a joint research project with VicRoads and the University of Melbourne to determine the effectiveness of fauna crossing structures for roads. Results are being used in the design of crossing structures for other RMS projects.

Activity	Purpose	Progress
Manage Green and Golden Bell Frog (Litoria aurea), South Nowra.	Minimise impacts on biodiversity.	In November 2011, RMS discovered that a Green and Golden Bell Frog population had expanded in to the project area of the Princes Highway Upgrade at South Nowra. In consultation with State and Commonwealth agencies, RMS developed and implemented a comprehensive plan of management to minimise the impact of the road project on the threatened frogs.
Monitor Pacific Highway threatened species.	Minimise impacts on biodiversity.	RMS undertook a monitoring program studying the impact of highway development on populations of Spotted-tailed quolls, Rufous bettongs and the endangered coastal emu population.
Implement biodiversity offsets.	Purchase and manage land to offset unavoidable biodiversity impacts.	In November 2011, RMS adopted a Guideline for Biodiversity Offsets and continued to implement Biodiversity Offset Strategies for a range of projects including the Hume Highway Duplication, Hume Highway bypasses and the Pacific Highway Upgrade.

Roadside environment

RMS continued to support the Roadside Environment Committee and funded the committee's secretariat and meeting costs in 2011-12. The committee is a multi-agency advisory body that promotes the management of linear reserves to balance environmental, social and economic values. The member organisations are:

- · RMS.
- Nature Conservation Council.
- Essential Energy.
- Rural Fire Service.
- · RailCorp.
- Institute of Public Works Engineering Australia.
- Local Government and Shires Association.

- Livestock Health and Pest Authorities.
- Office of Environment and Heritage.
- Department of Primary Industries.
- · Transgrid.
- · Catchment management authorities.

Key achievements in 2011-12 included:

- Supporting the Roadside Vegetation Implementation Project by assessing applications with the Local Government and Shires Association. A total of \$1,286,428 of Environmental Trust funding was distributed across 28 projects and 31 local councils across NSW.
- Mapping the status and implementation of Roadside Vegetation Management Plans across NSW.

- Sponsoring the inaugural Roadside Environmental Management Award as part of the 2011 Local Government Excellence in the Environment Awards. The awards recognise outstanding achievements by NSW Local Government in managing and protecting the environment. The winners of the 2011 award were:
 - Winner A Division: Cooma-Monaro Shire Council - Cooma-Monaro Shire Council Native Roadside Vegetation GIS Layer.
 - Winner B Division and Overall Category Winner: Mid-Western Regional Council - Roadside Corridor Management Project.
 - Winner C Division: Hunter and Central Coast Regional Environmental Management Strategy (HCCREMS) -Regional Roadside Vegetation Marker Scheme.

- Supporting a pilot training program in roadside environmental management for local council staff with three councils: Wyong, Singleton and Gloucester.
- Presenting at the Central West and Lachlan Local Government Reference Forums in November 2011.

Environmental planning and assessment

The environmental framework

The Environmental Planning and Assessment Act 1979 (EP&A Act) establishes the process for environmental impact assessment and approval. The *Environmental* Impact Assessment Guidelines provide a framework to ensure that RMS environmental assessments are of high quality and meet community expectations.

Managing environmental requirements for projects of State significance

From November 2011 to June 2012, two RMS projects were approved by the Minister for Planning under Part 3A of the EP&A Act, which requires environmental assessments to be carried out. The projects were the:

- M5 West widening project.
- Oxley Highway to Kempsey Upgrade (Pacific Highway).

In October 2011, changes were made, which included the repeal of Part 3A and the introduction of a new regime for assessment of State significant infrastructure under a new Part 5.1 of the Act. Since the introduction of Part 5.1. RMS

has lodged two State significant infrastructure applications and received environmental assessment requirements for the:

- Windsor Bridge replacement project.
- · Woolgoolga to Ballina Upgrade (Pacific Highway).

Environmental investigations and the preparation of Environmental Impact Statements for these projects have begun. A procedure with supporting templates and guidance notes dealing with State significant infrastructure under Part 5.1 of the EP&A Act is being developed. Awareness of the new Part 5.1 assessment processes was extended across the organisation through briefings and information sessions.

Managing Part 5 reviews of environmental factors

Part 5 of the EP&A Act applies to activities that do not require development consent under Part 4 or approval under Part 5.1 (or under the former Part 3A). Part 5 applies to the majority of RMS projects. For these projects, RMS is the proponent and prepares a Review of Environmental Factors report prior to determining whether or not the project should proceed.

The report examines the potential environmental impacts of activities, assesses whether or not the potential impacts would be significant, and identifies measures to avoid, minimise, mitigate and in some cases, offset impacts. As part of the *Environmental Impact* Assessment Guidelines, RMS has procedures with supporting templates and guidance notes to ensure quality assessment of works carried out under Part 5

Between 1 November 2011 and 30 June 2012, RMS exhibited reviews for environmental factors for community input for five projects:

- · Bringelly Road.
- · Richmond Road.
- · Great Western Highway Kelso.
- · Termeil Creek.
- Kirribilli Ennis Road redevelopment.

Environmental performance improvement

In 2011-12, regional environment staff undertook more than 500 inspections on 230 separate construction and maintenance projects being carried out by 47 separate contracting companies. Strategic environmental reviews were conducted on complex projects across the State including Kempsey Bypass, Holbrook Bypass, the M2 Motorway Upgrade and Erskine Park Link Road. The results and recommendations from these reviews were fed back to contractors and reported to the RMS Executive Environment Committee.

RMS also used external and internal environmental auditors to audit 12 construction projects in the period 1 November 2011 to 30 June 2012. These audit reports are used to review and improve contractors' environmental management systems and on-the-ground environmental controls.

Table 15. Licences issued for RMS activities

Project/site name	Licensed activity	
Camden Valley Way Upgrade	Road construction	
F5 Widening	Road construction	
Central Coast Highway	Road construction	
Hunter Expressway early works*	Road construction	
Woodford to Hazelbrook Upgrade**	Road construction	
Newcastle Inner City Bypass**	Road construction	
Mortlake Slipway	Marinas and boat repair facilities	
Ashby Dry Dock	Marinas and boat repair facilities	
James Craig Marina	Marinas and boar repair facilities	
Rockdale Depot	Transport of waste	
Wagga Depot	Transport of waste	
Unanderra Waste Processing Facility	Waste management	
Mewburn's Gravel Quarry	Hard rock gravel quarrying	

^{*}The environment protection licence for the Hunter Expressway early works was surrendered on 12 January 2012.

Environment protection licence management

RMS is required to hold environment protection licences under the Protection of the Environment Operations (POEO) Act 1997 for certain activities that trigger the licensing schedule in the Act. During the reporting period, RMS held 13 licences under the Act. RMS was issued with one penalty notice from the Environmental Protection Agency for pollution of waters resulting from a discharge of dirty water from a sediment basin on the Central Coast Highway Upgrade project in February 2012.

Noise management

Noise Abatement Program

In 2011-12, RMS treated 126 dwellings exposed to high levels of road traffic noise under the Noise Abatement Program. Architectural noise treatments include sealing around doors and windows,

installing mechanical ventilation and replacing doors and windows with acoustically rated units. The majority of building treatments were provided in the Sydney region (around 90 homes and two schools) with the remaining treatments focused in the Northern area of the State. RMS allocated \$8 million to the program in 2011-12. This increase from \$3 million in 2010-11 was to help reduce the backlog of residences waiting for treatment. It will be increased to \$15 million in 2012-13

Noise Nightworks DVD

The Minimising noise from night works DVD was developed and released. The DVD raises environmental awareness of how to approach noise management for night time works. The DVD was distributed to construction partners and the video is available to the public on the RMS Road Projects resources page.

Land and water management

Erosion and sedimentation control training

RMS delivered two-day erosion and sedimentation training across all RMS regions to 124 attendees including RMS staff, RMS contractors and staff from the NSW Environment Protection Authority. The training is designed to improve the management of erosion and sedimentation control on all RMS-contracted road construction sites.

Management of tannins from vegetation mulch

Tannins are naturally occurring plant compounds released when plants naturally breakdown in the environment. The stockpiling of vegetation mulch on construction sites may concentrate the production of tannins and result in discoloured stormwater discharges. RMS approved an Environmental Direction, which sets minimum management measures for a risk based approach to management of mulch on construction sites. The measures apply to all sites with higher level management measures to be applied to sites with a high risk of tannin generation.

Heritage

Unexpected Archaeological Finds Procedure

The Unexpected Archaeological Finds Procedure was developed to provide guidance on how to proceed in the event of uncovering an unexpected archaeological find (both Aboriginal and non-Aboriginal) during RMS activities. The procedure provides direction on when to stop work, where to seek technical advice, and how to notify the regulator if required.

^{**}RMS held the environment protection licences for the Woodford to Hazelbrook Upgrade and the Newcastle Inner City Bypass for a short period due to the contractor and licence holder becoming insolvent.

The procedure includes RMS' heritage notification obligations under the following legislation: Heritage Act 1977 (NSW), National Parks and Wildlife Act 1974 (NSW), Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth) and the Coroner's Act 2009 (NSW).

Heritage and **Conservation Register**

RMS continues to manage its S170 Heritage and Conservation Register, in accordance with S170 of the Heritage Act 1977 (NSW). The register documents RMS' State and locally significant heritage assets and currently lists 319 items including bridges, buildings, memorials and movable heritage items among others. With the formation of RMS and the alignment of maritime and roads service delivery, the 84 individual heritage assets managed by the former NSW Maritime are currently being incorporated with RMS roads-related heritage into a revised RMS Heritage Register.

In November 2012, RMS started cataloguing, tagging and re-housing the significant movable heritage items associated with cash tolling on the Sydney Harbour Bridge, which ceased with the introduction of fully electronic tolling. Around 100 items and collections of items, were catalogued and tagged, including 'toll paid' indicators; toll collectors' bags, uniforms and caps; cash boxes; toll signs and automatic coin counting machines. These items are now included within the RMS Movable Heritage collection, recorded in the S170 Register.

Aboriginal cultural heritage consultation

Aboriginal cultural heritage impacts on a range of projects from maintenance works to highway upgrades. In November 2011 the Procedure for Aboriginal Cultural Heritage Consultation and Investigation was updated to address amendments to the National Parks and Wildlife Act 1974.

The procedure ensures that Aboriginal cultural heritage is assessed and managed in a responsible and appropriate manner with active engagement from the Aboriginal community.

Managing Aboriginal cultural heritage on RMS projects

Although RMS seeks to avoid impacts on Aboriginal cultural heritage, this is not always possible. In such cases, RMS must ensure that it manages its impacts in accordance with relevant legislation.

For many projects being assessed under Part 5 of the *Planning and* Assessment Act 1979, RMS is required to seek an Aboriginal Heritage Impact Permit to allow for impacts on Aboriginal objects and places. Permits were sought for the following RMS projects:

- · Camden Valley Way Upgrade.
- Gostwyck Bridge Upgrade.
- · Hunter Expressway, west of Black Creek.
- Nelson Bay Road Upgrade.
- · Princes Highway Upgrade, Dignams Creek.
- Princes Highway Upgrade, Gerringong.
- Richmond Road Upgrade.
- · Schofields Road Upgrade.

Aboriginal cultural heritage investigations and salvage excavations not requiring a permit, have also been carried out on other projects, including the Pacific Highway Upgrade and the Princes Highway Upgrade - Foxground and Berry Bypass.

RMS Heritage Committee

The RMS Heritage Committee meets quarterly to discuss issues relating to the management of heritage assets and policy development for heritage conservation. The committee includes representatives from:

- · Engineers Australia.
- · Heritage Branch, Office of Environment and Heritage.
- · The National Trust of Australia (NSW).
- The Royal Australian Historical Society.

Over its 32 years the committee has provided specialist guidance on the value of heritage resource for the people of NSW. The meetings also present projects with significant heritage issues and provide an opportunity for stakeholders to raise issues with RMS.

RMS heritage photos on TROVE

RMS is progressively scanning selected still images from its collection of 190,000 historic photos, negatives and transparencies. The scanned images plus the associated metadata are being entered into the RMS image library. To facilitate public access, this image library has now been linked to the National Library of Australia's TROVE digital information searching facility. Almost 800 historic RMS images are now available on TROVE.

Selected historic films and videos from RMS' audiovisual collection are also being digitised and uploaded onto the RMS channel on YouTube.

Urban design

A number of initiatives were completed this year:

- Bridge Aesthetics: Design Guidelines to improve the appearance of bridges in NSW was updated with images of new bridges and revised guidance.
- An urban design training video was developed and is available on the RMS urban design intranet page or on a DVD.
- A design competition was held for a new pedestrian bridge across the Nepean River at Penrith. Contractors were engaged to provide a design vision for the bridge which was proposed as part of the Penrith City Master Plan The Future of Penrith, Penrith of the Future.
- Historic murals in The Rocks on the Cahill Expressway. implemented by Sydney Harbour Foreshore Authority working with RMS, were recognised by the National Trust's NSW Heritage Awards.
- The Inner West Busway was completed with the installation of the joint RMS-funded pontoon for use by the public including fishers and kayakers.

Clean Safe Wharf Initiative

The Clean Safe Wharf Initiative is being conducted in phases. In September 2011 a phased Three E's (Education, Enforcement, Exclusion) approach to ensuring commuter wharf cleanliness and safety was announced.

Phase One, Education, ran from October 2011 to April 2012 and initiatives included:

- Regular patrols by RMS Boating Safety Officers, Council Rangers and the NSW Police Force on wharves located in Abbotsford. Cabarita, Chiswick, Kissing Point and Taronga Park Zoo.
- Advertisements in various press and the distribution of educational brochures in numerous languages.
- The Fishcare Volunteer Program involving volunteers visiting wharves to meet and greet recreational fishers at wharves and distribute information and advice.

Phase Two, Enforcement, began on 23 April 2012 and will run through to the 2012 October long weekend. While education initiatives will continue during Phase Two, its focus is on enforcing regulations relating to littering, anti-social behaviour and fishing.

Since January 2012, more than 560 patrols and inspections of wharves have been carried out by RMS Boating Safety Officers and the NSW Police Force with 17 formal warnings and 16 infringements being issued.

Keeping waters clean

RMS daily performs the task of cleaning the waters and public foreshores of Sydney Harbour and also the navigable waters of the Parramatta and Lane Cove Rivers. This is currently the only effective means of removing floating hazards to navigation and Sydney Harbour's storm water pollution and other visible debris.

A total of 688 m³ of rubbish from the harbour and 239.56 m³ of rubbish from the Sydney electorate's navigable waters public harbour foreshores was removed during financial year 2011-12.

Vessel waste recovery

To protect the marine environment from the impact of sewage pollution from vessels and encourage the responsible disposal of vessel waste, RMS maintains pump-out facilities at King Street Wharf and Blackwattle Bay. An additional three pump-out facilities are monitored at Wharf 6 White Bay, Cabarita and Birkenhead Point.

During the 2011-12 financial year, a total of 12.123.789 litres of untreated sewage waste was pumped out from vessels through these facilities. This represented a 10 per cent decrease on the previous financial year. RMS also funds a mobile vessel pump out facility on Myall Lakes. During the year, 88,260 litres of untreated sewage waste was pumped out through these facilities, which is a decrease of 12 per cent on the previous year.

Maritime Trade Towers

RMS owns the Maritime Trade Towers at 201-207 Kent Street Sydney and occupies Level 5 (training room) and a service centre at Level 6, 207 Kent Street. RMS has introduced initiatives to reduce energy use, water use and waste at Maritime Trade Towers. These initiatives include:

- · Attaining a 4.5 star energy and a 3.5 star water rating following a National Australian Built Environmental Rating Scheme energy and water audit.
- Installation of waterless urinals in all male toilets which saves 70.000 litres of water per urinal per annum and a total 2.8 million litres of water per annum for the building.
- The continuation of an active waste reduction and recycling program.

A gold star from the Sydney **Catchment Authority**

Sydney Catchment Authority (SCA) commissioned Deloitte to audit four of its projects delivered by external providers. Two of these projects were delivered by RMS Road and Fleet Services, the Wingecarribee Dam Improvement Works and the Kangaroo Pipeline Incident Remedial Works. This was part of an SCA environment compliance audit.

The audit found that RMS' projects were 100 per cent compliant with SCA's environmental protection requirements. The audits included a review of site environmental systems and inspections.

Recycling

RMS exceeded its sustainability targets for recycling or reuse of road work materials. At the end of the year, 91 per cent, or 514,092 tonnes of all materials, was recycled with virgin excavated natural material (or fill) at 54.818 tonnes (93 per cent), concrete at 461 tonnes (63 per cent), and recycled asphalt pavement at 7444 tonnes (97 per cent).

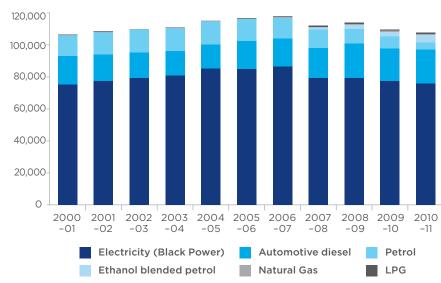
Organisational

Environmental sustainability strategy

Some key sustainability initiatives over the past 12 months include:

- RMS road maintenance crews in Sydney, Wollongong and Hunter regions were trained in eco-driving techniques to help reduce diesel fuel use.
- Installation of cathodic protection systems on several concrete bridges to extend their life.

Figure 15: Total greenhouse gas emissions (tonnes of carbon dioxide equivalent)



- · Establishment of recycling contracts with two companies to safely remove contaminated sections of old timbers removed from historic road bridges.
- The start of Green Facility Management training to integrate environmental management into day-to-day building maintenance activities.
- Development of a new resource recovery exemption with the **Environment Protection Authority** to better facilitate the re-use of excavated road materials.

Reducing RMS' carbon footprint

Greenhouse gas emissions

Reducing RMS' greenhouse gas emissions is an objective of the RMS Climate Change Plan. The organisation has set a target of reducing its greenhouse gas emissions by an average of 2 per cent per annum up to 2020. In 2010-11 RMS reduced its greenhouse gas emission by 1.9 per cent compared to the previous year. The main sources of emissions are the operation of RMS' buildings, street lights, traffic signals and vehicle fleet. The reduction in emissions was largely due to:

- Reduction in petrol use (38 per cent).
- · Reduction in LPG use (21 per cent).
- · Reduction in building energy use (1 per cent).

To reduce greenhouse emissions for road projects, this year RMS worked with other state road authorities to develop the *Greenhouse Gas* Assessment Workbook for Road Projects and calculator.

The workbook and calculator provide road designers, builders and managers with a common methodology for estimating emissions from the construction, operation and maintenance stages of a road project. The workbook also provides a better understanding of how emissions can be reduced and will enable benchmarking and comparisons of projects.

Improved light vehicle fleet fuel consumption

The Environmental Performance Score (EPS) is a rating score out of twenty given to all light vehicles sold in Australia and is based on the greenhouse gas emissions and air quality impact of vehicles. The higher the EPS score the better the environmental performance of a vehicle. RMS owns and leases a large number of vehicles and measures the average EPS scores for its passenger and commercial vehicle fleets.

The average passenger vehicle EPS score has increased from 12.34 in 2008 to 13.66 in June 2012. RMS' average commercial vehicle EPS score has increased from 8.05 in 2008 to 9.73 in June 2012. RMS has exceeded the NSW Government targets set for this period and continues to take into consideration the environmental performance of a vehicle when purchasing new RMS fleet vehicles.

Figure 18 shows RMS' improving EPS for its light vehicle fleet which is due to the implementation of a cleaner fleet procurement policy.

There has been a significant drop in the amount of unleaded petrol consumed in the past four years (see Figure 19). This is attributable to the purchase of more fuel efficient vehicles, an increase in the use of E10 fuel (a blend of 10 per cent ethanol and 90 per cent unleaded petrol), and an increasing proportion of LPG fuelled vehicles compared to previous years.

A target 20 per cent of all fuel used in government fleet light motor vehicles should be E10. The use of E10 in the RMS light vehicle fleet has been gradually increasing and was 69 per cent in June 2012, far exceeding the Government target.

Energy efficiency

RMS reports in October of every year on its direct energy consumption, in accordance with the NSW Government Sustainability Policy. In 2010-11 RMS consumed 690,712 gigajoules of energy, which is two per cent less than the energy used the previous year. RMS' major energy uses are electricity to operate traffic signals, street lights and buildings, and diesel and petrol for road machinery and vehicles. In addition, minor amounts of LPG and natural gas are consumed for heating buildings, as fuel for some light vehicles and for manufacturing asphalt. RMS' energy use profile for 2010-11 is shown in Figure 20.

During the year, RMS continued to implement building energy efficiency initiatives, including:

- Conducting energy audits at five frontline RMS offices in Illawarra and Hunter regions. The audits and subsequent installation of new energy efficient lighting and air conditioning systems were funded by the Office of Environment and Heritage, through its Government Building Retrofit Program.
- Upgrading old air conditioning systems with energy efficient systems at motor registries.

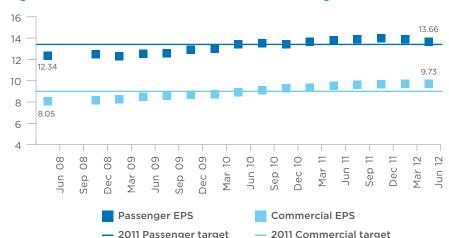
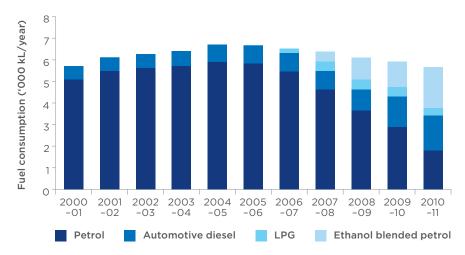


Figure 16. Environmental Performance Score for RMS light vehicle fleet





Note: Ethanol blended petrol data not collected prior to 2006-07

Waste reduction

RMS reports every two years to the Office of Environment and Heritage on the progress made in implementing its Waste Reduction and Purchasing Plan. The most recent progress was submitted in 2011 and includes information on RMS' progress in meeting the NSW Government's waste targets.

Overall, RMS is on target to meet the NSW Government's 2014 waste recovery targets. Table 16 provides summary of RMS construction waste recovery rates.

Some key waste initiates by RMS over the past 12 months include:

- Partnering with Boral to trial using high slag content cement on the Woomargama Bypass Project. The trial began in 2011 and will use 100 tonnes of Boral's propriety product, which uses approximately 50 per cent less Portland cement than traditional mixes.
- Recovering office paper; recovery rates are currently estimated at 90 per cent based on waste audits carried out in a sample of RMS offices.

- · Reselling all electronic equipment such as computers monitors and mobile phones.
- Awarding contracts to two timber recycling companies to recycle bridge timbers. Each company is required to provide test results showing that the recycled bridge timbers contain acceptable levels of residual contamination before being on-sold. Approximately 400 tonnes of old bridge timbers have been recycled.

Oil and pollution response

In 2011, strategic oversight of NSW's marine incident response arrangements moved from the former NSW Maritime to Transport for NSW. RMS is the combat agency responsible for marine incident and pollution response in NSW Waters from Port Stephens to the Queensland border and from Gerroa to the Victorian border.

The marine incident response arrangements form part of NSW's responsibility under the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (National Plan). The plan is an integrated government and

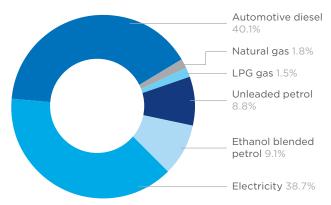
industry framework enabling effective response to marine pollution incidents.

During the reporting period, RMS staff responded to a number of minor pollution incident reports. Four staff also participated in a National Oil Spill Exercise held at Western Port Bay, Victoria, on 5-7 June 2012.

Challenges for the future

- Develop publicly available reporting on RMS' environmental sustainability.
- Develop a new environmental sustainability strategy and establish new sustainability commitments and targets.
- Create an RMS response and develop a guideline for implementing the Government Road Noise Policy to drive implementation.
- Establish the effectiveness of the current engine brake noise cameras and education program for heavy vehicles and develop a proposal to progress the technology and associated regulatory framework.

Figure 18. Energy use profile 2010-11 (Per cent of direct energy consumption as measured in gigajoules)



Because of the time delay in sourcing data and collating energy reports, all annual report energy data is 12 months in arrears.

Table 16. Waste recovery rates

Waste type	RMS 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 (VENM)	96%	95%



Business results - Engagement

Community, partners and stakeholders are consulted and informed about transport issues

RMS engages with members of the community, our partners and stakeholders through a number of different methods to ensure they are informed and up-to-date on matters that impact them. RMS also seeks and considers their feedback to ensure we deliver the right outcomes with the right approach.

Community consultation

In 2011-12, local communities were engaged in discussion of more than 700 different planning, construction and maintenance projects.

RMS information and consultation involved:

- Letterbox drops of more than 2664 different newsletters, community updates, letters and flyers.
- More than 1490 meetings, events and displays, attended by around 13,000 community members. This translates to roughly 30 sessions a week with customers and communities to resolve issues around road and water assets and improvements.
- Updating of more than 330 projects on the RMS Road Projects website (see Customer chapter).

On-water event coordination

RMS plays an important role in the licensing and on-water coordination of major aquatic events such as the start of the Sydney to Hobart Yacht Race, Australia Day, and New Year's Eve on Sydney Harbour celebrations. For the latter, which attracts an estimated 2500 to 3000 spectator vessels, RMS is the major event partner with the organiser, the City of Sydney. RMS issues the marine operations plan with responsibilities for risk and on-water crowd and traffic management, working closely with other organisations such as Sydney Ports Corporation, Sydney Water Police, Sydney Ferries and Marine Rescue NSW.

Sydney Harbour Bridge 80th Anniversary Event

As custodian of the Sydney Harbour Bridge, RMS held a community event to celebrate the 80th anniversary of the bridge opening. The vintage themed activities were held at Bradfield Park, Milsons Point. Around 3500 people attended the event which included a big band, swing dancers, 1930s fashion parades, souvenir tea towels and postcards. A special Seniors Morning Tea was held, where people from the community with a connection to the bridge shared their stories, including the grandchildren of Chief Bridge Engineer Dr JJC Bradfield and the Premier at the time of the opening, Jack Lang.

An online guestbook, 'Tell us your story', was also developed enabling people to contribute their memories and stories from around the State, country and the world. There have been more than 22,000 visits to the online guest book, and some remarkable memories captured, including vox pop interviews, photos and historical memorabilia.

The 'Price for Progress' campaign

A number of key corridors across Sydney have started major roadwork in the past year. A communication campaign was developed to advise customers of the changing road conditions including possible delays, alternative routes and the introduction of cashless tolling on some routes. Affected roads included the Hills M2 Motorway, the Sydney Harbour Bridge full weekend closures, the M4, Anzac Bridge, Eastern Distributor and the M5 East. The campaign used the tagline 'The Price for Progress - building for tomorrow today'.

Arthur Hall VC Way

In December 2011, the Arthur Hall VC Way was dedicated. It was the first main road in NSW to be named after a Victoria Cross recipient of the First World War. The dedication was held in the presence of the Governor of NSW, Hall family descendents and community.

Prosecutor education

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

Maritime Medal

The Maritime Medal recognises exceptional contributions to the boating and maritime community. The annual awards are directed at, but not limited to, a person or group who performs an outstanding effort in the categories of Safety, Environment and Community.

In December 2011, three individuals and one group were recognised with a Maritime Medal, and three individuals were recommended with high commendations. The 2011 Maritime Medal recipients were:

Rear Admiral (ret) Tony Hunt AO (Community Medal), the President of the Sydney Heritage Fleet.

Michael O'Connor from Ballina established the Marine Teachers' Association, of which he is President.

Ballina Jet Boat Surf Rescue Inc.

this stand-alone volunteer-run maritime rescue group has been an institution in Ballina for 40 years.

Peter Phillipson who has volunteered his time for 22 years for marine rescue work in Fingal Bay, Port Stephens.

Boat Builders Group

The Boat Builders Group brings together NSW and interstate vessel builders, designers, consultants and surveyors. The group met twice during 2011-12 and discussed a range of issues including the introduction of the NSCV (national standard for commercial vessels). survey anomalies, difficulties in the transfer of vessels between states and interpretation issues surrounding the use of the NSCV.

Boat Importers Group

This group was formed to address the specific requirements surrounding the importing of overseas vessels for commercial operations in NSW waters. The group met once during 2011-12 and discussed a range of issues including the introduction of the NSCV and the benefit of streamlining the process for importing vessels into commercial survey.

Partnership programs

A community partnership program was maintained to support local stakeholder initiatives as part of the Boating Safety Education and Communication Plan 2009-12.

The program typically provides between \$500 and \$5000 partnership funding to support a range of local community safety initiatives. Partnerships were delivered with a range of organisations such as Yachting NSW to promote the need to keep clear of larger vessels during aquatic events such as the Sydney International Regatta. Other partnerships included: Royal Humane Society in support of the NSW Bravery Awards; Corlette Point Sailing Club to promote safe and responsible boating during Sail Port Stephens.

RMS also maintained a partnership with the Boating Industry Association of NSW (BIA) at a total value of \$138,000. This partnership underpinned a year-long safety collaboration with the BIA and included the Sydney International Boat Show as the pinnacle event. The program provided a total of \$153,530 in funding over the year to support and promote stakeholder efforts that underpin a culture of safe and responsible boating in NSW.

The Recreational Vessel **Advisory Group**

This group is administered by the Office of Boating Safety and Maritime Affairs at TfNSW. The group met on two occasions during the reporting period to discuss and provide advice on issues including boating incidents, education and compliance campaigns, dive flag, paddle DVD and EPIRB (distress radio beacon) disposal.

- Develop an RMS Communication Strategy for both internal and external communication.
- Investigate and assess industry feedback on Design and Construct contract tendering processes, complete a process review and develop an implementation plan.
- Review and update the RMS policy for providing tender assessment feedback and publish improved guideline documentation.
- Ensure information on all major infrastructure projects is accessible to the community.

Business results - Governance

Effective governance is in place to deliver our results and services

RMS ensures that formal governance mechanisms are in place and that it is held accountable to delivering agreed outcomes in an open and transparent manner to agreed levels of quality.

Financial management

This year RMS focused on adapting the former RTA financial reporting platform, as well as identifying the process required to bring the financial reporting system of the former NSW Maritime onto that same platform. A common platform is expected to be in place by 30 June 2013.

RMS has adopted the finance policy frameworks of the former RTA and NSW Maritime, and is adapting them to align with the new organisation's strategic financial direction.

Corporate card and purchasing card

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

Financial performance

For details of RMS' financial performance for period 1 November 2011 to 30 June 2012, refer to the financial statements (see pages 65-156).

Transport for NSW integrated budget

RMS is working with the transport cluster on the implementation of an integrated budget. The key objective is to enable strategic and flexible financial resource allocation across transport to optimise whole-of-transport outcomes, priorities and service delivery.

Chief Executive

The Chief Executive of RMS is appointed by the Director General of the Department of Transport with the approval of the Minister for Roads and Ports. Under the governance arrangements of the Transport Administration Act 1988, the Chief Executive manages and controls the affairs of RMS subject to the control and direction of the Minister for Roads and Ports, and in accordance with any directions of TfNSW. The Chief Executive also has a wider role in interacting with heads of other transport agencies in NSW, across Australia, and internationally. The Chief Executive is accountable to the Minister for Roads and Ports for overall performance.

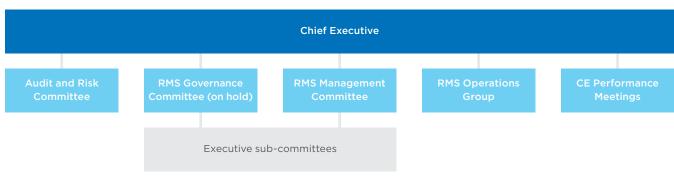
Executive framework

A new executive charter, executive committee structure and committee management system were developed for RMS. These outlined how the RMS Executive would support the Chief Executive in ensuring the effective governance of the organisation.

An Executive Management Committee was also formed to focus on the management of the organisation in the context of business and strategic priorities for the current period. The committee monitored current performance, particularly any issues or risks that could affect the current delivery of its results and services.

The management of RMS is also supported by a range of other executive committees that address key issues within RMS, such as commercial development, Work Health and Safety, and the environment. These committees typically comprise directors and other senior managers from across the organisation to ensure an integrated approach.

Figure 19. RMS committee structure during 2011-12



Internal audit and risk attestation for period 1 November 2011 to **30 June 2012**

I am of the opinion that Roads and Maritime Services 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.

I am also of the opinion that the Audit and Risk Committee for Roads and Maritime Services 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 (three year appointment from 1 July, 2011).
- 2. Dr Elizabeth Coombs, independent member (three year appointment from 1 July, 2010).
- 3. Alexander Smith, independent member (three year appointment from 15 January, 2012).

- 4. Peter Wells, Director Customer and Compliance, internal member (three year appointment from 1 July, 2010).
- 5. Geoff Fogarty, Director Infrastructure Development, internal member (three year appointment from 1 July, 2010).

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 RMS' 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 RMS' operations, ie they include a strong focus on large infrastructure projects as well as a strong frontline community presence in regard to 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.

These processes provide a level of assurance that enables the senior management of Roads and Maritime Services to understand, manage and satisfactorily control the organisation's risk exposures.

As required by this policy, I have submitted an Attestation Statement outlining compliance with the policy to Treasury.

Plum

Peter Duncan | Chief Executive

Risk management

A set of key elements provided the foundation and processes for developing, implementing, monitoring, reviewing and continually improving risk management. The approach is based on ISO 31000, but is specifically tailored to the new organisation and is integrated into existing systems and processes, and in particular business planning.

In this regard, RMS undertook an enterprise-wide, high level risk process as part of its business planning cycle. The result of the risk process was an organisation-wide Risk Profile which is presented to the Audit and Risk Committee (ARC) and the Executive for endorsement.

Reports are prepared for ARC to demonstrate the effective implementation of the risk framework and process, and its alignment with ISO 31000. This report also provides evidence to support the annual verification statement in compliance with NSW Treasury's TPP 09-5: Internal Audit and Risk Management Policy for the Public Sector.

Audit and Risk Committee

The committee meets at least once a quarter and one of its major objectives is to assess and provide independent assurance to the Chief Executive that RMS risk and control frameworks are operating effectively, and critical related external accountability requirements are being met.

In terms of audit, the committee:

· Approves and monitors the implementation of the internal audit programs.

- Reviews performance of internal and external audit functions.
- Reviews the internal control framework.
- Approves related external reporting of financial information.
- Reviews compliance with audit and finance related policies, procedures, central agency requirements and applicable laws and regulations.

In terms of risk management, the committee:

- Reviews the organisation's risk management framework.
- · Reviews RMS' Risk Profile.
- Reviews compliance with risk-management standards, policies, central agency requirements, relevant legislation and regulations.

Internal audit and assurance

New context for RMS audits under the transport cluster

A number of core RMS initiatives to improve service delivery through a line-of-business based restructure and centralisation of planning and policy functions has resulted in a number of changes to the audit approach adopted. RMS is working closely with TfNSW in regard to how both organisations maximise the benefits derived from their audit teams.

Engineering

A major part of RMS operations are engineering-related and the Engineering Assurance Group provides independent and objective assessments of civil engineering operations. The group's work is based on the development and implementation of a risk based audit program covering the organisation's major engineering programs, projects, systems, processes and products.

Major reviews carried out between 1 November 2011 and 30 June 2012 included:

- · Great Western Highway Upgrade Program between Penrith and Katoomba.
- Product Quality of Internal Alliance Development Works.
- Sydney Harbour Bridge Painting Process.
- Railway Level Crossing Improvement Program.

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

Customer and regulatory services

RMS carries out regular monitoring of customer service centre operations, other service delivery channels (such as the internet) and back office functions that support the customer and compliance services business. During the eight month period, assurance activities had a greater focus on 'root cause' analysis and adding value through advisory and consulting services. Maritime Service Centres were included in the audit program, which covered core financial and business processes as well as core service delivery operational risks. The audits continually review the operational risk management framework and related control environment for dealing with the exposures in these operations and, where necessary, the control framework is strengthened to ensure it remains effective.

Information technology

Information Technology (IT) audits for the eight month period included Information Communication Technology (ICT) governance, project management and IT security. Audits were also carried out of systems under development and improvement initiatives such as the realignment of the RMS DRIVES system.

Major assurance activities included areas such as:

- Service NSW.
- IT Contract Management.
- · Review of the new Electronic Document Management System.
- IT Security Baseline review.
- Ongoing involvement in the E-Toll Modernisation Program.
- Ongoing involvement in the Court and Case Management system.
- · Firewall management audit.

Significant findings at the project level led to improved management of project risk and cross-audit analysis identified 'root cause' issues which led to more fundamental improvements in, for example, firewall management.

Finance and operations

The Annual Financial and Operational Audit Program's coverage includes RMS financial support functions and a range of activities in procurement, overtime and other back office RMS services. The audit projects included an independent assessment of risks and compliance with policies, procedures and Treasury guidelines to provide assurance to the Chief Executive that related objectives were being met.

Some key audit projects for the eight month period covered:

- · Budgeting and financial forecasting.
- Stock Inventory Management.
- Purchase order and service entry release process.
- · Procurement.
- · Overtime.
- · Travel and accommodation.
- · Goods and services tax.
- · Cashback payments.
- Commercial contracts management.

Investigations

Corruption and fraud risk management

In addition to the investigation of allegations of corruption and fraud, RMS has a corruption and fraud control framework, for which the Corruption and Fraud Investigations Section has centralised oversight. This includes a range of tools. processes and initiatives aimed at minimising the risk of corrupt and fraudulent activity by staff and business partners. Examples of actions it involves include:

- Delivery of corruption and fraud/ ethics seminars to staff across high risk business environments to reinforce the corruption resistant culture of RMS.
- Provision of anti-corruption information through the RMS intranet.
- Provision of expertise and advice to staff and management on a wide range of corruption risks and ethical, probity and policy issues.

Business continuity

Business continuity management is the planning, preparation and response to a disaster or disruption to critical business activities, processes or services. A desktop testing exercise was conducted in December 2011 with the Central Recovery Team, and the master plan was further revised as a result of the testing exercise. An IM&IT business continuity plan was developed and tested. A business continuity management framework and program of work was also developed and implemented.

Operational complaints handling framework

The Maritime Division committed to the NSW Ombudsman to refresh the existing compliments, complaints and feedback procedures and implement the framework throughout the division. The project aimed to:

- Provide guidance for Maritime Division's staff who may be required to receive and/or address public complaints, compliments and feedback.
- Ensure complaints, compliments and feedback were handled in a manner which is fair, courteous, timely and respectful of privacy.
- Ensure complaints, compliments and feedback were logged in Maritime Division's records management system to assist with improving services and informing planning.
- Ensure all employees are aware of their responsibilities regarding handling complaints, compliments and feedback.

More than 95 per cent of Maritime Division staff received the NSW Ombudsman's complaint handling training and all staff are now aware of the procedures. The division now has a compliments, complaints and feedback framework consistent with the NSW Government requirements that contributes to fast and effective resolution of issues and feedback at the earliest opportunity.

Challenges for the future

- Implement a new governance structure to drive and oversee the ongoing RMS reform process.
- Revise the RMS Governance Framework and align it with TfNSW's Framework.
- Develop and implement an investment decision making governance approach to assist RMS in responding during the preparation of the 2013-14 budget

Develop and implement governance arrangements to address challenges presented by our relationship with Service NSW.

Business results - Value for money

Value for money is delivered within the integrated budget

RMS ensures that resources are allocated to deliver best value for money and assesses new ways to deliver more with less.

Key savings initiatives

RMS achieved savings of \$56 million against a target of \$40 million in 2011-12. Key initiatives contributing to the savings included information and communications technology savings, procurement savings, principal arranged insurances, brokering fees, exiting excess staff and shared services reform.

Live traffic data collection improvements

In previous years the organisation spent around \$750,000 running controlled floating car travel time surveys on the Sydney road network. New technology using GPS has allowed RMS to calculate travel times and traffic speeds across Sydney, Newcastle, the Central Coast and Wollongong at a recurrent cost of \$120,000 per annum. This new methodology also enables greater flexibility in determining traffic speeds outside the traditional survey times, and means information can be collected 24 hours a day.

Government Licensing Service

Four new releases were made in the 2011-12 period to the Government Licensing Service (GLS), which is the primary customer service delivery system for the Maritime Division of RMS.

Some of the key maritime-related improvements were:

• Enabling renewals at counters to be processed using bar code scanners and cheque readers.

- · Automation of notice delivery for commercial vessels.
- On-water licence checking services and vessel safety inspections for Boating Safety Officers and the NSW Police Force using mobile devices such as smart phones, tablets or laptop computers.

A GLS performance improvement group has identified and implemented changes to the user interface, database and screen layouts that have improved access speeds.

Reducing staff overtime

As part of a program across RMS to reduce costs and increase efficiency, a review was conducted to identify the key drivers for Road and Fleet Services overtime. This was in response to the Auditor-General's observations of overtime performance with Government.

In emergency situations, overtime is necessary for the business to be responsive and flexible, such as managing the road network during widespread flooding across NSW last year. Some opportunities were identified to reduce staff overtime with \$2.4 million saved throughout the year through a number of initiatives, including rostering new incident management crews at peak times and greater scrutiny of planned overtime for major roadwork projects. The reduction in overtime also had the added benefit of improving worker safety by reducing fatigue from excess work hours.

Reducing costs in the tolling business

More than \$9 million of savings were delivered in the tolling business. The biggest savings were realised through implementing an improved tag management system that includes greater recycling of returned tags.

Increasing revenue

A record \$419 million of commercial receipts was collected in the reporting period November 2011 to June 2012.

- · Develop a framework for the assessment of RMS' efficiency and effectiveness across core business areas.
- Ensure the appropriate identification and allocation of resources to deliver services to the community of NSW.
- Delivered efficiency savings through:
 - The recovery of merchant fees.
 - The contestability of maintenance.
 - Overtime savings.
 - The corporate and shared services reforms.
- · Work with TfNSW to implement the corporate and shared services reforms to improve support services.

Business results - Safety (Work Health and Safety)

Work Health and Safety is strengthened

RMS focuses on a safe work environment for our employees, those present on our sites, and those who work with us.

New Work Health and Safety legislation

The Work Health and Safety Act 2011 was introduced in New South Wales on 1 January 2012. RMS developed the first module in a planned ongoing series of modules that provide information about the legislation to RMS workers. Module 1 covers the general duties obligations of health and safety.

The modules are being delivered to specific management levels, with the first roll out provided to RMS Senior Managers (General Managers and above) in April 2012.

Continuation of Critical Tools for Safety Leaders training

During 2011-12, Critical Tools for Safety Leaders training continued to equip leaders with the critical tools and skills to drive safe behaviours in their teams in order to prevent incidents and injuries. This one day workshop enabled managers and safety leaders to:

- Apply Work Health and Safety risk management principles to identified team risks.
- Understand the importance of near miss reporting.
- Develop skills in incident investigation.
- Build effective Work Health and Safety leadership behaviours.

During the period 1 November 2011 to 30 June 2012, a further 151 managers and supervisors attended the training sessions. Since its initial roll out in 2010, 81 per cent of all managers and supervisors have completed the workshop.

Safety first for workers and contractors on our roadwork sites

Throughout the year, RMS conducted a number of initiatives to ensure a safety focus for our staff and contractors, including:

- Conducting 'Stop and Reset' Safety sessions with 1500 staff in January and April 2012 as they returned from Christmas and Easter break to 'ensure that safety came first'.
- Securing reaccreditation for our roadwork operations with the Federal Safety Commissioner.
- Developing and implementing new safety programs for working around mobile equipment and in high speed, high volume traffic.

The RMS safety programs have been developed by specialist cross-industry taskforces to address key risks for our workers and contractors. The taskforces included senior RMS personnel, key industry leaders, stakeholders from construction partners and

subject matter experts. Continued engagement with the construction industry is a critical part of implementing the safety programs as part of our vision to deliver an injury-free workplace.

Working parties for RMS' top seven issues

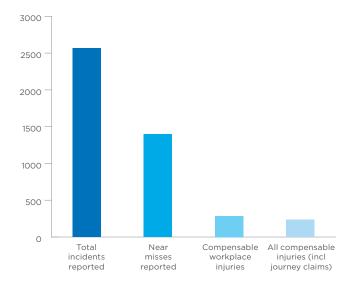
RMS established seven working parties to manage its top seven Work Health and Safety risks, which are:

- · Working near or around utilities.
- · Working near mobile plant.
- · School crossing supervisor drive-throughs.
- · Zero driving fatality.
- Violence/harassment by members of the public.
- · Working near traffic.
- · Driver tester risks.

During the reporting period the working parties considered and made recommendations to improve the way RMS manages the risks. The Working Party Reports are now complete and are being considered. Actions have begun to implement working near mobile plant working party recommendations within Road and Fleet Services.

Figure 20. WHS performance indicators 1 Nov - 30 Jun 2012

Performance indicator	1 Nov 2011 - 30 Jun 2012
Total incidents reported	2567
Near misses reported	1397
Lost time injuries	91
All other injuries (including first aid only)	742
Other incidents reported (including asset/property damage)	337
Number of near misses per injury	1.68
All compensable injuries (including journey claims)	286
Compensable workplace injuries	235
Total claims costs (\$ million)	1.1



Annual Contractors Forum

The Annual Contractors Forum was held in December 2011. This valuable industry partnering event offered participants the opportunity to hear senior executives and managers, Work Health and Safety professionals and working parties discuss mitigation strategy for high risk hazards within RMS.

Work Health and Safety performance

The near miss reporting strategy has shown great success in reporting near misses at a rate of 1.7 near misses for every injury reported. The more near misses reported, the greater our opportunity is to prevent workplace injuries.

Prosecutions

RMS was fined \$150,000 on 25 May 2012 after a prosecution involving a fatality to a subcontractor on Alfords Point Road in 2006. The prosecution began against the then RTA on 28 February 2011.

Health Awareness Day

NSW Department of Premier and Cabinet's initiatve A Healthy Workforce: Policy on Improving the Health and Well Being of Public Sector Employees encourages healthy lifestyles. The aim is to improve the health, happiness and productivity of employees. and reduce the levels of sick leave and workplace injuries in the NSW public sector.

During May 2012, Health Awareness Day was held across RMS and workers got involved in improving their health behaviours, increasing their health knowledge and supporting the health and safety of their peers in the workplace. Activities included healthy morning teas and facilitated discussions run by guest speakers on topics such as ergonomics, healthy eating and mental health awareness. RMS also launched a range of health and wellbeing screensavers on all desktop computers promoting healthy behaviours that encouraged staff to be active, spend time with family, relax and eat well.

- · Deliver the 'workers on foot' safety program to improve the safety of our workers and contractors.
- Continue to improve our Work Health and Safety performance to meet new Work Health and Safety legislative requirements.
- · Develop, consult with colleagues and industry partners, and implement the RMS Work Health and Safety Strategic Plan (2012-2016) to drive measurable improvements in Work Health and Safety performance.

Business results - Our people

Workforce commitment and capability is supported and developed

RMS drives a culture of staff engagement and accountability, with a focus on developing its people through a focus on high performance.

Employing people with a disability

In late April 2012, RMS was announced as a finalist in two categories for the Australian Human Resources Institute's Diversity Awards program. This is the first year for the awards, which have been developed to recognise the growing focus on the importance of diversity in Australian organisations. The awards recognise the outstanding individuals and organisations that have demonstrated excellence in the contributions they have made to their business, as well as to the HR profession, specifically in the area of diversity.

RMS was a finalist in the Disability Employment Award and Inclusive Workplace of the Year categories.

Aboriginal employment

Aboriginal staff network meeting

An RMS inaugural Aboriginal staff network meeting was conducted to provide a forum for improvement in Aboriginal staff retention and career development. An Aboriginal Cultural Education Program has been delivered across the business through 61 workshops throughout NSW.

HSC Scholarships for Aboriginal students

RMS has sponsored learning resources for two continuing Year 12 Aboriginal students and six additional Year 11-12 Aboriginal students. The sponsorships go towards future tertiary studies in Engineering or related technical careers.

Indigenous Engineering **Summer School**

RMS supported the Indigenous Australian Engineering Summer School. The event was held in January 2012 at the University of New South Wales with more than twenty Year 11-12 Aboriginal students from across Australia participating. The program included a visit to RMS where the participants received information regarding Aboriginal employment and civil engineering.

Women in engineering

RMS implements strategies to help attract women into non-traditional roles. This year RMS sponsored the Women in Engineering Summit at the University of Wollongong which had 60 female participants and the Women in Engineering weekend at the University of New England which had 24 regional senior school participants. RMS has supported our female engineers to mentor current University of Technology, Sydney female engineering students under the Lucy Mentoring Program.

Targeted Employment Programs

Through the RMS suite of Targeted Employment Programs, RMS is developing early career pathways for job readiness to ensure a skilled workforce that is ready to take on the challenges of tomorrow. For the period 1 November 2011 to 30 June 2012, more than 200 people were recruited into a range of Employment Programs including 42 into the RMS Graduate Recruitment and Development (GRAD) Program; 49 Apprentices across six trade groups; 100 trainees studying Civil Construction, Government Services or Business Services; and 18 in our paraprofessional programs including six Road Designers in Training and eight Traffic Engineering Officers in Training.

RMS currently has more than 600 people undertaking some form of study and/or work experience supported through these programs, including 136 in the GRAD Program; 86 apprentices; 193 trainees; 72 paraprofessionals; 72 in cadetship programs and 79 benefiting from support provided by RMS, including HSC Aboriginal Scholarships.

- Determine the capabilities and skills RMS will need into the future, and implement a targeted program to attract and retain these skills.
- Develop capabilities in staff in core competency areas.
- Sponsor the 2012 Year of Regional Engineering.