





Pacific Highway upgrade

Six month report card (July – December 2013)

Overview



This report provides an update on Pacific Highway upgrade progress to 31 December 2013.

The Pacific Highway corridor connects Sydney and Brisbane, and is a major contributor to Australia's economic activity. The road is a vital piece of the nation's infrastructure and is a key link in the National Land Transport Network.

There is now a multi-lane, divided highway link between Melbourne and Sydney and from Sydney through to Port Macquarie on the NSW North Coast. At the northern end of this transport link, improved weather patterns have allowed for significant progress to be made on the Sapphire to Woolgoolga project, the Frederickton to Eungai upgrade, and the Tintenbar to Ewingsdale upgrade between Ballina and Byron Bay – which is the final link in what will be a multi-lane, divided highway between Ballina and Brisbane.

The recent opening of the Woolgoolga bypass section of the Sapphire to Woolgoolga upgrade in December 2013 has provided a 10 kilometre multi-lane, divided highway north of Coffs Harbour.

The Australian and NSW governments are committed to completing the Pacific Highway by the end of the decade.



Tintenbar to Ewingsdale upgrade - bridge piling work at Watsons Lane

This means we are continuing to close in on the final section of what will be a high standard road link for the full length of the Melbourne-Sydney-Brisbane transport corridor.

An upgraded Pacific Highway must continue to service the needs of the travelling public and achieve transport efficiencies, while also ensuring ecological sustainability and meeting the needs of the coastal communities that live along the highway.

The Australian and NSW governments have been jointly upgrading the Pacific Highway since 1996.

Cover photo: Woolgoolga bypass

Overview





Sapphire to Woolgoolga upgrade -Headland Road overpass Sapphire looking north

The Australian and NSW governments have committed to complete the Pacific Highway by 2020. Joint expenditur e from 2008/09 to 2012/13 on the Pacific Highway was \$3.5 billion. The Australian Government has committed \$5.64 billion from 2013/14 and is working to restore the 80:20 Commonwealth to State funding partnership for completing the upgrade.



Devils Pulpit - line marking in preparation for upcoming traffic switch

The Pacific Highway upgrade is being completed in three priority phases:

Priority one is to complete a four-lane divided highway between Hexham and Port Macquarie, around the growing suburbs of Coffs Harbour and between Ballina and the Queensland border.

Priority one was targeted for completion by the end of 2014 but the final section is now expected to open to traffic in the first half of 2015. With a four-lane divided road now in place between Hexham and Port Macquarie, the Sapphire to Woolgoolga and Tintenbar to Ewingsdale upgrades are the last remaining projects needed to complete priority one.

The section around Coffs Harbour between Raleigh and Woolgoolga is on track for completion in 2014, once the full Sapphire to Woolgoolga upgrade opens to traffic. While construction is advancing on the Tintenbar to Ewingsdale upgrade, timing for opening this final 17 kilometre section will be greatly dependent on the amount of wet weather experienced during the next 12 months.

Priority two is the next phase of the Pacific Highway upgrade. It involves completing a four-lane divided highway between Port Macquarie and Raleigh (south of Coffs Harbour). Subject to obtaining all necessary government approvals for construction, major work will be under way on all priority two projects by the end of 2014. Priority two is expected to be nearing completion by the end of 2016, (subject to wet weather).

Good progress is already being made on priority two with the completion of the Kempsey bypass and the recent start of work on the Frederickton to Eungai and Nambucca Heads to Urunga upgrades. The other remaining projects needed to complete this section are now in the tendering and preconstruction phase.

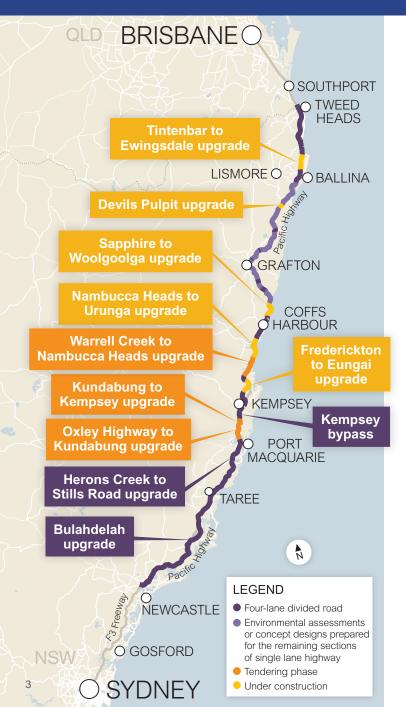
Priority three is the final phase of the Pacific Highway upgrade. It involves completing a four-lane divided highway between Woolgoolga (north of Coffs Harbour) and Ballina.

Major upgrades have been completed at Glenugie and Halfway Creek, south of Grafton. Further upgrading and preconstruction work is currently under way at Devils Pulpit and between Pimlico and Teven Road south of Ballina, respectively.

Planning and preconstruction activities continue on this section to allow major work to start when additional funding is made available.

Current status





As at the end of December 2013, about 57 per cent of the final length of highway between Hexham and the Queensland border is now a four-lane divided road.

Between July and December 2013, major work was under way on six upgrade projects (just over 100 kilometres). Moving into 2014, there are currently 87 kilometres under construction.

The remaining two-lane sections of the highway are being prepared for construction.

Safety work continues on sections yet to be upgraded.

Key pieces of infrastructure opened during the past six months include:

- The 10 kilometre Woolgoolga bypass
- The 3.5 kilometre Herons Creek to Stills Road upgrade

- The Moonee Beach, Graham Drive North and Smiths Road overpasses on the Sapphire to Woolgoolga upgrade
- Major traffic switches at Devils Pulpit and on the Sapphire to Woolgoolga upgrade, which have motorists travelling on about 10 kilometres of new highway.

For projects under construction in December 2013:

- over 6.8 million cubic metres of earthwork has been completed to date
- almost 420 bridge girders have been delivered to projects along the highway and over 350 of these have now been put in place.

More detailed information, including for priority two projects, will be available in the next Pacific Highway report card in mid 2014.



Sapphire to Woolgoolga upgrade - Smiths Road bridge open to traffic at Emerald Beach

Upgrade outcomes



Where are we now?

At 31 December 2013:

375 kilometres are four-lane divided highway – about 57 per cent.

87 kilometres are being built.

The remaining sections of two-lane highway are being prepared for major work.

For the second half of 2013, there was an average of **1100** people working on the various construction projects.

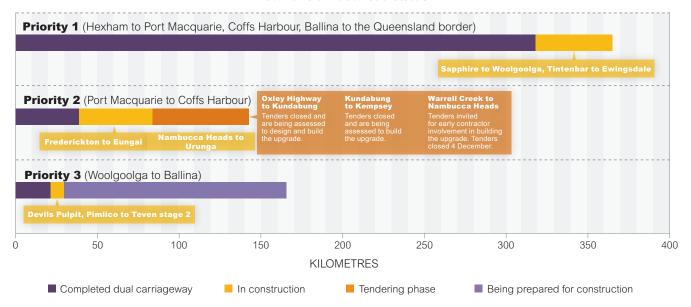
There were just over 1300 workers on site in December 2013.

The peak employment period is expected to come in 2015 where an estimated 3,500 workers will be employed on construction sites along the highway.

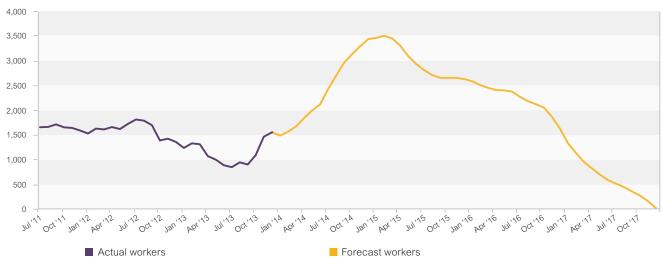
The Pacific Highway upgrade has participation plans in place for all of its construction projects that are aimed at encouraging Aboriginal employment opportunities including apprenticeship and traineeship programs.

The graph to the right shows actual and predicted workers on site. Future predictions have been estimated on the basis of 2.12 direct jobs per million dollars budgeted each year and future cash flows. It is anticipated that the number of indirect jobs would be three times the number of direct jobs.

Four-lane divided road status



Direct jobs created by the Pacific Highway upgrade

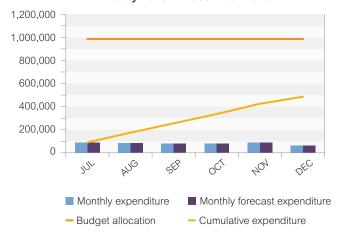


Upgrade outcomes

Expenditure update

The graph below shows progress of expenditure toward the budget allocation of \$985 million. In the six months to the end of December 2013, \$486 million (49 percent of the 2013/14 budget) had been spent. Due to good progress from drier weather and the start of two major construction projects in the second half of the year, we expect to bring forward expenditure and spend over \$1 billion dollars in the current financial year. The graph below also shows monthly expenditure against forecasts and generally there has been a close match between the two.

Pacific Highway Program expenditure by month July 2013 – December 2013



Wet weather

Weather patterns have improved, with drier weather experienced in the last six months. This improved weather has meant that progress has increased significantly across Pacific Highway construction projects.

For some projects, this increased work has meant that they have been able to achieve major milestones much earlier than expected - for example, the early opening of the Woolgoolga bypass on the Sapphire to Woolgoolga upgrade before the December school holiday period.

Other projects have been able to take advantage of the improved conditions, however they unfortunately continue to try and catch up to their original programs of work. The Tintenbar to Ewingsdale upgrade has made good progress in the last six months but is now expected to open in first half 2015 (subject to continued drier weather patterns). See the Tintenbar to Ewingsdale project page of this report for more information.



From 117 available working days







Sapphire to Woolgoolga upgrade stone mastic asphalt being laid south of Greys Road bridge, Woolgoolga



Tintenbar to Ewingsdale upgrade - bridge work looking south over Byron Creek

Upgrade outcomes



Travel times

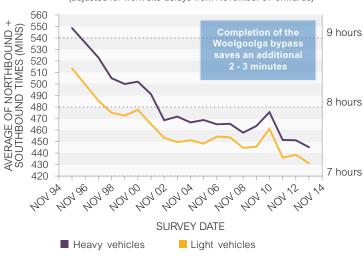
Since the start of the Pacific Highway upgrade program in the mid 1990s travel time between Hexham and the Queensland border has been tracked.

Travel time trends have been updated as of December 2013. The graph below shows the travel time trends on the Pacific Highway between Hexham and the Queensland border and has been adjusted for work site delays.

With the opening of the Woolgoolga bypass in December, it is now expected that light vehicles are saving a minimum of 90 minutes and heavy vehicles are saving a minimum of 100 minutes, compared to when the upgrade program started.

Travel times on the Pacific Highway, Hexham to the Queensland border

(adjusted for work site delays from November 97 onwards)



When averaged over north and southbound trips, the adjusted travel time is 7.3 minutes faster than 2012 for light vehicles and six minutes for heavy vehicles.

Over the whole route, heavy vehicle travel time is just 3.2 per cent greater than the light vehicle travel time. This reflects the improved overall standard of the route as new projects are opened and traffic bottlenecks are eliminated.



Sapphire to Woolgoolga upgrade - looking north to Woolgoolga Creek Road on the bypass

Crashes

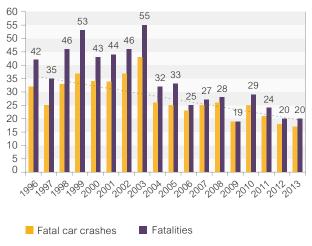
Since the start of the Pacific Highway upgrade, fatal crashes continue to trend downwards. Fatal crashes have almost halved, down from the mid 40s to the 20s in recent years.

Preliminary information shows there were 17 fatal crashes with 20 fatalities during 2013.

The number of fatalities shows a continuation of the improved five year average (which has previously been 26 per year). It also matches 2012 as being the second lowest annual record in over 40 years (there were 19 fatalities in 2009).

Further information on injury and non-injury crashes for 2013 will be available in the January – June 2014 six month report card, once crash data is finalised.

Fatal crashes and fatalities on the Pacific Highway by year



Finishing the job



Completing a four-lane divided highway between Hexham and the NSW/Queensland border remains an important issue for local communities and is a priority for the Australian and NSW State governments.

Once the Tintenbar to Ewingsdale upgrade opens to traffic and priority one is complete, it is also expected that:

- 412 kilometres of the Pacific Highway will be open to a four-lane divided road standard
- Another 104 kilometres of new highway will be under construction
- Substantial progress will be made in preparing the remaining length of the existing highway for major work.

Work will continue and ensure a four-lane divided highway will be open to traffic between Hexham (near Newcastle) and Port Macquarie, around Coffs Harbour, and between Ballina and the Queensland border by 2015.

Subject to all government approvals being received, time being recovered from past delays with approval and good weather patterns, work on the section between Port Macquarie and Woolgoolga (north of Coffs Harbour) is being targetted to be open to traffic by the end of 2016.

Work is being carried out to complete or advance a number of key activities on the highway between Woolgoolga and Ballina including, planning work, land acquisitions, preliminary investigations and early soil settlement and preconstruction work on critical sections. Some sections of four-lane divided highway are already in place at Halfway Creek and Glenugie and soon to be completed at Devils Pulpit (south of Ballina).

Key project milestones – how are we travelling?

Did we do what we said we would between July and December of 2013?

Open to traffic:

✓ The 3.5km Herons Creek to Stills Road upgrade.

Achieve major work progress:

- ✓ Start to build the Frederickton to Eungai and Nambucca Heads to Urunga upgrades
- Start to build the Sancrox Road interchange (received Australian Government environmental approval in January 2014).

Prepare for major work:

 Invite tenders and award a construction contract for the Kundabung to Kempsey upgrade.
(Tenders invited in July 2013. A contract is expected to be awarded in early 2014)



Herons Creek to Stills Road upgrade - Bago Road interchange opened to traffic on 20 September 2013

Announce a preferred tenderer for the Oxley Highway to Kundabung and Warrell Creek to Nambucca Heads upgrades. (Preferred tenderer for Oxley Highway to Kundabung is expected to be announced in January 2014. Tenders have been invited for early contractor involvement to design and build the Warrell Creek to Nambucca Heads upgrade. Additional time has been needed to investigate mitigation measures for a flying fox colony that recently relocated to the approved highway route).

Plan for remaining sections:

- ✓ Finish safety improvement and shoulder widening work at Old Post Office Lane, near Ulmarra. (Open to traffic with the final pavement surface to be placed in early 2014)
- ✓ Award a contract for detailed design work on a number of soft soil sections between Woolgoolga and Ballina
- ✓ Award a contract for early work between Pimlico and Teven roads, near Ballina.

In addition to the above, we started to build Stage two of the Pimlico Road to Teven Road upgrade.



Old Post Office Lane - asphalt paving work under way

Finishing the job



In the next six months (January – June 2014) RMS will:

Open to traffic:

√ The seven kilometre Devils Pulpit upgrade.

Achieve major work progress:

- ✓ Start to build the Kundabung to Kempsey upgrade
- ✓ Start to build the Sancrox Road interchange
- ✓ Breakthrough on clearing work and place the first bridge girder on the Frederickton to Eungai upgrade
- ✓ Breakthrough on the twin tunnels at St Helena Hill on the Tintenbar to Ewingsdale upgrade
- ✓ Start bridge work on the Nambucca Heads to Urunga upgrade
- ✓ Open a further overbridge on the Sapphire to Woolgoolga upgrade.

Prepare for major work:

- ✓ Award a contract to design and build the Oxley Highway to Kundabung upgrade
- ✓ Award a contract to design and build, and start detailed design work for the Warrell Creek to Nambucca Heads upgrades.

Plan for remaining sections:

✓ Receive advice about project approval for the Woolgoolga to Ballina upgrade.

Driving a better highway – projects opened to traffic in 2013







Community



How are we travelling?

Between July and December 2013, we have:

- √ Attended more than 50 community and stakeholder meetings or information sessions
- ✓ Carried out about 1000 individual meetings with property owners and other stakeholders
- ✓ Maintained 11 static displays
- √ Issued 14 community updates (including progress advertisements)
- ✓ Distributed about 180 separate letters to householders and traffic updates
- ✓ Held five community events (including site tours and opening events).

Kempsey bypass delivers for the community

In the last six months, the Kempsey bypass took top honours in the Infrastructure Category for the 2013 Premier's Public Sector Awards.

The project, which started construction in July 2010 and opened to traffic in March 2013, more than a year ahead of schedule, was named as the recipient of the award at a ceremony on 13 November 2013.

The awards recognised achievements of the public service and its partners in the private and non-government sector, with the 2013 theme being 'value'.

The project delivered innovative solutions to major engineering challenges, greatly enhanced scope for the same budget, significant safety and travel time benefits, and use of innovative procurement methodology.

Since opening to traffic on 27 March 2013, the Kempsey bypass has delivered significant safety improvements and travel time efficiencies to highway users, as well as the bypassed communities of Kempsey and Frederickton.

Bypassing Kempsey and Frederickton delivered safety and amenity improvements for local road users, pedestrians and cyclists by removing the high volume of heavy vehicles and highway traffic from the town centres. Morning and afternoon peak travel times on the bypassed highway in Kempsey have improved by about seven minutes.

In addition, the community has benefited from a range of improved flooding and environmental outcomes. In 2013, the Kempsey Bypass Alliance was also recognised with major environmental prizes including the NSW Office of Environment

and Heritage Sustainability Leadership Award and Civil Construction Federation Earth Award.

Roads and Maritime is continuing its engagement with the local community, working through noise and property impact issues following the opening of the bypass to traffic.

The Kempsey Bypass Alliance included Roads and Maritime Services, Leighton Contractors, AECOM and Coffey Geotechnics.

The \$618 million, 14.5 kilometre Kempsey bypass can also lay claim to having the longest road bridge in Australia with a crossing of the Macleay River and floodplain that spans 3.2 kilometres. Abigroup was awarded a separate contract to design and build the Macleay River and floodplain bridge.



Kempsey bypass - Community open day in March 2013

Environment



How are we travelling?

Between July and December 2013, we have:

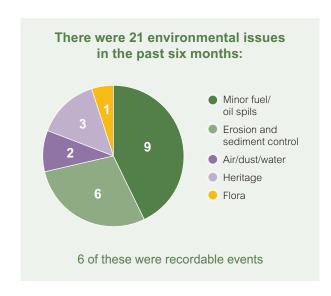
- ✓ Acquired approximately 380 hectares of biodiversity offset habitat
- ✓ Been awarded the Australian Institute of Landscape Architects Award in the Land Management category for the Glenugie upgrade
- ✓ Been awarded the Sustainability Leadership Award at the United Nations Association of Australia World Environment Day Awards 2013 and Civil Contractors Federation Earth Award 2013 for the Kempsey bypass
- ✓ Installed over 150 nest boxes ahead of construction starting for Oxley Highway to Kempsey and Nambucca to Urunga upgrades. Recorded a rapid use of nest boxes installed for the Tintenbar to Ewingsdale upgrade, including by several threatened bat species
- ✓ Put in place an improved fish way design at Sugar Mill Creek on the Sapphire to Woolgoolga upgrade, in consultation with NSW Fisheries
- ✓ Reused timber resources from required clearing for the Frederickton to Eungai upgrade and salvaged over 50 logs for use on the RMS Timber Bridge Program
- ✓ Awarded contracts for the monitoring of threatened species including a threatened frog species, Rufous Bettongs, Koalas, Brushtailed Phascogales and the Coastal Emu
- ✓ Successfully translocated the rare Koala Bells plant species as part of the Herons Creek to Stills Road upgrade, with substantial growth and expansion of this species recorded within the translocation area

- ✓ Progressed design refinements for the Woolgoolga to Ballina upgrade that resulted in reduced impacts to the Subtropical Lowland Rainforest (listed as Critically Endangered Ecological Community under the EPBC Act and habitat for the endangered Pink Underwing Moth)
- ✓ Completed a five year monitoring program for wetland rehabilitation on the Ballina Bypass. The rehabilitation program successfully converted previously cleared ex-cane/cattle paddocks into a functioning freshwater wetland
- ✓ Collected and planted Grey Mangrove seeds (Avicennia manna) on the Sapphire to Woolgoolga upgrade. The work was carried out by the Leighton Fulton Hogan Joint Venture in consultation with the Marine Parks Authority and NSW Fisheries at Double Crossing Creek. Ongoing monitoring has revealed an increase in the habitat value of this unique ecosystem.

Environmental issues for the past six months

Environmental incidents recorded between July and December 2013 relate to:

- Minor fuel and hydraulic oil spills from machinery on construction sites and compounds
- Erosion and sediment control (water quality) issues within construction sites
- Unauthorised work (ie outside of approved areas and/or construction hours)
- Other issues relating to air quality, heritage and waste management.

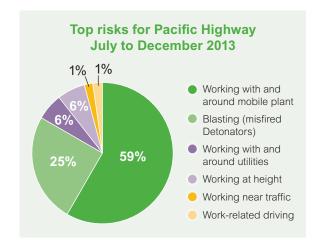


About 30 environmental inspections were carried out for the project sites from Bulahdelah to Ewingsdale. The vast majority of these inspections recorded a 'green' status, which indicates the sites were demonstrating good environmental practice with only minor corrective measures required.

Workplace health and safety

Roads and Maritime and its industry partners continue to work closely together to eliminate or minimise workplace health and safety (WHS) hazards and risk exposures to develop a safe and healthy work environment for all workers on Roads and Maritime work sites.

With more than 2.6 million working hours across the projects during this period, only three lost time injuries were reported. We continue to actively work with our industry partners to practice safe work behaviours at all times, so that together we lead in work health and safety performance in our industry.



How are we travelling?

Between July and December 2013, the project teams have:

- Worked more than 2.6 million hours
- Had three lost time injuries
- Had 46 working days lost due to injuries
- Proactively planned and actioned 4508 safety observations/audits
- Provided 82 first aid treatments
- Reported 33 serious events.

During this period a number of locations have developed site-based Safety Improvement Plans to improve WHS performance and review any safety initiatives, leadership, risk management or communication issues. This has had the full support and cooperation of Roads and Maritime and its industry partners.

There has been a reported increase in plant rollovers on the Pacific Highway over the six month period.

The fourth bi-annual Pacific Highway WHS workshop was held in November 2013 and attended by senior management from all projects. The WHS workshop provided an opportunity to share solutions and agree on consistent WHS standards for high risk activities across all projects.

The focus of this workshop was on developing agreed standards and planning for the elimination of plant rollovers.

Project leaders have committed to improving WHS performance on high-risk work activities. The aim is to assure all partner organisations that the highest levels of reasonably practicable controls are implemented through site-based initiatives and corporate systems. Managing the risks of working with and around mobile machinery remains a priority for Roads and Maritime.

Projects open to traffic



Contractor:

BMD Constructions Pty Ltd

Form of contract:

Construction

Average workers on site during the past six months: 48

Average pieces of large machinery on site during the past six months: 35

Start of major construction:

March 2011

Completion date:

Opened to traffic October 2013

Project value: \$60 million

Australian Government contribution:

\$53 million *

NSW State Government contribution:

\$7 million *

^{*} Contribution amounts may vary from year to year.



Herons Creek to Stills Road upgrade

The Herons Creek to Stills Road upgrade project is jointly funded by the Australian and NSW governments.

The project upgrades three and a half kilometres of the northbound lanes for this existing section of four-lane divided road and a multi-level grade seperated interchange at Bago Road.

Four days were lost to wet weather • in the past six months.

July – December 2013, 🛝





- ✓ The Herons Creek to Stills Road upgrade opened to traffic
- ✓ Earthwork was completed
- ✓ Line marking was completed
- ✓ A series of major traffic switches were completed including opening the new highway, local roads and the Bago Road interchange to traffic
- ✓ Topsoiling and vegetation work was carried out
- ✓ Animal crossings were completed
- ✓ Remediation work completed on local bike track (see incident investigation for more information).

January – June 2014, 🛝 expected work progress:

Weather permitting :

√ Finalise handover issues.

Incident investigation – site contamination

Roads and Maritime has remediated a contaminated area on the project that affected the health of a number of workers. The location of this site is where, in December 1980, a truck carrying a mixed load of waste crashed on the Pacific Highway.

Advice from a third party auditor found that the site has been successfully cleaned up.

Roads and Maritime completed remediation work at the Hastings Valley Motorcycle Club bike track.

More information is available on the project website at www.rms.nsw.gov.au/pacific (by clicking on Herons Creek to Stills Road).

Community issues



Nil.

Environmental issues



 Remediation of site contamination. being finalised.



Contractor:

Thiess Pty Ltd

Form of contract:

Design and construct

Average workers on site during the past six months: 168

Average pieces of large machinery on site during the past six months: 45

Start of major construction:

August 2013

Expected completion date:

2016 (weather permitting)

Project value: \$675 million

Australian Government contribution:

\$337.5 million *

NSW State Government contribution:

\$337.5 million *

* Contribution amounts may vary from year to year.



Frederickton to Eungai upgrade

The Frederickton to Eungai upgrade is the second stage of the Kempsey to Eungai upgrade, which was approved in 2008.

The project is jointly funded by the Australian and NSW governments. It will provide about 26.5 kilometres of four-lane divided road from the completed Kempsey bypass to Eungai Rail.



Geotechnical testing in soft soil north of Frederickton interchange

18 days were lost to wet weather in the past six months.

July – December 2013, 🛝 work progress:



- ✓ Major work started
- ✓ Clearing work started
- ✓ Utility adjustments started
- ✓ Boundary fencing work started
- ✓ Construction of erosion and sedimentation controls started
- ✓ Local road improvement work started and is nearing completion
- ✓ Detailed design work under way and nearing completion.

January – June 2014. expected work progress: 🔊



- Weather permitting 🏠
- ✓ Clearing work will be completed
- ✓ Bridge work will start, including off site production of precast elements such as piles and girders
- ✓ Earthwork and drainage work will continue
- ✓ Local road improvements will be completed
- ✓ Geotechnical monitoring will continue for soft soil areas
- ✓ Detailed design work will be completed
- ✓ Boundary fencing installation and utility and property adjustment work will continue
- ✓ Drainage and earthwork will be completed for the future Macleay Valley Way local service road near of the Stuarts Point turnoff.

Community issues 👗



Noise and dust issues.

Environmental issues



Nil.



Contractor:

Lend Lease

Form of contract:

Design and construct

Average workers on site during the past six months: 210

Average pieces of large machinery on site during the past six months: 35

Started construction:

November 2013

Expected completion date:

End 2016 (weather permitting)



Australian Government contribution:

\$390 million *

NSW State Government contribution:

\$390 million *

^{*} Contribution amounts may vary from year to year.



Nambucca Heads to Urunga upgrade

The Nambucca Heads to Urunga upgrade is the first stage of the 42 kilometre Warrell Creek to Urunga upgrade.

The project is jointly funded by the Australian and NSW governments. It will provide about 22 kilometres of four-lane divided road from Nambucca Heads to the existing Waterfall Way interchange at Raleigh.

Construction started at the end of November.

No days were lost to wet weather • in the past six months.

July – December 2013, work progress:



- ✓ Detailed design work continued
- ✓ Utility adjustments continued
- ✓ Boundary fencing installation started
- √ Field investigations continued including plant, animal, ground level survey, water quality, environmental and Aboriginal heritage
- ✓ Architectural noise treatments continued
- ✓ Preliminary work started to upgrade the Ballards Road intersection with the Pacific Highway
- ✓ Installation of accesses for soft soil treatments. started south of the Kalang River.



Delivery and laying of rock for an access route, south of the Kalang River



Geofabric installation prior to rock deliveries for an access route, south of the Kalang River

January – June 2014. expected work progress: 🐒 Weather permitting (a)



- ✓ Earthwork bridge building, vegetation clearing and topsoil stripping will start
- ✓ Drilling and controlled blasting work will start
- ✓ Drainage installation will start
- ✓ Local road intersection upgrades with the Pacific Highway will start
- ✓ New local access road construction will start
- ✓ Detailed design work will continue.

Community issues



• Haulage of materials from Dorrigo to project site.

Environmental issues



Nil.



Contractor:

Leighton Fulton Hogan Joint Venture

Form of contract:

Design and construct

Average workers on site during the past six months: 244

Average pieces of large machinery on site during the past six months: 166

Start of major construction:

August 2010

Expected completion date:

Second half of 2014 (weather permitting)

Project value: \$850 million

Australian Government contribution:

\$705 million *

NSW State Government contribution:

\$145 million *

* Contribution amounts may vary from year to year.



Sapphire to Woolgoolga upgrade

The Sapphire to Woolgoolga upgrade is jointly funded by the Australian and NSW governments. It will provide a four-lane divided road for about 25 kilometres from Campbell Close at Sapphire to Arrawarra Beach Road at Arrawarra.

53 days were lost to wet weather in the past six months.



July – December 2013, work progress:



- ✓ The Woolgoolga bypass opened to traffic
- ✓ The Moonee interchange and the Graham Drive North and Smiths Road overpasses opened to traffic
- ✓ A local service road from Maccues Road to the Moonee Beach overpass opened to traffic
- ✓ Interchange and overpass construction continued on other sections of the project, including at the Arrawarra interchange
- ✓ Construction continued on local roads.
- ✓ Bridge, pavement work, earthwork and drainage work continued.

January – June 2014, 🔊 expected work progress:

Weather permitting :

- ✓ Additional overpasses will be opened to traffic
- ✓ Major traffic switches will take place
- ✓ Construction will continue on local roads
- ✓ Bridge, pavement, earthwork and drainage work will continue.

Community issues



- The project team is working with the local community, Coffs Harbour City Council and key stakeholders to finalise a shared user path strategy
- The project team is working through issues relating to noise, access, dust, drainage, other property impacts and business signage.

Environmental issues



• The project team is managing the permanent placement of surplus soil generated during work.

Quality issues



 A defect affecting plain concrete pavement placed in the northern 4km of the Woolgoolga bypass section of the project was detected through project quality surveillance processes in August 2013. A metre wide strip of concrete was subsequently removed and replaced to address the issue.



Headland Road overpass Sapphire looking north



Contractor:

John Holland

Form of contract:

Construct only

Average workers on site during the past six months: 78

Average pieces of large machinery on site during the past six months: 22

Start of major construction:

December 2011

Expected completion date:

Early 2014 (weather permitting)

Project value: \$80 million

Australian Government contribution:

\$62 million *

NSW State Government contribution:

\$18 million *

* Contribution amounts may vary from year to year.



Devils Pulpit upgrade

The Devils Pulpit upgrade is jointly funded by the Australian and NSW governments.

It includes upgrading about seven kilometres of highway to four-lane divided road between Grafton and Ballina.

It is located within the larger Woolgoolga to Ballina project.



Asphalt paving work at the southern end of the project

21 days were lost to wet weather in the past six months.

July – December 2013, 🛝 work progress:



- ✓ A major traffic switch was completed
- ✓ All bridges were completed
- ✓ Bridge paving started
- ✓ Concrete paving started
- ✓ Work on animal underpasses was completed
- √ Wire rope safety installation continued
- ✓ Landscaping and revegetation started
- √ Work started on rest area facilities
- ✓ Temporary sediment basins were removed.

January – June 2014, 🔏 expected work progress: Weather permitting :

- ✓ Paving work will be completed
- ✓ Landscaping work will be completed
- √ Wire rope safety installation will be completed
- ✓ Rest area facility will be completed
- ✓ Animal fencing will be completed
- ✓ Line marking and other finishing work will be carried out
- ✓ The project will open to traffic.

Community issues



• Nil.

Environmental issues

• Nil.



Contractor:

Lend Lease

Form of contract:

Design and construct

Average workers on site during the past six months: 257

Average pieces of large machinery on site during the past six months: 198

Start of major construction:

September 2012

Expected completion date:

First half 2015 (weather permitting)

Project value: \$862 million

Australian Government contribution:

\$566.1 million

NSW State Government contribution:

\$295.9 million

BRISBANE O SOUTHPORT ○ TWEED **HEADS** Tintenbar to Ewingsdale upgrade LISMORE O BALLINA GRAFTONC COFFS

Tintenbar to Ewingsdale upgrade

The Tintenbar to Ewingsdale upgrade is jointly funded by the Australian and NSW governments.

It will provide 17 kilometres of four-lane divided road from the northern end of the Ballina bypass at Ross Lane to the existing Ewingsdale interchange.

39 days were lost to wet weather in the past six months.

July – December 2013, 🔊



- ✓ Excavation work continued on the entrances. to the St Helena twin tunnels
- ✓ Controlled blasting took place at the southern entrance to the twin tunnels
- ✓ Bridge work continued at Emigrant, Skinners, Byron and Minor creeks and at Broken Head Road
- ✓ Arch building continued at the local fish farm and Martins Lane West
- ✓ First concrete slab poured
- ✓ Earthwork and drainage installation work continued
- ✓ Detailed design work continued
- ✓ Traffic switch completed at Ewingsdale
- ✓ Watsons Lane and Bangalow Road re-opened to traffic.

January – June 2014, 🛝 expected work progress:

Weather permitting :

- ✓ Minor Creek bridges will be completed
- ✓ The overpasses at Broken Head Road and Martins Lane West will be completed
- ✓ A breakthrough will join the ends of both the north and southbound tunnels at St Helena Hill

- ✓ Controlled blasting at the St Helena twin tunnels will be completed
- ✓ Bridge work, drainage work and earthwork will continue across the project
- ✓ Paving work will start
- ✓ Detailed design work will continue.

Community issues

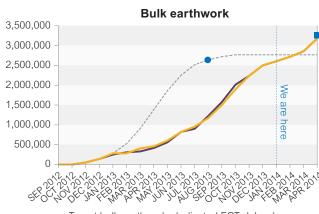


• The project team is working through issues relating to access, noise, dust, other property impacts and business signage.

Environmental issues



Nil.



- Target bulk earthworks (adjusted EOT delays)
- Actual bulk earthworks
- -- Target bulk earthworks (original contract program)
- Original planned completion
- Forecast completion

Safety improvements





While most of the funding will be directed to upgrading the highway to a four-lane divided road, there is a need to address road safety and traffic issues on two-lane sections.

Safety improvements are a part of the Australian and NSW governments' commitment to upgrade the Pacific Highway. Additional work is fully state funded.

Work is being delivered to improve safety until upgrades can be completed. Some of this work is also to reduce the delays caused by local and major flood events.

Work is nearing completion at Old Post Office Lane just north of Ulmarra. It involves widening the road, realigning the curve of the road and providing turning lanes at the Old Post Office Lane intersection. This is the last project to be completed under the current funding to 2014. Roads and Maritime is currently investigating projects that could form part of future safety improvement work.

Contractor:

RMS Road and Fleet Services

Average workers on site during the past six months: 12

Average pieces of large machinery on site during the past six months: $\boldsymbol{0}$

Start of major work:

November 2009

Expected completion date:

Early 2014 (weather permitting)

Project value: \$55 million (2009 - 2014)

July – December 2013, work progress:

- ✓ Shoulder widening
- √ Asphalt paving
- √ Line marking
- ✓ Project was opened to traffic, with finishing work to be carried out in early 2014.

January – June 2014, A expected work progress:

Weather permitting 🄅

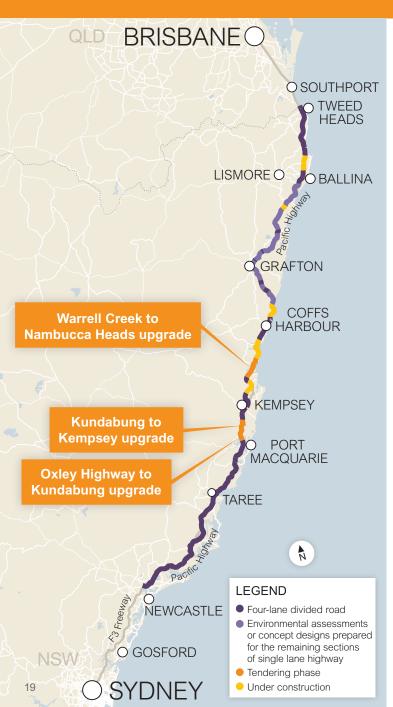
√ Final pavement layer will be placed.



Old Post Office Lane open to traffic

Projects being prepared for major work: Priority 2





Oxley Highway to Kempsey upgrade

The Oxley Highway to Kempsey upgrade is jointly funded by the Australian and NSW governments.

The upgrade will provide about 37 kilometres of four-lane divided road between the Oxley Highway near Port Macquarie and the Kempsey bypass. The project is being built in two sections:

Oxley Highway to Kundabung

July – December 2013, work progress: 🐔



- ✓ Tender assessment continued for design and construction
- ✓ Geotechnical investigations and survey work to identify ground levels completed
- ✓ Preconstruction ecological monitoring continued
- ✓ Environmental assessment and consistency reviews neared completion for design refinements
- ✓ Work under way to identify and assess biodiversity offset properties
- ✓ Land acquisitions now 44 per cent complete.

January - June 2014, expected work progress: 1



- ✓ A preferred tenderer will be announced and a contract will be awarded for design and construction
- ✓ Geotechnical investigations and ground survey work will continue
- ✓ Australian Government planning approval expected
- ✓ A contract will be awarded and construction. will start on the Sancrox Road interchange
- ✓ Land acquisitions will continue.

Community issues



• Nil.

Environmental issues



 Obtaining Australian Government environmental approval for the project to proceed.

Kundabung to Kempsey

July – December 2013, work progress: 🔊



- ✓ Tenders invited to build the upgrade
- ✓ Detailed design completed
- ✓ Geotechnical investigations and survey work to identify ground levels completed
- ✓ Environmental assessment and consistency reviews neared completion for design refinements
- ✓ Work under way to identify and assess biodiversity offset properties
- ✓ Land acquisitions now 64 per cent complete.

January - June 2014. expected work progress:



- ✓ Australian Government environmental approval expected
- ✓ A contract will be awarded to build the upgrade
- ✓ Land acquisitions will continue
- ✓ Major work will start.

Community issues



• Nil.

Environmental issues



 Obtaining Australian Government environmental approval for the project to proceed.

Projects being prepared for major work: Priority 2





Warrell Creek to Nambucca Heads upgrade

The Warrell Creek to Nambucca Heads upgrade is the second stage of the 42 kilometre Warrell Creek to Urunga upgrade.

The project is jointly funded by the Australian and NSW governments. It will provide about 20 kilometres of the total 42 kilometre project and involves an upgrade of the existing highway to a four-lane divided highway from the existing Allgomera deviation, south of Warrell Creek, to the Nambucca Heads interchange.

Procurement processes are underway for the Warrell Creek to Nambucca Heads upgrade:

Warrell Creek to Nambucca Heads upgrade

July – December 2013, work progress: 🔊



- √ Geotechnical investigation and revised noise impact assessments completed
- √ Flood modelling being finalised
- ✓ Work continued on developing a revised mitigation strategy for the colony of flying foxes which recently moved into an area on the approved project alignment
- ✓ Referral submitted to the Australian Government Department of the Environment
- ✓ Tenders closed for early contractor involvement contract for design and construction.

January – June 2014, expected work progress:



- ✓ A contract will be awarded for early contractor. involvement to design and construct the upgrade
- ✓ Land acquisitions will be completed.

Community issues



• Nil.

Environmental issues

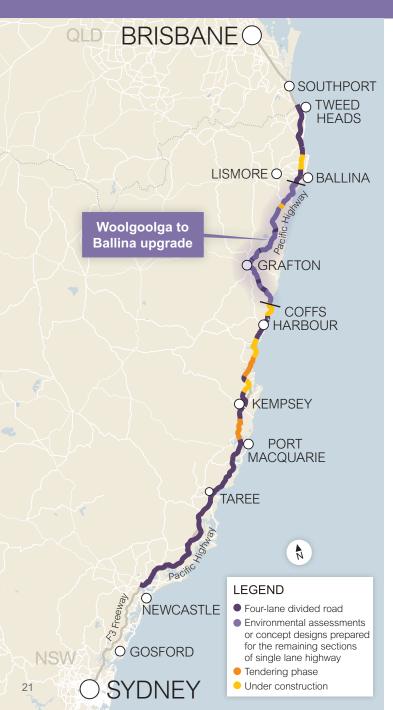


 Project team working on revised mitigation strategy to address flying fox colony.

Existing Pacific Highway at Macksville

Projects in planning: Priority 3





Woolgoolga to Ballina upgrade

The Woolgoolga to Ballina project is being prepared for construction and once completed will provide about 155 kilometres of upgraded four-lane divided road.

It does not include the Glenugie upgrade (completed) or the Devils Pulpit upgrade (currently being built).

July – December 2013, 🛝 work progress:

- ✓ Submissions and Preferred Infrastructure Report placed on public display, with 43 submissions received
- √ Ground survey investigations continued to gather data for design purposes
- ✓ Tender assessment continued for a number of activities, including for updating a number of environmental panels to assist with specialist support services for the upgrade
- ✓ Contracts were awarded for baseline surveys of threatened frogs species, Koalas and Emus
- ✓ Contracts were awarded for Aboriginal heritage investigation work
- ✓ Land acquisitions continued with about 57 per cent now complete
- √ A contract was awarded and work started on Stage two of the Pimlico to Teven upgrade.

January – June 2014, 🔊 expected work progress:

Weather permitting :

- ✓ Advice expected on project approval
- ✓ Land acquisitions will continue
- ✓ Major work will continue on Stage two of the Pimlico to Teven upgrade.

Community issues

- The project team is working through flooding concerns at Corindi
- The project team is addressing issues raised by federal and state agencies in relation to the environmental impact statement.

Environmental issues



 RMS has been reviewing the results of an Emu monitoring program.

The F3 Freeway to Raymond Terrace upgrade, Failford Road to Tritton Road upgrade and Coffs Harbour bypass projects do not form part of the joint commitment to upgrade the Pacific Highway to four-lane divided highway.









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