



Australian Government

BUILDING OUR FUTURE

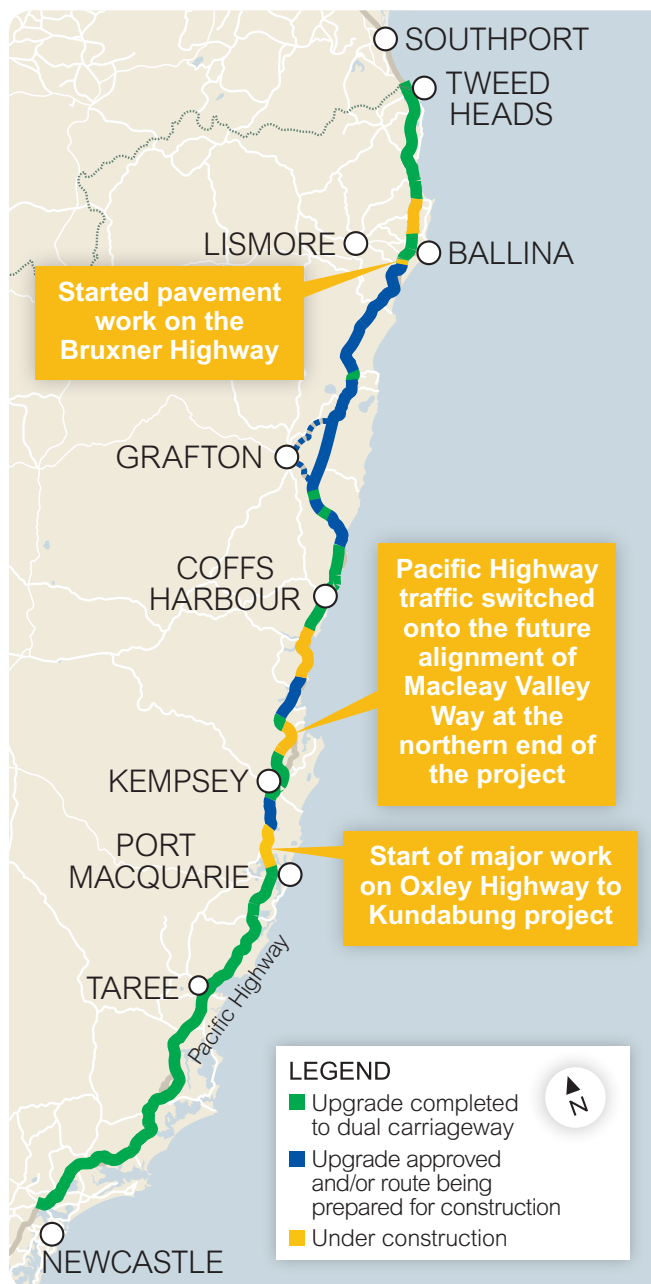


The new state
of business

Pacific Highway upgrade

Achievement report **October 2014**

An aerial view of the Frederickton to Eungai main site compound, looking south. The new Cooks Lane overbridge can be seen in the foreground, while the widened area will facilitate the building of rest areas



Pacific Highway upgrade

This report will provide you with information about Pacific Highway upgrade projects, including the current status and key activities.

As of 31 October 2014, 397 kilometres are four lane divided road and about 89 kilometres are being built. The remaining sections of two lane highway are being prepared for major work.

About 60 per cent of the final highway length is now four lane divided road.



89 km of highway under construction during October 2014.



An average of 2122 construction workers on site.



For overall upgrading strategy refer to the second last page.

Port Macquarie to Coffs Harbour – projects being prepared for major work

Kundabung to Kempsey

Contractors: McConnell Dowell
OHL joint venture

Form of contract: Build only

Expected start date: November 2014

Expected completion date: 2017 weather permitting

Project value: \$230 million

Australian Government contribution:
\$115 million *

NSW State Government contribution:
\$115 million *

Sancrox interchange

Contractors: Ferrovial Agroman

Form of contract: Build only

Workers on site: 80

Pieces of large machinery: 31

Start date: August 2014

Expected completion date: Mid 2015

* Contribution amounts may vary from year to year.

Oxley Highway to Kempsey upgrade

The Oxley Highway to Kempsey upgrade was approved by the NSW Minister for Planning and Infrastructure in February 2012 and the Federal Department of the Environment in January 2014.

The project is being built in two sections - from Oxley Highway to Kundabung and Kundabung to Kempsey. Major work began in August on the Sancrox interchange, which is being built under a separate contract but forms part of the Oxley Highway to Kundabung section. Overall, the Oxley Highway to Kempsey upgrade will provide about 37 kilometres of four lane divided highway between the Oxley Highway at Port Macquarie and the Kempsey bypass.

The project is jointly funded by the Australian and NSW Governments.

Key construction activities during October 2014

Kundabung to Kempsey

- Project plans, including the Construction Environment Management Plan, were developed, reviewed and submitted for approval
- Survey site controls establishment was completed
- Nest box installation completed and ongoing monitoring.

Sancrox interchange

2.5 days were lost to wet weather during this time. 

- Bridge piling completed
- Earthworks continued
- Drainage work continued
- Bridge substructure work started
- Alternate quarry access road work started
- Widening of Sancrox Road started
- Widening of Pacific Highway for traffic control provisions started.

Port Macquarie to Coffs Harbour – projects being built

Contractors:

Lend Lease

Form of contract:

Design and build

Workers on site: 120**Pieces of large machinery:** 14**Start date of major construction:**

October 2014

Expected completion date:

2017 (weather permitting)

Project value: \$820 million**Australian Government contribution:**

\$542.4 million *

NSW State Government contribution:

\$277.6 million *

* Contribution amounts may vary from year to year.



Some of the logs salvaged for Forests NSW

Oxley Highway to Kundabung upgrade

Background

The Oxley Highway to Kundabung upgrade is the southern section of the Oxley Highway to Kempsey upgrade, which was approved in 2012.

It involves building 23 kilometres of four lane divided road, including bridges over the Hastings and Wilson rivers.

The project is jointly funded by the Australian and NSW Governments.

Key construction activities during October 2014

No days were lost to wet weather during this time. 

- Major work started
- Final environmental approvals granted
- Design work continued
- Geotechnical investigation work continued, including drilling additional boreholes for piles on the Hastings and Wilson River bridges
- Additional survey work completed on site for designs to be enhanced
- Work to build the main site compound about 800m north of the Hastings River continued
- Consultation with affected property owners continued
- Traffic barriers installed and 80km/h speed zones erected in preparation for clearing work
- Houses in footprint of new alignment removed.

Oxley Highway to Kundabung upgrade



A harvester clearing native vegetation near Blackmans Point



Clearing work underway about 800m north of the Hastings River



The Environment Review Group inspects the clearing work

Port Macquarie to Coffs Harbour – projects being built

Contractors:

Thiess Pty Ltd

Form of contract:

Design and build

Workers on site: 450**Pieces of large machinery:** 148**Start date 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.



The Mill Lane overbridge is nearing completion and is expected to open to traffic before the end of the year

Frederickton to Eungai upgrade

Background

The Frederickton to Eungai upgrade is the second stage of the Kempsey to Eungai upgrade, which was approved in 2008. The Kempsey bypass was the first stage and opened to traffic in March 2013.

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.

Key construction activities during October 2014

One day was lost to wet weather during this time. 

- Pacific Highway traffic switched onto the future alignment of Macleay Valley Way at the northern end of the project
- The traffic switch enabled start of major work on the former alignment of the highway, including building more than three kilometres of new asphalt and concrete pavement
- Work on the Mill Lane overbridge continued ahead of planned opening in November
- Bridgework continued and was 46% complete.
- Girders placed and deck sections poured for the Cooks Lane overbridge
- Plank installation started for the bridges over the Collombatti Creek and Floodplain
- Drainage work continued and was 64% complete
- Installation of boundary and fauna fencing, including for frog and phascogale, continued
- Off site manufacture of precast concrete components, such as bridge girders, continued and near completion.

Frederickton to Eungai upgrade



The main alignment north of Mill Lane, looking south, is sealed and ready for paving



Installing girders for the North Coast Railway overbridge



Looking north along the main alignment south of Johnsons Creek



Bridge work continuing for the Cooks Lane overbridge



Traffic using the future Macleay Valley Way after the switch in October

Port Macquarie to Coffs Harbour – projects being prepared for major work

Contractors: Acciona Ferrovial joint venture

Form of contract: Design and build

Expected start date:
December 2014

Expected completion date:
2017, weather permitting

Project value: \$830 million

Australian Government contribution:
\$415 million *

NSW State Government contribution:
\$415 million *

* Contribution amounts may vary from year to year.



Geotechnical investigations underway in the Nambucca River (October 2014)

Warrell Creek to Nambucca Heads

Background

The Warrell Creek to Nambucca Heads upgrade was approved by the NSW Minister for Planning and Infrastructure in 2011 and as the second stage of the larger Warrell Creek to Urunga project. The project is jointly funded by the Australian and NSW Governments.

The 20 kilometre project involves upgrading the existing highway to a four lane divided road between the Allgomera deviation, south of Warrell Creek and Nambucca Heads, just south of the railway line.

Activities underway during October 2014

- Detailed design work continued
- Construction Environmental Management Plan and Environmental Protection Licence documentation progressed
- Additional geotechnical investigations progressed
- Installing at-resident noise treatments continued
- Work continued to identify and assess biodiversity offset properties
- Department of the Environment assessment continued
- Consultation regarding proposed project site office between Warrell Creek and Donnellyville continued
- Started installing flagging to protect sensitive environmental areas
- Detailed site survey to support design continued
- Scanning and marking of utilities continued

Port Macquarie to Coffs Harbour – projects being built

Contractors:

Lend Lease

Form of contract:

Design and build

Workers on site: 845**Pieces of large machinery:** 265**Start date of construction:**

November 2013

Expected completion date:

End 2016 (weather permitting)

Project value: \$780 million**Australian Government contribution:**

\$390 million *

NSW State Government contribution:

\$390 million *

* Contribution amounts may vary from year to year.



Bridge piling being carried out south of the Kalang River

Nambucca Heads to Urunga upgrade

Background

The Nambucca Heads to Urunga upgrade is the first stage of the Warrell Creek to Urunga upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2011. The Federal Minister for the Environment approved this upgrade in November 2013.

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.

Key construction activities during October 2014

No day was lost to wet weather during this time. 

- Detailed design work continued
- Field investigations continued
- Project boundary fencing work continued
- Drainage installation and bulk earthwork activities continued
- Soft soil treatment at Deep Creek continued
- Bridge building started at Deep Creek
- Realignment of Boggy, Cow and McGraths creeks continued
- Finished intersection upgrade work at Deep Creek Road
- Local access road between Deep Creek and East West Roads neared completion in readiness for opening to traffic
- Revegetation and hydro mulching of batters continued
- Intermittent haulage of materials over Kalang River temporary bridge continued
- Installation of pavement drainage continued north of Kalang River
- Bridge building continued at Kalang River
- Girders delivered to Short Cut Road overbridge.

Nambucca Heads to Urunga upgrade



Processing materials on the new alignment through Newry State Forest



An aerial view of work on the bridge over North Coast Railway



Building piers for the Kalang River bridges

Woolgoolga to Ballina – projects being prepared for major work



Existing highway at Shark Creek

Woolgoolga to Ballina

Background

The Woolgoolga to Ballina upgrade was approved by the NSW Minister for Planning in June 2014 and the Federal Minister for the Environment in August 2014.

The 155 kilometre project will provide a four lane divided road from the northern end of the Woolgoolga Bypass to the southern end of the Ballina Bypass.

The project is jointly funded by the Australian and NSW Governments and will be built in sections.

Activities underway during October 2014

Early work

- Early work continued including relocating utilities in Section 5 and Aboriginal salvage work

Enabling work

- Tenders closed and are being assessed for the construction of the Woolgoolga to Glenugie section
- Tenders closed and were being assessed for the early work soft soil treatments in Section 5 (Maclean to Iluka Road, Woombah)
- Tenders closed and were being assessed for emu exclusion fencing
- Contract awarded for threatened species management plans and biodiversity mitigation framework
- Woolgoolga to Glenugie community drop-in session held

- Comments on the draft urban design landscape plan for the Woolgoolga to Glenugie section closed
- Comments on the changes to levels for the Woolgoolga to Glenugie section closed
- Additional geotechnical work being carried out
- Detailed ground surveys continued
- Design of soft soil early work sites continued
- Threatened species baseline surveys continued
- Agreements in place on 73% of land acquisitions, with negotiations continuing on the remainder
- Ecological assessment and nest box management continued
- Ecological survey carried out for biodiversity offsets

Woolgoolga to Ballina – projects being built

Contractors: Leighton Contractors

Form of contract: Build only

Workers on site: 92

Pieces of large machinery: 15

Start date of construction:
November 2013

Expected completion date:
Mid 2016

Project value: Forms part of the Woolgoolga to Ballina upgrade.



The 13 month settlement period has started on the wick drain embankment south of Duck Creek

Pimlico to Teven upgrade

Background

The Pimlico to Teven project will upgrade about two kilometres of the Pacific Highway between Pimlico Road and Teven Road. This enabling work will facilitate the next phase of the highway upgrade, which is part of the overall Woolgoolga to Ballina project.

This project is jointly funded by the Australian and NSW Governments.

The Pimlico to Teven project involves building bridges over Duck and Emigrant creeks, providing about two kilometres of new road on the Pacific Highway and more than one kilometre of new road on the Bruxner Highway.

The project is being carried out in three stages. Stage one was completed by the Ballina Bypass Alliance.

Stage two is now under construction.

Stage three, which provides a four lane divided road, will be completed as part of the larger Woolgoolga to Ballina upgrade.

Key construction activities during October 2014

No days were lost to wet weather during this time. ☁️

- Completed piling and started building pier two and an abutment on Duck Creek bridge
- Started pavement work on the Bruxner Highway
- Completed placing fill on the wick drain embankment south of Duck Creek, with the 13 month settlement period starting
- Poured seven deck segments on Emigrant Creek bridge
- Started property adjustment work south of Duck Creek
- Removed the power pole access track east of Emigrant Creek
- Placed fill in the cross over east of Emigrant Creek
- Completed sheet piling for the retaining wall south of Duck Creek.

Pimlico to Teven upgrade



Work being carried out east of Emigrant Creek



Transverse drainage is being installed on Pimlico Road



Concrete being poured in a segment on the Emigrant Creek bridge



The Emigrant Creek bridge is taking shape



Laying road surface on the Bruxner Highway

Projects being built

Contractors: Lend Lease

Form of contract: Design and build

Workers on site: 333

Pieces of large machinery: 230

Start date of major construction:
September 2012

Expected completion date:
2015, weather permitting

Project value: \$862 million

Australian Government contribution:
\$566.1 million *

NSW State Government contribution:
\$295.9 million *

* Contribution amounts may vary from year to year.



Traffic using the Broken Head Road bridge

Tintenbar to Ewingsdale upgrade

Background

The Tintenbar to Ewingsdale upgrade was approved on 29 January 2010.

The project 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.

Key construction activities during October 2014

One day was lost to wet weather during this time. 

- Woodford Lane opened to southbound Pacific Highway traffic exiting for Byron Bay
- Tunnel waterproofing and permanent lining continued
- Tunnel tour for Engineers Australia group
- Drainage work continued across the project
- Work on roundabout at Bangalow continued
- Bridge work continued across the project
- Mainline paving and saw cutting continued
- Pavement work for the Pacific Highway diversion at Emigrant Creek neared completion.

Tintenbar to Ewingsdale upgrade



A spreader truck applies aggregate to the next bitumen seal run on the northbound carriageway



The first section of cross passage form is moved through to the southbound tunnel portal



Installing roofing to the St Helena tunnel control centre

Environment



Seven glider poles have been installed on the Kempsey bypass



A feather-tail glider using one of the glider poles on the Kempsey bypass

Aerial glider crossings having desired effect on Kempsey bypass

Glider poles installed during the building of the Kempsey bypass are being used by target species to cross the upgraded highway, ecological monitoring has shown, allowing animals east and west of the highway to continue healthy breeding patterns.

Monitoring at the two crossing locations began in November 2013, about eight months after the bypass opened to traffic.

Initial monitoring of the glider poles has provided vital information on the utilisation of the glider crossings by two of the target species.

Results from the first two monitoring events have shown:

- Two gliding marsupials, the sugar glider and feather-tail glider, were recorded using the glider poles on 45 separate occasions
- On multiple occasions feather-tail gliders were recorded on a median pole and a roadside pole, in quick succession. These recordings are likely to be the same individual, indicating a complete crossing of the highway
- Feather-tail gliders gliding at least 32 to 39 metres. This is an important find as there is little information published regarding the gliding angles and distances of this species
- The highest frequency of glides was observed from median poles, indicating that the most frequently used gliding path is from trees retained on the road side.

Roads and Maritime Services installed seven poles in total on both sides of the alignment, as well as within the median, during the building of the bypass.

The ecological monitoring program was developed to assess the effectiveness of the glider crossings at reducing the impacts associated with the upgrade.

Automated cameras were installed at the top of each of the seven poles. The cameras contain an internal sensor to detect any animal movement and are set to monitor continuously for a period of 60 days.

At the end of the 60 day period the photos were downloaded and analysed to determine if any animals completed a full crossing of the highway and to identify the species.

A further four monitoring events are scheduled during the next two years, building on the initial data to assist in identifying any trends in the use of glider poles.



A sugar glider is filmed using one of the glider poles on the Kempsey bypass

Four-lane divided road status

