



Australian Government

BUILDING OUR FUTURE



Pacific Highway upgrade

Achievement report **June/July 2018**



Aerial view Warrell Creek to Nambucca Heads looking south

Overview of the upgrade



Pacific Highway upgrade

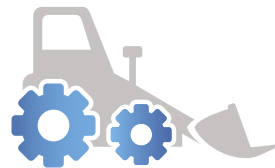
This report will provide you with information about Pacific Highway upgrade projects, including the current status and key activities.

As of 31st July 2018, about 81% of the final 657 kilometre length of the Pacific Highway are four lane divided road. The remaining kilometres are all in major construction and are on schedule to open before or during 2020.



about **81%** of highway length now four lane divided road

3,545 workers on site



129km of highway being built

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Port Macquarie to Coffs Harbour

The upgrade of the remaining six kilometres of the Pacific Highway to four lane divided road between Port Macquarie and Coffs Harbour was opened to traffic in June 2018. Five projects worth more than \$3.3 billion are now open to traffic.

The 26 kilometre Frederickton to Eungai project opened to traffic in May 2016, the Nambucca Heads to Urunga project in July 2016, the 14 kilometre Kundabung to Kempsey project opened to four lanes in October 2017, the 23 kilometre Oxley Highway to Kundabung section opened progressively between November 2017 and March 2018, and 14 kilometres of the Warrell Creek to Nambucca Heads section opened in December 2017. The remaining six kilometres of the Warrell Creek to Nambucca Heads section opened to traffic in June 2018. The summaries on the following pages outline progress in completing this section of the Pacific Highway upgrade, including key building activities.

Port Macquarie to Coffs Harbour

Project snapshot

Contractors: Lendlease

Form of contract: Design and build

Workers on site: 37

Pieces of large machinery: 3

Start date of major construction: October 2014

Expected completion date: open to traffic

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

Oxley Highway to Kundabung

Background

The Oxley Highway to Kundabung project is the southern section of the Oxley Highway to Kempsey upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2012 and the Federal Department of the Environment in January 2014. The project is jointly funded by the Australian and NSW governments. It involved building 23 kilometres of four lane divided road, including bridges over the Hastings and Wilson rivers.

Key activities/progress in June/July 2018

- project is "Open to Traffic"
- completed minor finishing work and site demobilisation
- finished final landscape work
- contracted builders finalised acoustic treatments for properties affected by noise due to the new road
- construction completion for the contract achieved in July 2018
- 36 month Landscape Maintenance Period begins
- commissioning of Variable Message Sign at Cooperabung Range.



OPEN TO TRAFFIC

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Oxley Highway to Kundabung



New Variable Message Sign for southbound traffic commissioned at Cooperabung



Final fencing and pavement work completed at Glen Ewan Road



Demobilisation of office buildings at the main site compound



Restoration of the northern compound site at Cooperabung

Port Macquarie to Coffs Harbour

Project snapshot

Contractors: Pacifico (Acciona Ferrovial joint venture)

Form of contract: Design and build

Workers on site: 177

Pieces of large machinery: 38

Start date of major construction: December 2014

Expected completion date: 14 km Macksville bypass opened late 2017, remaining six km opened in June 2018

Project value: \$830 million

Australian Government contribution: \$415 million*

NSW State Government contribution: \$415 million*

*Contribution amounts may vary from year to year

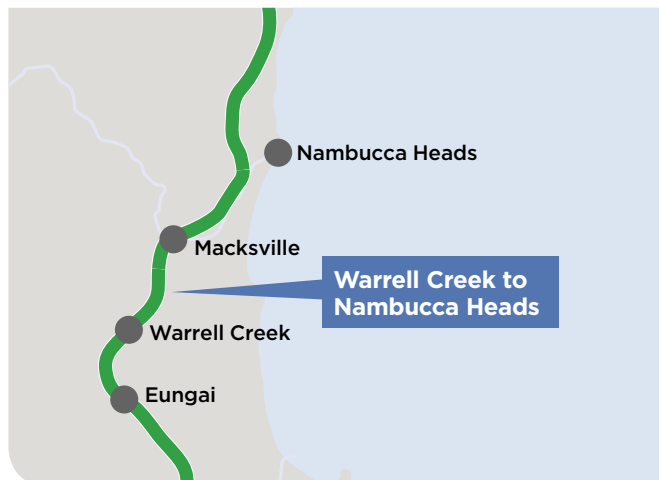
Warrell Creek to Nambucca Heads

Background

The Warrell Creek to Nambucca Heads project is the second stage of the Warrell Creek to Urunga upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2011. The Federal Department of the Environment approved this upgrade in December 2014. 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 Allgobera deviation, south of Warrell Creek, to just south of the North Coast railway line where it joins the Nambucca Heads to Urunga upgrade.

Key activities/progress in June/July 2018

- opening of the six kilometre section of dual lane highway between Bald Hill Road and Upper Warrell Creek Road
- finished drainage work along the alignment
- finished all asphaltting on the alignment to the top of the structural asphalt layer
- finished road repairs at Browns Crossing Road
- sealed the Bald Hill Road bus turning area
- continued work on Old Coast Road overbridge
- continued site demobilisation and removal of construction facilities
- completed rock placing and vegetation around the Upper Warrell Creek bridge.



177 average workers on site



38 average pieces of machinery on site



about
97%
complete

OPEN TO TRAFFIC

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Warrell Creek to Nambucca Heads



Revegetation and rock placing at Upper Warrell Creek



Bald Hill Road bus turning area sealed



The final asphalt layers being applied near Rosewood Road, looking north



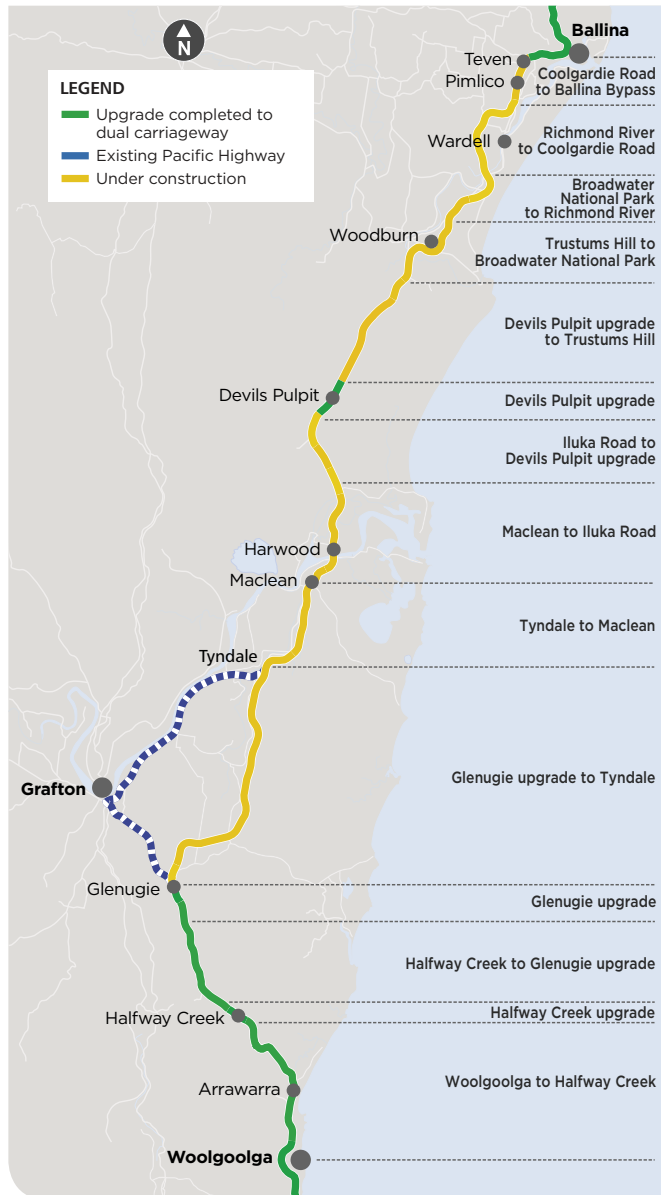
The first southbound vehicles on the new highway: A police car and a project vehicle

Woolgoolga to Ballina

The 155 kilometre upgrade between Woolgoolga and Ballina is the last highway link between Hexham and the Queensland border to be upgraded to four lanes. 26 kilometres opened in 2017 and the remaining sections are due to open before or during 2020.

Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the project. The delivery partner model is based on the approach used to oversee construction of infrastructure for the London Olympics and supports collaboration and innovation by bringing businesses, workers, consumers and suppliers together. It encourages the best ideas and solutions from the private sector while also drawing on Roads and Maritime's knowledge to ensure better engineering and design, customer outcomes and public value.

Woolgoolga to Ballina



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. Of the 155 kilometre project, 26 kilometres are open to traffic, and when complete 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.

Procurement

- rigid pavement contracts for the sections between Maclean and Devils Pulpit were awarded
- the combined procurement program for the section between Maclean and Iluka Road, Mororo was agreed between Roads and Maritime Services and the delivery partner, Pacific Complete

Overview

- construction is progressing across the entire W2B alignment. Key construction activities for June/ July include bulk earthwork, vegetation removal and building of highway bridges in numerous locations

Successes / Achievements for June/July 2018

- vegetation removal is 95 percent completed with an expected saving of 127 hectares of the maximum 686 hectares approved for removal
- bulk earthwork is 71 percent completed with 1.2 million cubic metres achieved during the two months
- 76 percent of the 155 bridges between Glenugie to Ballina are in construction, with 9 bridges completed.

Environment

- received positive response to rootball and timber pins recycling initiative posted on social media
- environment Protection Agency carried out an audit of the upgrade's performance under the Environmental Protection Licence.

Stakeholder and Community Engagement

- work Ready Program was completed with more than 800 people receiving induction and safety training
- paused consultation for a proposed temporary asphalt batch plant at Woombah to review overall asphalt supply strategy for the upgrade
- provided information to the community following the Department of Environment and Planning's approval of the Operational Noise Review.

3,331 total workers*  * including workers not on site working across the whole Woolgoolga to Ballina project

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Woolgoolga to Ballina



Glenugie to Maclean

Background

The Glenugie to Maclean section of the Woolgoolga to Ballina Pacific Highway upgrade extends more than 48 kilometres. Diverging from the existing Pacific Highway at Glenugie the new alignment heads east passing through Pillar Valley joining the existing Pacific Highway at Maclean. The upgrade in this location includes the Glenugie, Tyndale and Maclean interchanges.

Key activities/progress in June/July 2018

- vegetation removal was completed at Glenugie
- initial drainage work was completed at Glenugie
- all piling work on bridges was completed between Avenue Road at Lavidia and Tyndale
- construction of earthwork for a temporary concrete batch plant for paving was completed at Avenue Road at Lavidia
- placing headstocks was completed and installing Super-T girders started at the new bridge over Shark Creek at Shark Creek.



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Glenugie to Maclean



Drainage work at Glenugie



Aerial of bridge over Shark Creek at Shark Creek



Pier forms ready for concrete pour for the new bridge over Shark Creek at Shark Creek



Foundation work for paving south of Byrons Lane at Tyndale

Woolgoolga to Ballina



Maclean to Devils Pulpit

Background

The Maclean to Devils Pulpit section of the Woolgoolga to Ballina Pacific Highway upgrade extends about 27 kilometres. The upgrade in this location generally follows the existing Pacific Highway and includes Yamba, Harwood and Iluka interchanges.

Key activities/progress in June/July 2018

- continued bulk earthwork between Iluka Road and Devils Pulpit
- pier building started on the new bridge over the Clarence River North Arm, Mororo
- second stage of soft soil treatment completed at the Yamba interchange
- controlled blasting at Tyndale borrow site to provide material for earthwork started
- first Super T girder installed at the Chatsworth Road/Fischers Lane overpass, Chatsworth Island
- environmental approval for work to lift Maclean levee received.



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Maclean to Devils Pulpit



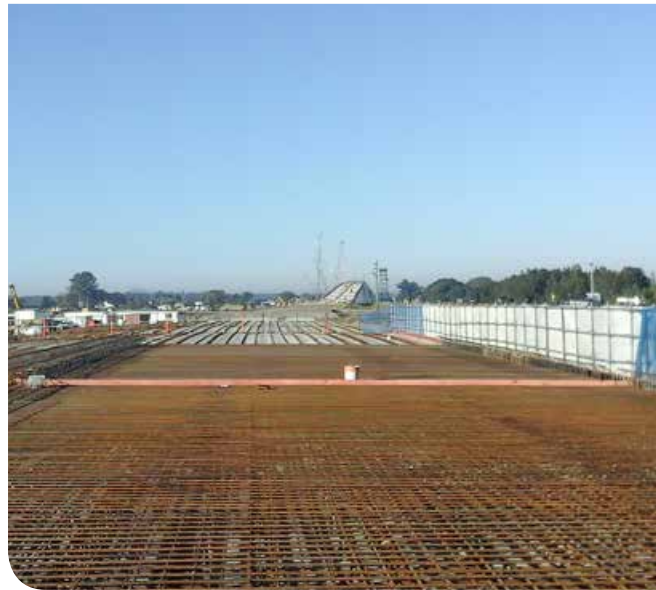
Foundation treatment for paving between Iluka Road and Devils Pulpit



Installing pilecap shells for the new bridge at Mororo



Progress of work at the Yamba interchange



Progress at the new bridge at Mororo



Earthwork at Iluka interchange

Woolgoolga to Ballina



Devils Pulpit to Broadwater

Background

The Devils Pulpit to Broadwater section of the Woolgoolga to Ballina Pacific Highway upgrade begins about 13 kilometres north of Mororo Road and extends about 34 kilometres north to the new Richmond River bridge. In this area the upgrade bypasses Woodburn and Broadwater and includes Broadwater and Woodburn interchanges.

- precast abutments & headstocks completed for bridge near Darky Road, Tabbimoble
- vegetation removal for the New Italy Museum carpark completed
- piling started on the Woodburn Evans Head Road overpass, Woodburn
- construction of a temporary concrete batch plant for paving was started at Broadwater.

Key activities/progress in June/July 2018

- piling for bridges near Oxleyan Pygmy Perch habitat completed and substructure work started, Broadwater
- foundation treatment substantially completed south of New Italy



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Devils Pulpit to Broadwater



Installing headstocks on bridge at Tabbimoble



Building the bridge substructure near Watsons Street at Woodburn



Work progressing on the southern approach to the new bridge over the Richmond River



Preparing for a deck pour at bridge near Darky Road at Tabbimoble

Woolgoolga to Ballina



Broadwater to Ballina Bypass

Background

The Broadwater to Ballina bypass section of the Woolgoolga to Ballina Pacific Highway extends more than 18 kilometres from the new Richmond River bridge to just south of the Teven Road interchange at Ballina.

Key activities/progress in June/July 2018

- Wardell Road fauna crossing culvert work completed to support Koala breeding season, Wardell
- traffic switch on the Pacific Highway at Pimlico completed, which will enable construction work in this area to continue
- piling for the new bridge over Duck Creek, Pimlico was completed
- eight of the 12 balanced cantilever segments for the new bridge over Emigrant Creek, Pimlico were completed
- earthwork for settlement at Coolgardie was completed
- started work on twin bridges over fauna passage south of Coolgardie Road, Coolgardie
- girders on two bridges in Wardell over Wardell Road and the floodway completed.



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Broadwater to Ballina Bypass



Foundation layer for paving at Wardell Road at Wardell



Building deck segments on the balanced cantilever bridge over Emigrants Creek at Pimlico



Traffic switch at Pimlico completed



Temporary concrete batch plant construction completed for work between Broadwater and Pimlico



Installing girders for the bridge north of Old Bagotville Road at Bagotville

Woolgoolga to Ballina



New bridge over the Clarence River at Harwood

Background

The bridge over the Clarence River at Harwood project is part of the Woolgoolga to Ballina Pacific Highway upgrade. It involves building a 1.5 kilometre long, four lane divided bridge, about 20 metres east of the existing Harwood Bridge.

Key activities/progress in June/July 2018

- work on the new Oval Link Road connection to the Pacific Highway progressing
- manufacturing and placing of 144 girders was completed
- placing of headstocks on marine-based columns was completed
- continued deck pouring.



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

New bridge over Clarence River at Harwood



Northern landside parapet and bridge railing



Installing transfloor panels on the bridge



Last girder placement for the bridge



Link Oval Road extension complete



Installing of southern median barriers



Last span concrete deck pour to marine spans

Woolgoolga to Ballina



New bridge over the Richmond River at Broadwater

Background

The bridge over the Richmond River at Broadwater will be one of two major bridges for the Woolgoolga to Ballina Pacific Highway upgrade.

The project involves building a one kilometre long, four lane divided road bridge, about 500 metres north of Broadwater.

Key activities/progress in June/July 2018

- installing girders over the Pacific Highway was completed
- installing of southern land headstocks completed
- second barge to support marine work arrived at the Richmond River
- more than 50 percent of precast concrete girders have been installed
- deck pours started
- installing headstocks on marine-based columns started.



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

New bridge over the Richmond River at Broadwater



First deck pour on southern land section



First marine columns



Barge travelling to site on the Richmond River for marine work



Installing marine girder at span 19

Spotted, taking a leisurely quoll!

A Spotted-tailed Quoll has been recorded using an underground fauna culvert on the Pacific Highway between the Oxley Highway and Kundabung. Rustic-brown in colour, with white spots on its back and tail, the endangered species is Australia's largest carnivorous marsupial.

An initial environmental assessment did not record any Spotted-tailed Quolls in the project area. Despite this, a habitat assessment deemed large sections of the project area to be quoll-friendly, and mitigation measures were introduced to reduce any impacts on a potential quoll population including clearing impacts, fauna underpasses and ecological monitoring programs.

Strict conditions of approval for the Pacific Highway required a pre-construction survey for the quoll, conducted over 3 months in 2014 using a total of 108 remote cameras. The survey did not detect any quolls.

As part of the Ecological Monitoring Program, fauna underpass monitoring is required at 13 fauna culverts, using remote cameras over a period of 60 days. The monitoring event conducted in autumn this year was the first monitoring event, following the opening of the final stage of the project in March, and revealed on camera, for the very first time, the use of an underpass by the species.

The sighted animal appeared to be on a mission which may explain why it was determined to use the structure to cross the highway. Despite being incredibly elusive, researchers are hoping the next culvert monitoring event which will take place in summer 2018-19, might see the return of a quoll.

Mitigation and monitoring actions will continue as part of the plan to reduce the project's impact on the environment.



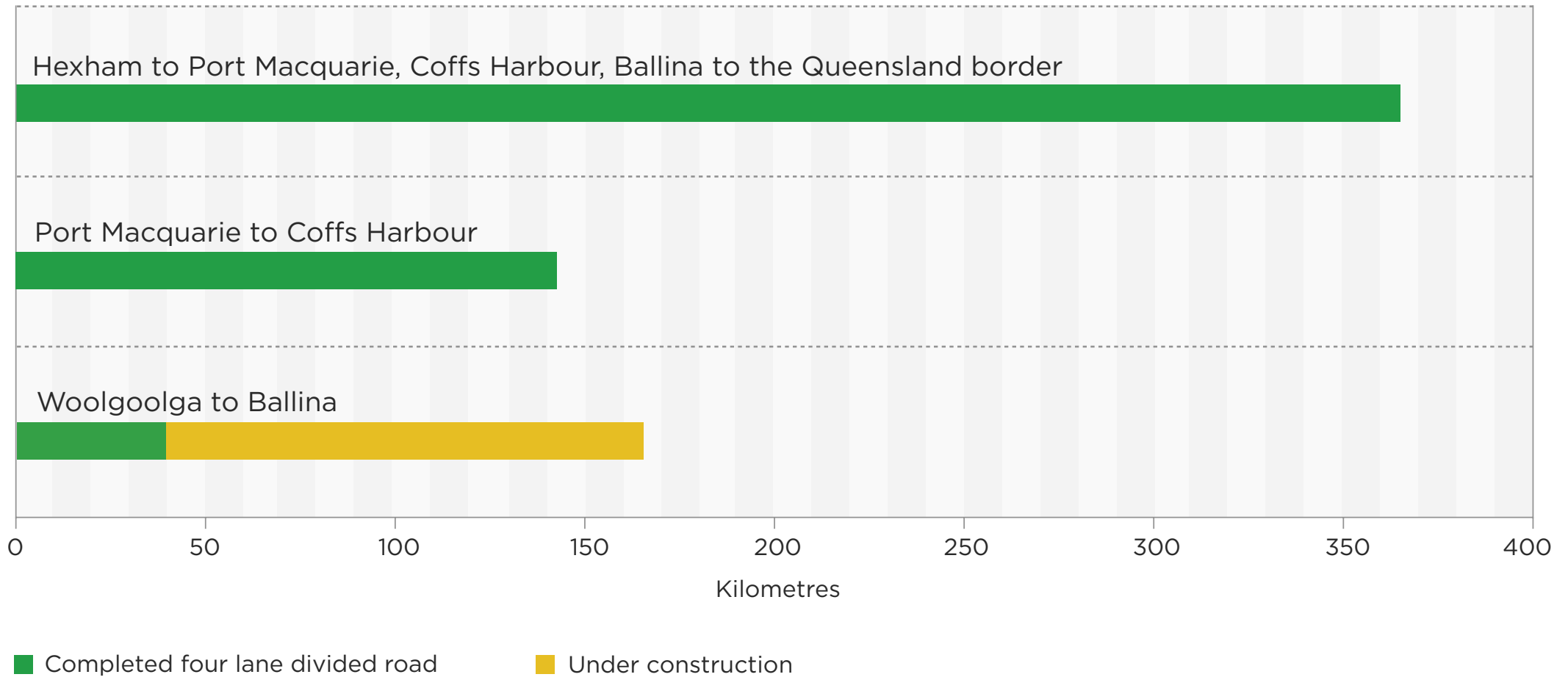
Spotted-tail Quoll



Spotted-tail Quoll

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific and environment news at www.rms.nsw.gov.au/projects/pacific-highway/environment/news.html or call the Pacific Highway office on 1800 653 092

Four lane divided route status





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