



Australian Government

BUILDING OUR FUTURE



Western Sydney Infrastructure Plan

1 July 2017 – 30 June 2018
Report Card

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Front cover: Looking east from The Northern Road over the Western Sydney Airport Growth Area

Message from the Ministers

The Western Sydney Infrastructure Plan (WSIP) has continued to make a significant difference in western Sydney over the last 12 months.

Since the 2016-17 report card, we have opened The Northern Road upgrade, The Old Northern Road to Peter Brock Drive to traffic and substantial progress has been made on others. In April, we had the pleasure of officially opening the first stage of The Northern Road upgrade between The Old Northern Road, Narellan and Peter Brock Drive, Oran Park. As residential and commercial development occurs in western Sydney, traffic is expected to increase on The Northern Road. The \$1.6 billion upgrade will increase capacity, improve safety and reduce congestion and travel times in the future.

Two other sections of The Northern Road upgrade are under construction; between Peter Brock Drive, Oran Park and Mersey Road, Bringelly, and between Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith. Good progress has also been made on the upgrade of Bringelly Road, with the first stage due to be open to traffic later this year and the second stage between King Street, Rossmore and The Northern Road, Bringelly under construction.

In February 2018, we were pleased to announce the release of the preliminary design for the M12 Motorway. The M12 will provide first rate connectivity to Western Sydney Airport and a direct connection to Sydney's motorway network, helping to unlock access to future housing developments and economic precincts. The M12 will be built in time for the opening of Western Sydney Airport in 2026.

Work is also continuing on the \$200 million Local Roads Package. Roads and Maritime is working with local councils to help progress projects worth \$62 million. Many of the projects will go into construction later this year, providing local communities with safer and more efficient roads.

Road users aren't the only group benefiting from WSIP road upgrades. Western Sydney businesses and job seekers are also reaping positive rewards. As of 30 June 2018, there were around 1798 full time equivalent jobs created as part of WSIP projects - an amount which has doubled in the last twelve months as projects move into construction. A total of \$163 million worth of contracts have been awarded to western Sydney businesses. Of the 636 businesses working on WSIP projects, 373 are based in western Sydney.

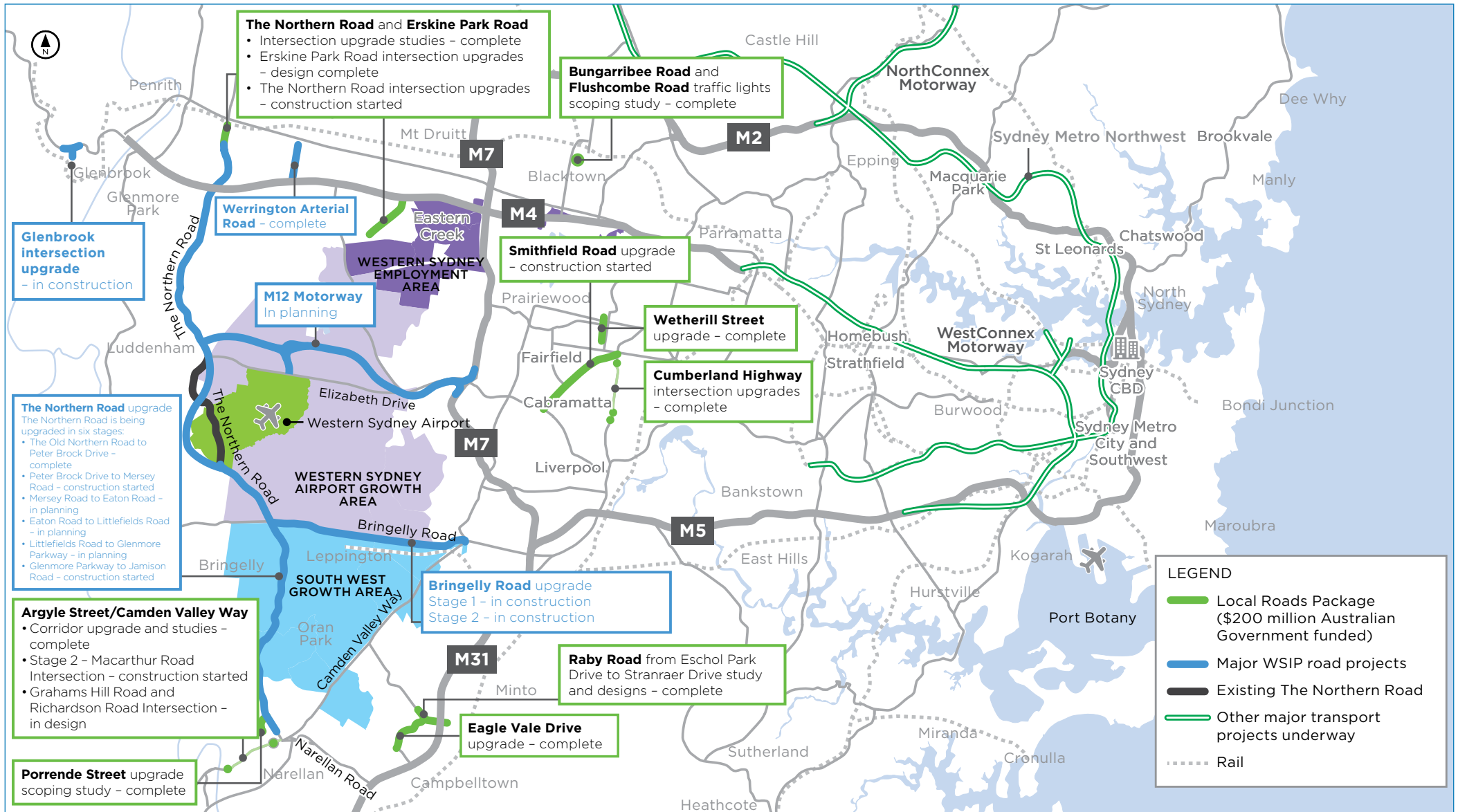
And the best is yet to come! The peak annual expenditure of over \$550 million for the WSIP program is forecast to take place in the 2019-20 financial year, which means the residents and businesses of western Sydney will continue to benefit from the WSIP projects in years to come.



The Hon. Alan Tudge MP
Minister for Cities, Urban Infrastructure and Population



The Hon. Melinda Pavey MP
NSW Minister for Roads, Maritime and Freight



Above: Western Sydney Infrastructure Plan overview map

Western Sydney Infrastructure Plan overview

The Australian and NSW governments are jointly funding this \$3.6 billion road investment program for western Sydney.

The Western Sydney Infrastructure Plan (WSIP) is delivering major road infrastructure upgrades to support an integrated transport solution for the region and capitalise on the economic benefits from developing the Western Sydney Airport.

WSIP will provide significantly safer and more efficient roads for customers.

The **Werrington Arterial Road**, which opened to traffic in May 2017, was the first major project to be completed as part of WSIP. The upgrade provided road users with better, safer access between the M4 Motorway and the Great Western Highway.

The 10 kilometre **Bringelly Road upgrade** is being delivered in two stages between Camden Valley Way, Leppington and The Northern Road, Bringelly.

- Stage 1 is a 5.7 kilometre section between Camden Valley Way, Leppington and King Street, Rossmore which should be opened to traffic in late 2018, weather permitting

- Stage 2 is a 4.3 kilometre section between King Street, Rossmore and The Northern Road, Bringelly. A sod-turning event was held in June 2017 to mark award of this contract.

The upgrade will provide a generally four lane divided road with six lanes between Eastwood Road and Upper Canal Bridge, through the future Leppington Town Centre.

The Northern Road upgrade will see around 35 kilometres of road upgraded between The Old Northern Road at Narellan and Jamison Road at South Penrith. The overall upgrade is being delivered in six sections between:

- The Old Northern Road, Narellan and Peter Brock Drive, Oran Park (3.3 kilometres) – opened to traffic April 2018
- Peter Brock Drive, Oran Park and Mersey Road, Bringelly (11.3 kilometres) – a sod-turning event was held in June 2017 to mark award of this contract. Due to open to traffic in 2020
- Mersey Road, Bringelly and Eaton Road, Luddenham (5.5 kilometres) – construction expected to commence in October 2018
- Eaton Road, Luddenham and Littlefields Road, Luddenham (4.5 kilometres) – the call for tenders for a construction contractor is expected to take place in late 2018

- Littlefields Road, Luddenham and Glenmore Parkway, Glenmore Park (six kilometres) – announcement of the construction contractor is expected shortly
- Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith (four kilometres) – a sod turning event was held in June 2017 to mark award of this contract. Due to be open to traffic in 2020.

The Northern Road upgrade will cater for future traffic from planned residential and commercial developments.

The new **M12 Motorway** will provide direct access to the Western Sydney Airport at Badgerys Creek and connect to Sydney's motorway network.

The **Glenbrook Intersection upgrade**, due to be completed in October 2018, weather permitting, will improve safety and access at the intersection of Ross Street and the Great Western Highway, Glenbrook.

The Australian Government is also investing \$200 million in a Local Roads Package as part of WSIP, allowing western Sydney councils to deliver improved road connections that support the WSIP.

Progress

The Australian and NSW governments have made significant progress in the delivery of the WSIP including:

- Completion of 5.3 kilometres of major road upgrades as part of the Werrington Arterial Road and The Northern Road upgrade, The Old Northern Road to Peter Brock Drive.

- Continuing work on 25.3 kilometres of road including the Bringelly Road upgrade between Camden Valley Way, Leppington and The Northern Road, Bringelly, and sections of The Northern Road upgrade between Narellan and Mersey Road, Bringelly and between Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith.

Employment

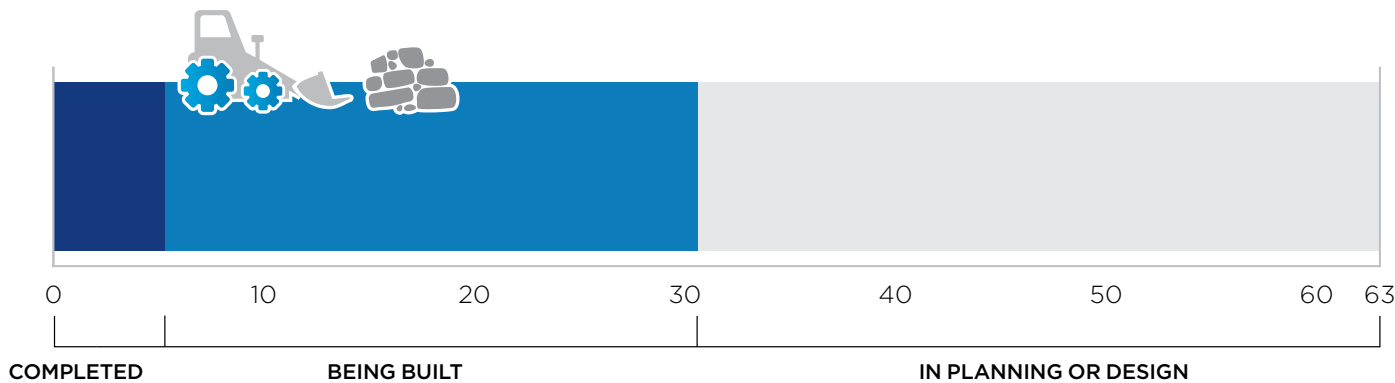
The Australian and NSW governments expect the WSIP projects to create about 4,000 direct and indirect jobs over the 10 year lifetime of the program.

As of 30 June 2018 there were around 1798 full time equivalent jobs created as part of WSIP projects. This is almost double the number at this time last year as more projects move towards construction with the associated increase in jobs and contracts.

Supporting Local Business

A total of \$163 million worth of contracts have been awarded to businesses based in western Sydney for WSIP projects.

A total of 636 businesses are working on WSIP projects, 373 of which are based in western Sydney.



5.3km
completed

25.3km
being built

32km
in planning or design

Providing Employment Opportunities

The Northern Road Training and Employment Hub, Glenmore Parkway to Jamison Road

Through their historic infrastructure spend, the Australian and NSW governments are creating training and careers for western Sydney people who face barriers to employment.

The Northern Road Training and Employment Hub was set up in July 2017 linking Aboriginal and Torres Strait Islanders, refugees, long-term unemployed, women and young people under 25 with on the job training and employment. So far, the Hub has trained around 30 people from these target groups, placing them into potentially lifelong careers, while also contributing to the future of western Sydney.

For skilled migrant and civil construction apprentice Casidhe Lee, from Lalor Park, the Hub has provided a vital foot-in-the-door to the construction industry, and the chance to earn formal civil construction qualifications through an apprenticeship with The Northern Road upgrade contractor, Lendlease.

“I had been trying to get into the industry for some years and completed formal vocational training in carpentry and other building skills, but I found that what I was promised and the support I had when working, were two different things. Things are a lot better now and I am learning so much.”

Ten women have so far completed a six-week pre-employment training course through the Hub and now work full-time on The Northern Road upgrade.

Shelley, 22, from Penrith said the Hub training program gave her the employment stability she needed to discover what she was really passionate about.

“I was craving stability and wasn’t really sure what I wanted to do with my time,” Shelley said. “I love being able to take something and make something of it, and see what I have accomplished. I am learning about safety, hazards, the way roads are made and all the little bits and pieces that are put into it to make the whole project.”



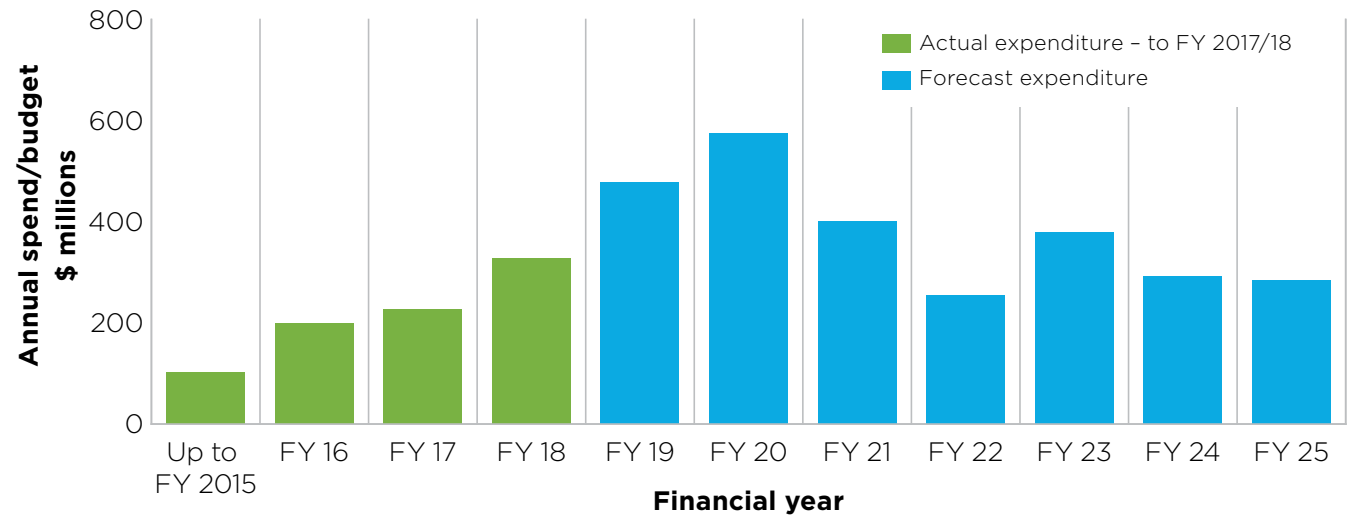
Civil Construction Apprentice, Casidhe Lee and the Lendlease Project Director, Barry Murphy

Expenditure

Of the \$3.6 billion for the WSIP, the Australian Government will fund \$2.9 billion, while the NSW Government will invest \$700 million.

Peak expenditure for the program is forecast to be over \$550 million during the 2019/20 financial year when simultaneous construction will be underway on the majority of the projects.

Expenditure on the WSIP for the full 2017/18 financial year was \$328 million.



Milestones

Six key milestones targeted for the 2017/18 financial year were completed:

Project	Milestone	Target achieved
The Northern Road upgrade, Peter Brock Drive to Mersey Road	Site work commenced	✓
Bringelly Road upgrade Stage 2	Site work commenced	✓
The Northern Road upgrade, Glenmore Parkway to Jamison Road	Site work commenced	✓
Local Roads Package - Round 2	Start work on all Round 2 projects	—
The Northern Road upgrade, Oran Park to Peter Brock Drive	Open to traffic	✓
M12 Motorway	Submit preliminary business case	—

The following six milestones are targeted for the 2018/19 financial year:

Project	Milestone
Bringelly Road Stage 1	Open to traffic
The Northern Road upgrade, Mersey Road to Eaton Road	Start major construction
The Northern Road upgrade, Littlefields Road to Glenmore Parkway	Start major construction
Local Roads Package - Round 2	Start work on all Round 2 projects
Glenbrook intersection upgrade	Open to traffic
M12 Motorway	Market sounding to commence

Progress

Environment

Roads and Maritime is committed to the delivery of efficient and effective environmental outcomes throughout the planning and construction of projects within the WSIP. This includes providing advice on the planning process, monitoring construction activities to mitigate the impact on the environment, and liaising with government and community stakeholders to address concerns.

Performance of construction contractors is monitored via fortnightly site inspections and scheduled management system audits. Contractors are assessed against environmental management practices and encouraged to look for innovation to achieve outcomes. Between July 2017 and June 2018, 72 scheduled inspections of projects within the WSIP were carried out.

A number of environmental impact assessments have taken place on projects in both development and construction. In May 2018, Roads and Maritime achieved a significant milestone in obtaining both NSW and Australian Governments approval for The Northern Road upgrade between Mersey Road and Glenmore Parkway. As the upgrade had significant impacts on Commonwealth land, separate NSW and Australian Government approvals were required.

We invited comments from the community and stakeholders on the preliminary design and access strategy for the M12 Motorway in February and March 2018. An environmental impact statement for the project is currently being prepared.

The presence of bonded Asbestos Containing Material (ACM) identified on WSIP projects poses a continuing challenge to construction timeframes and budgets. We have developed a process in consultation with the Environment Protection Authority (EPA) on several WSIP projects to encapsulate bonded ACM to minimise safety and environmental impacts. Roads and Maritime will continue to work collaboratively with regulatory stakeholders, industry specialists, our contractors and the community to effectively manage this issue.

The purchase of biodiversity offset credits for the WSIP under the NSW BioBanking scheme is ongoing. In December 2017, we launched a public Expression of Interest (EOI) process whereby advertisements were placed in relevant newspapers asking interested landholders to contact the Roads and Maritime Office about creating biodiversity credits on their land for exclusive purchase by Roads and Maritime.

In May 2017, approval was granted to purchase \$13 million of biodiversity offset credits listed on the OEH Public Register. This tranche comprised about 12 per cent of the total biodiversity offset credit requirements for The Northern Road upgrade and M12.

These credits compensate for the lost vegetation by protecting and managing biodiversity in one area in exchange for the impact created by a project.

BioBanking allows 'biodiversity credits' to be generated by landowners and developers who agree to enhance and protect biodiversity values on their land through a BioBanking agreement. These credits can then be sold, generating funds for the management of the site.



Cumberland Plain Woodland

Progress

Work, Health and Safety

We continue to work closely with our industry partners to manage risk and promote a safe work culture during construction of WSIP projects.

Working collaboratively and gaining industry partner participation has proven invaluable, allowing us to share lessons across our program and project offices. Roads and Maritime sponsored a safety forum that brought together 80 Roads and Maritime and industry leaders to discuss innovation and consistency across projects. This leads directly to specific improvements across WSIP projects.

We collaborate on all safety matters with our industry partners to challenge the status quo and promote continuous improvements and innovating in safety.

People Plant Proximity Technology Trial

We have committed to carry out a trial of 'wearable technology' aimed at improving the safety of people in the vicinity of mobile plant (People-Plant-Proximity) on our projects.

Roads and Maritime is partnering with our contractor for the initial trial over a 12 month period on The Northern Road upgrade, Mersey Road to Glenmore Parkway to benefit the wider construction community.

We have used the system EgoPro that offers proximity warning and alerts to workers and operators in real time. The system provides sound and visual display alarms based on presence of workers around plant or vehicles.

The pilot consists of EGOPro devices fitted to 17 items of plant and 200 individual sensors for project staff and contractors.

Not only do the devices offer a layer of controls to prevent people and plant incidents, the data from these devices allowed this information to assist in better planning and improved the management of work environments.

The pilot has been invaluable to help quantify the number of people/plant interactions on site, as well as providing insights into areas where

we are still exposed. The pilot is moving and maturing as technology improves and there are further aspirations to be realised to make this technology even more interactive.



Executive Director Technical Project Services, Jeff McCarthy and Director of Engineering, Chris Harrison getting hands-on experience with the People-Plant-Proximity wearable technology trial at the Northern Road upgrade, Mersey Road to Glenmore Parkway

Consultation

Roads and Maritime is committed to transparent and inclusive consultation throughout the development of projects. We work collaboratively with residents, stakeholders, interest groups, community representatives and councils to gain feedback and suggestions which helps to inform our planning and decision making.

These opportunities occur at specific project milestones such as selecting new road corridor alignments or during the display of environmental assessments.

We encourage the community to have a say at important milestones during project development through:

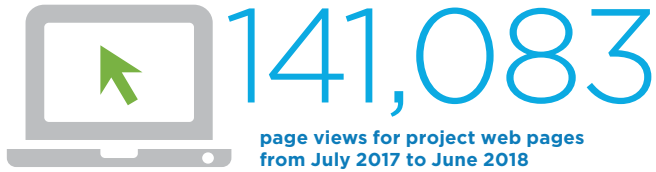
- one-on-one meetings
- community information sessions
- information displays
- postal submissions
- Roads and Maritime and other NSW Government websites.

Taking a leap ahead with technology, we plan to implement the proposed **Roads and Maritime 360 Virtual Reality App** to enable users to explore the new M12 Motorway design and intersections with their own phone for a completely immersive experience. The VR app includes proposed 360° images, 360° videos and an interactive map of the motorway. Google Cardboard devices will be given away at the community consultation and pop-up events so stakeholders can download the app and experience VR on their own device (iPhone or Android) anytime.



A user experiencing the Virtual Reality App at a community information session

Progress



Information on WSIP projects is provided through:

- project update newsletters
- regular website updates
- social media
- letters to land owners and residents
- staff visiting affected land owners and residents
- electronic message signs targeting road users.

The WSIP web pages received 141,083 page views during the 2017/18 financial year.

Roads and Maritime is continually updating the interactive digital portal on the WSIP web page which features project information, animated videos, maps and photo galleries. To explore the interactive digital portal, visit www.rms.nsw.gov.au/wsip.



Approximately 193,600 project update newsletters, letters and notifications were distributed for WSIP projects from 1 July 2017 to 30 June 2018. Our project teams met with education institutions, businesses, councils, other government agencies, residents and property owners throughout project areas to consult on various project matters.





Open to traffic

Werrington Arterial Road

M4 Motorway to the Great Western Highway, Claremont Meadows

The Werrington Arterial Road upgrade opened to traffic in May 2017. This upgrade is providing road users with faster and safer access between the M4 Motorway and the Great Western Highway.

The completed project included widening a two-kilometre section of the Kent Road and Gipps Street corridor to four lanes as well as two new east facing ramps to the M4 Motorway. This has increased capacity on the road and improved travel times.

Benefits

- Better access and network connections for motorists and road freight by providing new east facing ramps on and off the M4 Motorway.
- Reduced congestion and more reliable travel times, especially on The Northern Road and Mamre Road.
- Enhanced safety at intersections with traffic lights, pedestrian crossings, separate turning lanes, and a separate shared path.



Project snapshot

Project value: \$55 million

Construction contractor:
Burton Contractors Pty Ltd

Construction started: March 2015

Open to traffic: May 2017

Australian Government contribution:
50 per cent

Budget Saving: \$15 million

NSW Government contribution: 50 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic



Features

- Traffic lights on Kent Road for the new eastbound entry ramp to the M4 Motorway and at the westbound M4 Motorway exit ramp
- A shared pedestrian and cycle bridge over the M4 Motorway
- New line marking on the Kent Road Bridge to create two northbound lanes and one southbound lane
- Improvements to five intersections, including three new intersections
- A noise wall on the western side of Gipps Street between Caddens Road and the Great Western Highway.



5 Intersections improved



Newly built Werrington Arterial Road

The Northern Road upgrade

The upgrade of The Northern Road extends around 35 kilometres between The Old Northern Road at Narellan and Jamison Road at South Penrith.

The upgrade is being delivered in six stages:

Completed

- The Old Northern Road, Narellan and Peter Brock Drive, Oran Park (3.3 kilometres)

Being built

- Peter Brock Drive, Oran Park and Mersey Road, Bringelly (11.3 kilometres)
- Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith (four kilometres).

In planning

- Mersey Road, Bringelly and Eaton Road, Luddenham (5.5 kilometres)
- Eaton Road, Luddenham and Littlefields Road, Luddenham (4.5 kilometres)
- Littlefields Road, Luddenham and Glenmore Parkway, Glenmore Park (six kilometres).

Key benefits

- Enhanced travel times and access to future precincts along The Northern Road by increasing the number of lanes
- Increased capacity to accommodate future growth and development needs
- Better public transport by providing dedicated bus lanes
- Improved safety for motorists by:
 - building new intersections with traffic lights to access precincts
 - building a central median to separate opposing traffic flows
 - building turning lanes at 20 intersections
 - installing traffic lights at 27 intersections
- Improved safety for cyclists and pedestrians by building a new shared path
- Better access to the Western Sydney Employment Area, the South West Growth Area, and the Western Sydney Airport
- Enhanced access for the construction of the Western Sydney Airport at Badgerys Creek and surrounding developments
- Improved access and travel times for road freight in Sydney's south west.



Open to traffic

The Northern Road upgrade, The Old Northern Road to Peter Brock Drive

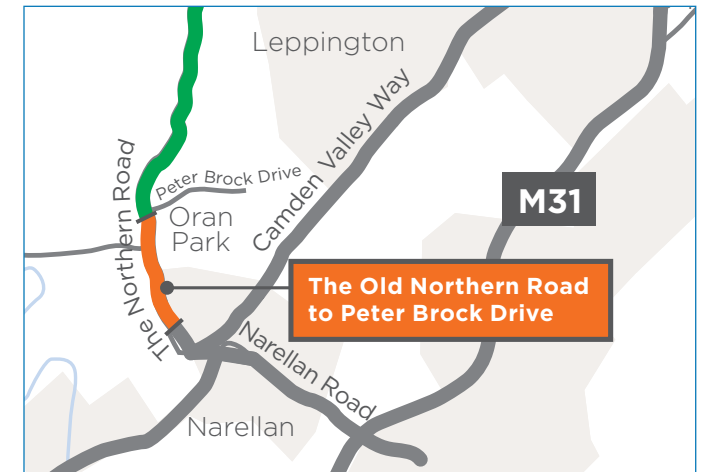
The first stage of The Northern Road upgrade opened to traffic in April 2018, with 3.3 kilometres of new dual carriageway completed between The Old Northern Road, Narellan, and Peter Brock Drive, Oran Park.

Benefits

- Increased capacity to cater for future population growth in the area
- Improved safety for road users through:
 - New intersections with traffic lights to access precincts
 - A central median to separate opposing traffic flows
 - Turning lanes at intersections
- Enhanced safety for cyclists and pedestrians through an off-road shared path
- More reliable travel times and access to future precincts along The Northern Road
- Improved access and travel times for road freight in Sydney's south west.

Features

- Three lanes in each direction – two for general traffic plus a kerbside bus lane
- Upgraded intersections at Fairwater Drive, Hillside Drive and Cobbity Road, with traffic lights and dedicated turning lanes
- An increased 80 km/h speed limit
- A new off-road shared pedestrian and cycle path.



Project snapshot

Project value (of all six sections): \$1.6 billion

Construction contractor for this section:
Georgiou Group Pty Ltd

Contract awarded: November 2015

Open to traffic: Early 2018

Australian Government contribution:
80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic



3 Intersections improved



Local State Member Camden, Chris Patterson; Minister Melinda Pavey (front centre); Federal Minister, Paul Fletcher



Being built

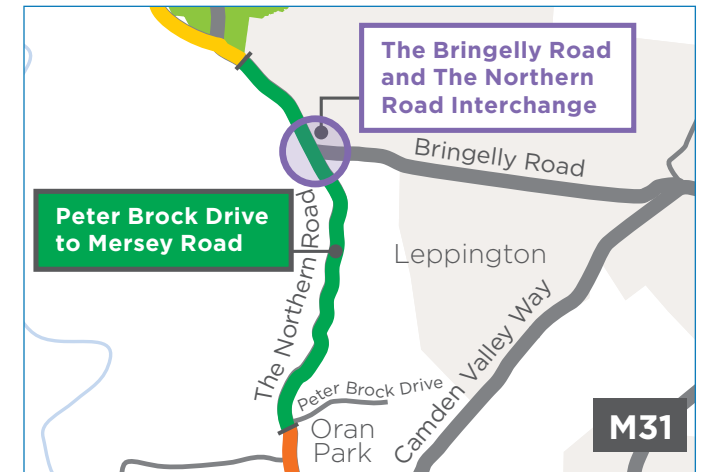
The Northern Road upgrade, Peter Brock Drive to Mersey Road

Construction on The Northern Road upgrade between Peter Brock Drive, Oran Park and Mersey Road, Bringelly started in July 2017.

This project is being built together with the Bringelly Road upgrade between King Street, Rossmore and The Northern Road, Bringelly.

Features

- 11.3 kilometres of main line road and associated local road improvements
- About 11 kilometres of shared pedestrian and cyclist path
- Nine new intersections with traffic lights and a further six intersections to be upgraded
- Wide shoulders in both directions
- Existing bridge at Thompsons Creek replaced with new twin bridges
- An interchange to separate vehicles on The Northern Road and Bringelly Road for better traffic flow, with The Northern Road passing under Bringelly Road
- A new connection from Robinson Road to The Northern Road and an off-road shared path for pedestrians and cyclists
- Changes to access for some properties along The Northern Road, Bringelly Road and Robinson Road.



Project snapshot

Project value (of all six sections): \$1.6 billion

Construction contractor for this section:
Lendlease Engineering

Start of construction: Mid-2017

Expected to be open to traffic: 2020

Australian Government contribution:
80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic



Progress – July 2017 to June 2018

- During the 2017/18 financial year \$41 million was spent
- Total expenditure as of 30 June 2018 is \$147 million
- Forecast expenditure for the 2018/19 financial year is \$107 million
- Earthwork and drainage being progressed site wide
- New roundabout to improve traffic flow
- Thompsons Creek northbound bridge 60 per cent complete
- Foundations for Bringelly interchange bridge complete
- Utility adjustments approaching 40 per cent completion
- Ongoing property adjustment work.

Next Steps

- Commencement of pavement layers
- Commencement of superstructure for Bringelly Interchange Bridge.

Next major milestone

- Open to traffic in 2020.



Recently completed traffic switch to facilitate the Stage 1 construction of the southern end of The Northern Road, Oran Park



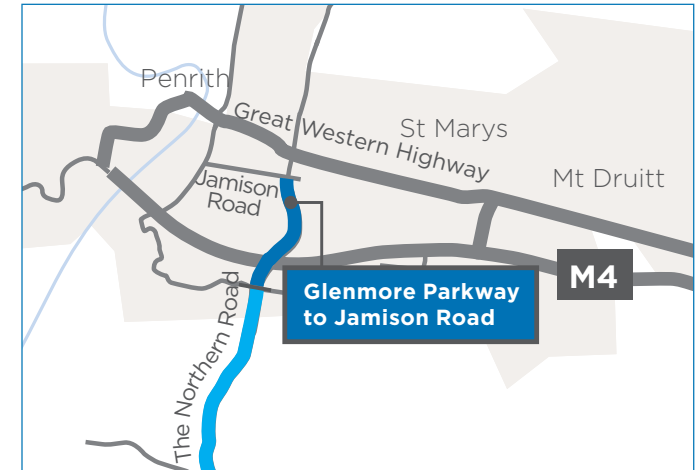
Being built

The Northern Road upgrade, Glenmore Parkway to Jamison Road

Construction commenced on site in August 2017 for the upgrade of The Northern Road between Jamison Road and Glenmore Parkway. To date a significant amount of earthwork has been completed to build up the embankments on the northern and southern sides of the M4 Motorway for the new bridge. Critical work including stormwater drainage and utility relocations are well underway, with the substructure for the new bridge completed in May 2018.

Features

- Four kilometres of road and four kilometres of shared pedestrian and cyclist path
- Ten intersections
- Bus priority lanes in each direction
- New and upgraded traffic lights and turning lanes at six intersections.



Project snapshot

Project value (of all six sections): \$1.6 billion

Construction contractor for this section:
Lendlease

Start of construction: Mid 2017

Expected to be open to traffic: 2020

Australian Government contribution:
80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic

Progress – July 2017 to June 2018

- \$60million was spent during the 2017/18 financial year
- Total expenditure as of 30 June 2018 was \$105.4 million
- Forecast expenditure for the 2018/19 financial year is \$83 million
- Penrith Christian School oval relocation completed in April 2018
- New bridge columns were completed in May 2018
- Utility relocations for Telstra, Endeavour Energy and Sydney Water began in May 2018
- Significant volume of bonded Asbestos containing material discovered on site with more than 5,000 cubic metres removed to date.

Next Steps

- Complete all design packages for the project
- Finish construction of the new bridge over the M4 and switch traffic to the future southbound carriageway in late 2018
- Demolish the existing bridge and partially open the new bridge to traffic in January 2019
- Complete all underbores for utilities under the M4 Motorway.

Next major milestone

- Complete the construction of the new bridge over the M4 Motorway in early 2019.



Construction of the columns for the southern abutment of the new bridge



Detailed design

The Northern Road upgrade, Mersey Road to Glenmore Parkway

In mid-2017, Roads and Maritime invited comments from the community and stakeholders on the Environmental Impact Statement (EIS) and concept design for The Northern Road upgrade between Mersey Road and Glenmore Parkway.

In response to submissions received, the design was refined and approved by the Australian Minister of the Environment and Energy and the NSW Minister for Planning in May/June 2018.

Features

- A minimum of two general traffic lanes in each direction between Mersey Road, Bringelly and just south of Glenmore Parkway, Glenmore Park
- Three lanes and a bus lane in each direction between Bradley Street and Glenmore Parkway
- A central median to allow for an extra travel lane in each direction in the future, if required
- About eight kilometres of new road between Mersey Road, Bringelly and just south of the existing Elizabeth Drive, Luddenham to realign the section of The Northern Road that currently runs through the Western Sydney Airport site and to bypass the Luddenham town centre
- About eight kilometres of upgraded and widened road between the existing Elizabeth Drive, Luddenham and just south of Glenmore Parkway, Glenmore Park
- Separate bus lanes at all intersections and dedicated bus lanes to serve existing communities north of Bradley Street, Glenmore Park
- Provision to extend bus lanes as growth and service demand requires
- Access to the Luddenham town centre from the realigned The Northern Road with traffic lights
- Eight new traffic light intersections and new traffic lights at existing intersections
- Local road changes and upgrades to current access arrangements for businesses and private properties
- A new shared path on the western side of The Northern Road and pedestrian paths on the eastern side of The Northern Road where required.

Progress – 1 July 2017 to 30 June 2018

- During the 2017/18 financial year \$72 million was spent
- Total expenditure as of 30 June 2018 is \$96 million
- Forecast expenditure for the 2018/19 financial year is \$125 million
- Consulted the community about the concept design and exhibited and obtained approval for the EIS – both Federal and State
- Substantially progressed property acquisition
- Called and received tenders for the sections between Mersey Road and Eaton Road, and Littlefields Road and Glenmore Parkway.



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic



The Northern Road next to the Western Sydney Airport site

Next steps

- Complete property acquisition
- Award contracts and start construction of the sections between Mersey Road and Eaton Road, and Littlefields Road and Glenmore Parkway
- Call tenders for and award contract for the section between Eaton Road and Littlefields Road.

Next major milestone

- Start of construction in late 2018.

Project snapshot

Project value (of all six sections): \$1.6 billion

Design consultant: Jacobs Pty Ltd for the section between Mersey Road and Eaton Road

Design consultant: Mott MacDonald Pty Ltd for the section between Eaton Road and Littlefields Road

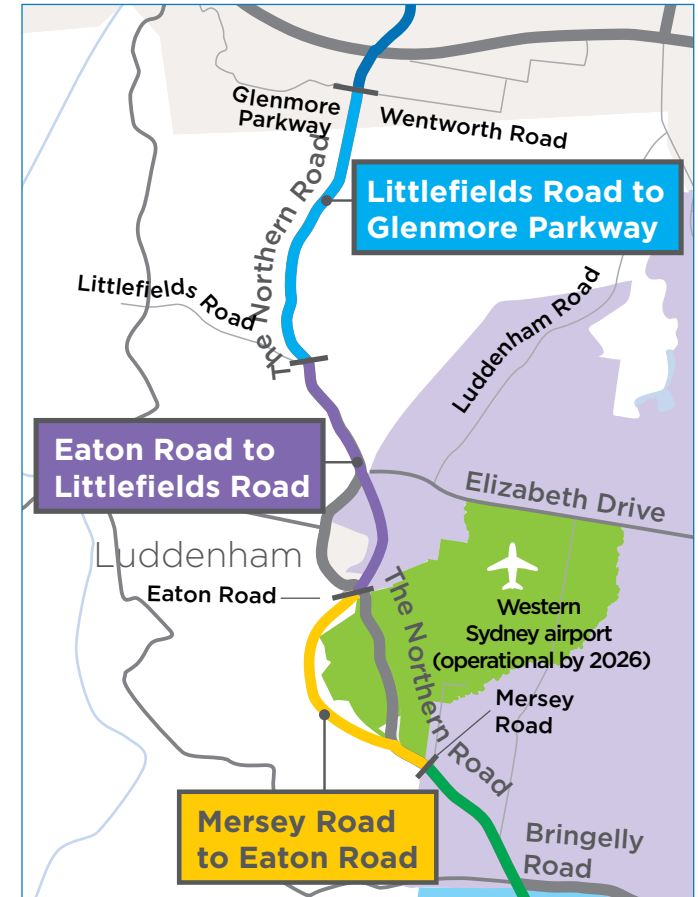
Design consultant: GHD Pty Ltd for the section between Littlefields Road and Glenmore Parkway

Expected start of construction: Late 2018 (in stages)

Expected to be open to traffic: From 2020 (in stages)

Australian Government contribution: 80 per cent

NSW Government contribution: 20 per cent



Map showing the three sections of The Northern Road upgrade between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park

Bringelly Road upgrade

The \$509 million Bringelly Road upgrade is being delivered in two stages to support the development of growth centres, employment and Western Sydney Airport.

This 10 kilometre project includes upgrading Bringelly Road from two lanes to a six lane divided road between the Upper Canal bridge and Eastwood Road, through the future Leppington Town Centre.

The rest of Bringelly Road will be upgraded from two lanes to a four lane divided road with a central median, allowing for widening to six lanes when required.

Key benefits:

- Improved access to the Western Sydney Airport site, Leppington Railway Station, the new Leppington Town Centre and the M5 and M7 motorways
- Increased road capacity
- Improved safety for motorists
- Better bus priority and facilities
- More reliable travel times
- Improved access and safety for pedestrians and cyclists.



Being built

Bringelly Road upgrade - Stage 1

Camden Valley Way, Leppington to King Street, Rossmore

In October 2017, traffic moved onto the newly built eastbound carriageway between Camden Valley Way and Edmondson Avenue, allowing work to start on the westbound carriageway.

Work is also progressing on upgrading key intersections along Bringelly Road and installing new traffic lights.

Features

- Improvements to nine intersections
- New traffic lights at seven existing intersections with designated right and left turning lanes
- Realignment of the Bringelly Road/Camden Valley Way/ Cowpasture Road intersection and upgrade of the traffic lights
- An extension to the existing noise wall on the corner of Cowpasture Road and Camden Valley Way
- 80 kilometres per hour speed limit.

Progress - July 2017 to June 2018

- During the 2017/18 financial year \$42 million was spent
- Total expenditure as of 30 June 2018 is \$216 million
- Forecast expenditure for 2018/19 financial year is \$31 million
- Girder erection of westbound bridge over the Upper Canal completed
- Westbound carriageway foundation and upper zone formation completed including major cut areas
- Utility relocation work progressed significantly
- Eastbound and westbound carriageways opened to traffic at the intersection of Bringelly Road, Camden Valley Way and Cowpasture Road.



Project snapshot

Project value Stages 1 and 2: \$509 million

Construction contractor:
BMD Constructions Pty Ltd (Stage 1 only)

Construction started: January 2015

Expected to be open to traffic: End 2018

Australian Government contribution:
80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic

Next Steps

- Complete relocation work for electrical and telecommunication utilities
- Complete property adjustments
- Landscaping and finishing work
- Complete heavy duty base on the remaining sections of westbound carriageway and lay asphalt on both carriageways
- Open Eastwood Road to traffic
- Pour deck slab of the bridge over the upper canal to complete bridge work.

Next major milestone

- Open to traffic end 2018.



9 Intersections to be improved



Water quality testing



Being built

Bringelly Road upgrade - Stage 2

King Street, Rossmore to The Northern Road, Bringelly

Construction of the Bringelly Road upgrade between King Street, Rossmore and The Northern Road, Bringelly started in July 2017.

This project is being built together with The Northern Road upgrade between Peter Brock Drive, Oran Park and Mersey Road, Bringelly.

Features

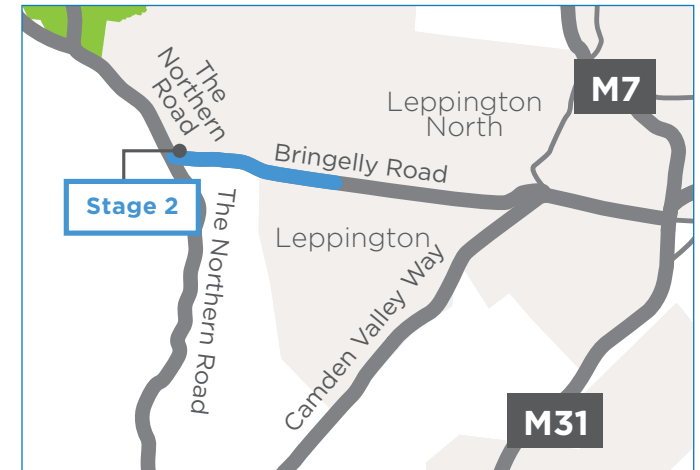
- 4.3 kilometres of road
- 4.2 kilometres of shared pedestrian and cyclist path
- Four upgraded intersections with traffic lights and upgrades to three existing intersections
- New twin bridges over South Creek.

Progress - July 2017 to June 2018

- During the 2017/18 financial year \$48 million was spent
- Total expenditure as of 30 June 2018 is \$80 million
- Forecast expenditure for the 2018/19 financial year is \$60 million
- Earthworks and drainage underway across the site
- Rossmore Public School rear carpark construction complete
- Utility adjustments approaching 50 per cent completion
- Ongoing property adjustments work.

Next Steps

- Installation of pavement layers
- Construction of superstructure for eastbound bridge over South Creek.



Project snapshot

Project value Stages 1 and 2: \$509 million

Construction contractor: Lendlease Engineering (Stage 2 only)

Construction start: Mid 2017

Expected to be open to traffic: 2020

Australian Government contribution: 80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic

Next major milestone

- Open to traffic in 2020.



7 Intersections

to be improved



Bringelly interchange looking south



Announce preferred option

M12 Motorway

Between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham

The M12 Motorway will provide direct access to Western Sydney Airport and connect to Sydney's motorway network.

In February 2018, Roads and Maritime invited community feedback on the preliminary design and access strategy for the M12 Motorway. The consultation report, responding to comments raised, will be released in late 2018.

The M12 Motorway will be built as four lanes with capacity for six lanes in the future. A central median will separate opposing traffic flows.

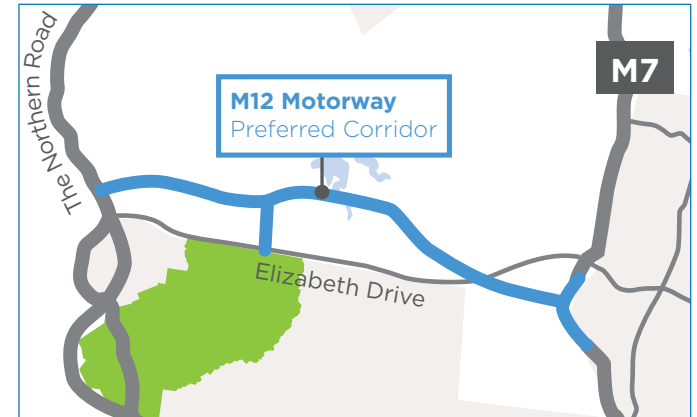
Once complete, the M12 Motorway will increase capacity and provide improved access to future development areas, including the Western Sydney Airport Growth Area and the Western Sydney Employment Area. It will improve the movement of freight in and through western Sydney.

Features

- An east-west 16 kilometre motorway between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham
- A four lane motorway (with provision for six lanes) with a central median to separate opposing traffic flows
- New 'at grade' connection to The Northern Road
- Motorway-to-motorway interchange at the M7 Motorway
- A new grade-separated interchange with the access road to the Western Sydney Airport site.

Further community consultation on the planned M12 Motorway will be done as part of the Environmental Impact Statement (EIS) and concept design.

The scope will be updated as the design progresses.



Project snapshot

Project value: \$1.25 billion

Design consultant: Aurecon Pty Ltd (strategic corridor route options)

Design consultant and environmental assessment: Jacobs Pty Ltd / Arcadis Pty Ltd Joint Venture (concept design and EIS)

Expected start of construction: Early 2020s

Expected to be open to traffic: prior to opening of the Western Sydney Airport

Australian Government contribution: 80 per cent

NSW Government contribution: 20 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic

Progress – 1 July 2017 to 30 June 2018

- During the 2017/18 financial year \$12.4 million was spent
- Total expenditure as of 30 June 2017 is \$20.6 million
- Forecast expenditure for the 2018/19 financial year is \$21.5 million
- Announced the preliminary design and access strategy in February 2018 and sought community feedback
- Field investigations for concept design and environmental assessment continued during 2018.

Next Steps

- Prepare environmental assessment
- Complete field investigations for concept design and environment assessment
- Complete concept design.

Next major milestone

Display the environmental assessment and concept design for community feedback in second half of 2019.



Elizabeth Drive looking east toward Kemps Creek



Glenbrook intersection upgrade

The Australian and NSW governments are upgrading the Great Western Highway and Ross Street intersection at Glenbrook as part of the WSIP. Construction on the Glenbrook intersection upgrade started in June 2018.

The Glenbrook intersection upgrade will improve safety and access along the Great Western Highway, while enhancing the primary gateway to Glenbrook Village.

Features

- New traffic lights at the Great Western Highway and Ross Street intersection with pedestrian crossings
- Right turns permitted from Ross Street onto the Great Western Highway
- Closing general traffic access to the Great Western Highway from Hare Street (south), while maintaining access for emergency vehicles
- Extending the existing right turn lanes on the Great Western Highway, allowing for more vehicles turning right into Ross Street and Hare Street (north)
- New signage, line marking and footpath connections.



Project snapshot

Project value: \$5 million

Construction contractor: RD Miller Pty. Ltd

Start of construction: June 2018

Expected to be open to traffic: End 2018

Australian Government contribution:
50 per cent

NSW Government contribution: 50 per cent



Scoping and investigation



Announce preferred option



Display environmental assessment



Project approval



Detailed design



Award contract



Building started



Open to traffic

Progress

- Contract for work awarded to RD Miller Pty. Ltd on 7 April 2018
- Work commenced on 12 June 2018
- During the 2017/18 financial year \$1.2 million was spent
- Forecast expenditure for 2018/19 financial year is \$3.9 million
- Utility work adjustments began 20 June 2018.

Next steps

Open to traffic October 2018.



Wascoe Street, Ross Street and Great Western Highway intersection at Glenbrook.

Local Roads Package

The Australian Government is funding the \$200 million Local Roads Package to support local councils to deliver road improvement projects.

This gives councils an opportunity to enhance local transport connections in western Sydney.

Eligible councils are Liverpool, Camden, Wollondilly, Campbelltown, Penrith, Fairfield and Blacktown.

Funding is being announced progressively over four rounds.

- The seven projects funded as part of Round One were completed for \$29.45 million. Funding was provided to Fairfield, Penrith, Camden and Campbelltown Councils.
- In January 2016, \$62 million was provided as part of Round Two allocation to Fairfield, Penrith, Camden, Campbelltown and Blacktown Councils.

Round One Projects

The Northern Road and Erskine Park Road Study

Penrith City Council was granted \$1.1 million to carry out a traffic, safety and scoping study to identify issues and options to upgrade The Northern Road, Orchard Hills/South Penrith and Erskine Park Road, Erskine Park. This project is now complete and has resulted in Penrith Council being successful in obtaining Round 2 funding for construction.

Cumberland Highway Intersection upgrades

Fairfield City Council was granted \$5.8 million over two years to upgrade the Cumberland Highway intersections at Hamilton Road, St Johns Road and John Street. The project included road widening, increasing the capacity of turning bays, adjustments and rephasing of traffic lights and utility services work.

The last of the upgraded intersections opened to traffic in September 2016, significantly improving traffic flow for motorists travelling in and around Cabramatta, Canley Heights and Fairfield West.

Wetherill Street upgrade

Fairfield City Council was granted \$8.2 million over two years to upgrade Wetherill Street, Wetherill Park between Polding Street and Victoria Street.

The upgrade duplicated Wetherill Street to a four lane divided road, realigned the intersection of Wetherill Street and The Horsley Drive, provided new traffic lights at the intersection of Wetherill and Shakespeare streets and improved side street access to Wetherill Street. The upgrade opened to traffic in July 2016, and has made it easier for motorists to access key destinations in the Fairfield Local Government Area.

Local Roads Package

Eagle Vale Drive upgrade

Campbelltown City Council was granted \$12.01 million over two years to upgrade Eagle Vale Drive, between Badgally Road, Blairmount and Raby Road, Eagle Vale.

A 1.7 kilometre upgrade of Eagle Vale Drive between Badgally Road at Blairmount and Raby Road at Eagle Vale was completed in December 2016.

The upgrade has increased road capacity and provided safer and improved access from residential areas to the major road network including to the Raby Road on ramp at the Hume Motorway.

Argyle Street/Camden Valley Way Corridor upgrade - Stage 1

Camden Council was granted \$2.14 million over two years to construct new traffic lights at the intersection of Argyle Street and Oxley Street, Camden.

The upgrade also included replacing a marked pedestrian crossing with pedestrian activated traffic lights on Argyle Street west of Hill Street, Camden. The project was completed in August 2016 and has improved safety and access through the Camden town centre.

Argyle Street/Camden Valley Way upgrade study - Stage 2

Camden Council was granted \$150,000 for a study to identify future road improvements along Camden Valley Way between the Camden Town Centre and The Northern Road.

This project is complete and has resulted in Camden Council being successful in obtaining Round Two funding for the upgrade of Grahams Hill Road and Camden Valley Way.

Argyle Street/Camden Valley Way/Macarthur Road Intersection Study

Camden Council was granted \$50,000 to complete option testing and prepare a concept design to improve safety and efficiency at this intersection.

This work was completed in July 2015 and has resulted in Camden Council being successful in obtaining Round Two funding for construction.

Round Two Projects

Smithfield Road upgrade

Fairfield City Council was granted \$16.4 million to upgrade Smithfield Road to a continuous two lane two way road. The project includes a number of intersection upgrades and realignment of Richards Road at Smithfield Road.

The detailed design is currently progressing. Construction is scheduled to start in early 2019 with completion expected in mid 2020.

Erskine Park Road and Peppertree Drive Intersection upgrade

Penrith City Council was granted \$11.3 million to upgrade the existing intersection at Erskine Park Road and Peppertree Drive to a seagull intersection.

The upgrade will significantly improve road safety and traffic efficiency. The detailed design has been finalised and the contract has been awarded with construction scheduled to start in September 2018 and finish in late 2019.

Erskine Park Road and Bennett Road upgrade

Penrith City Council was granted \$7.5 million to upgrade the intersection at Bennett Road and Erskine Park Road and install traffic lights.

The upgrade will improve road safety and traffic efficiency. The detailed design has been finalised and the contract has been awarded with construction scheduled to start in September 2018 and finish in late 2019.

Erskine Park Road and Coonawarra Drive Intersection upgrade

Penrith City Council was granted \$6.9 million to upgrade the intersection at Coonawarra Drive and Erskine Park Road to a seagull intersection.

The upgrade will improve road safety and traffic efficiency. The detailed design has been finalised and the contract has been awarded with construction scheduled to start in late 2018 and finish in late 2019.

Erskine Park Road and Explorers Way Intersection upgrade

Penrith City Council was granted \$3.4 million to upgrade the intersection at Explorers Way and Erskine Park Road and install traffic lights. The upgrade will improve road safety and traffic efficiency.

At the completion of the Erskine Park Road intersection upgrades, Erskine Park Road will have been widened to four lanes between Bennett Road and Explorers Way to join the existing four lane section north of this location. The detailed design has been finalised and the contract has been awarded with construction scheduled to start in September 2018 and finish in late 2019.

The Northern Road Intersections upgrade

Penrith City Council was granted \$6.7 million to upgrade intersections on The Northern Road at the Great Western Highway and at Derby Street. A roundabout will also be built at the Bringelly Road/Caddens Road intersection.

The intersections form a part of the A9 corridor connecting Windsor to Campbelltown via Penrith. The upgrade of these intersections will significantly improve road safety and traffic efficiency.

The Bringelly Road/Caddens Road intersection was completed at the end of June 2017. Work on the Northern Road intersection upgrade at Derby Street and Great Western Highway commenced in July 2018 and will be completed in mid 2019.

Camden Valley Way/Argyle Street - Stage 2 - Macarthur Road Intersection

Camden Council was granted \$4.3 million to realign Macarthur Road on the approach to Camden Valley Way and install new traffic lights at the Camden Valley Way and Macarthur Road intersection at Elderslie. Work commenced in early 2018 and will be completed by late 2018.

Camden Valley Way/Argyle Street - Grahams Hill Road and Richardson Road Intersection

Camden Council was granted \$4 million to upgrade the intersection to include right turn bays on Camden Valley Way into Grahams Hill Road.

The project also includes traffic light adjustments and a new shared path on the southern side of Camden Valley Way. The work on the intersection of Camden Valley Way and Richardson Road will be completed in late 2018.

Local Roads Package

Raby Road from Eschol Park Drive to Stranraer Drive scoping study

Campbelltown City Council was granted \$655,000 to carry out traffic, safety and scoping studies to identify issues and options to upgrade Raby Road from Eschol Park Drive to Stranraer Drive.

The study was completed in March 2017 and Council is now progressing concept designs at two intersections; Raby Road/Eagle Vale Drive and Raby Road/Spitfire Drive. Council is proposing to seek construction funding as part of its Round Three project proposals.

Bungarribee Road and Flushcombe Road signalisation scoping

Blacktown City Council was granted \$526,000 to develop options and complete preliminary investigations for safety and efficiency improvement at this intersection.

The detailed design of the selected option was completed in late 2017.

Porrende Street upgrade scoping

Camden Council was granted \$120,000 to develop options and complete a detailed design for Porrende Street between The Northern Road intersection and Grahams Hill Road. The detailed design was completed in August 2017 and Council will be seeking construction funding as part of its Round Three project proposals.



Camden Valley Way/Macarthur Rd Intersection upgrade - Preparation work for utility adjustments on Camden Valley Way eastbound.





The Northern Road southbound, south of Hillside Drive

For further information about the Western Sydney Infrastructure Plan visit the interactive digital portal



www.rms.nsw.gov.au/WSIP



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