

Project Newsletter

July 2017

Half way through construction



Upgrade of Nudgee Road interchange (looking north)

The Gateway Upgrade North project is now more than half way through construction with work full-steam ahead across the project's length.

Since major works began in February 2016, more than 2 million hours have been worked by more than 4,300 people.

The past few months have seen a series of significant milestones achieved, including the realignment of southbound traffic onto the new lanes of the Deagon Deviation, construction underway on the new northbound bridge over Sandgate Road, widening work completed on the southbound bridges over Bicentennial Road interchange at Boondall, and finishing touches being made to the new Nudgee Road overpass.

Over the next few months, motorists will continue to notice significant changes in the road landscape as the project progresses through the second half of its construction. The new Deagon Deviation overpass will continue to take shape, widening work on the motorway bridge over Depot Road will be completed, construction of noise barriers will commence and the new Nudgee Road bridge will open to traffic.

When complete, the \$1.143 billion project will reduce congestion, improve motorists' safety, accommodate future growth and improve travel time reliability.

The project is on track for completion in late 2018.

Since construction commenced in February 2016:

- ▶ more than 2 million hours worked
- ▶ 4,300 people completed site safety inductions
- ▶ 2km kilometres of guardrail installed
- ▶ 75 kilometres of concrete barriers installed
- ▶ 8 major traffic switches
- ▶ 135 bored/driven piles installed
- ▶ 47 T-shaped bridge girders installed
- ▶ 260 bridge deck units installed
- ▶ over 12,000m³ of concrete poured
- ▶ around 200 visitors to the Visitor Information Centre
- ▶ more than 220 site tour attendees
- ▶ 56,000 construction notifications delivered.

About the project:

- ▶ involves upgrading the Gateway Motorway to six lanes between Nudgee and Deagon
- ▶ will widen the Deagon Deviation to provide two lanes in each direction between Depot Road and Bracken Ridge Road
- ▶ includes the construction of a new, off-road shared pedestrian and cycle path between Nudgee and Bracken Ridge
- ▶ will enhance safety, ease congestion and improve freight movements on the national network
- ▶ the \$1.143 billion Gateway Upgrade North project is jointly funded by the Australian Government (\$914.18 million) and Queensland Government (\$228.54 million) on a 80:20 split
- ▶ the Department of Transport and Main Roads has engaged Transurban Queensland to assist in managing delivery of the project.



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Works are progressing to improve the Deagon Deviation alignment in both directions

Keeping traffic moving

Maintaining traffic flow while widening the Gateway Motorway to six lanes is one of the key challenges facing the project team. The maintains two lanes of traffic in each direction on the motorway during the day and at peak times.

To keep motorists moving, the project team will occasionally implement traffic changes to establish new construction areas in locations that were previously inaccessible. These changes are often implemented at night and may not be obvious to motorists. This includes:

- ▶ realigning traffic lanes into road shoulders and/or centre medians to allow construction areas to be established within redundant lanes. This arrangement is currently in place north of Nundah Creek, Nudgee and south of the Bicentennial Road interchange, Boondall.
- ▶ realigning both directions of traffic onto one side of the road to allow for construction on the other side of the road, also known as contra-flow. This arrangement is currently in place on Depot Road, along the Nundah Creek bridges and at night along the motorway through Bracken Ridge.

Since major works began in early 2016, more than 40 minor traffic switches and eight major traffic switches have been completed to keep traffic moving while the motorway is widened. Motorists will notice further traffic switches and changed conditions throughout the second half of the year.

Motorists can plan their travel via www.QLDTraffic.qld.gov.au or by phoning 13 19 40.

Local road changes



Local roadworks on Braun Street/Depot Road to upgrade the intersection and improve connectivity to the motorway

This project will not only provide additional capacity on the Gateway Motorway, it will also improve safety and connectivity on the local road network to support the upgrades on the motorway.

Permanent changes are being made to Nudgee Road and Childs Road as part of the Nudgee Road interchange upgrade. Childs Road was recently moved east onto a new permanent road alignment to connect with the new Nudgee Road bridge when it opens to traffic in the coming months. A temporary shared pedestrian/cycle pathway is in place to maintain connectivity to existing pathways in the area.

Work to widen Depot Road at Deagon to two lanes in both directions is progressing well, including upgrading the intersection at Depot Road/Braun Street/Board Street/Deagon Deviation. These changes will improve connectivity for motorists accessing the motorway on-ramp at Depot Road, and for those accessing the upgraded Deagon Deviation.

Work to widen the southbound Gateway Motorway bridge over Depot Road will be completed later this year. Beneath the bridges, a contra-flow traffic arrangement is currently in place to enable the sloping rock-finished walls to be trimmed back. This will provide more road width beneath the Depot Road bridges to fit two lanes of traffic in each direction as well as pedestrian/cycle facilities. The contra-flow arrangement will be in place until late 2017.

Slow down at roadworks

Safety is the Gateway Upgrade North project's number one priority. Recognising the risks of working in close proximity to live traffic on busy roads such as the Gateway Motorway, the project team has rolled out a number of safety initiatives to help keep workers and motorists safe.

The team is currently trialling the use of rumble strips at work zones during night shifts to help moderate the speed of vehicles travelling through the roadworks. The yellow rumble strips are placed across traffic lanes in locations where speeds have been reduced to 40km/h and are similar to driving over a small speed bump.

Speed camera trailers are also being used along the project to enforce reduced speed limits in place during the day and at night.

Drivers can help keep construction workers SAFE when travelling through the project by:

- S**lowing down and driving carefully
- A**dhering to sign-posted speed limits
- F**ollowing traffic control and police direction
- E**nsuring they look out for road workers.



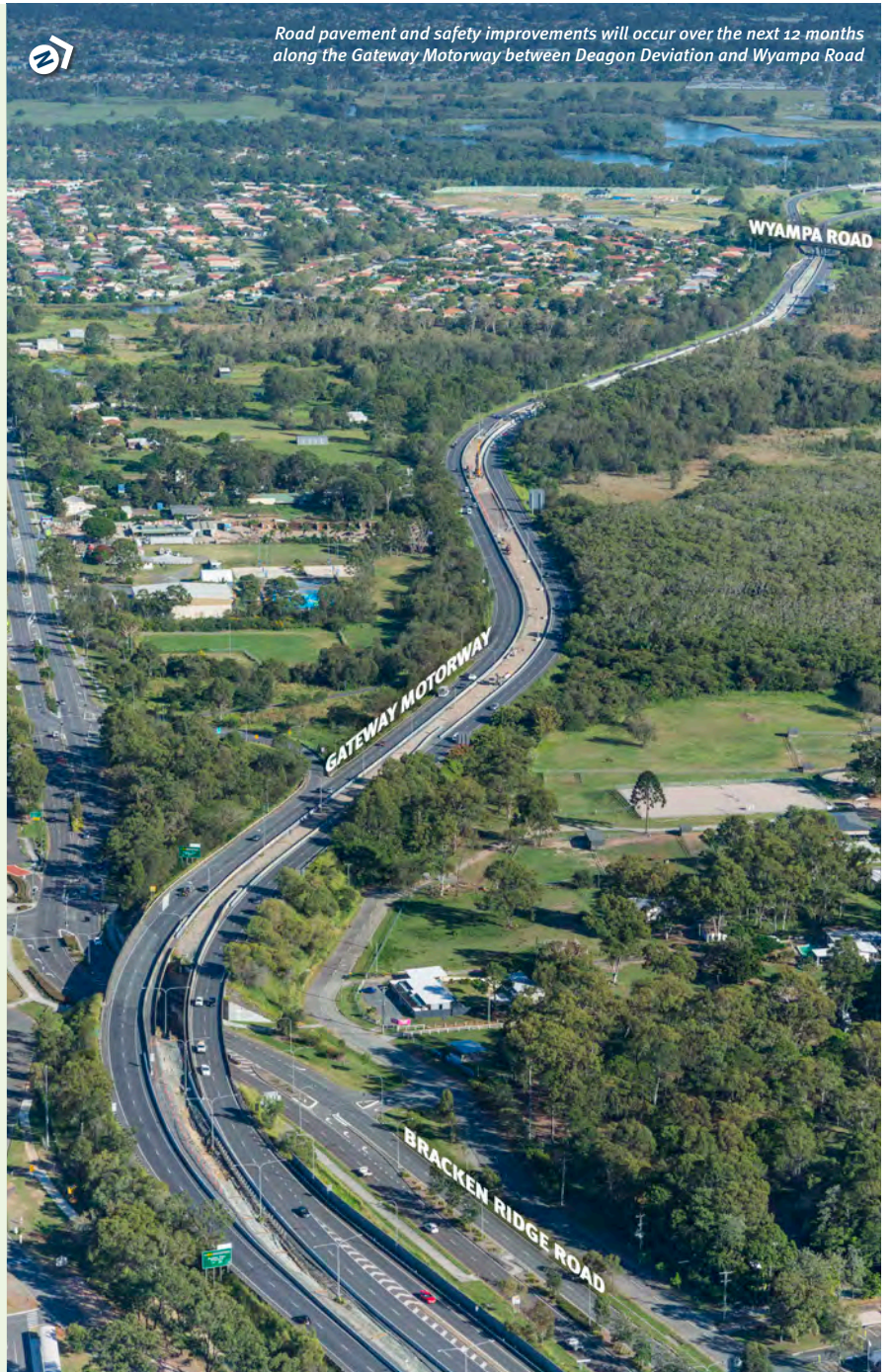
Road pavement and safety improvements at Bracken Ridge

As part of the Gateway Upgrade North project, road pavement rehabilitation work and safety improvements are being undertaken on the motorway between Deagon Deviation, Bracken Ridge and Wyampa Road overpass, Bald Hills.

The main component of this work involves rehabilitating the motorway road surface in both directions by removing layers of asphalt, patching cracks and laying new asphalt.

This work will be undertaken over the next 12 months, mostly at night when traffic volumes are lower. This enables the team to safely accommodate single lane closures and other traffic changes (including contra-flow) while minimising the impact to motorists.

Additional work to improve motorists' safety along this section of the motorway includes the installation of new guardrail, median and roadside safety features (including emergency stopping bays), variable message and speed signs, and upgraded lighting.



Noise barrier update

Construction of the new and upgraded noise barriers, required as part of the Gateway Upgrade North project, will commence in the coming months.

The barriers will generally consist of steel posts and concrete-type panels. The height of the barriers will vary according to their location, slope of the land and predicted noise levels resulting from the road traffic noise assessment.

Where noise barriers are required in close proximity to properties, the project team will continue to liaise with individual property owners to discuss the works.

For more information on noise barriers, visit the project website www.gatewayupgradenorth.com.au.

What's next:

- ▶ ongoing pavement rehabilitation along the motorway at Bracken Ridge
- ▶ ongoing construction of the new motorway overpass to the Deagon Deviation
- ▶ opening of the new Depot Road northbound on and off-ramps
- ▶ completion of widening works on the southbound bridge over Depot Road
- ▶ construction of the new northbound bridge over Sandgate Road
- ▶ traffic travelling on the newly completed southbound motorway bridges over Bicentennial Road interchange
- ▶ opening of the new Nudgee Road overpass
- ▶ deconstruction of the redundant Nudgee Road bridge.

Achieving sustainability excellence

Last month, the Gateway Upgrade North project team was awarded the Infrastructure Sustainability Council of Australia (ISCA) rating of 'Excellent' – the first major road project in Queensland to gain this rating.



The ISCA rating scheme provides an independent, verified assessment of the sustainability of an infrastructure project.

The Gateway Upgrade North project team is committed to sustainable outcomes throughout design and construction, including considering the motorway's neighbours, reducing waste and thinking long term. By achieving the "Excellent" rating, the project has proven its achievements in how it's being managed, including how it uses construction materials, controls pollution, protects ecology, delivers community benefits and incorporates innovation.

An ISCA "Excellent" rating provides an assurance to the community that the project's contribution to sustainability goes beyond visible features to the less obvious such as the selection of sustainable materials, superior management systems and community engagement.

Two examples of innovation in practice on the project include the use of sustainable asphalt and bridge load testing.



EME2 asphalt being laid

Paving the way for sustainable asphalt

A new type of sustainable asphalt, called EME2 was recently demonstrated on the project. In its first large-scale use in Australia the demonstration involved the design, manufacture and placement of approximately 10,000 tonnes of EME2 asphalt on the Deagon Deviation southbound lanes.

EME2 is a high-modulus (stiff) asphalt, designed for busy roads like motorways. Its use allows for a reduction in the depth of road pavements by up to 20 per cent. This means less asphalt is needed to deliver the same performance as conventional approaches. The benefits of EME2 are significant, including reducing the use of non-renewable resources and fewer trucks on the road to produce and construct the pavement.

The use of EME2 is a great example of the project supporting smart sustainable engineering solutions that provide significant benefits to the industry and environment, now and into the future.

Bridge load testing provides industry insight

The northbound Gateway Motorway bridge spanning Sandgate Road in Deagon has been deconstructed to make way for a new wider bridge. The deconstruction process provided a unique opportunity to conduct innovative research into the performance of the old road bridge.

In an industry first, the research aims to provide engineers with a greater understanding of the behaviour of these types of ageing bridge structures. The team deliberately damaged the bridge by cutting its steel reinforcement and then loaded the bridge to test its behaviour.

This unique opportunity hopes to provide significant benefits to the road and bridge industry by providing more certainty around the performance of older bridges and their maintenance requirements.

Bridge testing equipment



Project timeline



Contact details

The project team is committed to working with the community to better understand your views and ensure the successful delivery of the Gateway Upgrade North project.

You can contact the project team via:

- ✉ contactus@gatewayupgradenorth.com.au
- ☎ 1800 607 755 (freecall)
- 🌐 www.gatewayupgradenorth.com.au

For up-to-date project information and to subscribe to project updates visit www.gatewayupgradenorth.com.au and click on the subscribe link.

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