

Toowoomba Bypass



Australia and New Zealand

Transport

The Toowoomba Bypass is a 41-kilometre bypass which runs to the north of Toowoomba from the Warrego Highway to the Gore Highway via Charlton and was one of Queensland's highest priority road infrastructure projects.

The project will assist in reducing travel time across the Toowoomba range by up to 40 minutes.

It will redirect trucks from local roads in Toowoomba's central business district and enhance freight efficiencies.

Project facts

Location

Toowoomba, Queensland, Australia

Client

Queensland Department of Transport and Main Roads

Value

A\$1.6 billion

Our role

Financial adviser

Project investor

Builder

Ferrovial and ACCIONA joint venture

Architects

Parsons Brinkerhoff and Aurecon joint venture

Services

Broadspectrum

Financial close

August 2015

Completion date

September 2019

Contract terms

Design, build, finance and maintain for 25 years

Awards

- Best Road/Highway Project, 2020 Engineering News-Record Global Best Projects Awards
- Most Innovative National Road Infrastructure Project, 2019 BUILD Infrastructure Awards
- Silver, Best Transport Project, 2017 PPP Awards
- Best Road Project, 2016 Partnerships Awards
- Road Deal of the Year, 2015 PFI Awards
- Asia Pacific Deal of the Year, 2015 IJGlobal

Project website

<https://net-flowjv.com.au/projects/toowoomba-second-range-crossing-3/>

Plenary is part of the Nexus Infrastructure consortium contracted by the Queensland Government to finance, operate and maintain the project for 25 years.

The road partially opened to traffic in December 2018 and was fully completed and operational by September 2019.



Design features

Some of the key features of the Nexus design solution:

- Four lanes from Warrego Highway East Interchange to Warrego Highway West
- Grade separated interchanges at Warrego Highway West, Toowoomba-Cecil Plains Road and Gore Highway
- A grade-separated connection to Mort Street
- An approximately 30-metre cutting at the top of the range constructed as an alternative to the tunnel solution
- An 800-metre-high viaduct built over the existing Queensland Rail line; and
- Continuity of the New England Highway through a new bridge over the cutting.

Innovations

Key design innovations revolved around the 800-metre-high viaduct which allowed the removal of the tunnel which was part of the reference design. This resulted in allowing all vehicle classes to utilise the bypass, removing dangerous goods and over dimensioned vehicles from Toowoomba city centre.

The Nexus design also the size of the cutting at the top of the range to reduce the impact on the existing landscape.

Local economic impact

Nexus recruited around 75% of subcontractors and labour from the greater Toowoomba region, assisting in the creation of up to 1800 full time jobs during construction and maintenance of the project.