

Wanneroo Road and Joondalup Drive Interchange



Project development activities are progressing well for the Wanneroo Road and Joondalup Drive Interchange project, including preparation of detailed traffic analysis.

Overview

The Wanneroo Road and Joondalup Drive Interchange project is part of a series of improvements to Wanneroo Road, which will increase safety and provide shorter, more predictable journey times for road users.

The intersection upgrade will remove bottlenecks and reduce congestion on:

- Wanneroo Road – currently used as an alternate route to Mitchell Freeway; and
- Joondalup Drive – used as an east-west access corridor between Mitchell Freeway, the Joondalup City Centre and the expanding residential communities to the east of Wanneroo Road.

Why the upgrade is necessary

The intersection upgrade is required to support current and projected levels of residential and commercial growth in the north-eastern metropolitan corridor.

The City of Wanneroo is the fastest-growing Local Government in Western Australia, with the population expected to grow to 400,000 by 2041, from a 2016 level of 198,000.

Main Roads traffic modelling indicates that within five years, service levels at the existing intersection will deteriorate significantly due to increased demand.

- By 2023, vehicles in the morning peak will encounter delays of up to 80 seconds and an unstable flow of traffic.

- By 2029, the level of service will further deteriorate resulting in extensive delays, congestion and queues failing to clear the intersection.

These unacceptable levels of congestion will also pose a heightened safety risk to all road users.

By undertaking construction while the intersection has some capacity, disruption to road users will be minimised. Delaying the project until congestion materialises will result in major construction impacts and disruptions at the intersection and on the surrounding road network.

The concept design can be found on the back page of this newsletter.



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Traffic modelling analysis

Traffic surveys have been completed at nine local road intersections surrounding the project, from the boundary of the Burns Beach Road roundabout, to Clarkson Avenue and Waldburg Drive.

As a result, significant modifications at the existing roundabout at Burns Beach Road and Joondalup Drive are included in the scope of this project, while investigations are underway to examine potential improvements to the intersections of Wanneroo Road and

Clarkson Avenue, and Joondalup Drive and Cheriton Drive.

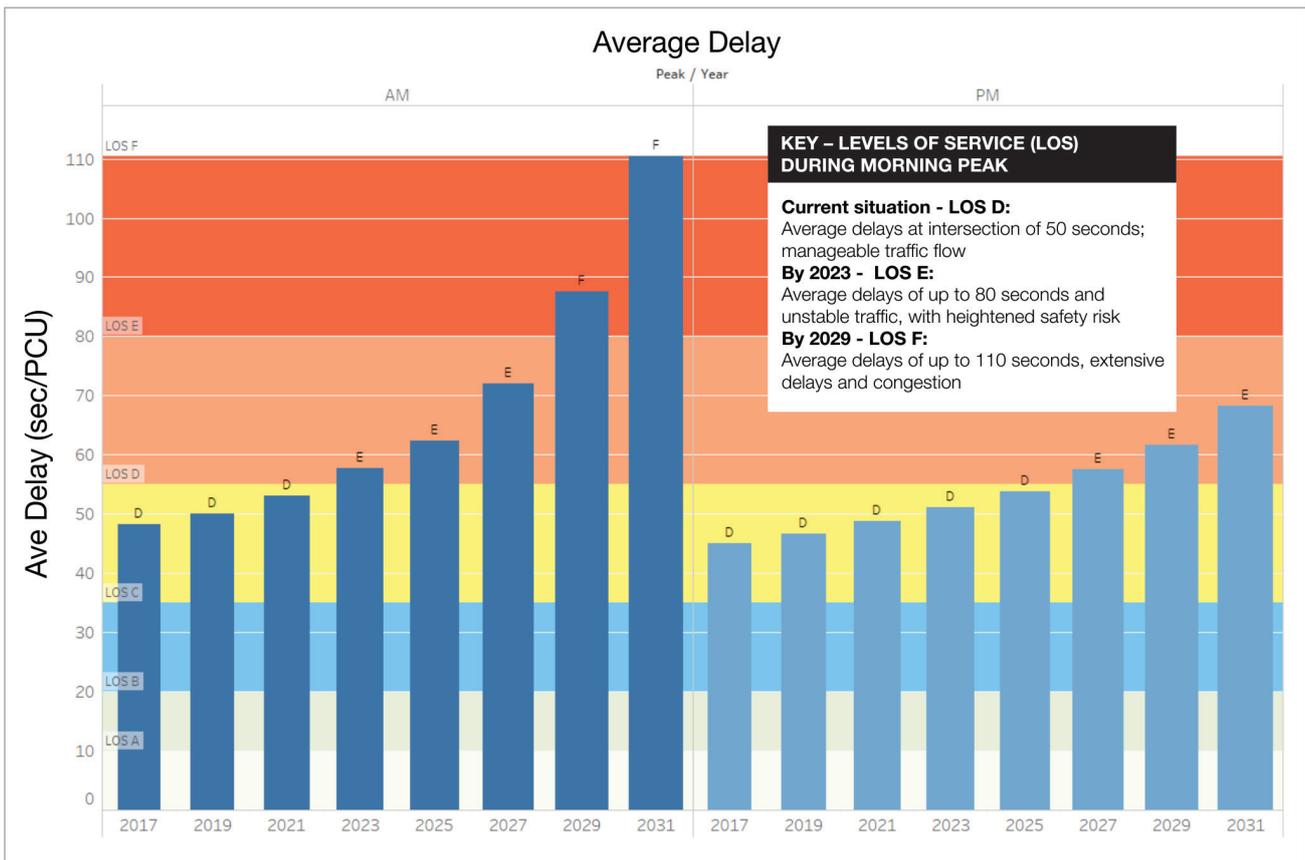
Detailed traffic modelling also highlights the deterioration in Levels of Service at the existing Wanneroo Road and Joondalup Drive intersection between 2017 and 2031.

The graph below illustrates the level of performance over time if the intersection isn't upgraded.

Within five years, performance at the intersection in the morning peak period

will fall to Level of Service E, which will result in significant delays and congestion.

By 2029 (and potentially sooner subject to the speed of commercial and residential development), the intersection will be heavily congested, reaching Level of Service F. The result will be longer journey times, heavy congestion on both Wanneroo Road and particularly Joondalup Drive and a more dangerous environment.



Improving safety on our road network



Road safety assessments

The overpass and roundabout designs for the Wanneroo Road and Joondalup Drive interchange have undergone a Safe Systems Assessment to ensure they meet the State and national road safety targets and commitments.

The assessment concluded that the interchange will provide a safer environment for motorists due to the separation of north-south and east-west traffic.

Likewise, pedestrian exposure to traffic at the intersection will be reduced by over 50 per cent, and the potential severity of accidents will reduce significantly as the impact speed will reduce from 70km/h to 40km/h (necessitated by new roundabout).

Further assessments are being conducted as part of the detailed design phase of the project.



Safety at St Stephens Crescent

Safety at the intersection of Joondalup Drive and St Stephens Crescent has been of concern for some time, particularly due to its close proximity to local schools.

Between 2012 and 2016 there were seven crashes resulting from vehicles trying to make a right turn into or out of St Stephens Crescent, some of which hospitalised motorcyclists.

Additionally, the gaps in traffic along Joondalup Drive will soon be reduced as a result of the Wanneroo Road and Joondalup Drive Interchange project making the road more free flowing and less congested. This will make right turn access into St Stephens Crescent even more difficult and potentially dangerous.

As a result, right turn access between St Stephens Crescent and Joondalup Drive will be removed to create a safer environment at the intersection.

There will be no restrictions on left turn access.

PROJECT NEWS



Procurement

Requests for Proposals have been issued to four shortlisted contractors for the project's Design and Construction, with the contract award expected in June 2018.



Community engagement

Briefings are continuing with local Members of Parliament, schools, business owners, amenity groups, and local residents.

A fourth Community Liaison Group meeting was held on 13 February 2018.

In response to community feedback, we have broadened the area for the distribution of newsletters and continue to build our online subscription list.

For the latest news, you can subscribe to email updates via the Main Roads website: www.mainroads.wa.gov.au

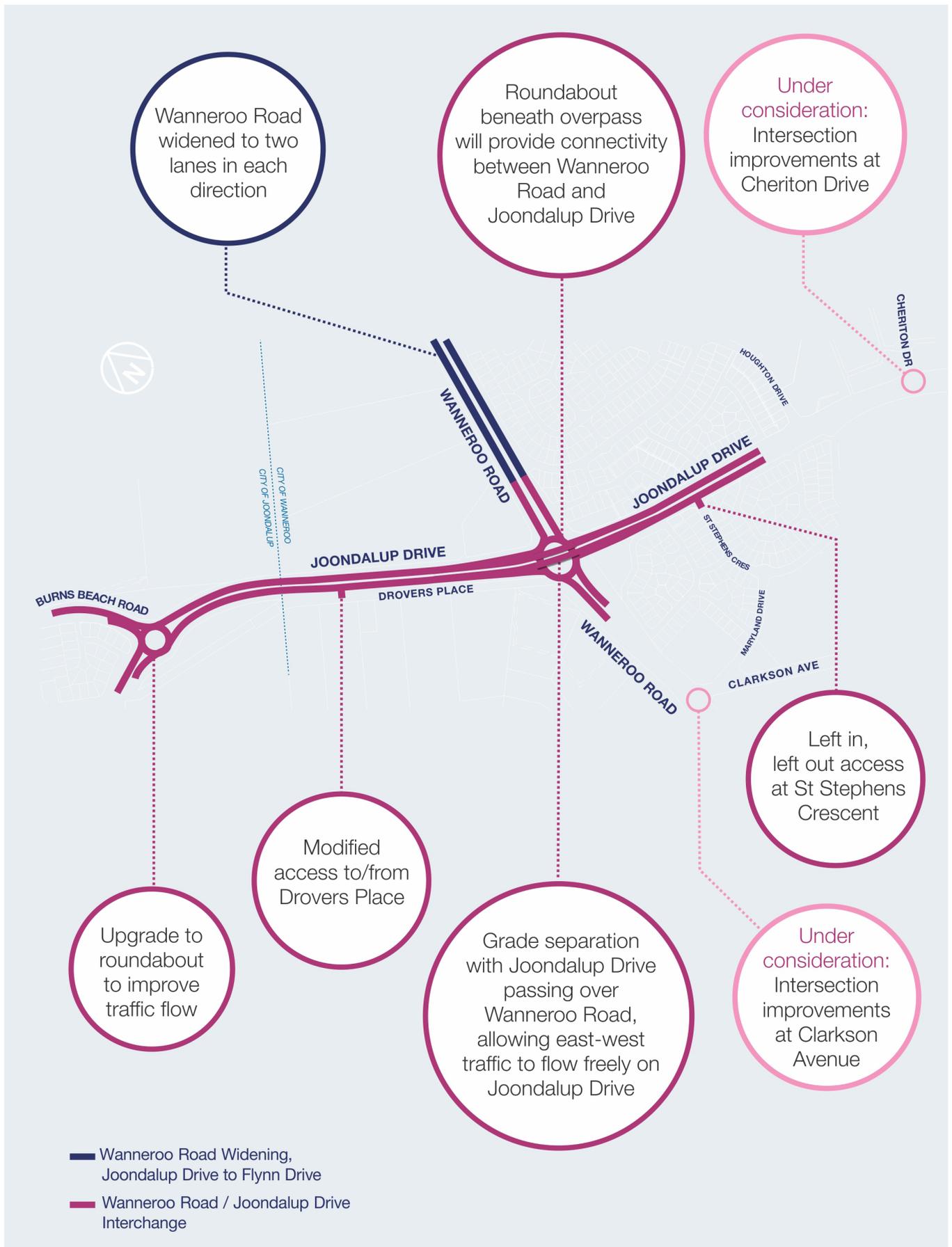


Bus routes

Main Roads is working closely with the Public Transport Authority to confirm alternative bus routes in and around Tapping.

The long term plan for the area is to re-route bus services along Clarkson Avenue. More information will be provided as the project moves forward.

Current Concept Design (February 2018)



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