Upgrading the Wanneroo Road and Joondalup Drive Interchange

The Wanneroo Road and Joondalup Drive Interchange project forms part of the Australian and State governments' \$2.3 billion investment in road and rail infrastructure announced in May 2017.

It is one of three new improvements planned for Wanneroo Road, to increase safety and provide shorter, more predictable journey times for road users.

The intersection upgrade will remove bottlenecks and reduce congestion on:

- Wanneroo Road 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 east of Wanneroo Road.

COMMUNITY ENGAGEMENT

Community Information Displays - March 2018

Main Roads is presenting information displays in March to enable the community to learn more about the project, view the design and ask questions of the project team.

Displays will be held on:

Saturday 17 March

1pm – 5pm Carramar Community Centre 5 Rawlinna Parkway, Carramar WA 6031

Thursday 22 March

3pm – 8pm Wanneroo Central Shopping Centre 950 Wanneroo Road, Wanneroo WA 6065

Saturday 24 March

10am – 4pm Village Shopping Cer

Carramar Village Shopping Centre 7 Cheriton Drive, Carramar WA 6031

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 distribution of newsletters and continue to build our online subscription list.

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

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





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 according to the Australian Bureau of Statistics.

Main Roads traffic modelling indicates that without intervention, within five years, capacity of the intersection will not meet increasing demand.

- By 2023, vehicles in the morning peak will encounter delays of up to 80 seconds.
- By 2029, the flow of traffic will destabilise futher, resulting in extensive delays, congestion and queues failing to clear the intersection.

Unacceptable levels of congestion pose a heightened safety risk to all road users.

Undertaking construction while the intersection has capacity, means disruption to road users is minimised. Delaying the project will result in major construction impacts and disruptions at the intersection and the surrounding road network.

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.

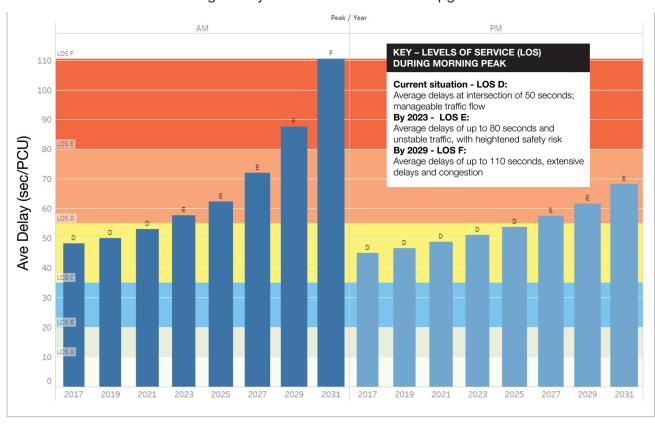
Detailed traffic modelling also highlights the deterioration in Levels of Service at the existing Wanneroo Road and Joondalup Drive intersection between 2017 and 2031.

The graph below illustrates the forecast 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, 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 and have impacts on road safety.

Average Delay - If the intersection isn't upgraded



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 the new roundabout).

Further assessments continue to be conducted as part of the detailed design phase of the project.

Drovers Place access

The intersection of Joondalup Drive and Drovers Place will be modified to improve safety. Access will be changed to left-in left-out, with right turn access provided for emergency services vehicles only. In order to achieve a key objective of the project – free flowing east-west traffic to relieve congestion, it is not practicably possible to retain right turn access between Joondalup Drive and Drovers Place.





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 to left turn access.

Road users wishing to turn right into St Stephens Crescent from Joondalup Drive

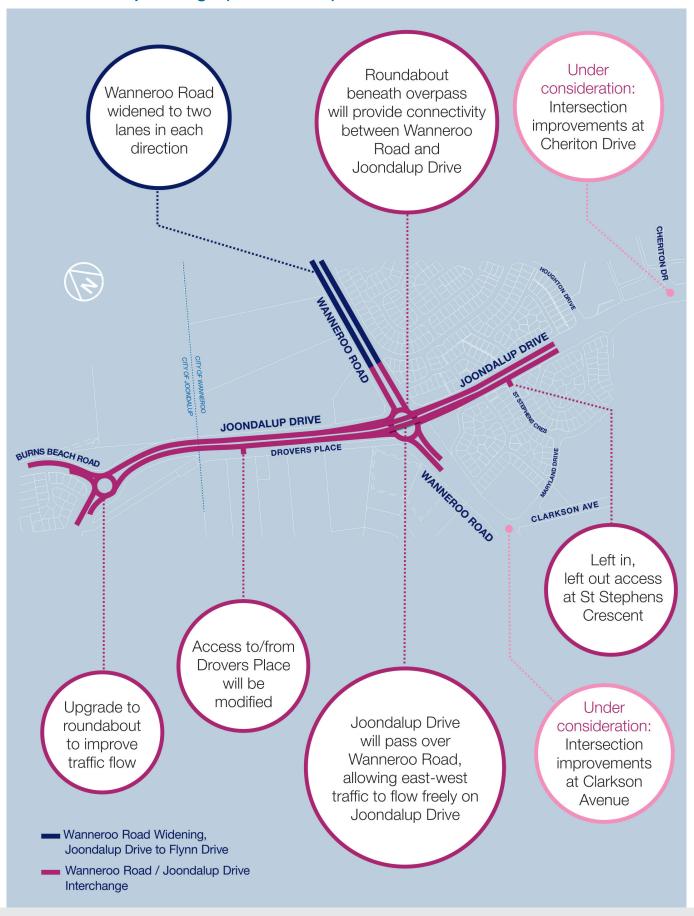
 The most efficient route will be to exit Joondalup Drive at the new Wanneroo Road roundabout and then use Clarkson Avenue to access Tapping.

Road users wishing to turn right out of St Stephens Crescent on to Joondalup Drive (eastbound)

- The most efficient route will be to exit the suburb via Waldburg Drive instead of St Stephens Crescent.
- Alternatively, road users can turn left on to Joondalup Drive and make a U-turn around the new Wanneroo Road roundabout, a detour of approximately 800 metres.

The changes will affect a relatively small number of road users and we are confident that the redistribution of vehicles as a result of the changes will have little or no impact on the performance of other local intersections.

Current Concept Design (March 2018)









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