The 14.5 kilometre Joondalup Line extension is essential in managing the planned growth of Perth's northern suburbs, addressing road congestion and creating the focus for progressive mixed use development that will provide local amenity, services and employment.

The project addresses three key local issues:

- Worsening urban congestion due to a lack of efficient transport alternatives.
- Continued land development that promotes private vehicle use and limits opportunities to create higher density residential areas.
- Social inequality and lower levels of opportunity for people who do not own or are unable to use a private vehicle.

**Project snapshot**

- **19,440** Total daily boardings (2031)
- **2,000** Total parking bays
- **49 min** Train journey from Perth to Yanchep
- **30** Total u-rails and
- **6** Total bike shelters
- **30** Total bus stands
- **14.5 km** Joondalup Line extension
- **13.8 km** Principal-shared path
- **9** Road-over-rail bridges
- **3** New stations at Alkimos, Eglinton and Yanchep
- **Bus stowage depot at Alkimos**
- **Modifying Butler Station into a through station**

*Final details are subject to detailed design and may change.*
The majority of the 14.5 kilometre rail extension will be in a cutting to support community connections and integration, reduce noise and improve overall amenity.

The Yanchep Rail Extension will deliver nine road-over-rail bridges, which will also support access and early staging of development around the stations. Eleven potential crossings are identified along the route as part of longer term development intentions. These have been future proofed in the design, but are subject to further planning and delivery by third parties.

The rail alignment will travel through some Parks and Recreation sites and a Bush Forever area. While every effort was made to avoid these areas, including careful consideration of alternative alignments, the undulating landscape, tight rail curve (not conforming to strict railway design standards) and impact on existing and future residents meant this was not viable.

One Parks and Recreation site will have a fauna underpass and four fauna underpasses will be built through the Bush Forever area. In these areas every effort will be made to minimise impacts.
Walk, cycle, bus and share

While ample parking will be provided, the Yanchep Rail Extension will look to encourage passengers to access the stations by walking, cycling, bus and drop-off.

The METRONET Office is working with stakeholders to plan the area around the station with a diverse mix of uses and density that support walkable communities that are safe and accessible.

Along the western side of the rail extension will be a 13.8 kilometre principal shared path (PSP) that will follow the natural ground levels, except where it passes under road bridges, to ensure a continuous and safe option for pedestrians and cyclists. This path will be connected to existing local pathways and to the future stations.

Each station will have dedicated passenger drop-off areas, secure bicycle parking shelters, bike u-rails and the ability to add additional secure bicycle parking shelters in the future.

The area’s existing bus services will be reviewed to create a comprehensive feeder bus network that will see routes ‘loop’ between train stations. Final service details will be determined closer to when rail operations begin following detailed planning and community consultation.

Minimising noise and vibration

To minimise noise and vibration impacts on the surrounding proposed residential developments, the majority of the Yanchep Rail Extension will be in a cutting. Other measures to be investigated when the contractor is appointed include:

- noise walls;
- ballast matting;
- encouraging developers neighbouring the railway to have appropriate setbacks from the rail reserve via road reserves or public open space; and
- encouraging homes yet to be built in the ‘first row’ facing the route to implement ‘quiet house design’.

The Project

The Yanchep Rail Extension’s transport infrastructure will be delivered by the Public Transport Authority and includes:

- 14.5 kms of new dual-track to extend the Joondalup Line.
- Alkimos Station with a cut-and-cover tunnel construction, including parking, bus interchanges, passenger amenities and cycling facilities to cater for approximately 3,616 daily boardings (2031) and offering an approximate 41-minute journey to Perth.
- Eglinton Station including parking, bus interchanges, passenger amenities and cycling facilities to cater for an estimated 4,792 daily boardings (2031) and offering an approximate 46-minute journey to Perth.
- Yanchep Station with a cut-and-cover tunnel construction, including parking, bus interchanges, passenger amenities and cycling facilities to cater for an estimated 11,032 daily boardings (2031) and offering an approximate 49-minute journey to Perth.

Two stow roads north of Yanchep Station for four six-car trains.

- Nine road-over-rail bridges.

- New bus stowage depot at Alkimos.

- Noise and vibration mitigations measures.

- Modifying Butler Station into a ‘through’ station.

- 13.8 kms of new shared path for cyclists and pedestrians adjacent to the rail line.

As a result of the integrated METRONET approach the Yanchep Rail Extension will also promote and encourage higher-density development surrounding the stations.

The METRONET Office will continue to work closely with stakeholders and landowners to ensure planning for these new urban centres makes the most of the public transport infrastructure.
Transport projects can be planned and delivered in a relatively defined timeframe. However, the associated development around a station can take 30 to 40 years (or longer) to reach target densities and is often not within the State Government’s control. In addition, land uses are impacted by planning, investment and policy factors beyond the investment in transport infrastructure alone.

For the Yanchep Rail Extension, the METRONET Office will continue to work with state agencies, local governments and the private sector to help transition the areas around Alkimos, Eglinton and Yanchep stations into mixed-use centres over time.

### Planning history in Perth North-West sub-region

<table>
<thead>
<tr>
<th>Timeline Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>Corridor Plan Identifies the Perth Metropolitan Northwest Corridor as attractive for urban development due to its undulating well drained soils, proximity to Indian Ocean and substantial lifestyle and climatic advantages for housing. Identifies the northern urban growth extent of Perth to Yanchep-Two Rocks.</td>
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<tr>
<td>1977</td>
<td>Planning Structure for the Northwest Establishes a structure plan to guide development in the Northwest Corridor, including the Alkimos to Yanchep subregion.</td>
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<tr>
<td>1992</td>
<td>North West Corridor Structure Plan Identifies the strategic significance of Alkimos. Identifies the importance of a passenger rail system to connect and service this growth corridor. Identifies rail alignment to be deviated away from the freeway reserve to service greenfield commercial centres north of Butler.</td>
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<tr>
<td>2010</td>
<td>Yanchep-Two Rocks District Structure Plan Identifies Yanchep-Two Rocks as the largest single urban development project in Perth. Identifies an ultimate population of 155,000 or 2 - 3% of Australia’s population growth over the next 40 years. Identifies opportunity for 55,000 new jobs within the district or almost one job per household.</td>
</tr>
<tr>
<td>2015</td>
<td>Alkimos Eglington District Structure Plan Identifies an ultimate population of more than 57,000 residents. Clever, transit oriented development with sustainability at the heart of its design and central to residents’ way of life.</td>
</tr>
<tr>
<td>2016</td>
<td>Draft North-West Sub-regional Planning Framework The framework acknowledges delivering a high-density urban environment, characterised by lower car dependency and strategic employment opportunities, is dependent on providing essential supporting infrastructure, such as the extension of passenger rail to Alkimos, Eglington and Yanchep.</td>
</tr>
</tbody>
</table>

### Timeline: Transport infrastructure delivery

- **JULY 2018** Main contract awarded and design begins
- **LATE 2018** Early works begin
- **MID 2019** Rail infrastructure procurement begins
- **LATE 2019** Main construction begins

# More Information

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