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Kwinana Rail Loop alternative concept

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Relevance to Westport

Hundreds of bulk and container trains use Perth's freight rail network each week, with most of this rail traffic concentrated in the Kwinana Rail Triangle servicing the Western Trade Coast.

Addressing key constraints to facilitate future growth in the freight supply chain is Westport's key objective, and the Kwinana Triangle is a significant constraint to rail operations on the Western Trade Coast.

Improving the efficiency and capacity of this part of the rail network is immediately relevant to the bulk trades already operating on the Western Trade Coast, and may also prove vital for container movements should Westport's final strategy include a recommendation to build a new container port in Kwinana.

This is proposed in Westport's Strategic Options 2, 4 and 6, listed below:

- Option 2: Optimise Fremantle Port and transition containers to Kwinana over time;
- Option 4: De-industrialise Fremantle Port and move all containers to Kwinana as soon as possible;
- Option 6: Fremantle and Kwinana both have containers for the long-term.



Limitations of the Kwinana Triangle

High volumes of dual-gauge traffic from the north, and narrow-gauge traffic from the south pass through the Kwinana Triangle to access the various port terminals, bulk sidings, and other private industrial terminals and siding facilities within the Western Trade Coast.

Currently, trains heading south meet the trains heading north at a crossover point up to 65 times a day within the Kwinana Triangle.

The Kwinana Triangle is currently at full capacity. Without freight rail infrastructure planning and investment, there will be insufficient capacity to support any future increase in demand. This will place even greater pressure on the road freight network and potentially limit economic development. The single entry to the Kwinana Industrial Area through the Kwinana Triangle also presents extreme risk of a major network blockage if an incident

occurs, such as a train derailment.

The existing alignment of the Kwinana Triangle and Co-operative Bulk Handling (CBH) Loop is shown in Map 1 (overleaf).

Constructing an alternative freight rail access corridor into the Western Trade Coast will facilitate increased rail freight movements into and out of this key industrial area. It will provide additional capacity, network resilience and enhance the functionality of the entire Kwinanabased rail network.

The proposed alignment is known as the Kwinana Rail Loop.

Kwinana Rail Loop options assessment

In response to the constraints at the Kwinana Triangle, a Project Working Group was first established by the Department of Transport in 2016 to assess alignment options.

This group comprised of nine key stakeholders: Department of Transport; Public Transport Authority; Arc Infrastructure; Main Roads WA; Department of Planning, Lands and Heritage; Department of Jobs, Tourism, Science and Innovation; LandCorp; CBH; and the City of Rockingham.

Sixteen rail corridor options were explored within the Kwinana Industrial Area using five different corridor alignments. To assess each option, a multi-criteria assessment (MCA) was used to evaluate and then compare the economic, social and environmental strengths and weaknesses of each option.

However, following the MCA, concerns about the preferred option were raised by both the community and some key stakeholders.

Westport reviewed the outcomes of the Project Working Group's findings in 2018, and identified a new alignment that amends the current corridor but does not impact on Rockingham residents. The Kwinana Rail Loop proposal is represented by the dotted line in Map 2 (overleaf).

This alignment within the southern corridor was revised to bypass the residential area, and is supported by industry and stakeholders.





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Outcomes

By adding a second entry and exit point to the Kwinana Triangle, the proposed Kwinana Rail Loop would enhance the overall resilience and efficiency of the network. This would allow more freight to be transported on rail to the Outer Harbour, which is an essential component of three of Westport's Eight Strategic Options.

Increasing the amount of freight transported on rail will reduce the number of trucks on the road, leading to many other benefits for the community, including improved safety, reduced congestion and less carbon dioxide emissions.

Next steps

The next step in securing this alternative rail corridor is to seek Government endorsement for the proposal. To that end, Westport will be briefing the Minister for Transport; Planning, and the Minister for Ports.

Subject to Government endorsement, Westport will work with the Department of Planning, Lands and Heritage and the Western Australian Planning Commission in preparing an amendment to the Metropolitan Region Scheme (MRS) to reserve the new alignment and remove portions of the redundant reserve. Formal consultation with the community and stakeholders would be part of this MRS process.



Map 1: Existing alignment of the Kwinana Triangle

Map 2: Kwinana Rail Loop possible solution

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