



Infrastructure
Western Australia

Major Infrastructure Proposal Assessment

Department of Transport (Westport Office)

Westport

Summary Assessment Report

Infrastructure WA

Level 41, 108 St Georges Terrace
Perth Western Australia 6000

Phone: 08 6552 5229

Email: proposals@infrastructure.wa.gov.au

October 2024

© Government of Western Australia 2024

Trouble reading this document?

If you have trouble reading this document and would like us to share the information with you in another way, please contact Infrastructure WA on 08 6552 5229 or proposals@infrastructure.wa.gov.au.

Acknowledgment of Country

Infrastructure WA acknowledges the Traditional Custodians of Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures; and to Elders both past and present.

Purpose

This assessment report has been prepared in carrying out Infrastructure WA's (IWA) legislative function to assess and report to the Premier on major infrastructure proposals. The assessment is of the Department of Transport's (through the Westport Office) Westport business case, which assesses the strategic rationale for Westport as an extended program of works. Additional supporting information received from the proponent and consultation with relevant key stakeholders has also been used by IWA to support its analysis.

1. IWA observations

IWA considers that the business case provides **sufficient information** to proceed with the next stage of Westport development based on the preferred Westport Now option, prior to making a final funding decision for individual Westport proposal elements. However, significant risks to the project remain.

The scale and complexity of Westport and various interfacing and related projects is greater than previously attempted by WA state government agencies. Key risks associated with the program relate to:

- Interfaces – the number and magnitude of projects in close, timing and spatial, proximity to Westport.
- Schedule and cost estimates – programs of this magnitude are prone to cost and schedule overruns when compared to estimates at early stages of development.

These risks will need to be managed through the next stage of the proposal development which will require appropriate assurance processes and the coordination of a portfolio of related infrastructure investments to optimise delivery outcomes for the WA Government.

2. Context

2.1 Project background

The Westport Office was established in 2017 to develop a plan to manage the growing freight demands of the Perth metropolitan area and surrounding regions for the next 50 years and beyond.

The Westport proposal is a program of works to relocate container trade to Kwinana, serviced by an Anketell Road freight route, including the development of new port infrastructure, dredging of new channels and the development of landside infrastructure including road and rail infrastructure and intermodal facilities.

The Westport Independent Taskforce published the Westport Stage 2 Report in August 2020 investigating future container port options. The Westport Stage 2 Report investigated 25 options and identified 2 preferred options for Perth's container freight network.

The WA Government announced the preferred Westport design option for Perth's future supply chain in November 2023, consistent with the preferred option included in the Westport business case.

3. Strategic merit

3.1 Alignment

The Westport proposal is strategically aligned with the State Infrastructure Strategy (SIS), with the Westport Office progressing recommendation 66 of the SIS as part of the development of the business case.

Westport is aligned with the WA Government's previous commitments and policies related to the relocation of container trade from the Fremantle Inner Harbour, previous budget decisions progressing Westport proposal development, and public announcements.

Westport is closely related to other projects that are also being considered by the WA Government, including:

- Future of Fremantle

- Kwinana Bulk Terminal
- Kwinana Bulk Jetty
- Relocation of non-container trade
- Western Trade Coast infrastructure upgrades.

Westport also aligns with other Government policies and strategies including Perth and Peel @3.5 million, Diversify WA, and Global Advanced Industries Hub.

3.2 Problems and opportunities

The business case presents three core problems that drive business case investigations and the investment case. The problem statements are:

- Emerging constraints on the movement of containers will impose significant delays and costs on the economy.
- Continued growth in freight movements through residential areas deteriorates local amenity and adversely impacts safety, health and wellbeing.
- Prioritising port activity over other commercial and recreational uses harms opportunities to improve land use consistent with the vision for Fremantle and Perth.

4. Options assessment

A multi-stage process was undertaken to inform the development and consideration of options in the business case, including the previous Westport Stage 2 Report. This has involved significant stakeholder consultation (both internal and external to Government) which IWA considers good practice.

The Westport business case identified two shortlisted options, Westport Now and Extend Fremantle.

- Westport Now - Build and fully transition operations to Kwinana as the Fremantle Inner Harbour reaches capacity (without major investment). The business case assesses a delivery timeframe with completion in the late 2030s.
- Extend Fremantle - Invest in the existing Fremantle Port precinct to increase capacity and extend the operating life by approximately 10 years. After which Westport would then be delivered and container trade transitioned once the revised capacity at Fremantle Port is reached (approximately 10 years after Westport Now). The business case assesses a delivery date of Westport in the late 2040s.

A third option was excluded as part of a strategic merit test in the business case. This option was to build and commence operations at Westport as the Fremantle Inner Harbour reaches capacity, with both ports operating concurrently for 10-12 years prior to a full transition to Westport.

The preferred option, Westport Now, was identified in the business case based on an integrated analysis of both options, including an assessment of project economics, strategic outcomes, deliverability and operational impacts on the supply chain.

Considerable work has been progressed to consider port design options as part of the Supply Chain Integrated Design process. Supplementary information provided by Westport documents a robust process to assess design options for marine infrastructure and high-level options analysis for land-based freight infrastructure.

5. Societal impacts

5.1 Economic and financial assessment

Economic analysis of the two options, Westport Now and Extend Fremantle, assumes container trade that cannot be accommodated at the Fremantle Inner Harbour once the port reaches capacity needs to be exported or imported at significantly greater cost across an eastern states landbridge from Port Botany and the Port of Melbourne.

IWA considers that conceptually, this is an appropriate methodology against which to evaluate both options, including optimal timing for a move to Westport. However, IWA notes that broader other

non-economic issues can be taken into account when assessing project options, including policy alignment, strategic outcomes, project risks, social and environmental outcomes.

The cost benefit analysis results present a benefit cost ratio (BCR) of 1.96 and 2.44 for Westport Now and Extend Fremantle respectively, using a 7% discount rate. The difference in the results are largely driven by a delay in capital expenditure of 10 years under the Extend Fremantle option.

Under a 4% discount rate the BCR increases substantially to 4.04 and 4.41. IWA note that's that the difference in BCR between options is reduced from 0.48 using a 7% discount rate, to 0.37 using a 4% discount rate. IWA note that the business case has conducted sensitivity analysis on economic results as required by the Strategic Asset Management Framework business case guidelines.

IWA notes that despite the economic analysis, further project definition, an assessment of project deliverability, and additional clarity regarding interrelated projects in the area including Australian Department of Defence proposals is required to adequately understand the optimal timing and construction schedule for the Westport program.

5.2 Social assessment

IWA notes that social licence for the continued efficient operation of the supply chain is the primary social benefit of the proposal. This includes the reduced congestion, noise and safety concerns from passenger and freight traffic conflicts.

The Westport Office has conducted positive engagement with Traditional Owners. Westport objectives include social targets to partner with Noongar people to recognise cultural value in design and create opportunities for the Noongar community and businesses, and consultation with Traditional Owners, which included the Noongar Advisory Group. Procurement of an Aboriginal engagement manager, and conducting cultural values assessment are also evidence of good practice.

The scale and extended timeframe of delivery of Westport represents an opportunity to provide lasting benefits and training opportunities for Traditional Owners.

5.3 Environmental assessment

The Westport business case provides evidence that Westport presents a significant opportunity to decrease the greenhouse gas (GHG) emissions of the supply chain, with forecast long-term emission reductions across the evaluation period of 23.8 billion tonnes of carbon dioxide equivalent.

The Westport Net Zero Strategy, consideration of GHG emission comparisons between shortlisted project options, Westport outcomes to plan, build and operate the most sustainable port in Australia the Westport Net Zero Strategy and Actions Plan, and the Resource Efficiency Strategy and Action Plan represent good practice for considering environmental and sustainability considerations. IWA notes further work will be required as part of the next phase of project development to meet Westport Net Zero targets.

Commonwealth and State based environmental approval will need to be completed as part of the next phase of the proposal and are currently underway. These approvals will determine whether the project will proceed, and under what conditions. While mitigating environmental risks has been a key focus as part of proposal development, there are residual risks to project scope, cost and schedule which will need to be worked through as part of the next phase of project development. This relates to Westport as well as cumulative environmental impacts on Cockburn Sound.

6. Recommended Option: Project definition

The proposed scope of the preferred option includes the construction of:

- a container terminal adjacent to the shoreline of the Kwinana Bulk Terminal
- a new breakwater to provide enhanced protection to the port and docked ships
- major upgrades to key freight roads leading to and from the new container terminal including Anketell Road (west of Kwinana Freeway, with indicative planning for Anketell Road east of Kwinana Freeway), Kwinana Freeway and Roe Highway
- duplication of the freight rail between the container terminal and Cockburn

- upgrades to key intermodal terminals (IMT) at Kenwick and Forrestfield, and the delivery of a new IMT at Kewdale.

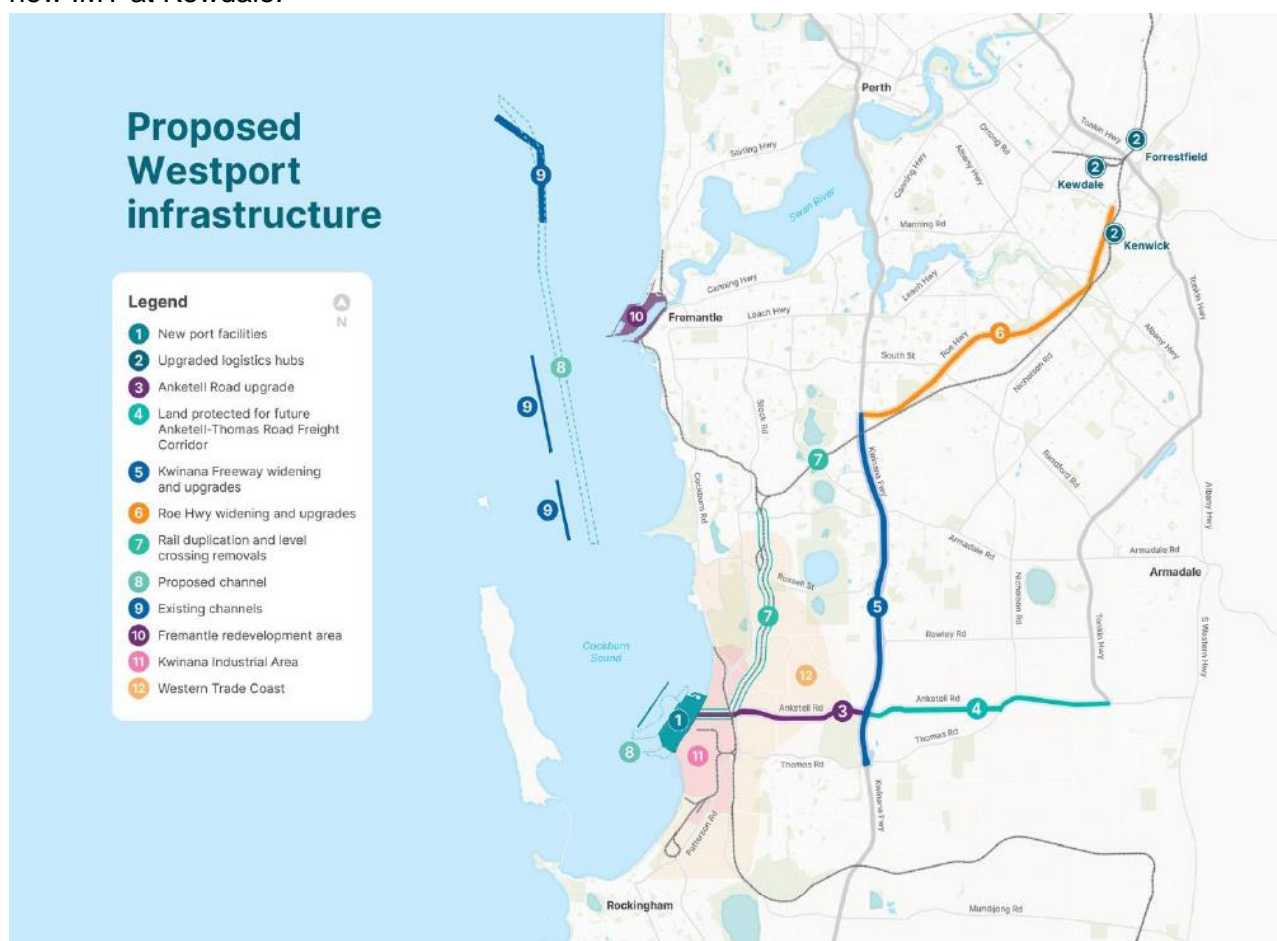


Figure 1 – Westport Proposed Infrastructure (as announced November 2023)

The Westport business case includes a capital cost estimate to achieve day 1 operations, however, notes further development work will continue to refine the estimate and provide greater confidence in the likely cost of the project.

7. Deliverability

The cost estimates provided involved a bottom-up estimation of project costs to a P90 level, as would be expected for a project of this scale and complexity (90 percent probability of the cost being under the estimated cost).

Given the existing environmental approval uncertainties, which can have a material impact on project scope, IWA note that the progressing environmental approvals and understanding environmental conditions for the project will provide a better understanding of expected project capital costs and schedule. IWA also considers that large infrastructure projects are often subject to cost increases from estimates at early stages of project development. IWA considers that these issues will be addressed as part of the next phase of project development to provide more reliable cost and schedule forecasts on which to base future funding decisions for individual elements of Westport project scope.

Westport construction is proposed at a similar time to multiple other large scale infrastructure proposals, which may have implications for Government, public sector and market capability and capacity to deliver. This includes proposals such as KBT, KBJ, Water Corporation Desalination infrastructure, investment in the Western Trade Coast supporting a Global Advanced Industries Hub, Future of Fremantle, relocation of non-container trade, development of HMAS Stirling, development of a large vessel dry berth (or berths) at the Australian Marine Complex (AMC) and associated

investments. IWA understands this could also involve the relocation of infrastructure from the AMC to an alternative location to support increased Defence sector activity.

While Westport has considered these issues as far as practicable, the risks associated with these interrelated projects can be further mitigated by taking a whole of government approach to managing market and public sector capacity, project interface risks, the scheduling and prioritisation of investment, procurement and delivery, and communication to industry and the Commonwealth Government in relation to defence related investments.