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navigate

Westport Program Update

GOVERNMENT OF WESTERN AUSTRALIA

WESTPORT

Taking a closer look at some of the science, thinking and technical processes behind one of Western Australia's largest ever infrastructure projects.

Managing Director's Message

We reached a major milestone in November with the State Government confirming completion of the business case and investing $273 million to progress Westport to project definition.

The investment announcement coincided with release of the Westport Business Case Summary, which provides a snapshot of our work over the last 3 years. This includes the drivers for change, determining a preferred design for the new port facilities and container supply chain, an optimal approach and timing for transition, and proposed commercial model.

Our work built on the solid strategic optioning foundations provided by the Westport Taskforce between 2017 and 2020. Since then, we've addressed the identified gaps in that study, invested heavily in data and science, stress-tested previous assumptions, and engaged broadly and deeply with more than 400 stakeholders across 1,500 hours, including stevedores, importers, government trading enterprises operating in Kwinana, and community representatives.

Investment in port capacity is critical for supporting growth in WA, and we've provided a compelling economic case for progressing Westport by the late 2030s. It will ensure the resilience of our container supply chain and that the cost of everyday goods is protected from major increases in transportation costs.

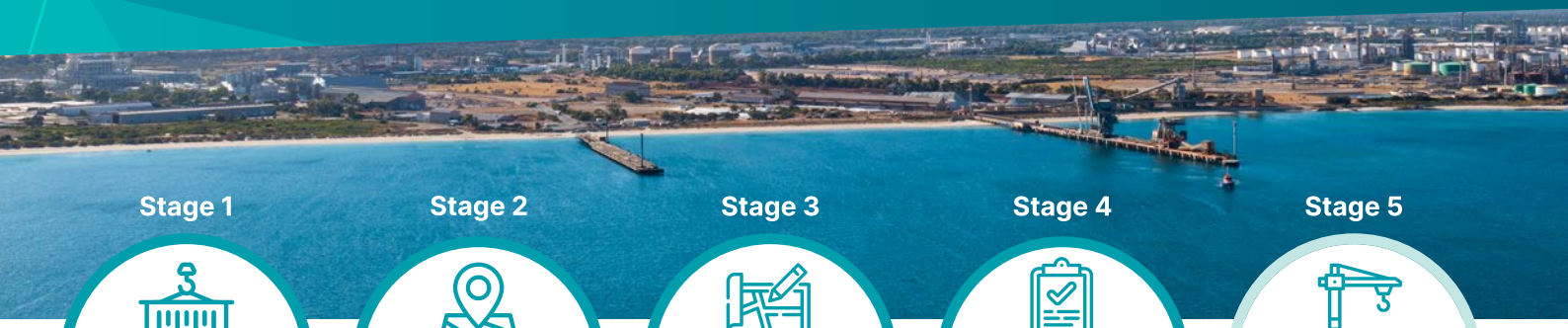
Beyond the economics, we're also investing heavily to understand critical environmental and social considerations associated with a significant port development. This is reflected by Westport's recent $730,000 commitment to support seagrass restoration in and around Cockburn Sound well in advance of construction of the port (explored in this edition of Navigate).

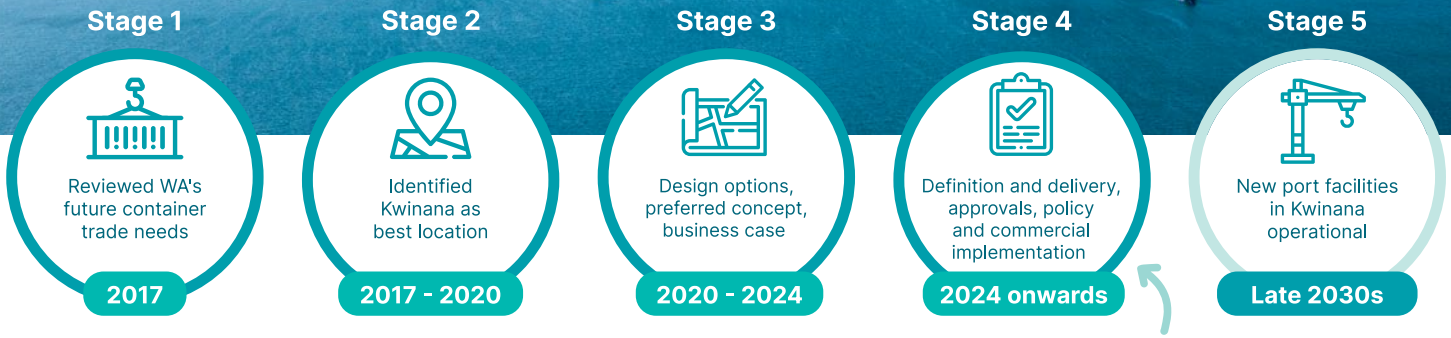
We started this social and environmental work pre-business case, and it will continue through project definition to inform environmental impact assessment, and final investment decisions.

As a result of our approach, Westport's business case is not your average business case – it's the culmination of thousands of technical inputs and countless conversations with knowledgeable people. It is a business case appropriate for such a big project, in such an important place, that our whole economy is so dependent on.

I thank everyone for your involvement to date. This includes our stakeholders and community, but also the people in the Westport team and partner agencies who have worked so hard to ensure the best outcome for our State. Our collaborative work now paves the way for the next 10-plus years of definition and delivery. I also wish you all a very merry Christmas and a safe new year.

Patrick Seares
Managing Director, Westport





Where are we now?

Westport has now officially entered Stage 4 – Definition and Delivery – which is expected to run from the mid-2020s until the late 2030s.

The recent funding will support Westport through the definition phase, which will involve completing designs, securing approvals, resolving risks and uncertainties, land acquisition and refining costs and construction strategies. At the end of definition, Government will be able to make a decision about investing in the capital works program, well informed about risk and cost.

The marine infrastructure is currently undergoing an environmental impact assessment (EIA) process with both the State and Commonwealth environmental regulators. In November, the EIA process progressed with the State and Commonwealth regulators calling for public comment on Westport's Environmental Scoping Document and Assessment Guidelines respectively.

The definition phase will significantly refine the port and channel design, construction approach and complete major geotechnical investigations, enabling Westport to better articulate potential environmental impacts and opportunities to minimise or manage those impacts. This knowledge will inform the ongoing assessment process with both the State and Commonwealth regulators.

Over the next few years, Westport will work to secure environmental approvals, leading to a final investment decision. Construction would only commence once approvals have been granted.

Information for consultants and companies interested in working with us

With Westport entering project definition, there has been increased interest from industry and the market. To unpack how Westport will engage with contractors and consultants in Stage 4, we recently held a market briefing. The presentation and recording of the event are now available on Westport's website.

Based on survey responses collected during the briefing, in 2025 we will offer quarterly briefings for consultants and companies interested in future opportunities to work with Westport. We anticipate that these briefings will commence in April 2025.

Westport intends to release a marine and ports technical advisor package to the market by mid-to-late March 2025. The advertised date has been pushed out due to caretaker period, which commences on 5 February 2025.

Opportunities to work with Westport will be advertised via TendersWA.

Westport Business Case Summary – what we found

Below we highlight some of the key findings from the Westport Business Case Summary. To view the full document, please visit our website.

Importance of container trade to WA

With WA's population and international trade continuing to grow, an efficient container port is needed to meet future demand.

As an isolated state, Western Australia is heavily reliant on imports and has two main ways of bringing in goods – through Fremantle Port, or east coast ports and then transported across Australia via land.

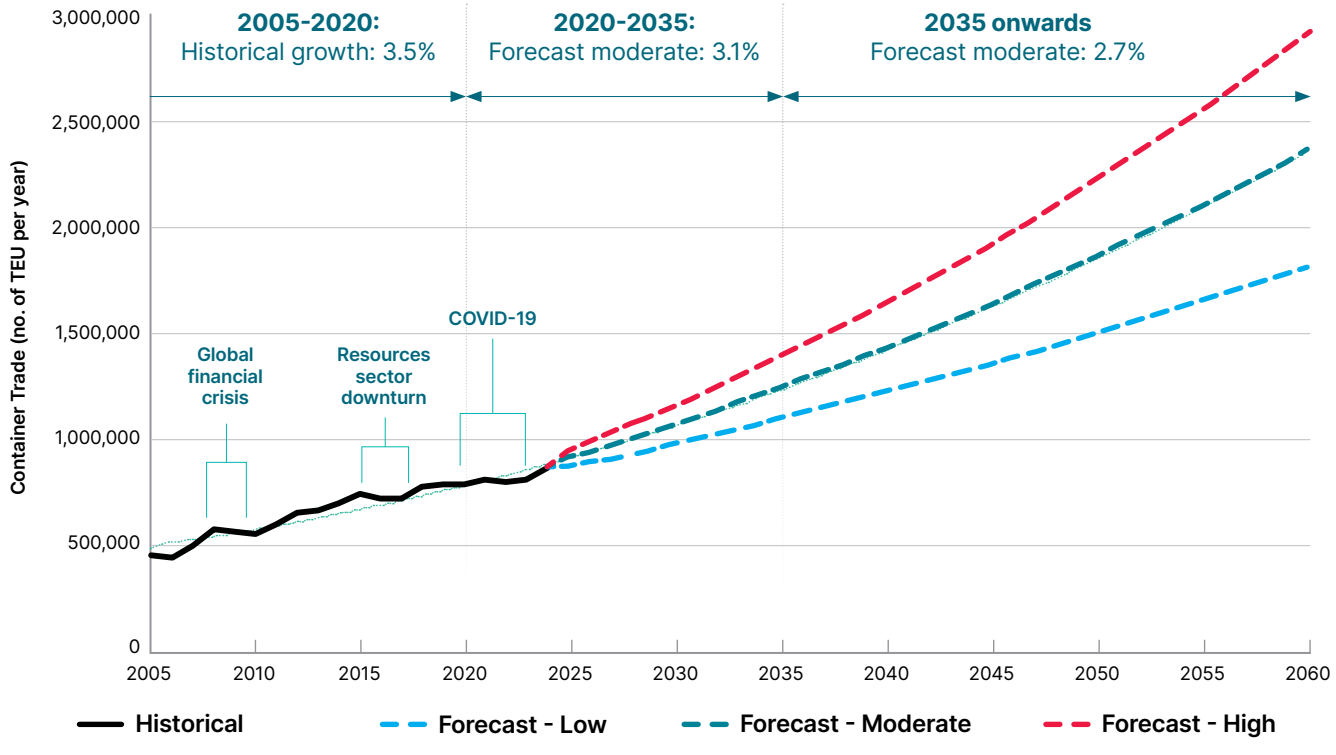
Fremantle Port is the gateway to WA's $445 billion economy and is the only major container port on Australia's western seaboard. This makes Fremantle Port and its supply chain nationally critical infrastructure, essential to servicing WA's population.

Currently, Fremantle Port has an annual maximum practical capacity to handle 1.4 million twenty-foot equivalent units (TEU) each year, which has been increased from the 2019 Westport Taskforce study. Trade volumes will continue to grow with our population and economy and are expected to reach approximately 2.9 million TEU per year by 2070. Again, this has been reduced from the 2019 study.

Under a moderate trade scenario, and without investment, Fremantle Port is expected to reach capacity by around 2040 or as early as the mid-2030s if higher volumes of trade eventuate.

The volume of truck movements will continue to grow with trade growth, putting pressure on impacted urban communities where roads and adjacent land uses have not been designed for heavy freight use.

Historical and Forecast Container Trade Volumes



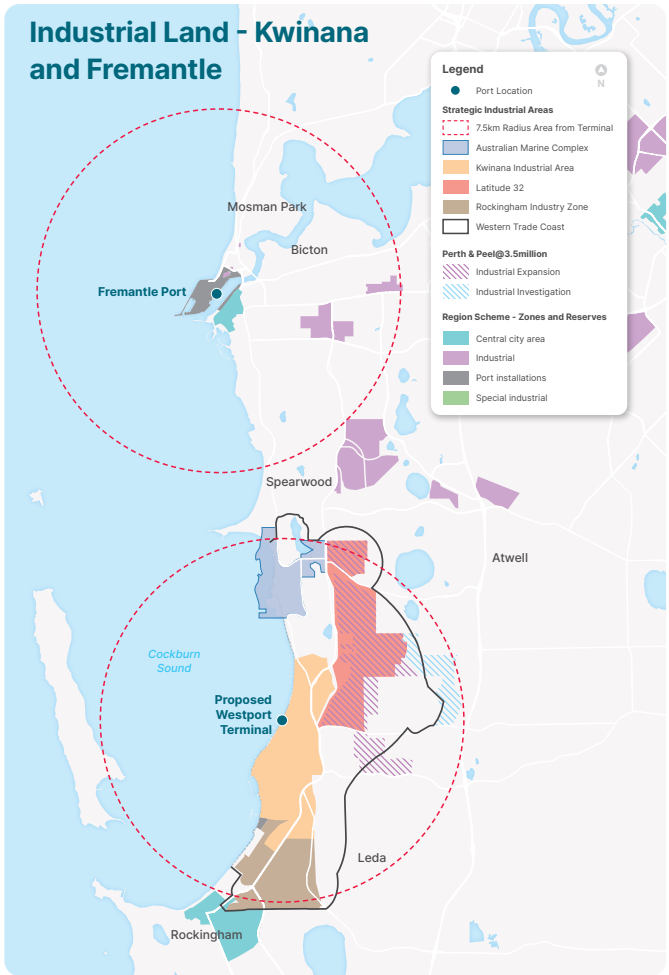
Why not Fremantle?

Maintaining Fremantle as WA's main container port has been extensively investigated by Westport. It is not a viable long-term solution.

Extending Fremantle Port's lifespan would require significant investments in port infrastructure, road and rail between now and the 2040s and the direct capital costs of these investment are estimated to be at least $2.2 billion.

Undertaking these upgrades would be highly disruptive to port operations, as access to the quay-line, as well as road and rail networks, would be impacted while construction was underway. These investments would also fail to address other challenges and risks at Fremantle, including limited land availability, vessel size constraints, road congestion and rail capacity limits.

Beyond the 2040s Fremantle Port's footprint and infrastructure would need to be expanded to a scale comparable to that proposed at Kwinana. Redeveloping Fremantle Port while it is operating and approaching its capacity would be expensive and disruptive.



However, several major issues for which there are no viable solutions would remain, including road linkage efficiency, amenity issues and rail capacity limits, meaning even more trucks on the road.

This means the major investment in Fremantle Port to extend it past the 2050s would still result in a less-efficient container port, which leads to higher costs, large disruptions, ongoing amenity issues, and wasted investment.

Key remaining issues include:

- The existing freight roads in and out of Fremantle, including Stirling Highway and Leach Highway, which negatively impact hundreds of residential properties and hundreds of businesses in direct proximity. Resolving freight congestion impacts in the long-term would require extensive and expensive road upgrades that would impact a significant number of properties and businesses, while exposing road users and the community to exponential growth in truck traffic.
- A single freight train line runs through the heart of Fremantle. This rail line will reach capacity around the mid-2030s, meaning every new container from that point will need to be transported along Stirling and Leach Highways, and Stock Road. The only way to significantly improve capacity on this rail line is to take it underground, which is cost prohibitive and technically challenging, considering the proximity to heritage areas in Fremantle.
- A lack of industrial land around Fremantle that will not allow the growing port services to expand, preventing the co-location of a range of supply chain and other marine businesses with the Port.

Timing and transition

Westport's business case recommends moving container trade from Fremantle to Kwinana by the late 2030s.

A transition to Kwinana in the late 2030s would reduce overall infrastructure and development costs and emissions by avoiding expensive and short-lived upgrades to Fremantle Port and improving the entire port and supply chain ecosystem earlier.

This option would allow for the development of a modern and fit-for-purpose supply chain enabling larger vessels to be accommodated, boosting the use of freight rail, shifting heavy freight vehicles to more suitable corridors, and improving road connections in the southern metropolitan region.

Increasing efficiency of the whole ecosystem would put downward pressure on container trade costs for industry and consumers, from 2040.

The business case estimated Government investment in the container port infrastructure of $7.2 billion, in today's dollars, will be required to deliver the new container port. Final budgets will be determined through procurement and capital works contracts.

Detailed economic analysis has shown that the benefit to cost ratio (BCR) of moving container trade to Kwinana by the late 2030s was over 4[1] (with BCRs over 1.0 demonstrating that the benefits outweigh costs).

Several major enabling road and rail projects such as widening the Kwinana Freeway and upgrades to Anketell Road will also be required. These projects will facilitate broader outcomes including addressing existing congestion bottlenecks, supporting further development of the Western Trade Coast and enabling a major expansion of our defence industry.

Stage 3 Options assessments and outcomes for container trade

1 At a 4 per cent discount rate.

Cost of inaction

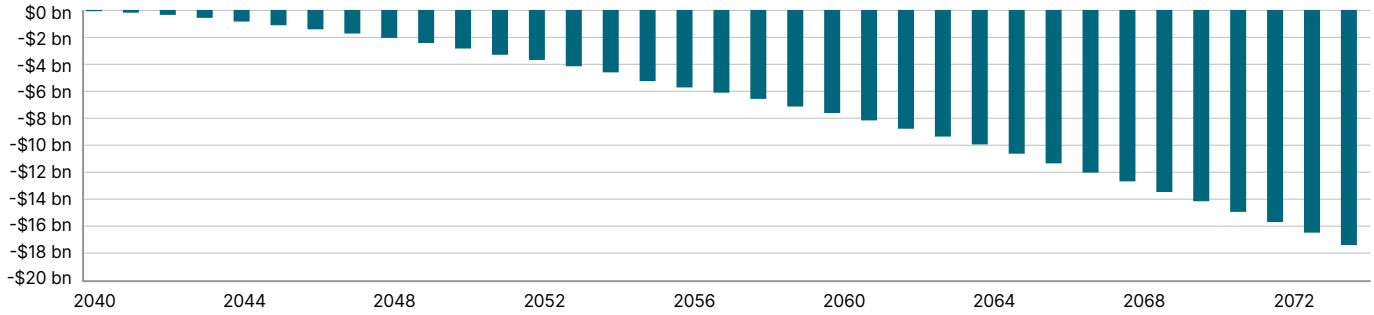
The Westport business case showed significant risk to the WA economy from future constraints on container trade if Westport is not built in time.

The business case found inaction to address constraints on trade could cost the Western Australian economy $244 billion by the mid-2070s.

If no action is taken and trade exceeds Fremantle Port's capacity, containers bound for WA will need to be offloaded on the east coast, making transportation 3.5 times as expensive, increasing the costs of everyday goods for households and businesses, and putting WA's economic self-sufficiency at severe risk.

The business case also confirmed that due to a wide range of issues and constraints, any option to extend the life of Fremantle Port would only be an interim measure and the move to Kwinana would still be required.

Cost of inaction



Commercial model

The WA Government will own the new port at Kwinana under a landlord model.

The recommended model is like the current operation of Fremantle Port at a high level, giving the Government control over the port's development and operation. It was selected due to:

- Government's ability to retain a high degree of control over the development and operation of the port, and an ability to control the competitive landscape around terminal operators, fees and charges, and entry of new participants.
- Market appetite from contractors and terminal operators for this model, given it is tried and tested.

Benefits for WA

The new container terminal in Kwinana will deliver significant benefits to the State, including:

- ✓ Scale up WA's trade capabilities for the next century, ensuring costs for imports, exports and everyday goods remain low.
- ✓ Enable larger, more efficient vessels that Fremantle Port cannot accommodate.
- ✓ Increase the share of rail freight from 20% (subsidised by the public) to an estimated 30% (without needing subsidies), reducing road congestion and emissions.
- ✓ Enable the transformation of Fremantle Port into vibrant mixed-use waterfront communities, with tens of thousands of new homes for Western Australians (noting these benefits were not included in the economic assessment for Westport to ensure the focus remains on trade related matters).
- ✓ Generate thousands of jobs annually during construction and significant skilled employment opportunities once the port is operational.
- ✓ Encourage growth and diversity within the Kwinana Industrial Area and Western Trade Coast.

Seagrass restoration gets major funding boost

In December, Westport announced $730,000 in funding as the next step in long-term seagrass restoration activities in and around Cockburn Sound.

The funding provides a holistic approach for the future of seagrass restoration, bringing together a successful community-driven program with pioneering automated technology that has potential to significantly scale-up activities, all underpinned by the latest independent scientific data.

Boosting Seeds for Snapper

The investment includes two years of funding totalling $500,000 to OzFish Unlimited, a non-government organisation that undertakes a range of fish habitat restoration activities involving community volunteers.

The funding will boost OzFish's WA-based *Seeds for Snapper* program and expand restoration activities in Cockburn Sound, marking the next step in Westport's long-term commitment to significantly scale up seagrass restoration in and around the Sound.

Seeds for Snapper is a WA community-based restoration program, developed in collaboration with UWA researchers in 2018, with the goal to restore Posidonia australis meadows in Cockburn Sound and Owen Anchorage. Seagrass is critical to marine health, providing food and shelter for many marine species, nursery grounds for commercially important species, maintaining water quality and sequestering carbon.

This unique program, which is one of the largest community driven seagrass restoration initiative underway in Australia, mobilises volunteer divers and fishers to collect seagrass fruit and disperse seeds into pre-selected sites across Owen Anchorage and Kwinana Shelf for restoration.

By engaging local volunteers and citizen scientists, *Seeds for Snapper* has increased seed dispersion about 10-fold to more than 4 million seeds since the project began, increasing the scale of restoration activities and recovery opportunities.

OzFish CEO, Cassie Price, explained that "Over the last 7 years, OzFish and supporters have collected more than 5 million *Posidonia* fruit from which we've been able to collect and disperse more than 4 million seeds to areas in Cockburn Sound and Owen Anchorage."

"There is a significant amount of work to replace the seagrass meadows that were lost in the Sound from the 1970s to the 1990s, and this funding from Westport provides critical support to ensure the restoration work continues."

Investing in new technology to upscale seagrass restoration

This year's *Seeds for Snapper* program will be further boosted by an Australian-first trial of robotic seagrass seed injection technology, supported by an additional $230,000 investment by Westport and managed by the University of Western Australia (UWA).

The robotic device, developed by Ulysses Ecosystem Engineering, delivers seagrass seeds in a single stream, directly into the sediment, improving the likelihood of seagrass germination as compared to manual methods of seagrass seeds being dispersed into the water by hand.

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The November trial of the Ulysses technology followed an earlier trial in March run by UWA, which calibrated the technology to suit the sediment conditions of Cockburn Sound.

This initial funding supports Westport's long-term commitment to significantly scale-up seagrass restoration in Cockburn Sound, before and after development of the new port facilities.

According to Professor Gary Kendrick from UWA, "Westport is connecting the dots and putting WA at the forefront of seagrass restoration globally, by bringing together *Seeds for Snapper* with the trial of the Ulysses autonomous robotic technology, all backed by the latest science from the WA Marine Science Institution."

"The seagrass restoration task is huge and intensive, so we need to harness the scaling power of automation. The Ulysses trial provides an incredible opportunity for us to test innovations, and ultimately prove the viability of new restoration methods."

Science Underpinning Restoration

The investment is underpinned by the latest scientific data. It builds on the $13.5 million partnership between Westport and the Western Australian Marine Science Institution (WAMSI), which since 2023 has produced multiple studies to support seagrass restoration activities in Cockburn Sound, including seagrass mapping, light and sediment tolerance thresholds and best practice methods for scaling-up successful seagrass restoration.

Ulysses Ecosystem Engineering team, Steve Pursell (OzFish Program Manager WA), Professor. Gary Kendrick (UWA), Patrick Seares (Westport Managing Director) and Luke Twomey (WAMSI CEO) with robotic seagrass seed injection device.