

Bunbury supply chain opportunities

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Westport's shortlist of options has been determined, based on criteria and weightings informed by research and widespread consultation. While Bunbury Port does not feature in the shortlisted options, there are still plenty of opportunities for future growth.

Westport's analysis and evaluation process has revealed a number of opportunities for Bunbury Port and the South West's burgeoning industries that could increase trade and economic growth for the region well into the future.

Bunbury Port expansion opportunities

Westport's investigation into whether Bunbury Port should be a location for a major container port included gaining an understanding of how local industries are transporting containerised freight for import or export to/from the South West region by road, and the potential to sustainably transfer this freight onto rail.

Independent to Westport, Southern Ports has been progressing its master plan for the long-term development and expansion of Bunbury Port.

An artist's impression comparing the Bunbury Inner Harbour's current state with what it could look like if the Revised Inner Harbour Structure Concept Plan (draft only) goes ahead, are shown to the right (images courtesy of Southern Ports).

This Concept Plan is a preliminary draft and will be subject to a public consultation process by Southern Ports.







Image 1: Bunbury Port currently (January 2019)



Image 2: Bunbury Revised Inner Harbour Concept Plan (draft only – subject to public consultation)

Key findings for Bunbury

- 1. Westport's consultation with South West businesses found that the current annual volume of containers exported from the region is approximately 33,000 containers (TEU).
- An annual task of approximately 20,000 TEU – or 60 per cent of the current freight task – would be required to support a daily rail freight service to transport containers from Bunbury up to the Fremantle North Quay Rail Terminal (NQRT) for export.
- No major improvements or capital upgrades to the freight rail corridor or intermodal terminal feeder roads would be required to support the daily rail freight service from Bunbury to NQRT in the short-term.
- 4. When comparing the costs of road versus rail transportation, it was found that a rail-based container supply chain is commercially comparable with trucks, subject to sufficient volumes and meeting the customers' needs.
- 5. It is estimated that an additional 10,000 to 50,000 TEU will come on line in the South West region in coming years with expansions and new ventures, including the Albemarle lithium hydroxide manufacturing facility in Kemerton, which is under construction.
- 6. An assessment of suitable intermodal terminal (IMT) locations (where containers transfer from road to rail and vice versa) found multiple potential sites in Picton and Bunbury Port areas.

Further work with relevant State Government agencies must be undertaken before a decision on the IMT location can be made.

Capitalising on these opportunities

There are several steps that can be taken in the short-term to facilitate the growth of the South West's container trade with a view to establishing a niche container operation at Bunbury Port.

- The Department of Transport is working with the Department of Planning, Lands and Heritage (DPLH), Southern Ports and Bunbury stakeholders to undertake more detailed supply chain work to confirm the most suitable location for a future IMT and to better understand requirements for integrating IMTs into the South West rail supply chain.
- 2. Steps will be taken to investigate the feasiblity of protecting the requisite road and rail corridors in the local planning scheme, so the land is available if and when required. Having suitable corridors in place may allow Bunbury to be integrated into Perth's supply chain at a later date if it becomes viable. This issue will be investigated with the relevant Government agencies.
- The working group can encourage identified local exporters and their freight logistics providers to transfer from road to rail by promoting the benefits of the rail based supply chain to NQRT.

Growing the local container task may eventually lead to the critical mass required to establish a niche stevedore operation at Bunbury Port.

Establishing a container operation at Bunbury Port would encourage large industries to operate in the area – especially with such an abundance of industrial land available close to the port. Facilitating industrial development could also spur social and economic development for the region as it would create skilled job opportunities for locals and bring more people to the area for work purposes.

With an initial container freight consolidating IMT site operating and then a potential container-handling facility in place, Bunbury may be well-positioned to be included in handling the growing freight needs of the Perth metropolitan area in the long-term.



Why didn't Bunbury make Westport's shortlist?

While Westport is undertaking many tasks, our main priority is specifically addressing the issue of Perth's container terminal capacity and land transport access, as stated in the 2019 Infrastructure Australia priority list.

Due to its distance from Perth, Bunbury Port was unlikely to compare favourably with Fremantle and Kwinana in terms of handling container imports destined for consumers in the Perth metropolitan area. However, it was timely to take a fresh look at Bunbury to see whether ongoing improvements in transport and construction methods had changed this outlook.

A much earlier assessment for a 1989 report which investigated having dedicated container-handling facilities at either Geraldton, Bunbury, Wilbinga or Breton Bay found that:

- land transport costs associated with cartage between a regional container port and Perth were prohibitive, given that the majority of containers had an origin or destination in the metropolitan area;
- there would be high costs for upgrading rail connections to these ports to handle high volumes of containers; and

 regional ports go against the international trend of consolidated container port facilities.

These findings are supported by the Fremantle Ports Container Movement Study 2017, which found that only 3.5 per cent of containers handled at the Inner Harbour are transported more than 100km from the port for unpacking (see Table 1 below).

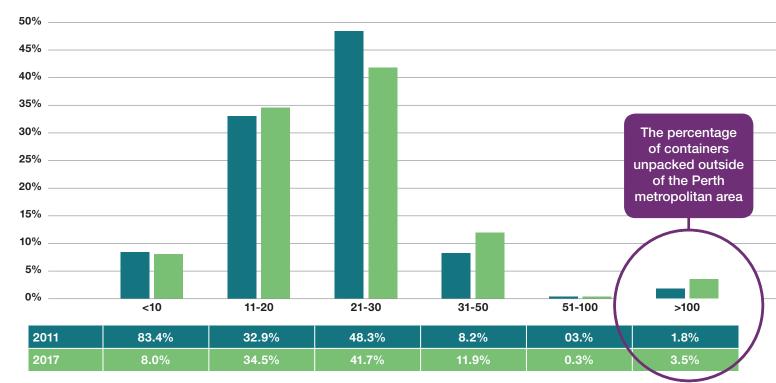
With distance comes cost – the cost of having to build more infrastructure, as well as the higher operational costs of transporting goods across long distances – which would then likely be passed onto consumers.

In the case of Bunbury Port, to build an effective supply chain operation to Perth would require a duplication of the South West Main rail line. While the capital costs of building heavy rail are significant, there would be further costs including land acquisitions, grade separations at several key crossings, and management of the other 100-plus level crossings. The large increase in daily rail movements would also cause disruption and impact the amenity of communities lining the rail corridor.

The road enhancements required to make Bunbury Port a major container port – including duplication of Willinge Drive and several grade separations on Forrest and South West Highways – also present significant costs.

(continued overleaf)

Table 1: Radial distance from the port for unpack locations - combined



Source: Fremantle Ports Container Movement Study 2017



Another major challenge is the basalt layer which sits under the Bunbury Inner Harbour channel and extends under Koombana Bay at a depth of around 14m below sea level. To reach the estimated end-state port depth of 18m would necessitate extensive blasting, which would potentially cost billions of dollars as well as posing environmental risks.

The final issue for the Bunbury options related to questions over whether the port's capacity could be increased enough to handle the end-state container capacity of 3.8 million TEU. Even the proposed extensions inland and additional berths were unlikely to be sufficient, requiring the port to be extended out to sea – creating further costs and environmental damage.

The issues highlighted above make Bunbury unsuitable in playing a central role for Perth's container supply chain, but do not present hurdles for creating a niche container trade servicing the South West. This opportunity can now be explored by local stakeholders.

Over time, as Perth's population extends further south and new technologies are developed - such as rapid, cost-effective transportation methods - there is also every chance that Bunbury can and will play a bigger role in the metropolitan supply chain.

Next steps

The four Bunbury options outlined in Westport's long-list will not be progressed any further through the process. The five shortlisted options will be the only options tested in MCA-2 and the cost-benefit analysis.

The Transport Portfolio will work with Southern Ports and local stakeholders in Bunbury and the South West region to determine how to best realise opportunities to improve freight transport supply chains.

Thank you to Westport's valued **Bunbury stakeholders**

Westport would like to extend our sincerest thanks to the members of the Westport Taskforce who championed Bunbury and the South West throughout our process, and provided us with valuable information and data:

- **Arc Infrastructure**
- **Aurizon**
- Bunbury Geographe Chamber of Commerce and Industry
- Bunbury Geographe Economic Alliance
- **City of Bunbury**
- LandCorp
- Main Roads WA
- Member for Bunbury, Hon. Don Punch MLA
- **Shire of Dardanup**
- South West Development Commission
- **Southern Ports**
- Watco

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- MZI Keysbrook
- Simcoa Kemerton
- Talison Lithium
- **V&V** Walsh Meat
- Wren Oil

Thanks are extended to everyone who attended our community events in Bunbury, the local media and everyone who engaged with Westport.







