FREMANTLE PORT’S CONTAINER TERMINAL: ITS HISTORY AND FUTURE
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for the North Fremantle Community Association

INTRODUCTION
The question addressed by this discussion paper is whether Fremantle’s container terminal is socially and environmentally sustainable now and into the future on its present growth trajectory; or does it have a use-by date, and if so what is it?

Our motivation for preparing this paper was the decision by the City of Fremantle to formally adopt the statement below as its up-to-date position on the role of the inner harbour into the future, to ‘guide officers in working with the Westport Taskforce to form hypotheses and in subsequent stages of the Westport Strategy development process.’

Port related employment and activity associated with the Inner Harbour, including supporting services and maritime industries, are a critical component of the Fremantle region’s economy. To retain and if possible expand this economic activity into the future, the inner harbour should be retained in the long term as an operating port.

The statement goes on to list the ongoing operating port’s desirable characteristics, which include a Container Terminal. For reasons we explain in detail below, we believe Council’s statement is premature, is not supported by the facts of the container trade, ignores social and environmental consequences, and pre-empts the results of the Westport study.

This paper is in four parts: Parts 1 to 3 presents information, and Part 4 discussion, conclusions and recommendations.

• Part 1. The history of the container port’s expansion as it has affected North Fremantle from its inception in the 1960s to the present day.
• Part 2. The statistics of the growth in container traffic, and the scenarios developed from them at various times, for forecasting the future.
• Part 3. The practicability and environmental impact of various strategies advanced for dealing with the growing container trade.
• Part 4. Comments and Recommendations, discusses in detail the findings of Parts 1 to 3 and their implications for Council’s policy position.

1 Ann Forma and Gerry MacGill have lived in North Fremantle since the early 1970s. Ann served as councillor for the North Ward from 1992 to 1998 and Gerry from 1975 to 1988.
2 City of Fremantle, Minutes, Ordinary Meeting of Council, 22 August 2018, item SPT 1808-3. For the full text of the resolution see Appendix 2
PART 1.
NORTH FREMANTLE AND
THE CONTAINER TERMINAL: A HISTORY

1960 – 70 Building a New Container Terminal

Similar to recent government pushes, the State Government raised the amalgamation issue in the late 1950s. North Fremantle Council was vulnerable, with low council rates for industry, to the point that North Fremantle Council became financially unviable and moved to amalgamate with Fremantle in 1961.

Fremantle Port was relatively un-mechanised at the time, needing a large workforce up until the 1960s. From 1962 to 1969 North Fremantle’s residential base was effectively halved to accommodate the new Container Terminal. The new wharves 11 and 12 on North Quay were created by moving the rail line and bridge east, then John St/Tydeman Road re-routed north as a double carriageway, wiping out 300 homes, a substantial railway station and land, and half the thriving North Fremantle Town Centre. A coherent community that existed both sides of the rail line and south of Tydeman Road disappeared, along with many businesses, churches, beautiful buildings and some of the most historic sites in the suburb.
Figure 1: 1963 The new rail bridge is in place across the river while the existing remains. Clearing of the new rail alignment north shows up as white patches. Stirling Bridge and approaches not yet in place.
Figure 2: Post Office (now Tydeman Road traffic island) and shops demolished 1966. Photo from 1903

Figure 3: All the shops on the left were demolished as far as the Police Station (current Post Office). Main Roads left this demolition site in a derelict state for 50+ years. Council finally landscaped the Post office car park at our expense in 2018.

The new Container Terminal opened in 1969.
1970 – 80 Completing the road network

Approach roads for a new bridge over the river (Stirling Bridge) destroyed another street of houses, (Bruce Street) and several bowling greens. Stirling Highway cut off the major connector from the Town Centre into the suburb, Harvest Road, with no provision made for safe pedestrian access to shops and bus routes. This situation still exists today.

Bulldozers moved in at 6am on a Sunday morning to avoid protestors.

1980 – 2000

Port Options Study Stage 1, 1989

Container traffic more than doubled in the first decade. In response, the 1989 Port Options Study Stage 1\(^3\) was commissioned to ‘determine if the current Inner Harbour could reasonably meet the forecast demands on the Port in the period 2010 and beyond.’ Stage 1 was ‘to determine the nature of alternative Port developments at number of potential sites’. Stage 2 was ‘to compare them, using a range of identified evaluation criteria’. The Stage 1 Study expected the capacity of the container terminal to be reached by 2020.\(^4\) It recommended a more detailed analysis of three sites (in a Stage 2 Study) that would cover amongst other things social and environmental impacts and constraints of the North Fremantle site. Stage 2 was never undertaken, and any further study was referred to an Auxiliary Study.

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\(^3\) Port Options Study Stage 1 Report, Fremantle Port Authority, November 1989

\(^4\) The Study had projected that, based on a 6% per annum increase, the volume of container traffic in the decade from 1989 would rise from 123,500 TEUs to 234,400, but by 1999 it was 18% higher at 275,700.
Future Port Options Auxiliary Study, 1991

The study\(^5\) posed an opening question that established the theme of its content.

Is the port adequate to fulfil its vital function? Will it still be adequate 30 years from hence? If not, can it be adapted, or must a new port be constructed? If so, where?

Stage 1 had recommended three possible sites for further investigation: an extension of the Inner Harbour, a new harbour at Catherine Point, or a new harbour at Naval Base/Kwinana. However, the terms of reference of the Auxiliary Study make it clear that the focus would be entirely on the Fremantle Inner Harbour, with other sites referred to only briefly in a four page technical paper.

Both studies were substantial: the former running to 156 pages of investigations and analysis, and the latter to 39 pages plus seven detailed technical papers.

The study examined in detail the ability of the Fremantle Inner Harbour to handle projected growth to the year 2020 and concluded that it had the capacity to do so. The Auxiliary Study forecast that the number of TEUs\(^6\) handled in the year 2020 would be 588,000, a number that by 2018 was to exceed this figure by 30%. The report noted that ‘pressure on transport linkages serving the Inner Harbour would be the limiting factor in cargo handling capacity in the long term, well before any expansion of port facilities beyond North Quay is required because of land limitations in the Inner Harbour’. Measures canvassed in the report included the railway loop line and rail bridge.

Social Impact Research Task, 1991

This report\(^7\), prepared by Sinclair Knight, was in effect a scoping study for further research to be undertaken should the Auxiliary Study find that North Fremantle was suitable for further Port development. Its objectives were to identify any significant social impacts (both positive and negative) likely to be associated with the Port’s development, and to identify whether any management techniques could be adopted to avoid, or reduce, adverse social effects. Community concerns about social impacts of traffic (road and rail), noise, congestion and hazardous goods transport were noted but not quantified. The report noted that improved information dissemination and communication with the community, as well as meaningful public involvement in the future planning processes, were required. However, no further action followed.

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\(^5\) Future Port Options Auxiliary Study, Final Report, Future Port Options Auxiliary Study Steering Committee, October 1991

\(^6\) TEU stands for Twenty-Foot Equivalent Unit which can be used to measure a ship's cargo carrying capacity. The dimensions of one TEU are equal to that of a standard 20’ shipping container, 20 foot long, 8 foot tall. Usually 9 – 11 pallets are able to fit in one TEU.

\(^7\) Fremantle Port Options Auxiliary Study – Social Impact Research Task, Draft Study Report, Department of Planning and Urban Development, June 1991
2000 – 2010
Dredging deepened the Port to 14 m. Sea and river had sediment plumes that did not clear for 2 years.

Construction in 2005 of the Rail Loop directly into the Container Terminal freed up the marshalling yards for the Leighton re-development, which according to 1994 Fremantle Regional Strategy\(^8\), was meant to pay for the line and also the Tydeman Road works. The loop line was not grade separated, necessitating a level crossing on Tydeman Road.

**Fremantle Ports Outer Harbour Project 2005**
This report\(^9\) examined four options for an overflow container and general cargo port when the Inner Harbour facility reaches capacity. It provided information on why Naval Base/Kwinana had been selected for the proposed Outer Harbour expansion. It forecast that the Inner Harbour capacity of 1.2 million TEUs would be reached in 2017, and the combined harbours’ capacity of more than 3,000,000 TEUs reached by 2027. In 2006 a Draft Recommendations Report on a Preferred Option followed the Outer Harbour Report.

2010 – 2017 Fremantle Port Container Movement Studies
In 1997\(^10\) and 2017\(^11\) Fremantle Ports undertook two major container movement studies. These forensically detailed studies reveal the enormous complexity of the supply chain and the multitude of variables acting on it.

2019
The current leases held by DP World and Patrick have been in place since 1996 and are due to expire in June 2019\(^12\). The government’s intention is to grant new seven-year leases with options for extensions for two further periods of up to seven years, at the discretion of Fremantle Ports and dependant on the outcome of the Westport: Port and Environs Strategy. The possibility thus exists for the container port’s operations to continue in their present form until 2040. Part 2 includes the implications of this scenario.

\(^8\) Fremantle Regional Strategy, Department of Planning and Infrastructure, City of Fremantle, 1994.
\(^9\) Fremantle Ports Outer Harbour Project, Department of Planning and Infrastructure, March 2005.
\(^10\) Fremantle Port Landside Container Study 1997
\(^11\) Fremantle Ports Container Movement Study 2017
\(^12\) Minister for Transport media release, May 2019
PART 2
CONTAINER STATISTICS AND GROWTH FORECASTS

Introduction
This section uses actual Fremantle Ports data to document the historical trend in container growth, and compares it with some of the more recent forecasts.

Fremantle Ports has itself offered sound advice on forecasting future volumes of container traffic.\textsuperscript{13}

Containerised cargoes comprise a complex mix of agricultural, manufacturing, mining and other cargoes. In principle, it is possible to build up an estimate of future container volumes by examining in detail each of the main components of this mix, and forecasting its prospects. In practice, however, this approach is useful only for fairly short forecasting periods. This is because the composition of the container trades is constantly changing. …For longer term planning, it is more usual and more reliable to rely on aggregated forecasts for the container trade as a whole.

To inform discussion of the subject, the growth curve of Figure 5 represents the aggregated data for the lifetime of the container port to 2018\textsuperscript{14} as compiled by us. Appendix 1 tabulates the original data.

FIGURE 5
Inner Harbour Container Traffic, 1972 – 2018

\textsuperscript{13} Fremantle Port Authority. Port Development Plan 1997 – 2007, 4.1, p6
\textsuperscript{14} Source, Fremantle Port Authority annual reports for the 46 years 1972 – 2018
The curve exhibits a steady upward trend from 1976, when growth resumed after the loss of the interstate container trade. Notable points are the dips in 2008 (GFC) and 2009-10 (possibly the collapse of the mining boom). Percentage growth rates can be calculated for any section of the curve, but selection of the range should avoid unusual events that might distort the result. The larger the sample, the more reliable it might be considered to be. As a comparison with other estimates, the 28-year interval from 1990 to 2018 yields an annual growth rate of just over 6.3%.

Table 1 shows some of the forecasts on record and their sources.

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>% PER ANNUM</th>
<th>PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landside Study 2012(^\text{15}), p8</td>
<td>5.4</td>
<td>2001-2011</td>
</tr>
<tr>
<td>Container Movement Study 2017(^\text{16})</td>
<td>3.6</td>
<td>2009-2017</td>
</tr>
<tr>
<td>Fremantle Ports 5 year(^\text{17})</td>
<td>2.8</td>
<td>2014-2018</td>
</tr>
<tr>
<td>Fremantle Ports 10 year(^\text{18})</td>
<td>2.8</td>
<td>2009-2018</td>
</tr>
<tr>
<td>Raw data, Fremantle Ports Annual Reports, see Fig. 5 and Appendix 1</td>
<td>6.3</td>
<td>1990-2018</td>
</tr>
<tr>
<td>Western Harbours Alliance Rpt.No.3</td>
<td>5.4 (? 5.1)</td>
<td>2000-2017</td>
</tr>
<tr>
<td>Western Harbours Alliance Rpt.No.3</td>
<td>5.8</td>
<td>To 2032-33</td>
</tr>
</tbody>
</table>

We have not chosen these examples to pursue a particular agenda, nor do we contest them. Their basis is explained in the relevant source documents. Our purpose is to show that forecasts are intrinsically subject to amendment in light of changing circumstances. They must be treated with caution as predictors for the future, as Table 2 demonstrates.

\(^{15}\) Fremantle Port Landside Container Study, March 2012  
\(^{16}\) Fremantle Port Container Movement Study, p4  
\(^{17}\) Fremantle Ports, Annual Report 2018  
\(^{18}\) Fremantle Reports, Annual Report 2018, but actually 3.1%
### TABLE 2: Trade Growth Forecasts
According to Different Assumed Growth Rates

<table>
<thead>
<tr>
<th>YEAR ENDING</th>
<th>Westport long term rate; Fremantle Ports 5 and 10 year rate, 2.8%</th>
<th>Container Movement Study 2009-17 3.6%</th>
<th>Landside Study 2001-2011 5.4%</th>
<th>Western Hbrs Alliance 5.8</th>
<th>Historic 6.3% rate 1990-2018 (from the actual raw data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>716,000</td>
<td>716,000</td>
<td>716,000</td>
<td>716,000</td>
<td>716,000</td>
</tr>
<tr>
<td>2019</td>
<td>757,000</td>
<td>769,000</td>
<td>797,000</td>
<td>804,000</td>
<td>812,000</td>
</tr>
<tr>
<td>2021</td>
<td>801,000</td>
<td>827,000</td>
<td>888,000</td>
<td>902,000</td>
<td>921,000</td>
</tr>
<tr>
<td>2023</td>
<td>847,000</td>
<td>888,000</td>
<td>989,000</td>
<td>1,013,000</td>
<td>1,044,000</td>
</tr>
<tr>
<td>2025</td>
<td>895,000</td>
<td>955,000</td>
<td>1,102,000</td>
<td>1,137,000</td>
<td>1,184,000</td>
</tr>
<tr>
<td>2027</td>
<td>947,000</td>
<td>1,026,000</td>
<td>1,227,000</td>
<td>1,277,000</td>
<td>1,342,000</td>
</tr>
<tr>
<td>2029</td>
<td>1,001,000</td>
<td>1,102,000</td>
<td>1,367,000</td>
<td>1,434,000</td>
<td>1,522,000</td>
</tr>
<tr>
<td>2031</td>
<td>1,059,000</td>
<td>1,187,000</td>
<td>1,522,000</td>
<td>1,610,000</td>
<td>1,726,000</td>
</tr>
<tr>
<td>2033</td>
<td>1,120,000&lt;sup&gt;19&lt;/sup&gt;</td>
<td>1,273,000</td>
<td>1,695,000</td>
<td>1,800,000</td>
<td>1,957,000</td>
</tr>
</tbody>
</table>

What the figures show is that for any given future year the volume of container trade has a range of possible values depending on the rate of growth, which is in turn largely determined by external factors beyond the control of the port.

The reportage relevant to the container terminal’s future is replete with forecasts of growth rates and ultimate capacity, all no doubt at the time considered well founded. However, the fragility of forecasts is evident in the examples previously cited, the 1989 Port Options Study Stage 1 and the 1990 Port Options Auxiliary Study. The former expected the capacity of the container terminal to be reached by 2020. The Auxiliary Study forecast that the number of TEUs handled in the year 2020 would be 588,000<sup>20</sup>. As previously noted, this number was in fact exceeded two years earlier in 2018 (769,686) by more than 30% after growth in 2018 of 7%, which is the long term average.

Fremantle Council’s most recent statement forecasts ‘council considers the viable level of operations is likely to be in the range of 700,000 to 1 million container units per year’ whereas even just taking the long term average it would possible reach 2 million; and from Westport that ‘ …the long term average annual growth rate is forecast to be 2.8 per cent between 2017/18 and 2067/68, to reach 3.1 million TEU by 2067/68…’

A prudent approach would therefore dictate that contingency provisions be built into strategies to deal with possible ranges of volumes and it

<sup>19</sup> Figure also adopted by Western Harbours Alliance, see Table 1.
<sup>20</sup> Future Port Options Auxiliary Study, Technical Paper 1, Trade Development Projections.
  Auxiliary Study Working Group, May 1990, p.15
would seem that the Fremantle Council position is based on much lower numbers.

Which leads us to Part 3.

**PART 3**

**STRATEGIES: OPTIONS CURRENTLY PROPOSED FOR THE MANAGEMENT OF GROWING VOLUMES**

**Introduction**

In this part we look at the measures most commonly proposed for dealing with expanding container traffic. A recent example is the Westport Port and Environs Strategy report of December 2018, which included the following statement\(^{21}\).

A study of Fremantle’s land transport and port capacity in 2014 considered the land transport network that was proposed at the time and found that a throughput of around 2.1 million TEU\(^ {22}\) could be achieved by (on the landside):

- major improvements to the land transport network;
- improving intersections;
- increasing rail mode share; and
- extending operating hours (taken to mean days and hours) for truck movements;

In the following we highlight that these measures raise critical matters requiring resolution before they can be given serious consideration.

**Major improvements to the land transport network.**

‘Major’ improvements were effectively ruled out with the abandonment of the Perth Freight Link. However, even the PFL did not complete the critical link from Canning Highway to the container terminal, an omission that is revisited in the Westport report, which states:

*Stirling Highway and Stirling Bridge* - the intersection with Canning Highway will come under increasing pressure and significant upgrade is constrained by the Stirling Bridge abutment to the north and adjacent development along Canning Highway. The possibility of upgrading Stirling Highway between High Street and Queen Victoria Street as well as potentially increasing the capacity of Stirling Bridge will be considered in the context of Westport’s strategic options.\(^ {23}\)

**Matters requiring resolution**: design options, costings, feasibility, environmental impact studies and timeframe for Stirling Bridge widening and highway upgrading. Note that the same questions

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\(^{21}\) AECOM, 2014, Fremantle Ports Inner Harbour Land Transport and Port Capacity, AECOM, Perth

\(^{22}\) The assessment included the now abandoned PFL project

\(^{23}\) WESTPORT Port and Environs Strategy: What we have found so far December 2018, p44
concerning this ‘missing link’ were also left for the future in the PFL proposal. An option floated at the time being was a long loop via Leighton and back down Port Beach Road, which would suggest that such matters are far from straightforward, and indeed the former Premier said there did not seem to be an ‘elegant solution’.

**Improving intersections.**

The intersections involved are Stirling Highway with High Street, Marmion Street, Canning Highway and Tydeman Road, as well as the intersection of Tydeman Road with Queen Victoria Street. Works for the Stirling Highway – High Street intersection are designed and approved, and are minimal changes to the area involved. To convert the remainder to achieve uninterrupted flow of heavy vehicles would be a massive undertaking.

**Matters requiring resolution:** design options, costings, feasibility, environmental impact studies and timeframe for all four intersections.

**Increasing rail mode share**

The present (subsidised) rail share is up to about 18%. The previously cited Westport report notes:

> The railway bridge to the west of the Fremantle Traffic Bridge has two tracks and is shared by freight and passenger trains. During the weekday passenger peak periods, freight rail services are unable to use the tracks due to the risk of delaying passenger rail services. This and current track maintenance practices restrict the ability for rail freight to maximise available capacity at North Quay Rail Terminal (NQRT).

The electrified passenger rail prevents double stacking, and train length is limited by the curvature of the North Fremantle loop into the North Quay. Thus the only practicable short-term option available to increase the rail participation rate would seem to be more trains out of hours (i.e. at night). To overcome these limitations, a proposal has been widely mooted, including by the Member for Fremantle, the Hon. Josh Wilson, to build a dedicated bridge, either replacing the Traffic Bridge with a dual use bridge, or a separate crossing elsewhere.

**Matters requiring resolution:** the environmental impact on Fremantle of an increased frequency of freight train movements through the West End; design options, costings, feasibility, environmental impact studies, timeframe and cost-benefit analysis for a new rail bridge. These are not simple matters.

**Extending operating days and hours for truck movements**

A study in 2017\(^24\) revealed the weekday-weekend split in TEU movements to be 89% – 11%. In 2012\(^25\), the split was 96% – 4%. There is thus a theoretical possibility that the traffic load could be spread, or

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\(^{24}\) Fremantle Ports Container Movement Study 2017, p13
\(^{25}\) Fremantle Port Landside Container Study 2012, p72
increases accommodated, by extended operating days. Extended hours would mean more night activity. The immense complexity of the supply chain, where changing one element means changing many others, probably lowers the likelihood of rapid progress being made in this area.

**Matters requiring resolution:** the feasibility of making further gains in spreading the traffic load; an assessment of the social and environmental impact of extending truck movements into nights and weekends. The latter include noise, vibration, traffic congestion and diesel particulate pollution.

Parts 1 to 3 have presented the objective facts of the container port’s expansion, the growth of the traffic in TEUs and the matters requiring resolution raised by the strategies adopted in response to it. Observers may interpret the facts differently according to their own perspective: Fremantle Ports, its business and bottom line; Fremantle Council, the city’s heritage and economy; workers, their job security; environmentalists, the future of Cockburn Sound. Ours is from the perspective of the social and environmental health of the Fremantle community.

In Part 4 we comment on the foregoing accounts and put forward recommendations for action on matters previously neglected as the port’s development has proceeded over the last half century.

**PART 4**

**COMMENTS AND RECOMMENDATIONS**

**Comments**

**History**

North Fremantle paid a big price for the arrival and subsequent 50 years of growth of the container terminal: hundreds of houses, a thriving local business economy, recreation areas and the ‘social capital’ of churches, hotels, and part of the bowling club. It could be argued that the sacrifice of heritage, environment and a community was worth it to provide an efficient port for the state for the next 50 years; alternatively, a more efficient container terminal with better transport links could have been planned, as had been intended in the 1989 Port Options Study Stage 1, and as in other states where planning had already begun for the movement of container operations away from old centres -- the Botany Bay terminal, for example, endorsed in 1969 and opened ten years later.

1989 was a highly significant year in the history of the container port: from that point on the focus became solely one of finding the means to meet the demands of the supply-chain and internal port infrastructure necessary to accommodate the ever-growing trade. The 2005 Fremantle Ports Outer Harbour Project recognised the need for ‘spillover’ capacity and looked at alternative sites, including a proposal for an Outer Harbour based in the northern area of Kwinana and with a large amount of reclaimed ocean bed in Cockburn Sound. This site appears to have
been rejected now in favour of a site to the south that had been proposed as a private port by Len Buckeridge, and was given EPA approval. However, the momentum to consider an Outer Harbour went on the back burner during the Barnett Government period and hence the only planning slipped back to just considering growth in the Inner Harbour, eventually leading to the dramatic developments around the Perth Freight Link. The PFL did not take seriously the Outer Harbour and proceeded, against great opposition, to plan a massive road complex that eventually went through the middle of North Fremantle and was strongly opposed by the Fremantle Council.

However, assessment of the social and environmental impacts of the land traffic has never achieved any level of importance. The 1991 Social Impact Research Task was never followed up.

**Council Policy**

The Council resolution for adoption of the policy is reproduced in full in Appendix 2. Here, we highlight for comment the two ‘characteristics’ of it that are conditional to Council’s preference that the inner harbour should be retained in the long term as an operating port.

Container handling capacity at North Quay at a scale that can be supported by future land side transport infrastructure and logistics practices which have no greater impact on the local community and urban fabric than current port operations and associated road and rail transport arrangements.

**Comment:** The impact of current operations on the local community has never been assessed; and possible future transport and infrastructure practices (see Part 3) have yet to be seriously assessed for practicability or effectiveness.

Unless there are changes to land side logistics which improve the efficiency and levels of freight on roads during business hours on weekdays, a level of container movements that reflects a viable economic outcome balanced against existing transport infrastructure capacity; likely to be in the range of 700,000 to 1,000,000 TEUs per annum.

**Comment:** A million TEU movements without changes to land side logistics is not something to be casually contemplated. Reaching this number might seem a distant possibility to some. The Mayor has stated27 “… there is no need to rush into making a one of Perth’s biggest ever infrastructure investments. There has been slow container growth over the last 5 years and there is considerable uncertainty around the growth in imports by volume….” We question that “there is no need to rush”.

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26 It is worth remembering the lessons set out in ‘Never Again: Reflections on Environmental Responsibility after Roe 8’ edited by Andrea Gaynor, Phil Jennings and Peter Newman, published by UWA Press in 2018. This book shows how the history of ill considered options to the future of the Inner Harbour have led to a litany of road issues in the broader Fremantle community and which the Council have opposed and generally won. They are now turning a blind eye to this past opposition.

27 Personal communication, email 9/11/2018
Table 2 shows that even if the present assumed growth rate stays at 2.8%, the 1 million mark will arrive in 2029, or just ten years from now; but if the growth is underestimated by just 0.8%, the 1 million point will arrive two years earlier. If the long term average growth rate was taken then the 1 million TEU’s will arrive in 2023 and it is worth noting that despite the Mayor’s reassurance that growth has been slowing that the past year has seen a return to long term growth rate. These figures give an indication of the very limited time horizon to build Westport and meanwhile progressively preparing infrastructure in Fremantle for a 30% increase in container traffic. Such numbers easily lead to desperate solutions like the Perth Freight Link as the alternatives have not been adequately examined.

**Container Growth Forecasts**

Three things stand out about Container Growth forecasts:

- they are almost always exceeded;
- they are generally claimed to be manageable subject to certain measures being taken; and
- the measures to accommodate them are never (or have not been since 1991) subject to considerations of social and environmental impact, nor to any overt cost-benefit analysis.

The Fremantle Council resolution just continues this approach to the future of the port and its environs.
RECOMMENDATIONS

Council’s first duty is to protect the health and amenity of its citizens. Maintaining a sound level of economic activity is an important part of this, but the point at which the latter begins to impact adversely on the former is an important one for Council to recognise, and to face up squarely to the consequences for Fremantle of expanding container operations indefinitely. We are, in fact in complete accord with the Mayor’s comment to us that

The future of the Fremantle Port is probably one of the most important debates Fremantle will have this decade and beyond28.

In this spirit we urge that the debate starts now, and recommend as follows.

1. That Council’s 2018 policy for the future of the Fremantle Port’s Inner Harbour be rescinded and approached afresh in the full light of community consultation. The starting point for such a review should be:

   Fremantle values its historic links with the port, but considers that in its evolution to a major container handling operation, the impacts of port operations (congestion, air quality, noise and the transport of dangerous goods) have gradually escalated to a level which may be inconsistent with what is acceptable in a modern commercial, residential, entertainment and visitor-oriented city of national heritage significance.

2. Before beginning to re-formulate the policy, that Council undertakes a comprehensive investigation including the following.
   i. The environmental impact (congestion, air quality, noise and the transport of dangerous goods), taking into account both road and rail transport, of the present level of activity.
   ii. Whether the present level of activity is acceptable to the community.
   iii. The measures necessary, and their feasibility, to progressively increase the Port’s container handling capacity to up to 1,000,000 TEUs annually within the next 8 or 10 years or perhaps even sooner if the past year’s growth continues.

3. Assesses the environmental impact of such measures, including:
   i. Replacing the Fremantle Traffic Bridge to accommodate road and rail.
   ii. Doubling rail container traffic, frequency and stacking.
   iii. Extending transport operations (road and rail) into weekends and evenings.
   iv. Road works (e.g. intersections, bridges, tunnels)

4. Undertakes cost-benefit analyses of any proposed measures.

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28 Email, 2/01/2019
5. Assesses the impact on the city’s economy if container traffic ceased and compares this to the costs of continued expansion.
6. Investigates opportunities for alternative developments (residential, commercial, industrial) should the port be wound down.
7. Enters into serious consideration of how the Outer Harbour container port could be rapidly built in a way that keeps to the Council’s policy of capping the Inner Harbour as soon as possible.
8. Seeks a higher level of representation on the Westport study project and makes active representations for the above matters to be made central to future investigations.

AFTERWORD

The breaking news that Infrastructure Australia will give priority to funding replacement of the Fremantle Traffic Bridge 'within the next five years', whilst very welcome, serves to underline the necessity to undertake a comprehensive social and environmental impact study and cost-benefit analysis before considering such a major project.

Some questions: the role and fate of the Traffic Bridge; the new bridge’s location and approaches; whether it will be dual purpose vehicle/rail to facilitate more container traffic on rail, and the implications of that for Fremantle’s West End.

ACKNOWLEDGEMENTS

We are grateful to the following for assistance in preparing this paper.
Fremantle Ports for providing us with all annual reports’ files.
Fremantle Library History Centre for assistance with historical research.
Mayor Brad Pettitt and Councillor Wainwright, who responded thoughtfully to our earlier expressions of concern on this subject.
APPENDIX 1
TEUs PER YEAR, 1971 – 2018
Data from Fremantle Ports Annual Reports

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APPENDIX 2
Council resolution adopted 22 August 2018

SPT1808-3 FREMANTLE PORT – WESTPORT TASKFORCE – FUTURE OF INNER HARBOUR

15 August 2018 Director Strategic Planning and Projects

1. Extract from Westport’s “What You Have Told Us” document dated April 2018, showing work packages and methodology

AMENDED OFFICER’S RECOMMENDATION

Council:

1.a.

Adopts the following as a statement of its current position in respect of the future of Fremantle Port Inner Harbour:

Port related employment and activity associated with the inner harbour, including supporting services and maritime industries, are a critical component of the Fremantle region’s economy. To retain and if possible expand this economic activity into the future, the inner harbour should be retained in the long term as an operating port with the following characteristics:

I. shipping functions that include:
   i. container handling capacity at North Quay at a scale that can be supported by future land side transport infrastructure and logistics practices which have no greater impact on the local community and urban fabric than current port operations and associated road and rail transport arrangements.
   ii. unless there are changes to land side logistics which improve the efficiency and levels of freight on roads during business hours on weekdays, a level of container movements that reflects a viable economic outcome balanced against existing transport infrastructure capacity; likely to be in the range of 700,000 to 1,000,000 TEUs per annum
   iii. cruise ship visits
   iv. naval ship visits, excluding any vessels that are nuclear powered, or carry nuclear weapons and/or depleted uranium
   v. tall ship visits
   vi. pilot functions
   vii. Rottnest ferry services.
II. Efficient logistics practices to optimise use of the road and rail transport infrastructure network for freight movement in a manner that does not place any greater burden on the local community and urban fabric than current transport and logistics arrangements.

Victoria Quay should be progressively developed for community, tourism and commercial purposes integrated with non-freight maritime functions, especially enhanced cruise ship passenger facilities. To facilitate this outcome, the vehicle import trade and other freight shipments currently utilising berths on Victoria Quay are a priority for transfer to an alternative port location.

Reaffirms its support for a wind farm on North Quay.

Confirms continued officer participation in the process of forming the Westport Port and Environs Strategy and in doing so officers will advance Council’s position outlined in (1) above.

Requests the Chief Executive Officer to present to Council for consideration, when available, Westport’s public consultation material on hypotheses formation and evaluation.

COMMITTEE DECISION

The item be referred for further information / deferred for a decision to the Council meeting on Wednesday, 22 August 2018, to allow officers to provide further information.

Officer’s additional comment

Officers propose the following amended recommendation for council’s consideration. The recommendation seeks to address matters raised in debate on the item at the Strategic Planning and Transport Committee on 15 August, which led to the committee resolving to defer the item to the Ordinary Meeting of Council.

Mayor, Brad Pettitt moved the amended officer’s recommendation (shown above); seconded by Cr Dave Hume

AMENDMENT 1
Moved: Cr Andrew Sullivan Seconded: Cr Sam Wainwright

Amend part 1. a. I. ii. to add the words shown in green italics and remove the word ‘and’ shown in red strikethrough, as follows;

ii. unless there are changes to land side logistics which improve the efficiency of movements overall while restricting the current and levels of freight on roads during business hours on weekdays, a level of container movements that reflects a viable economic outcome balanced
against existing transport infrastructure capacity; likely to be in the range of 700,000 to 1,000,000 TEUs per annum.

Amendment carried: 12/0 Mayor, Brad Pettitt, Cr Ingrid Waltham, Cr Doug Thompson, Cr Jon Strachan, Cr Andrew Sullivan, Cr Rachel Pemberton, Cr Adin Lang, Cr Hannah Fitzhardinge, Cr Jenny Archibald, Cr Sam Wainwright, Cr Jeff McDonald, Cr Dave Hume

AMENDMENT 2
Moved: Cr Andrew Sullivan Seconded: Cr Sam Wainwright
Amend part 1. b. to add the words as shown in green italics, as follows;

b. Victoria Quay should be progressively developed for community, tourism and commercial purposes integrated with non-freight maritime functions, especially enhanced cruise ship passenger facilities. To facilitate this outcome, the vehicle import trade and other freight shipments currently utilising berths on Victoria Quay are a priority for transfer to an alternative port location. Consideration should be given to dealing with the movement of dangerous goods in a manner and location that ameliorates risk contours to help facilitate the redevelopment of Victoria Quay.

Amendment carried: 12/0 Mayor, Brad Pettitt, Cr Ingrid Waltham, Cr Doug Thompson, Cr Jon Strachan, Cr Andrew Sullivan, Cr Rachel Pemberton, Cr Adin Lang, Cr Hannah Fitzhardinge, Cr Jenny Archibald, Cr Sam Wainwright, Cr Jeff McDonald, Cr Dave Hume

AMENDMENT 3
Moved: Cr Andrew Sullivan Seconded: Cr Ingrid Waltham
Amend part 1. a. I. i. to add the words as shown in green italics, as follows;

i. container handling capacity at North Quay at a scale that can be supported by future land side transport infrastructure and logistics practices which have no greater impact and where possible reduces the impact on the local community and urban fabric from congestion, air quality, noise and the transport of dangerous goods, than current port operations and associated road and rail transport arrangements.

Amendment carried: 12/0 Mayor, Brad Pettitt, Cr Ingrid Waltham, Cr Doug Thompson, Cr Jon Strachan, Cr Andrew Sullivan, Cr Rachel Pemberton, Cr Adin Lang, Cr Hannah Fitzhardinge, Cr Jenny Archibald, Cr Sam Wainwright, Cr Jeff McDonald, Cr Dave Hume

AMENDMENT 4
Moved: Cr Andrew Sullivan Seconded: Cr Jenny Archibald
Amend part 1. a. II. to add the words as shown in green italics, as follows;
II. efficient logistics practices to optimise use of the road and rail transport infrastructure network for freight movement in a manner that does not place any greater burden and where possible reduces the impact on the local community and urban fabric from congestion, air quality, noise and the transport of dangerous goods, than current transport and logistics arrangements.

Amendment carried: 12/0 Mayor, Brad Pettitt, Cr Ingrid Waltham, Cr Doug Thompson, Cr Jon Strachan, Cr Andrew Sullivan, Cr Rachel Pemberton, Cr Adin Lang, Cr Hannah Fitzhardinge, Cr Jenny Archibald, Cr Sam Wainwright, Cr Jeff McDonald, Cr Dave Hume

Mayor, Brad Pettitt moved the amended officer’s recommendation, as amended, to read as follows;

COUNCIL DECISION ITEM SPT1808-8
Moved: Mayor, Brad Pettitt Seconded: Cr Dave Hume

Council:
1. Adopts the following as a statement of its current position in respect of the future of Fremantle Port Inner Harbour:

a. Port related employment and activity associated with the inner harbour, including supporting services and maritime industries, are a critical component of the Fremantle region’s economy. To retain and if possible expand this economic activity into the future, the inner harbour should be retained in the long term as an operating port with the following characteristics:

I. shipping functions that include:

i. container handling capacity at North Quay at a scale that can be supported by future land side transport infrastructure and logistics practices which have no greater impact and where possible reduces the impact on the local community and urban fabric from congestion, air quality, noise and the transport of dangerous goods, than current port operations and associated road and rail transport arrangements.

ii. unless there are changes to land side logistics which improve the efficiency of movements overall while restricting the current levels of freight on roads during business hours on weekdays, a level of container movements that reflects a viable economic outcome balanced against existing transport infrastructure capacity; likely to be in the range of 700,000 to 1,000,000 TEUs per annum.

iii. cruise ship visits

iv. naval ship visits, excluding any vessels that are nuclear powered, or carry nuclear weapons and/or depleted uranium

v. tall ship visits
vi. pilot functions
vii. Rottnest ferry services.

II. efficient logistics practices to optimise use of the road and rail transport infrastructure network for freight movement in a manner that does not place any greater burden and where possible reduces the impact on the local community and urban fabric from congestion, air quality, noise and the transport of dangerous goods, than current transport and logistics arrangements.

b. Victoria Quay should be progressively developed for community, tourism and commercial purposes integrated with non-freight maritime functions, especially enhanced cruise ship passenger facilities. To facilitate this outcome, the vehicle import trade and other freight shipments currently utilising berths on Victoria Quay are a priority for transfer to an alternative port location. Consideration be given to deal with the movement of dangerous goods in a manner and location that ameliorates risk contours to help facilitate the redevelopment of Victoria Quay.

2. Reaffirms its support for a wind farm on North Quay.
3. Confirms continued officer participation in the process of forming the Westport Port and Environs Strategy and in doing so officers will advance Council’s position outlined in (1) above.

4. Requests the Chief Executive Officer to present to Council for consideration, when available, Westport’s public consultation material on hypotheses formation and evaluation.

Carried: 12/0 Mayor, Brad Pettitt, Cr Ingrid Waltham, Cr Doug Thompson, Cr Jon Strachan, Cr Andrew Sullivan, Cr Rachel Pemberton, Cr Adin Lang, Cr Hannah Fitzhardinge, Cr Jenny Archibald, Cr Sam Wainwright, Cr Jeff McDonald, Cr Dave Hume