Interim progress report on the Upper North Island Supply Chain Strategy

A report from the Working Group undertaking the review of Upper North Island Supply Chain Strategy

The Government's interest is in the ports, freight services and coastal shipping needed to secure the wellbeing of all New Zealanders, and development of regions, now and into the future. This is the first of our reports. It outlines the approach we have set out to achieve the overall objective of an Upper North Island Supply Chain Strategy. It reports on the findings of our initial investigations, stakeholder engagement and the key themes that have emerged so far. These include port ownership, efficiency, social licence and community support, investment, optimal land use, and the wider context within which the strategy is being developed. It also sets out our plan to complete the review, explore scenarios and present a strategy. We plan to deliver another two reports, one in June 2019 that reports on the evaluation of different options, and one in September 2019 that sets out our recommendations.

Approach

Our interpretation of the Terms of Reference for the Upper North Island Supply Chain Strategy is to develop a plan for an efficient freight network for the upper North Island (ports, land and rail and road networks) that we believe will deliver the best long-term outcomes for New Zealand. We have placed particular emphasis on identifying the different types of cargo moved through the upper North Island ports (containers, logs, break-bulk, new and used cars) and considered how the supply chain could be structured to ensure the efficient flow of these different cargo types. We are also giving significant consideration to the existing landside network infrastructure (rail, roads, and inland freight terminals) and potential upgrades and new infrastructure. We are also considering the wider context of optimal land use.

Our approach in the first stage is fairly high level and pragmatic. We have challenged ourselves to envision how we would reconfigure the Upper North Island supply chain over the long-term if the current constraints did not exist, following the thinking of “if we owned it, what would we do?”. However, gaining an in-depth and practical understanding of the supply chain has also been a critical component of our approach.

We have defined the upper North Island broadly as the Northland, Auckland, Waikato and Bay of Plenty regions which includes the three ports at Northport, Auckland and Tauranga. Our approach has been to erase the boundaries of the individual regions and consider the best collective outcome for the combined regions.

In our focus on the bigger picture we have recognised the importance of first working out where to get to, before focusing on how to get there. At the completion of this study we intend to deliver an action plan detailing the steps required to transition to the future supply chain configuration we believe will deliver the best long-term outcomes for New Zealand.

We recognise there have been a number of freight and port studies which have been mentioned in our discussions with some stakeholders. We have reviewed the findings of
these studies and while we are taking on board these findings, we note a number of these studies reflect the views of the party that funded them. We are mindful of this and in preserving our independence.

Our plan

We are approaching the work in three stages. Each stage will involve preliminary reports and the final strategy recommendations will be communicated to Ministers, stakeholders, media and public.

Stage 1 – Review the history and current UNISC issues and opportunities

- **Fact finding and gaining a practical understanding of the supply chain**
- **Stakeholder engagement** - hear from all who wish to be heard; what do stakeholders need, what is working, what is not working, what opportunities exist
- **State of the UNISC**
- **Interrelationships** – land use, urban form, regional economic development

Stage 2 – Vision, Possibility, Resilience, Strategic Thinking

- **Barriers, future system design, network, land use** – advantages and benefits to changing from the status quo
- **International comparisons** and benchmarking against best in class supply chains e.g. Sydney and Brisbane.
- **Long-term view** – transition and context, history and future

Stage 3 – Practicalities, Costs and Benefits, Backcasting

- **Options development** – developing a strategic vision, articulating a case for change, exploring scenarios for development and the effects on freight efficiency, land use, resilience, capacity and wellbeing for all New Zealanders
- **Strategy and recommendations** – articulating our findings on the strategy and reasons for our recommendations.

This is the first of three reports that outlines where we are, the things we have to consider and the stakeholders we have engaged with. Our next report will lay out the options and details to improve the supply chain and our final report will provide our recommendations. Our rationale for proceeding in this way is to ensure that we have heard from all interested parties and had time to understand how they got there and what the influences were.

Progress to date

Process

We have met fortnightly during the discovery phase of our work.

We began our review with a briefing and tour of Northport. We have since visited Ports of Auckland and have plans to visit Port of Tauranga for those members of our committee not familiar with the port and it's operation. We are also gaining a practical understanding of the broader supply chain. We have visited an inland freight hub and ridden the North Auckland rail line. Our practical experience has been supported by analysis of available freight and
economic data, reading background materials and reports, international research from the OECD, a written set of questions for stakeholders, and meetings where stakeholders could present any information they deemed pertinent, ask questions and discuss ideas.

We are continuously seeking advice to broaden our understanding. To date we have commissioned advice from the Ministry of Transport on the legislation and regulatory framework that applies to ports, and Ministry of Primary Industries on the bio-security context and procedures of imported goods into New Zealand, particularly vehicles. Recent cases of bio-security hazards relating to the Brown Marmorated Stink Bug resulted in the turn around of some importing vessels. We have also been briefed on other programmes of work such as the North Auckland Line Business Case and Future of Rail, allowing us to consider how this review aligns with the broader context.

Our key areas of focus

In considering how to develop an efficient network for the upper North Island, we have identified key areas of focus that have guided our fact-finding and process to date:

- The landscape of the existing upper North Island freight system – the ports, inland hubs, transport networks (road, rail, coastal shipping), ownership and operating structures
- Previous investigations of potential locations for the development of a new port
- The upper North Island freight task and flows – past, present and future
- Shipping trends – past, present and future
- Land values and opportunity costs – is current land use optimal or are there better alternatives?
- The regulatory environment within which ports operate - port legislation and regulation
- The urban development context – social licence, social amenity and de-industrialisation of urban areas
- The regional growth context and economic profiles
- What we can learn from international experience and examples of best practice
- Company law and tax implications of loss transfers

The current freight system

The upper North Island ports are critical to the New Zealand freight task. Together they account for approximately half of New Zealand’s total export volume and two-thirds of its import volume (in tonnes). Port of Tauranga handles the highest volume of all New Zealand ports in tonnes. Our view is that Port of Tauranga capitalised on the public infrastructure provided to the Bay of Plenty region which subsequently has made the port a success. We will therefore be considering whether similar investment in Northland would provide similar results for the region and Northport.
Note: the graph includes the 5,425 tonnes imports and 271 tonnes of export of fuel oil products through Marsden Point Oil Refinery as a dotted line.

Northport

Northport is a deep-water port situated at Marsden Point. Northport occupies 49ha with 180ha of commercially zoned land for port use outside the Northport boundary\(^1\).

Northport exported approximately 3,250,000 revenue tonnes in the year ended June 2018. Northport’s exports are mostly logs (approximately 85% in the year ended June 2018). The remaining exports were made up of woodchip, laminated veneer lumber, sawn lumber, veneer, trilboard, kiwifruit and steel.

Northport’s import volumes are much lower than its export volumes, at 311,000 tonnes in the year ending June 2018. In this period, Northport’s imports were made up of palm kernel (46%), coal (24%), gypsum (17%), distillers dried grain (7%) and fertiliser (5%).

In the year to June 2018, Northport handled 7,975 Twenty-foot Equivalent Unit (TEU)\(^2\), just over 60% of which was cement ISO Pods moved coastally\(^3\).

Ports of Auckland

Ports of Auckland occupies 77ha on the Auckland waterfront. Its current location is generating concerns of social licence and prompting public debate about whether there are better alternative uses for its land.

Ports of Auckland is significant for imports due to the population that it serves – the Auckland region accounts for 35% of New Zealand’s population\(^4\) and 37% of New Zealand’s GDP\(^5\). In comparison, its export volumes are low at approximately 6% of New Zealand’s total exports in the year ended June 2018.

\(^1\) https://northport.co.nz/
\(^2\) A twenty-foot equivalent unit. A 20ft container is one TEU and a 40ft container is two TEU.
\(^3\) Northport presentation, 3 September 2018.
\(^4\) Statistics New Zealand, year at 30 June 2018.
Ports of Auckland handles containers and bulk and break-bulk volumes, including cars. Ports of Auckland is New Zealand's second largest container port, after Port of Tauranga. Together Port of Tauranga and Ports of Auckland handle 62 percent of New Zealand's total TEU. This includes the handling of both full and empty containers.

Ports of Auckland is New Zealand's largest container importer (approximately 35 percent of total import TEU). In the year to June 2018, Ports of Auckland handled over 850,000 TEU through its container terminal, almost 400,000 of which was import TEU.

Ports of Auckland is also New Zealand's largest importer of vehicles. In the year to June 2018, Ports of Auckland handled nearly 300,000 cars. This is an increase of 43% from 2014 where Ports of Auckland handled 207,591 cars. The average dwell time for cars in 2018 was 2.9 days.  

---

Port of Tauranga

Port of Tauranga handles both containers and bulk volumes, and is New Zealand’s largest container port.

Port of Tauranga is New Zealand’s most significant port by volume, accounting for 35% of New Zealand’s total export volume in the year ended June 2018. Approximately 55% of Port of Tauranga’s exports are of wood and paper products, the majority of which is logs. Dairy is another key export for Port of Tauranga, accounting for approximately 12% of its exports. In 2017, Port of Tauranga was the first New Zealand port to surpass handling one million TEU in a 12-month period and is New Zealand’s largest container exporter (approximately 40 percent of total export TEU).

Ports of Auckland and Port of Tauranga have an import-export imbalance. Ports of Auckland’s import volumes are about twice as large as its export volumes while Port of Tauranga’s import volumes are almost two-thirds of its export volumes. This imbalance results in the generation of empty containers. Around 40 percent of Ports of Auckland’s export TEU and Port of Tauranga’s import TEU are empty.

---

Future freight projections

The available projections of exports and imports by region of port are set out below. Overall, imports are expected to increase across all upper North Island regions while exports are projected to increase, before declining in the case of Northport and Port of Tauranga, largely due to the projected decline in log exports. Projections for individual ports were based on the current settings at the time of modelling and are therefore uncertain.

Given the uncertainty, we question some of the available projections. Excluding logs, New Zealand’s exports are mostly agricultural and horticultural and regionally produced. Our view is that Waikato’s dairy production is relatively mature and will therefore grow much more slowly than it has in the past. We think that the Bay of Plenty’s horticultural production faces similar constraints. We therefore anticipate the real growth in these sectors will come from Northland where there is available land and some signs of investment in these sectors.

Note: A decline in export tonnages in some ports from 2022/23 or 2032/33 is largely due to a projected decline in log exports. This is because as forests planted in the 1990s are harvested but not immediately replaced.
Financial performance of ports

Table 1 below shows a summary comparison of financial performance for each upper North Island port and Table 2 shows the financial performance from their port operations (e.g. excluding returns from investments and property investment).

This summary analysis shows that Port of Tauranga (POT) has an overall better financial performance compared to Ports of Auckland (POAL), with a higher operating margin, lower debt ratio, higher return on capital employed and return on equity from core port operations.

While Ports of Auckland reports a lower tax rate of 10.2%, investigations show this is artificially lowered through its access to the tax losses of a fellow owned council subsidiary, which has allowed Ports of Auckland to appear more profitable than it otherwise would. The impact of this accounting treatment will need to be reviewed as this option is not available to other port owners and may be a perverse incentive.

Port of Tauranga, as well as Marsden Maritime Holdings Ltd. (MMH) have higher returns on capital (ROCE) from their core port operations than their overall business while the opposite is true for POA. Financial information for Marsden Maritime Holdings Ltd. is presented in these tables due to insufficient information being available for Northport.

There are issues in the way in which ports present their financial information and underlying valuation inputs. This was highlighted by the Auditor General in a letter to all New Zealand port companies in June 2018. More work is required to understand these issues and correctly adjust for them to ensure that implicit subsidies such as land value are clearly stated.
Land value of ports

The Ports of Auckland reports that the 77ha, on which it sits, has a book value of approximately $735m ($955/sqm), the land with a value of $343m ($533/sqm), the pavement with a value of $75m ($117/sqm) and the wharves with a value of $316m ($2518/sqm)\(^8\) as shown below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Land Value ($m)</th>
<th>Capital Value ($m)</th>
<th>Area (ha)</th>
<th>Land Value ($/sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Operations, of which…</td>
<td>734.961</td>
<td>734.961</td>
<td>77.0000</td>
<td>964.50</td>
</tr>
<tr>
<td>Land</td>
<td>343.349</td>
<td>343.349</td>
<td>64.4442</td>
<td>532.78</td>
</tr>
<tr>
<td>Pavement</td>
<td>75.469</td>
<td>75.469</td>
<td>64.4442</td>
<td>117.11</td>
</tr>
<tr>
<td>Wharves</td>
<td>316.143</td>
<td>316.143</td>
<td>12.5558</td>
<td>2,517.90</td>
</tr>
</tbody>
</table>

Ports of Auckland reported land value of $533/sqm is lower than that of comparable industrial land in the Auckland Central Business District. In recent times, neighbouring land sales have been between $2500/sqm and $7500/sqm giving total land values between $2bn and $6bn, based on best alternative use. This represents an approximate return of between 0.8% and 2.5% to shareholders. Considering the dividend of around $50 million paid to Auckland Council each year\(^6\), although more work is required to confirm this, this calculation does suggest a potentially hidden subsidy.

\(^8\) Analysis based on FY18 Financial Statements
This excludes the massive social, cultural, environmental and economic value that would be created by transforming this property into a globally iconic waterfront.

Land values of ports in major cities are a worldwide issue and it has been noted by Audit NZ as an issue for New Zealand ports. Audit NZ noted that “port companies do not value their property, plant and equipment consistently” and urged port companies to review how they value their assets in the future.\(^{10}\)

We consider accurately valuing land particularly important as artificially low land values may overstate the performance of ports and it could be argued they aren’t operating on a fully commercial basis. To ensure our study is based on consistent and accurate valuations of land we have commissioned further analysis of land values of the three ports. This will allow us to consider whether the current land use is optimal and untangle whether ports are operating in a commercially viable way.

**Stakeholder engagement**

We have engaged with stakeholders and key interest groups including representatives from the three upper North Island ports, port company shareholders, the road freight industry, the shipping industry, commercial interests, cargo interests other interested parties.

A full list of stakeholders who have provided feedback to date is provided below.

<table>
<thead>
<tr>
<th>Ports</th>
<th>Northport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ports of Auckland</td>
</tr>
<tr>
<td></td>
<td>Port of Tauranga</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Company Shareholders</th>
<th>Auckland Council</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northland Regional Council</td>
</tr>
<tr>
<td></td>
<td>Marsden Maritime Holdings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Road Freight Industry</th>
<th>Road Freight Transport Forum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Toll</td>
</tr>
<tr>
<td></td>
<td>Transport Investments Ltd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shipping Industry</th>
<th>NZ Shipping Federation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pacifica/Swire Shipping</td>
</tr>
<tr>
<td></td>
<td>Armacup Shipping</td>
</tr>
<tr>
<td></td>
<td>International Container Lines Committee</td>
</tr>
<tr>
<td></td>
<td>NZ Shippers Council</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial Interests</th>
<th>Auckland Chambers of Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Auckland Waterfront Consortium</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cargo interests</th>
<th>Custom Brokers and Freight Forwarders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fonterra / Kotahi</td>
</tr>
<tr>
<td></td>
<td>CODA</td>
</tr>
<tr>
<td></td>
<td>PTS Group</td>
</tr>
<tr>
<td></td>
<td>Motor Industry Association</td>
</tr>
<tr>
<td></td>
<td>Imported Motor Vehicle Industry Association</td>
</tr>
<tr>
<td></td>
<td>Dolphin Shipping New Zealand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interested parties</th>
<th>Auckland Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tainui Group Holdings Ltd</td>
</tr>
<tr>
<td></td>
<td>Richard Pearson, CK Hutchison Group</td>
</tr>
<tr>
<td></td>
<td>Waikato Regional Council</td>
</tr>
<tr>
<td></td>
<td>Taileys/Open Country Dairy/AFFCO</td>
</tr>
</tbody>
</table>

Stakeholders have provided feedback on the strengths and weaknesses of the upper North Island's current three-port freight system, as well as the main opportunities and threats over the next 10, 25 and 50 years. We have also received feedback on the ownership structures of the three ports and the extent to which they are influencing freight outcomes for NZ Inc.

We have asked stakeholders to consider how they might structure the upper North Island freight system if the system could be redesigned from scratch, including thoughts on how many ports they would have, where they would be located, what their roles would be, who would own them and who would operate them.

**Common themes we heard**

We heard a number a common views throughout our engagement:

- Unanimous support for a fully functioning rail system to the ports / ship side.
- General agreement that the current ports are competing but not cooperating.
- That the mixed shareholdings of the ports, particularly of Northport, are restricting its natural role.
- Freight forwarding community is largely agnostic to where imports arrive as long as they are supported with good transport infrastructure.
- Widely accepted that the Bay of Plenty and the Waikato have benefitted from rail infrastructure provided by Government at no capital cost to end users.
- The lack of rail infrastructure and port connectivity has been a brake on Northland's economic development.
- The currently successful Port of Tauranga existed several years before its successful level of container traffic followed.
- There is universal interest in the cost of moving freight and that cost is a big driver of behaviour.
- Land values key drivers of change and land use patterns globally – the issues facing Auckland are shared by many cities around the world.
- Councils all considered the dividend provided by ports very important.
- There are too many ports trying to be the same thing.
- Concerns over duplication of port and inland port assets.
- Congestion is the number one problem for freight operators.
- There are problems in getting rail through Auckland.

A number of differing points of consideration have also emerged during our initial investigations and discussions with stakeholders to date which we have grouped into five broad themes:

- The **wider context** within which the Upper North Island Supply Chain Strategy is being conducted, with a particular emphasis on **optimal land use**.
- **Efficiencies** of the network, encompassing rail, road, ports, shipping and hubs.
- The **ownership** of network infrastructure and assets.
- The importance of **social licence** and working within the communities that the network is there to serve.
- The **infrastructure investment** – which projects should receive investment, who should be investing, what the trade-offs are, how to future-proof infrastructure, and make smart decisions for the long term.
The wider context that a strategy is being developed within — broader considerations, trends, and a need to think about the national system and optimal land use

Stakeholders had a range of views on the scope of what should be considered by the study, from ensuring that Waikato was included, to needing to think about the North Island or even New Zealand as a whole when making decisions about ports, roads and rail in the upper North Island. Their overall view was that the impacts were far-reaching and so should be grounded in robust evidence.

Many submissions were clear about the supply chain strategy being more than looking at infrastructure. Stakeholders are clear that the behaviours and types of freight handlers and logistics organisations have equally important effects on the effectiveness and outcomes of the supply chain. We heard that cost is a big driver of behaviour and there was a universal interest in the cost of moving freight. Importers of motor vehicles indicated a change in port landing from Ports of Auckland could add approximately $100 per vehicle in cost, but accepted this could be less than the current land subsidy associated with the storage of cars on Auckland’s waterfront for approximately three days.

Submissions talked about the need to develop resilience in the system — so that allowances are made for adverse events (such as a natural disaster affecting part of the chain, or climate change). Others considered that the strategy could positively contribute to other national priorities, such as lowering emissions or meeting international standards.

Some submitters noted the importance of considering land use and whether current land use of the ports is optimal, which has raised the question of “could the land Ports of Auckland occupies could be better utilised?” Some submitters also noted that Auckland Council could potentially derive more income from the land than it currently does by using it differently.

Ports of Auckland currently occupies 77ha of prime real estate close to the hub of Auckland city and there may be better uses for the land which could enhance the attractiveness of the city and ultimately make Auckland a better place to live. We have heard some proposals on how to make alternative use of this land from stakeholders — this includes things such as a new stadium, hotel, offices, open spaces and residential developments.

Auckland City Council, Ports of Auckland and Auckland Chamber of Commerce all told us that Auckland Port would relocate at some point in the future but there was significant debate over when and where to. A report commissioned by Auckland City had suggested options including the West Coast and the Firth of Thames, but the analysis did not give detailed consideration to Northport as a viable alternative. The marine insurance industry suggested to us that a potential West Coast option was not viable. The Firth of Thames may well have a place in a future port configuration but also has a number of barriers to overcome, not least the level of infrastructural investment and Resource Consent required.

Our option selection and analysis will consider optimal land use and whether the relocation of some or all of Ports of Auckland’s freight task would be beneficial to Auckland’s long-term social and economic success.
How best to optimise the upper North Island network (rail, road, shipping, ports) – the different options that could do this, and different views on how best to optimise

While stakeholders recognised there are strengths in the current supply chain, nearly all stakeholders have thought about where inefficiencies exist. These include:

- The number of ports, and how the ports are competing with each other on specialised operations and markets (domestic, international, cargo type) was criticised by many stakeholders.
- There was a mix of opinions about the optimal number of ports/hubs, and the differentiation that each should be undertaking.
- The imbalance of freight flows and waste in the system, evident through the movement of empty containers. The imbalance of imports-exports at Ports of Auckland and Port of Tauranga results in around 40 percent of Ports of Auckland’s export TEU and Port of Tauranga’s import TEU being empty.
- The counter-intuitive freight movements such as Northland production being exported out of Tauranga. We have learnt that approximately 30,000 TEU originating in Northland travels out of the region by road each year.
- A number of stakeholders objected to the current upper North Island ports being described as a “system.” There was general agreement that the three ports compete but do not cooperate, and some concern that they are working against each other to the detriment of NZ Inc.
- We have heard from some stakeholders that “there are too many ports trying to be the same thing,” with concern being expressed over the duplication of assets and over capitalisation, particularly at ports and inland hubs.
- The current levels of infrastructure congestion and delays in processing cargo were criticised by several stakeholders.
- We heard from stakeholders about the constraints of transporting cargo to and from the ports, particularly Ports of Auckland. Representatives from the road freight industry and those representing cargo interests cited issues with port congestion and slowness as the number one issue facing their industry, with trucks needing to wait in long queues at the port.
- That the status quo provides little incentives for logistics and freight companies to work together to achieve efficiencies, and instead the competing behaviours lead to system inefficiencies and non-strategic investments.
- Many stakeholder were agnostic about port locations as long as the supply chain enabled freight to flow efficiently and cost-effectively. We heard that the best solution would be one that provides consistency, efficiency and predictability.

We consider an efficient supply chain key to unlocking the success of the upper North Island. Our option selection will therefore place particular emphasis on how to optimise the upper North Island network, taking into account the wide-ranging views we have heard.

Ownership of assets

Many stakeholders considered that ownership is a critical part of the supply chain, as ownership has significant impacts and influences on investment decisions and supply chain operations behaviour.
The ownership structure of the three upper North Island ports is complex. The ownership is characterised by significant local government and cross-port ownership, as summarised below:

<table>
<thead>
<tr>
<th>Ports of Auckland</th>
<th>Northport</th>
<th>Port of Tauranga</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ports of Auckland is wholly owned by Auckland Council</td>
<td>• Marsden Maritime Holdings Ltd owns the Northport facility (land and fixed assets) and is the statutory port company for the port. This is a publicly listed company, and the two largest shareholders are the Northland Regional Council (53.8 percent) and Port of Auckland Ltd (19.9 percent).</td>
<td>• Port of Tauranga is owned 54 percent by the Bay of Plenty Regional Council and 46 percent by the public.</td>
</tr>
<tr>
<td>• Ports of Auckland has a 19.9 percent stake in Marsden Maritime Holdings (owners of Northport).</td>
<td>• Northport is operated by Northport Limited, which is 50 percent owned by Port of Tauranga and 50 percent by Marsden Maritime Holdings Ltd.</td>
<td>• The Port of Tauranga group includes 50 percent ownership of Northport Ltd.</td>
</tr>
</tbody>
</table>

Auckland City ownership allows transfer of losses from other council companies to reduce Ports of Auckland tax, this option is not available to other ports.

The Working Group continues to investigate the contractual relationship between Marsden Maritime Holdings and Northport Limited.

Many stakeholders had a view on the current ownership structure of the three ports:

- The interwoven nature of port ownership has restricted ports from developing in New Zealand’s best interests.
- Current decisions tend to be made in isolation which some believe has led to inefficiencies and duplication of resources.
- Councils in particular noted the value that the ports bring in terms of dividend income and thereby providing a subsidy to ratepayers. However, we have learnt that the benefits of this are not currently spread evenly amongst all regions of the upper North Island.
- Submitters generally viewed Port of Tauranga as having the best ownership model.
- The current ownership arrangements of Northport were criticised by some but defended by others.
- Those who criticised the ownership structure of Northport argued that it has hampered its natural development, and despite all ports having a shareholding, there is a lack of cooperation. One example provided was Northport’s struggle to get agreement from its shareholders to procure and install a mobile container crane. This appears to have taken place at the same time that Ports of Auckland were recapitalising its own cranes, the potential re-use of Ports of Auckland’s old cranes at Northport was not explored.
- While there was no general consensus about the best ownership structure, many stakeholders supported a change in port ownership for the benefit of New Zealand.
• Some stakeholders suggested potential alternative ownership structures for our consideration such as single ownership, suggesting this would solve the lack of cooperation and overcapitalisation.
• Councils were somewhat open to a change in port ownership as long as they preserved their income and value of the port to their community.
• Some stakeholders also discussed the constraints on ownership imposed by legislation.

We will be considering the current ownership structure of ports and whether a change may be needed to ensure interests are aligned to deliver the best outcome for New Zealand.

Social licence and community support

Some submissions noted the need for community support, and how some areas were losing their social licence to operate as urban areas grow and congestion and encroachment on industrial areas grows too. Community support – including mana whenua support – for investment decisions was seen as a key part of the decision-making process.

We consider a broad definition of social licence to encompass the following aspects:
• Environment – issues such as noise, light, dust, and contamination created from port activity.
• Congestion – the flow of trucks to and from ports and the impact this port traffic has on community traffic.
• Social amenity conflicts.
• Financial considerations – is having a port in its current location the best return on investment?
• Consideration of competing sectors such as cruise and ferries.
• Longer term considerations – Ports of Auckland have considered their long-term possible relocation with options as discussed above.

A number of points relating to community support and social licence emerged in our discussions with stakeholders:
• Ports of Auckland has faced significant community resistance to its development plans, and there is a growing awareness of the opportunity cost to Auckland of an industrialised waterfront.
• While community unrest and opposition with Ports of Auckland is well documented, we have heard that signs of this are emerging in Tauranga.
• Port of Tauranga acknowledged its social licence is something it cannot take for granted. Port of Tauranga indicated that the port is receiving some criticism of its contribution to peak traffic, despite much of its recent growth being on rail rather than road. Port of Tauranga makes significant use of rail, with almost half (49 percent) of its TEU entering the port by rail and 42 percent of its TEU exiting the port by rail\textsuperscript{11}. Port of Tauranga also noted that while it has not received any complaints around noise, they have had queries on other areas of port activity such as dust.

\textsuperscript{11} Freight Information Gathering System (figures for 2017).
While Ports of Auckland may be able to accommodate some of the future freight growth through automation, port activity should not impede on the ethos of the city. The current location of Ports of Auckland does not fit with the surrounding landscape of the city and its activity is seen by some as an eye sore.

Some stakeholders noted that while the current port location is ideal in terms of being in close proximity to its market, it is not ideal from a Central Business District design perspective.

Northport does not face the same land constraints as Ports of Auckland and Port of Tauranga. Northport is located within industrial zoned land, away from residential areas with additional space for expansion.

A port’s influence extends well beyond its physical footprint, there is a growing conflict between port operations and urban residential areas, which is a worldwide issue. The movement of freight to and from the port imposes significant land-side externalities through congestion, emissions, and damage to roads. These impacts can be greatly exacerbated if the port’s proximity is close to the central business district. There are also significant sea-side impacts in terms of harbour congestion and, environmental impacts caused by dredging and harbour reclamation.

The question of port relocation should therefore not solely hinge on the ability of a port to accommodate future growth, which is how the problem has been framed previously. In formulating our options, we will therefore give consideration to community support and externalities, and whether the location of the port hinders our cities from achieving their full social, economic and environmental potential.

Supply chain infrastructure investment

There was general agreement among stakeholders that the network is constrained and there has been a lack of investment in infrastructure.

Stakeholders noted the importance of landside infrastructure in connecting cargo from ports to where it needs to go. We heard that investment in infrastructure has not kept pace with the growth of the supply chain, as a consequence the network has insufficient capacity to handle increasing volumes of freight.

One consistent and overarching theme in the stakeholder comments was the need for a national, connected and well-functioning rail system. There was unanimous support, including from the road transport and coastal shipping groups, for a fully functional rail freight system.

Stakeholders provided examples of current issues with the rail network including:
- The lack of rail connection to Northport (Northport and Nelson are the only ports in New Zealand without a rail connection)
- The North Auckland line between Auckland and Whangarei has a number of issues. For example, while other lines have had improvements to their tunnels over time, many of the tunnels on the North Auckland line remain too low to accommodate, industry standard, high-cubed containers.
The Northland rail network has had no capital investment for the last few decades and has been in a managed decline.

Lack of an East to West rail corridor in Auckland

Some cited issues with the Auckland rail network arising from the fact that freight needs to compete with passenger services.

The risk to Port of Tauranga arising from its reliance on the rail line through the Kaimai tunnel.

Our discussion with stakeholders lead us to believe that the Bay of Plenty and the Waikato have benefited from rail infrastructure and investment provided by Government at no capital cost to the end user, which Port of Tauranga was able to capitalise on. Conversely, it is generally agreed that the lack of rail infrastructure and connectivity to Northport has hindered Northland’s economic development. Some stakeholders noted the similarities of Northland to Bay of Plenty in terms of productive capacity, and thought appropriate investment in Northland could produce results similar to those observed in the Bay of Plenty.

Investment in Northland was supported by other regional councils, and there was general support for upgrades of its rail and road networks regardless of a supply chain strategy.

We fundamentally believe that there is no point making further investment in Northport without investment in, and development of, the train line to Auckland.

We have been briefed on the North Auckland Line Business Case and Future of Rail project which points to a considerable upgrading of the rail infrastructure. Our option development will take into consideration these current programmes of work when considering the infrastructure upgrades, new infrastructure, and operational changes that may need to occur. There are a large number of infrastructure options that may have a part or full place to play in changes to the Upper North Island supply chain which will be considered, these include but are not limited to:

- A rail spur connecting the North Auckland Line to Northport (government is soil testing for this).
- A second route between Auckland to Tauranga.
- A freight corridor through west-Auckland.
- A west-Auckland Inland port.
- An expanded or moved Southdown inland port.
- A new mega-port in the Firth of Thames.
- A vehicle servicing and import facility at Northport.
- Inland hubs for logs and exports within Northland with refurbished local rail lines.
- A NZ dry dock.
- An upgrade to the North Auckland Line (and spur to Northport) to double track and double stack, or to high service single track with passing loops.
- The electrification of rail services and alternative truck and rail machinery.
- A four lane highway to between Auckland and Whangarei (currently 18kms to Warkworth underway but at 12 years and $1bn for 18kms this will take 60 years and $7bn).
- An upgraded cruise-liner terminal at Ports of Auckland.
For example, in evaluating one of our options that involves moving some of Ports of Auckland’s freight task to Northport, we will consider potential infrastructure that may be required to support this such as if (as expected):

- a spur to Northport, of which we understand the current Government investigating
- upgrades to the existing North Auckland Line
- potential short-term operational changes such as moving freight through Auckland on the commuter network at night
- potential long-term new infrastructure requirements such as a new rail line out west of Auckland to avoid congestion in the Auckland public transport rail network and connect through to the current inland freight terminals, and the potential establishment of new inland freight terminals

Assuming that the Northland Rail upgrade proceeds then the system could look like the map illustrated below:

Some stakeholders also noted concerns with other infrastructure, for example:

- constrained capacity at some ports and at the inland freight terminals in Auckland
- the congested road network, particularly around Ports of Auckland e.g. Grafton Gully
- roading conditions in Northland, not helped by the pressure of trucks. In the year ended June 2018, there were 144,827 single truck movements to Northport.

In making recommendations about infrastructure investment, we will give consideration to all modes of transport including the role coastal shipping may play. We will also give consideration to social license, externalities, and optimal land use. We believe that the success of Port of Tauranga and smaller investments such as the relocation of the port from
Whangarei to Northport were as a result of strategic vision rather than detailed business cases which have difficulty anticipating and valuing the multi-generational benefits created by catalytic infrastructure. Much of the infrastructure in New Zealand today was also justified on the basis of vision rather than business case. There is a need to be deliberately strategic in developing and evaluating investment options for the supply chain of the Upper North Island; we intend to produce an evidence based strategic vision of an efficient and effective supply chain and port system that takes into account what is best for NZ Inc.

Our discussions with stakeholders also raised some broader questions surrounding investment for our consideration:

- **When should infrastructure investment occur?** Some stakeholders indicated a sense of urgency and the need to act quickly. Shipping industry representatives noted they foresee the next two years as being constrained while current upgrades are completed and then expected some recovery before the network becomes considerably constrained in 10-15 years. Given how long it takes to implement major infrastructure this means that serious planning needs to start immediately.

- **What aspects of the network should be prioritised for investment?** Rail and multi-user assets (ports, inland hubs) were seen as desirable for more investment, in part because of the flow-on effects for other supply chain companies, jobs and flow-on investment.

- **How do we make investments that support a whole-of-network approach?** How do we avoid investments that duplicate or are isolated in their connection to the network? Stakeholders largely agreed that a balance needs to be struck between achieving good competitive conditions and ensuring the network as a whole is working together. While most stakeholders were open to a range of infrastructure investment options for the supply chain, most agreed that achieving a system that is efficient and consistent is what counts.

- **Who should invest in the network?** What funding models are best for the upper North Island? Most submitters looked at infrastructure investment from a government-funded basis, however others raised different models – such as public-private-partnership models.

- **What are the trade-offs for infrastructure investment options** e.g. will optimising rail through Auckland come at a cost of fewer lanes on the highways and roads from the port?

- **Are we making investment decisions based on an appropriate timeframe?** Is 50 or 100 years appropriate? Stakeholders were supportive of both short-term and long-term investment horizons being considered as part of the strategy.

- **Are we making sure investment decisions are future proofed and able to adapt to changes in trends and technologies?**
Appendix 1

Wider Context

- How the UNISCS works within a national context – can the strategy be considered as part of a national (or North Island) system? How do Waikato assets (the inland port) complement the UNISCS?
- How does the UNISCS work with previous studies and proposals?
- Ensuring the UNISCS supports an efficient freight and logistics solution within the context of optimal land use
- Can the UNISCS support broader objectives, such as lowering New Zealand’s emissions or international requirements (e.g. MARPOL requirements)
- Ensuring a resilient network – one able to absorb shocks, future-proofed (including for climate change) and able to adapt to coming technologies and trends

Efficiency

- How do we optimise the whole network? Road congestion, rail usage (working with the city rail link / solving the Swanson to Wiri issue), shipping logistics.
- How can the ports complement and collaborate with each other to optimise the network, rather than competing? How do we reduce duplication of investment, and overcapitalisation in individual ports? Can ports specialise and differentiate?
- Can we make better use of hubs? For cars, freight. Can we move some activities to other places?
- How can freight handlers and logistics companies help the network work well?

Ownership

- What is the best ownership arrangement for the ports? Should the ownership arrangements of assets beyond the ports be considered – are they working well? Could they work better?
- How do ownership arrangements affect the efficiency of the system? How do they affect outcomes?
- How do ownership arrangements affect investment decisions? Is the status quo optimal, or are changes needed?

Community support

- Need to think about urban encroachment trends on supply chain areas (such as Auckland and Tauranga port areas)
- Changes to assets (ports, railways, hubs, roads) need community support and endorsement
- How parties have influence over other actors – such as the power of international companies at the expense of smaller operators
- The importance of mana whenua in investment and decision making

Investment

- When should investment occur?
- What aspects of the network should be prioritised for investment?
- How do we make investments that support a whole-of-network approach? How do we avoid investments that duplicate or are isolated in their connection to the network?
- Who should invest in the network? What funding models are best for the UNISCS?
- What are the trade-offs for investment options (e.g. will optimising rail through Auckland come at a cost of less lanes on roads from the port?)
- Are we making investment decisions based on an appropriate timeframe? Is 50 or 100 years appropriate?
- Are we making sure investment decisions are future proofed and able to adapt to changes in trends and technologies?
Next steps

In this report we have presented a summary of the things we have learnt through our discovery phase (Stage 1) and the things we need to consider as we complete our remaining stages. While there were a number of concerns raised with the current system, there were a number of positive aspects. We consider the issues not insurmountable, and look forward to setting out our joint view and recommendations to improve the supply chain and provide better outcomes for New Zealand.

Our next steps are to complete stages 2 and 3:

Stage 2 - Vision, Possibility, Resilience and Strategic Thinking
- **Barriers, future system design, network, land use** – advantages and benefits to changing from the status quo
- **International comparisons** and benchmarking against best in class supply chains e.g. Sydney and Brisbane
- **Long-term view** – transition and context, history and future

Stage 3 - Practicalities, Costs and Benefits, Backcasting
- **Options development and evaluation** – developing a strategic vision, articulating a case for change, exploring scenarios for development and the effects on freight efficiency, land use, resilience, capacity and wellbeing for all New Zealanders
- **Strategy and recommendations** - articulating our findings on the strategy and reasons for our recommendations.

We intend to produce a full range of options for further discussion, taking into account what we have learnt to date, and taking note of the recommendations of the Port Future Study\(^\text{12}\). Our option development and evaluation will place particular emphasis on the key themes that have emerged to date. Following the evaluation of these different options, we will present our recommendations, including key actions to be taken over the next five years and beyond. Throughout this process we will continue to engage with stakeholders to ensure we engage with those we have not yet spoken to and those who are likely to be most significantly impacted.

**Deliverables and timetable**

We intend to deliver a further preliminary report to Cabinet in June 2019. This report will provide a fuller update on our progress and evaluation of different options.

We intend to deliver a **final report to Cabinet in September 2019**. This report will include our final conclusions and recommended actions to be taken over the next five years and beyond.

---

\(^{12}\) [http://www.portfuturestudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf](http://www.portfuturestudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf)
Karl,

This might be useful read before Thursday’s session with the Working Group.

Thanks,
Dan

Dan Jenkins
Manager, Analytics & Modelling
Ministry of Transport - Te Manatu Waka

www.transport.govt.nz

Enabling New Zealanders to flourish
Interim progress report on the Upper North Island Supply Chain Strategy

A report from the Working Group undertaking the review of Upper North Island Supply Chain Strategy

The Government's interest is in the ports, freight services and coastal shipping needed to secure the wellbeing of all New Zealanders, and development of regions now and into the future. This is the first of our reports. It outlines the approach we have set out to achieve the overall objective of an Upper North Island Supply Chain Strategy. It reports on the findings of our initial investigations and stakeholder engagement and the key themes that have emerged so far. These include port ownership, efficiency, social licence and community support, investment, optimal land use, and the wider context within which the strategy is being developed. It also sets out our plan to complete the review, explore scenarios and present a strategy. We plan to deliver another two reports, one in June 2019 that reports on the evaluation of different options and one in September 2019 that sets out our recommendations.

Approach

Our interpretation of the Terms of Reference for the Upper North Island Supply Chain Strategy is to develop a plan for an efficient freight network for the upper North Island (ports, land and rail and road networks) that we believe will deliver the best outcomes for New Zealand. We have placed particular emphasis on identifying the different types of cargo moved through the upper North Island ports (containers, logs, break-bulk, new and used cars) and considering how the supply chain could be structured to ensure the efficient flow of these different cargo types. We also are giving significant consideration to the existing landside network infrastructure (rail, roads, and inland freight terminals) and potential upgrades and new infrastructure. We are also considering the wider context of optimal land use.

Our approach in the first stage is fairly high level and pragmatic. We have challenged ourselves to envision how we would reconfigure the Upper North Island supply chain over the long-term if the current constraints did not exist, following the thinking of "if we owned it, what would we do?". However, gaining an in-depth and practical understanding of the supply chain has also been a critical component of our approach.

We have defined the upper North Island broadly as the Northland, Auckland, Waikato and Bay of Plenty regions which includes the three ports at Northport, Auckland and Tauranga. However, our approach has been to erase the boundaries of the individual regions and consider the best collective outcome for the combined regions.

In our focus on the bigger picture we have recognised the importance of first working out where to get to, before focusing on how to get there. At the completion of this study we intend to deliver an action plan detailing the steps required to transition to the future supply chain configuration that we believe will deliver the best long-term outcomes for New Zealand.

We recognise there have been a number of freight and port studies which have been mentioned in our discussions with some stakeholders. We have reviewed the findings of
these studies and while we are taking on board these findings, we note a number of these studies reflect the views of the party that funded them. We are mindful of this and preserving our independence.

Our plan

We are approaching the work in three stages. Each stage will involve preliminary reports and the final strategy recommendations will be communicated to Ministers, stakeholders, media and public.

Stage 1 – Review the history and current UNISC issues and opportunities
  - Fact finding and gaining a practical understanding of the supply chain
  - Stakeholder engagement - hear from all who wish to be heard; what do stakeholders need, what is working, what is not working, what opportunities exist
  - State of the UNISC
  - Interrelationships – land use, urban form, regional economic development

Stage 2 – Vision, Possibility, Resilience, Strategic Thinking
  - Barriers, future system design, network, land use – advantages and benefits to changing from the status quo
  - International comparisons and benchmarking against best in class supply chains e.g. Sydney and Brisbane.
  - Long-term view – transition and context, history and future

Stage 3 – Practicalities, Costs and Benefits, Backcasting
  - Options development – developing a strategic vision, articulating a case for change, exploring scenarios for development and the effects on freight efficiency, land use, resilience, capacity and wellbeing for all New Zealanders
  - Strategy and recommendations – articulating our findings on the strategy and reasons for our recommendations.

This is the first of three reports that outlines where we are, the things we have to consider and the stakeholders we have engaged with. Our next report will lay out the options and details to improve the supply chain and our final report will provide our recommendations. Our rationale for proceeding in this way is to ensure that we have heard from all interested parties and had time to understand how they got there and what the influences were.

Progress to date

Process

We have met fortnightly during the discovery phase of our work.

We began our review with a briefing and tour of Northport. We have since visited Ports of Auckland and have plans to visit Port of Tauranga for those members of our committee not familiar with the port. We are also gaining a practical understanding of the broader supply chain. We have visited an inland freight hub and ridden the North Auckland rail line. Our practical experience has been supported by analysis of available freight and economic data,
reading background materials and reports, international research from the OECD, a written set of questions for stakeholders, and meetings where stakeholders could present any information they deemed pertinent, ask questions and discuss ideas.

We are continuously seeking advice to broaden our understanding. To date we have commissioned advice from the Ministry of Transport on the legislation and regulatory framework that applies to ports, and Ministry of Primary Industries on the bio-security context and procedures of imported goods into New Zealand, particularly vehicles. We have also been briefed on other programmes of work such as the North Auckland Line Business Case and Future of Rail, allowing us to consider how this review aligns with the broader context.

Our key areas of focus

In considering how to develop an efficient network for the upper North Island, we have identified key areas of focus that have guided our fact-finding and process to date:

- The landscape of the existing upper North Island freight system – the ports, inland hubs, transport networks (road, rail, coastal shipping), ownership and operating structures
- Previous investigations of potential locations for the development of a new port
- The upper North Island freight task and flows – past, present and future
- Shipping trends – past, present and future
- Land values and opportunity costs – is current land use optimal or are there better alternatives?
- The regulatory environment within which ports operate - port legislation and regulation
- The urban development context – social licence, social amenity and de-industrialisation of urban areas
- The regional growth context and economic profiles
- What we can learn from international experience and examples of best practice
- Company law and tax impacts of loss transfers

The current freight system

The upper North Island ports are critical to the New Zealand freight task. Together they account for approximately half of New Zealand’s total export volume and two-thirds of its import volume (in tonnes). Port of Tauranga handles the highest volume of all New Zealand port in tonnes. Our view is that Port of Tauranga’s success was created on the back of infrastructure provided to the Bay of Plenty region which Port of Tauranga was able to capitalise on. We will therefore be considering whether similar investment in Northland would provide similar results for the region and Northport.
Export and import tonnage
Year ended June 2018

Note: This graph excludes imports through the Marsden Point Oil Refinery, which imported and exported xx tons of fuel

Northport

Northport is a deep-water port situated at Marsden Point. Northport occupies 49ha with 180ha of commercially land for port use outside the Northport boundary\(^1\).

Northport exported approximately 3,250,000 revenue tonnes in the year ended June 2018. Northport’s exports are mostly logs (approximately 85% in the year ended June 2018). The remaining exports were made up of woodchip, laminated veneer lumbar, sawn lumber, veneer, triboard, kiwifruit and steel.

Northport’s import volumes are much lower than its export volumes, at 311,000 tonnes in the year ending June 2018. In this period, Northport’s imports were made up of palm kernel (46%), coal (24%), gypsum (17%), distillers dried grain (7%) and fertiliser (5%).

In the year to June 2018, Northport handled 7,975 TEU, just over 60% of which was cement ISO Pods moved coastally\(^2\).

Ports of Auckland

Ports of Auckland occupies 77ha on the Auckland waterfront. Its current location is generating concerns of social licence and prompting public debate about whether there are better alternative uses for its land.

---

\(^1\) [https://northport.co.nz/](https://northport.co.nz/)
\(^2\) Northport presentation, 3 September 2018.
Ports of Auckland is significant for imports due to the population that it serves – the Auckland region accounts for 35% of New Zealand’s population\(^3\) and 37% of New Zealand’s GDP\(^4\). In comparison, its export volumes are low at approximately 6% of New Zealand’s total exports in the year ended June 2018.

Ports of Auckland handles containers and bulk and break-bulk volumes, including cars. Ports of Auckland is New Zealand’s second largest container port, after Port of Tauranga. Together Port of Tauranga and Ports of Auckland handle 62 percent of New Zealand’s total Twenty-foot Equivalent Unit (TEU)\(^5\). This includes the handling of both full and empty containers.

Ports of Auckland is New Zealand’s largest container importer (approximately 35 percent of total import TEU). In the year to June 2018, Ports of Auckland handled over 850,000 TEU through its container terminal, almost 400,000 of which was import TEU.

![Ports of Auckland - 12 month rolling TEU](image)

Ports of Auckland is also New Zealand’s largest importer of vehicles. In the year to June 2018, Ports of Auckland handled nearly 300,000 cars. This is an increase of 43% from 2014 where Ports of Auckland handled 207,591 cars. The average dwell time for cars in 2018 was 2.9 days.\(^6\)

---

\(^3\) Statistics New Zealand, year at 30 June 2018.
\(^5\) A twenty-foot equivalent unit. A 20ft container is one TEU and a 40ft container is two TEU.
Port of Tauranga

Port of Tauranga handles both containers and bulk volumes, and is New Zealand’s largest container port.

Port of Tauranga is New Zealand’s most significant port by volume, accounting for 35% of New Zealand’s total export volume in the year ended June 2018. Approximately 55% of Port of Tauranga’s exports are of wood and paper products, the majority of which is logs. Dairy is another key export for Port of Tauranga, accounting for approximately 12% of its exports.\(^7\)

In 2017, Port of Tauranga was the first New Zealand port to surpass handling one million TEU in a 12-month period and is New Zealand’s largest container exporter (approximately 40 percent of total export TEU).

---

\(^7\) Freight Information Gathering System, year ended June 2018.
Ports of Auckland and Port of Tauranga have an import-export imbalance. Ports of Auckland's import volumes are about twice as large as its export volumes while Port of Tauranga's import volumes are almost two-thirds of its export volumes. This imbalance results in the generation of empty containers. Around 40 percent of Ports of Auckland's export TEU and Port of Tauranga's import TEU are empty.
Future freight projections

The available projections of exports and imports by region of port are set out below. Overall, imports are expected to increase across all upper North Island regions while exports are projected to increase, before declining in the case of Northport and Port of Tauranga, largely due to the projected decline in log exports. Projections for individual ports were based on the current settings at the time of modelling and are therefore uncertain.

Given the uncertainty, we question some of the available projections. Excluding logs, New Zealand’s exports are mostly agricultural and horticultural and regionally produced. Our view is that Waikato’s dairy production is mature and won’t increase much, likewise for Bay of Plenty’s horticultural production. We therefore anticipate the real growth in these sectors will come from Northland where there is the availability of land and signs of investment in these sectors.

![Projected exports by region of port (million tonnes)](image)

Note: A decline in export tonnages in some ports from 2022/23 or 2032/33 is largely due to a projected decline in log exports. This is because as forests planted in the 1990s are harvested but not immediately replaced.
Financial performance of ports

Table 1 below shows a summary comparison of financial performance for each upper North Island port and Table 2 shows the financial performance from their port operations (e.g. excluding returns from investments and property investment).

This summary analysis shows that Port of Tauranga (POT) has an overall better financial performance compared to Ports of Auckland (POAL), with a higher operating margin, lower debt ratio, higher return on capital employed and return on equity from core port operations.

While Ports of Auckland reports a lower tax rate of 10.2%, investigations show this is artificially lowered through its access to the tax losses of a fellow owned council subsidiary, which has allowed Ports of Auckland to appear more profitable than it otherwise would. The impacts of this will need to be reviewed as this option is not available to other port owners and may be a perverse incentive.

Port of Tauranga, as well as Marsden Maritime Holdings Ltd. have higher returns on capital (ROCE) from their core port operations than their overall business while the opposite is true for POA. Financial information for MMH is presented in these tables due to insufficient information being available for Northport.

There are issues with the way ports present their financial information and underlying valuation inputs. This issue was highlighted by the Auditor General in a letter to all New Zealand port companies in June 2018. More work is required to understand these issues and correctly adjust for them to ensure that implicit subsidies such as land value are clearly stated.
Table 1 - As Reported Financial Comparison

<table>
<thead>
<tr>
<th>Financial Analysis</th>
<th>2018 Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POA</td>
</tr>
<tr>
<td>EBITDA Margin</td>
<td>41.6%</td>
</tr>
<tr>
<td>Operating EBIT Margin</td>
<td>32.1%</td>
</tr>
<tr>
<td>Debt/Debt+Equity</td>
<td>33.6%</td>
</tr>
<tr>
<td>Interest Coverage times</td>
<td>6.1%</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>10.2%</td>
</tr>
<tr>
<td>ROCE (pre-tax) based on Book Value</td>
<td>7.5%</td>
</tr>
<tr>
<td>ROCE (post tax) based on Book Value</td>
<td>4.9%</td>
</tr>
<tr>
<td>EVA</td>
<td>-3.3%</td>
</tr>
<tr>
<td>ROE based on Book Value</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Table 2 - Port Operations Financial Comparison

<table>
<thead>
<tr>
<th>Financial Analysis</th>
<th>2018 Port Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POA</td>
</tr>
<tr>
<td>EBITDA Margin</td>
<td>40.0%</td>
</tr>
<tr>
<td>Operating EBIT Margin</td>
<td>30.2%</td>
</tr>
<tr>
<td>Debt/Debt+Equity</td>
<td>43.0%</td>
</tr>
<tr>
<td>Interest Coverage times</td>
<td>5.6%</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>26.2%</td>
</tr>
<tr>
<td>ROCE (pre-tax) based on Book Value</td>
<td>6.8%</td>
</tr>
<tr>
<td>ROCE (post tax) based on Book Value</td>
<td>4.9%</td>
</tr>
<tr>
<td>EVA</td>
<td>-3.3%</td>
</tr>
<tr>
<td>ROE based on Book Value</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

Land value of ports

Ports of Auckland reports the 77ha has a book value of approximately $735m ($955/sqm) as shown in the following table – the land with a value of $343m ($533/sqm), the pavement with a value of $75m ($117/sqm) and the wharves with a value of $316m ($2518/sqm)\(^8\).

<table>
<thead>
<tr>
<th>Type</th>
<th>Land Value (Sm)</th>
<th>Capital Value (Sm)</th>
<th>Area (ha)</th>
<th>Land Value ($/sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Operations, of which...</td>
<td>734,961</td>
<td>734,961</td>
<td>77,000</td>
<td>964.50</td>
</tr>
<tr>
<td>Land</td>
<td>343,349</td>
<td>343,349</td>
<td>64,4442</td>
<td>532.78</td>
</tr>
<tr>
<td>Pavement</td>
<td>75,469</td>
<td>75,469</td>
<td>64,4442</td>
<td>117.11</td>
</tr>
<tr>
<td>Wharves</td>
<td>316,143</td>
<td>316,143</td>
<td>12,5558</td>
<td>2,517.90</td>
</tr>
</tbody>
</table>

Ports of Auckland reported land value of $533/sqm is a lower rate than that of comparable industrial land in the Auckland CBD. Neighbouring land sales in recent times have been between $2500/m2 and $7500/m2 giving total land values between $2bn and $6bn based on best alternative use, which represents an approximate 0.8% - 2.5% return to its shareholder based on the dividend of around $50 million paid to Auckland Council each year\(^9\), although more work is required to confirm this, but it does suggest a hidden subsidy.

---

\(^8\) Analysis based on FY18 Financial Statements

---

Page 11 of 24