From a New Zealand-wide perspective, our economic advisors, EY, calculate the benefit:cost ratio of our recommendation to be 2:1.

**An Appetite for Change**

We have talked to all people who wanted to talk to us and we have not heard a valid reason against our recommendation. Any objections we have heard have been based on inaccurate information about the benefits of the status quo and the costs of change. We have addressed these matters through this report.

In summary, our recommendation has wide-reaching benefits that would enable the Auckland, Northland and New Zealand economies to grow and improve the wellbeing of their people:

- It moves 77 hectares of prime Auckland land to its highest and best use; delivers $6 billion in value to Auckland Council; reduces congestion throughout the city; makes Auckland a better city to live, work and visit according to its residents; promotes much-needed economic growth and jobs in Northland; and supports planned growth in the Bay of Plenty.
- It reduces carbon emissions and motorway congestion by creating a port configuration designed for rail rather than road.
- It promotes resilience in the supply chain by providing two distinct North and South entry points for international freight originating in and destined for Auckland.
- It reduces transport friction in the Auckland CBD which is currently a congested entry point for freight out of Ports of Auckland, and provides two alternative entry points into the city.
- It potentially further reduces friction with urban personal transport and regional deliveries able to be further reduced by a dedicated freight rail line through the Avondale corridor, connecting the two main freight hubs.
- It improves road safety by increasing rail freight capacity.
• It maintains levels of competition in the Upper North Island Supply Chain, and fosters innovation and cost effectiveness and efficiency of freight delivery.
• It maximises the use of the existing port system and the availability of surrounding land at Northport, noting potential alignment with other strategic projects such as a new dry-dock and rail staging for NZ refinery in west Auckland.
• It avoids the significant capital investment and development that would be required to build a new super port by making the best use of our existing ports.
• It avoids further dredging of the Waitemata Harbour, and the huge capital spend in Auckland needed to get freight off the port to the motorway that is already gridlocked at peak times.
• It does not increase freight costs and may reduce them, meaning it will have no inflationary effect on consumer goods, and perhaps a small deflationary impact.

Roadmap for Government: Leadership, Investment & Regulation

With at least 20 similar studies have been carried out over the last decade, the time for procrastination is behind us and the time for decisions and implementation is now. Given the enormous ongoing costs of the status quo, each year’s delay costs the people of Auckland tens of millions of dollars and prevents NorthPort and the people of Northland from benefitting from change.

Change will not occur without Government leadership over a sector that exists in its current shape only because of earlier 1980s’ legislation.

We identify three roles for Government: leadership, investment and – if necessary – regulation.

Leadership
The essential first step for central government is to adopt the recommendation as government policy and state its commitment to making it happen by 2034 at the latest. This will provide a vital signal to local government, port companies, supply-chain participants, the public service and the public that it accepts the case for change, for the process to begin immediately and for its implementation to be completed within 10-15 years. That is, the Government needs to be the first prime mover, setting out its commitment to the plan, its commitment to invest when required, and its commitment to regulate if that proves necessary. Without this commitment, it is clear to the Working Group that individual decision-makers will not be, or not remain, sufficiently committed for the change to happen on its own, despite the clear economic benefits to New Zealand and the local economies.

However, much more is needed from Government than this initial first step. It will be necessary for the Government to momentum for the process and the urgency that is required. We recommend that Government facilitate a process through the establishment of project implementation capacity to achieve delivery and resource it accordingly. It should be based in Auckland and staffed by people with extensive experience in difficult multi-billion dollar commercial negotiations and managing major engineering and infrastructure projects, and proven international track-records in meeting deadlines and budgets. The capacity would need to have sufficient mana and independence to facilitate the necessary bilateral or multilateral equity discussions that will be needed among the ports, shipping companies, shareholders, local and central government, KiwiRail, trucking companies, and major port users. It will need to be respected by all sides, and be listened to by ministers. A facilitated
process like this would help Government to identify early whether a trigger point had been reached for regulatory options to be pursued.

As part of the follow-on work to develop an appropriate transition plan and delivery structure we also recommend that work is done by Government to ensure that port operations and development, and any other potential Crown or commercial investments in Northport, for example the potential dry dock and/or move of the NZDF naval facility, are fully deconflicted.

As outlined below, our preference is that our recommendation be implemented through agreement among the affected commercial parties and central and local government agencies. However, as a backstop, we recommend that the Government set a one-year deadline, expiring on 1 December 2020, and make clear that if significant progress has not made by that date through commercial negotiations among the parties, Cabinet will introduce legislation to Parliament to amend the Port Companies Act 1988 and take all necessary steps to force the implementation of our recommendation. The Government should also make it clear that it would treat any defensive steps that are taken in the meantime, such as a split of Ports of Auckland into land-holding and operations companies, as reversible through legislation.

**Investment**

Underlining its leadership commitment to our recommendation, we further recommend that the Government immediately confirm it will make the necessary investments in rail and road infrastructure to make it happen. This includes most particularly a fully upgraded Northland rail line and spur to Marsden Point, as well as an upgraded Northland rail line and spur to Marsden Point, as well as an
acceleration of roading upgrades between Auckland and Marsden Point. This in turn will encourage and build confidence in investments by the port companies and the private sector to give effect to the plan.

The necessary investments and responsibilities are shown in the table.

<table>
<thead>
<tr>
<th>What needs to be built</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail upgrade north with link to Northport</td>
<td>Government / KiwiRail</td>
</tr>
<tr>
<td>Development of Northport</td>
<td>Port companies</td>
</tr>
<tr>
<td>Development of West Auckland inland hub</td>
<td>Private enterprise / NZ refining / KiwiRail</td>
</tr>
<tr>
<td>Road upgrades north (a continuation of current planned investment)</td>
<td>Government / NZTA</td>
</tr>
</tbody>
</table>

**Regulation**

The Working Group does not propose specific regulatory interventions to give effect to our recommendation. With a clear commitment by Government that the recommendation will be implemented and that it will make the necessary investments in rail and road, there is no reason that agreement cannot be reached among the affected commercial parties and central and local government agencies by the proposed 1 December 2020 deadline, avoiding the need for the backstop to take effect. While existing ownership arrangements are dysfunctional – as emphasised throughout this report – the Government can further help facilitate these discussions through the project implementation capacity.

The project implementation capacity would also have the function of recommending to the Government after 1 December 2020 whether
or not the backstop needed to be triggered. In making this recommendation, the project implementation capacity would need to consider a range of matters discussion below.

NorthPort [THIS IS A SUB-SUB HEADING]

The Working Group has identified that the current ownership structure constrains the long-term development of NorthPort in a way that isn’t in the shareholders’ or New Zealand’s best interests. The key issue is that the structure makes it too easy for one or other of the shareholders to use their voting interest as a blocking stake, depending on how their individual short-term interests view the particular matter. This will need to change for the recommendation to be successful and for NorthPort to grow.

We again emphasise we would prefer for this change to be made on a commercial basis between the parties involved, and we are confident that this is feasible should the Government pursue the leadership and investment steps outlined above. However, should commercial negotiations fail, regulatory options could include legislation requiring the relevant local authorities and council-controlled organisations to divest, purchase, consolidate or otherwise deal with their shareholdings in the relevant ports, for the purpose of establishing an ownership structure that supports growth at NorthPort. This option would have to be carefully communicated that it was a perfectly legitimate step for Parliament to take given the organisations are already creatures of statute, namely the Port Companies Act 1988, and therefore not precedent setting for any other commercial organisations.
Ports of Auckland and Auckland Council [AS NORTHPORT HEADING ABOVE]

It is to be hoped that Ports of Auckland’s governance and management will not act as a barrier to the transition. We believe they have important roles to play both in the development of NorthPort and in the success of the new Cruise Ship terminal at Auckland.

One key risk is a potential plan to separate the company into an OpCo and a LandCo, with the floated OpCo holding a long-term lease over the port land and then being privatised based on the value of holding this lease. The split proposal appears to be a defensive strategy to prevent the implementation of our recommendation, and we recommend the Government and Auckland Council oppose it and, if necessary, take steps to prevent it.

Another key challenge is the interests of the shareholder, Auckland Council, which appears to place reliance on dividends from the port. However, while last year it paid a $50 million dividend, it borrowed $75 million to do so. Next year, it will pay an $8.7 m dividend. As outlined in our Second Interim Report, rates and ground leases over the waterfront land would deliver the Council an estimated $100 million while transparent land valuation would dramatically improve Auckland Council’s balance sheet and ability to fund transport infrastructure.

An interrelated issue is the valuation methodology used for port land. As noted in our FIRST OR SECOND? Interim Report, the Auditor General has commented unfavourably on the variation in approaches to port land valuation. If the land the port currently uses...
was valued at its highest and best use (as is the case with rating of land in private ownership) it would be in our view unconscionable for a public authority to allow the port land to continue being used in its current manner.

The implementation of our recommendation would be difficult without Auckland Council’s cooperation. The question is whether that cooperation will be voluntary, or whether regulatory or other government intervention will unfortunately be required. There are regulatory options available to the Government to force the issue if necessary. At the more limited end of the spectrum of interventions, there could be a change the required valuation method to be used for the land the Port of Auckland currently uses to highest and best use. At the more significant end, Government could force changes to the ownership of Ports of Auckland’s assets, change its objectives, or require changes to its ownership. These are legitimate given Ports of Auckland is a creature of statute.

Port Cooperation and Other Regulatory Matters

We have not come across unsurmountable regulatory barriers to greater port cooperation or more efficient operation, provided the relevant decision-makers are committed to the outcome and working through any issues carefully and systematically. For example, inefficiency caused by excessive empty container movements should be able to be resolved through collaborative agreements that are acceptable within the Commerce Act 1986.

The Government must, however, keep an open mind to the need for regulatory reform of legislation relating to port companies. The Port Companies Act 1988 is an old piece of legislation enacted with the
expectation of relatively quick port divestment, so applies awkwardly to ports that remain in substantial local government ownership. The Productivity Commission identified some potential, relatively minor, regulatory barriers in the Port Companies act that we recommend that government reconsider. If legislation proves necessary to shift the incentives, we recommend that the Port Companies Act is revised to ensure it remains fit for purpose.

If legislation proves necessary to shift the incentives, we recommend that the Port Companies Act is revised to ensure it remains fit for purpose.
Upper North Island Supply Chain Working Group Members

**Wayne Brown (Chair)**
Mr Brown, an engineer, builds and owns roads, pipe networks, subdivisions and commercial buildings. He has extensive experience in fixing Auckland infrastructure messes. He was appointed to chair Vector back to reliability and profit following Auckland CBD power failure; chaired Auckland DHB to get the $500 million Auckland City Hospital build back on time and budget; and publicly predicted major electricity supply failure at Penrose before then being appointed to chair Transpower to bring a 400kva line up through Waikato and upgrade supply through Auckland. He was the founding chair of Kordia and drove the introduction of Freeview, and was appointed to chair Land Transport Safety Authority to sort out the digital driving license fiasco. He is also a two-term Mayor of Far North.

**Noel Coom**
Mr Coom spent 46 years in the shipping, rail, freight and logistics sector. He was previously a senior manager in a number of shipping companies in New Zealand, Los Angeles and Sydney, as well as the previous Group General Manager of TranzRail in New Zealand. Mr Coom is a current Director of Mondiale Freight Services Limited and previously served as a member of the Port Future Study Group commissioned by Auckland Council.

**Susan Krumdieck**
Professor Krumdieck is the Co-Leader of the Global Association for Transition Engineering and Director of the Advanced Energy and Material Systems Lab at the University of Canterbury. She has spent the last 17 years consulting for local and central government, and community groups on a number of transport, energy and future demand projects. She has strong academic background and in-depth understanding of engineering and transport modelling.

**Gregory Miller**
Mr Miller has three decades of experience in the logistics and global supply chain sector, having been the Managing Director of Toll New Zealand and the Global Development Manager of Mainfreight Group Limited. He is a Fellow of the Chartered Institute of Transport and Logistics and has a wealth of supply chain knowledge both domestically and internationally to this role. He is the current Chief Executive of KiwiRail.

**Shane Vuletich**
Mr Vuletich has spent the past 17 years consulting on a number of major events, business strategies and providing advice on provisions of tourism and infrastructure. He is currently the Managing Director of the Fresh Information Company specialising in strategy, measurement, evaluation and forecasting and has a strong analytics and economic background. Mr Vuletich was a member of the Port Future Study.
Vaughan Wilkinson
Mr Wilkinson has 37 years experience in the agriculture and fisheries sector, and has been involved in a range of roles spanning from teaching to research to senior management, most recently with Sanford Limited. He has also held a number of directorships, mostly in the marine and fisheries sector. Mr Wilkinson is also an exporter of fish.
### Table 1

<table>
<thead>
<tr>
<th>Mode</th>
<th>Million tonnes</th>
<th>Percentage of total</th>
<th>Billion tonne-km</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail transport</td>
<td>15.6</td>
<td>5%</td>
<td>3.5</td>
<td>12%</td>
</tr>
<tr>
<td>Coastal shipping</td>
<td>4.6</td>
<td>2%</td>
<td>4.0</td>
<td>13%</td>
</tr>
<tr>
<td>Road transport</td>
<td>258.5</td>
<td>93%</td>
<td>23.1</td>
<td>75%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>278.7</strong></td>
<td><strong>100%</strong></td>
<td><strong>30.6</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**GRAPH 1**

Upper North Island Port Ownership Structure

**MAP 1**
A resilient two port mode

Aligns with the decentralisation of growth, out of central Auckland, and towards the north, south and west.

62% of Aucklanders think moving Auckland’s cargo port would make the city better.*
Hi Dan,

It is all in there. About 4 times at least on every point. (there is massive repetition)

I’m not experienced in what effective reports to ministers are like. But I would recommend that it should be half as long and much more strategically organized.

Pull out the important things that must be delivered to the ministers by this report. Organize them as in a staged progression of persuasive arguments. State the argument, support with evidence. Wrap it up as the coherent set of infrastructure investments called ___________. I have used the POINT Supply Chain Strategy. We should name the resulting programme, then you don’t have to keep saying “it” “our recommendation” “our preferred option”... there will be a cognitive transition in the reader from “the working group’s ideas” to “the visionary plan for the country” if it has a name. (AKA Roads of National Significance)

Then give our recommendation for how to stage the POINT and who should take what actions when.

I’ve made comments in the draft about what could be pulled out as supporting commentary and put in an annex of supporting commentaries, data, technical modelling (aka the modelling report I did) multicriteria analysis considerations, and real estate speculation.

I have pulled up the question of additional costs of goods to consumers. This is a late and unfounded criticism. It now holds such a prominent place in the report that a person new to the report would be thinking – oh – this must be a big problem. Again, I suggest a brief mention in the report, and put the rationale for the conclusion in an annex.

And I did a tonal transformation on the summary at the front.

I have an editorial preference for not using

It
This
These
While

It makes it ambiguous this using of these words while it is these things we want it to mean.

I have attached my write up of the UNISC POINT Strategy which is constructed in the most succinct and straightforward way I can.

The “Results and Conclusion” section are too wishy-washy.

For context, I went over the modelling approach, assumptions and results with Dave Bond, KiwiRail Network Planning Engineer with substantial experience, and he gave everything the thumbs up, and said it was pretty impressive and can we use it for all the work ahead?

Susan
From: Dan Jenkins
Date: Monday, 4 November 2019 at 10:42 AM
To: "Wayne Brown", Vaughan Wilkinson, shane, Susan Krumdieck, Greg Miller
Cc: Matthew Hooton
Subject: Draft report for Working Group

All,

Please see attached draft from Matthew – please can you read for tone and factual correctness – any comments back to Matthew direct cc’ing me by tomorrow morning (Tuesday 5/11) at the latest.

I will read through and comment today.

Thanks,
Dan

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

www.transport.govt.nz

Enabling New Zealanders to flourish

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Transforming Auckland; Transforming Northland

Final Report of the Upper North Island Supply Chain Strategy Working Group

11 November 2019
Upper North Island Supply Chain Working Group Recommendation

1. Ports of Auckland’s freight operation will progressively be closed and shifted to Northport or Tauranga and the land it currently occupies be progressively rezoned and redeveloped for higher and better use urban waterfront mixed use.
2. Port of Tauranga’s existing expansion plans to proceed to accommodate growth.
3. NorthPort to be developed to take over and handle much or all of Auckland metropolitan area’s existing and projected future freight business.
4. Auckland’s cruise-ship terminal to be modernised and the Waitemata Harbour becomes a commuter, tourism and recreation harbour.
5. The new two-port configuration to be supported by supply chain served by a rejuvenated North Auckland rail line and spur to Northport, and a new inland freight hub in northwest Auckland, to complement and be connected to a rail freight corridor connects Metroport in the south.
6. Transition to begin immediately and be fully completed by no later than 2034, fifteen years hence. The first keystone project for the vision is the North Auckland Line with connection to a rail terminal at Northport.
Introduction

The Upper North Island Supply Chain Strategy Working Group was established under the Labour-New Zealand First Coalition Agreement, which included a commitment of "commissioning a feasibility study on the options for moving the Ports of Auckland, including giving Northport serious consideration".

The Working Group’s study has been carried out in the context of New Zealand’s international freight being projected to grow by 55% by 2042, from 237 million tonnes in 2013/14 to 366 million tonnes in 2042/43.1

At the same time, Ports of Auckland’s major freight operation is already significantly constrained, especially on the landside. It would require an estimated $1 billion in investment over the next 30 years, and the dredging of a further two million tons from Auckland’s Waitemata Harbour, to deal with this growth. Within 15 years, one container truck would be leaving the POA gates into Auckland’s already gridlocked traffic every 23 seconds, worsening to one every 16 seconds by 2049. Auckland’s freight port is struggling to maintain its social license, with regular public and political calls for it to move or its growth checked.

Beyond Auckland, other very large investments, of $1.2 billion at Port of Tauranga and $XX billion in the Upper North Island’s road and rail networks, would also be needed to maintain the status quo.

The status quo is therefore not free locks in future expenditure of at least $3.5 billion to maintain a declining supply chain efficiency. The

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Commented [SK2]: Further than what? State as 50% increase in dredging – what ever the percentage is

Commented [SK2]: How is this related to POA remaining? The argument is that there are factors and pressures on the BAU course which increase congestion and incur cost. BAU would mean the growth of freight would have to be taken up by Tauranga? Is that the source of the cost of the UNI road and rail? Is it road and rail to Tauranga? Make clear, since we are recommending similar spend to Northland as the answer.
question for taxpayers, ratepayers and shareholders of the three Upper North Island ports is not whether large sums need to be invested to manage freight growth but how and where that money is best spent, and what added benefits can be derived from the major infrastructure investments.

After nearly 18 months of work and two interim reports, our main recommended strategy is:

1. Ports of Auckland’s freight operation is no longer viable at its current site. The time for moving the industrial freight operations of Ports of Auckland from the CBD waterfront has come. It is in the interests of taxpayers and ratepayers that POA be progressively shifted to other NI ports, and the land it currently occupies be progressively rezoned for higher and better uses, redeveloped as urban waterfront;

2. Port of Tauranga’s existing expansion plans should proceed to accommodate growth;

3. NorthPort be developed as a modern, full service port which can service much or all of Auckland metropolitan area’s existing and projected future freight business;

4. Auckland’s cruise ship passenger terminal should be modernised and the Waitemata becomes a commuter, tourism and recreation harbour;

5. The new two-port configuration should be supported by a rejuvenated North Auckland rail line and spur to Northport, and a new inland freight hub in northwest Auckland to complement and be connected to Metroport in the south; and

Our solution envisages a future UNI supply chain with a port configuration designed for 21st century rail rather than an overloaded 20th century road network that emerged from the horse-and-coach era of the 19th century.
6. this transition should begin immediately and be fully completed by no later than 2034, fifteen years hence.

Our solution envisages vision for the future UNI supply chain is a port configuration designed for 21st century rail rather than an overloaded 20th century roading network that emerged from the horse-and-coach era of the 19th century. This bi-directional approach would significantly reduce congestion in Auckland and on the Northland roading network based on the principle that roads should predominately be for people and railways for freight. Our understanding and analysis of how global supply chains operate and consumer prices are set indicates the long-haul rail or ship freight is the lowest energy, emissions and cost segment of an efficient supply chain. Freight intermodal operations at Northport with modern rail to Auckland metropolitan inland ports would be have no consumer price effect in Auckland or New Zealand shops. Auckland and Auckland Council would be enriched by around $6 billion and create thousands of jobs would be created in Northland.

We are aware this is not the first report on the future of the Upper North Island Supply Chain and its implications for Ports of Auckland, the Port of Tauranga and NorthPort. Just this decade, at least 20 similar studies have been carried out. Our findings are largely consistent with most of those previous studies. The time for debate about the overall strategic concept we recommend is surely over and the time for Government-led action has arrived.

Our preference is that the details of the transition to the model we recommend should be negotiated by the current owners of the three ports. However, the ports are a product of the Port Companies
Act 1988, they have an uncommon and overlapping ownership structure and there may be behavioural and perhaps legal barriers to their cooperating. Moreover, changes to the configuration of the Upper North Island’s ports will both require and strongly influence decisions to be made about the future roading and rail infrastructure of the region.

It is our judgment, therefore, that such a transition to the new configuration will only be successful if national government leadership with clear deadlines are set by the Government for the completion of the commercial negotiations and its own infrastructure investments, and if a regulatory or legislative backstop is communicated or in fact established to legally require the proposed changes to have occurred by a certain date. We recommend the Government give the ports and their owners until 1 December 2020 to reach agreement for the good of the country, after which it should introduce legislation to Parliament to make our recommendation happen.

Our roadmap for the Government to implement the new configuration strategy is therefore based around the three themes of leadership, investment and regulation.

This report should be read in association with the two interim reports. It recaps the rationale for change, outlines our work and analysis, makes the case for our recommendations, outlines a roadmap and urges the Government to act as soon as possible. In our view, there are few if any other projects that would so positively transform Auckland and Northland as thriving communities for the
future. We commend it to the Prime Minister, the Deputy Prime Minister, the Cabinet and Parliament as a whole.

Background

The future of the three Upper North Island ports and the implications for the Upper North Island Supply Chain has been contentious for many years. At least 20 studies on the future of the Upper North Island Supply Chain and including its implications for Ports of Auckland, the Port of Tauranga and NorthPort have been carried out since 2010. The future of the freight port in Auckland’s CBD has been a regular topic of fierce political and public debate. There is broadly a consensus that the status quo is not an option yet no long-term strategic decisions have been taken by the ports themselves, their owners, local councils or central government over what should happen.

Perhaps in recognition of this, the Labour-New Zealand First Coalition Agreement included in October 2017 a commitment of
“commissioning a feasibility study on the options for moving the
Ports of Auckland, including giving Northport serious consideration”.  

Following the formation of the Coalition, the Cabinet considered
how best to give effect to this commitment and resolved to establish
the Upper North Island Supply Chain Strategy Working Group, which
was announced in February 2018 with its members appointed in
September that year. In announcing the Working Group, the
Government described itself as having a strong interest in the future
of New Zealand’s ports, freight services and coastal shipping, seeing
them as important to lifting and securing the economic well-being of
New Zealanders, promoting opportunities for regional development
and employment, developing an efficient and effective transport
and logistics infrastructure that is resilient and works in the national
interest, and being mindful of the need to ensure the best use of
scarce resources such as land, especially in metropolitan areas.
Profiles of the members of the Working Group are set out in the
inside back-cover. They are experts in logistics, shipping, transport
and supply-chain management; engineering, infrastructure
investment and management; agri-business, fisheries and tourism;
and corporate governance and strategy.

The Terms of Reference for the Working Group were to set out a
joint view of:

• the current and future drivers of freight and logistics
demand, including the impact of technological change;

There is broadly a consensus that the status quo is not
an option yet no long-term strategic decisions have been taken
by the ports themselves, their owners, local councils or central
government

The members of the Working Group are experts in logistics,
shipping, transport and supply-chain management; engineering,
infrastructure investment and management; agri-business,

https://d3n8a8pro7vhmx.cloudfront.net/nzfirst/pages/1911/attachments/original/1508875804/LabourandNewZealandFirstCoalitionAgreement2017.pdf?1508875804
• a potential future location or locations for Ports of Auckland, with serious consideration to be given to Northport, taking a long-term view given that ports are long-term assets;
• supporting priorities for other transport infrastructure, across road, rail and other modes and corridors such as coastal shipping;
• potential priorities for transport-related infrastructure investment from a national economic and regional development perspective;
• the optimal regulatory settings, and planning and investment frameworks across government to give effect to the review findings;
• future challenges on which government and industry will need to work together; and
• key actions to be taken over the next five years.

To meet these Terms of Reference, the Working Group gained an understanding of the current system with a number of site visits, supported by stakeholder engagement and initial analysis and advice in order to gain an understanding of the current system. A number of key themes emerged during this discovery phase that guided the remainder of the review.

The group’s second phase consisted of a strategic investigation and analysis of the Upper North Island Supply Chain. This work focused on determining the possible options available to different stakeholders and whole-system performance.

The group then undertook economic and multi-criteria evaluation of a range of potential future options for the configuration of the Upper North Island Supply Chain. Combining this with further fisheries and tourism; and corporate governance and strategy

Cities develop around ports which then tend to move to more distant locations as population grows and waterfront land-values rise. Sydney
stakeholder consultation, expert advice and research of public opinion, the group identified a preferred option for the design of a future Upper North Island Supply Chain.

A full list of the stakeholders engaged with, along with analysis of those interactions, is presented on page XX.

It became clear early on that port cities worldwide deal with the friction between urban living and freight needs in a range of ways, each unique to the urban, industrial and transport geography. There is no off-the-shelf solution. The broad theme, however, is that cities develop around ports with concentration of mixed industry and business. With time, industry and business move off the waterfront, and which then tend ports move to service the city from the “back door”. Pressure for this move increases to move to more distant locations as population grows and waterfront land-values rise.

Sydney is a classic example with its transition from Circular Quay to Darling Harbour to Botany Bay. If there is any one common indicator of success it is that successfully changing supply chain infrastructure to benefit an entire state or country requires vision, bold actions by leaders and cooperative management of the transition. In some areas, New Zealand has a record of achieving bold, visionary and cooperative change while in others individuals have obstructed progress it does not.

Our Second Interim Report identified a Preferred Option for the future of the Upper North Island Supply Chain and its three ports. Broadly, we recommended a two-port model supported by specifically configured rail rather than one being reliant on a road network that has evolved to meet other purposes. The criteria used to arrive at the Preferred Option are to ensure the best and most

is a classic example

Successfully changing supply chain infrastructure to benefit an entire state or country requires vision, bold actions by leaders and cooperative management of the transition.

Our Preferred Option creates enormous new economic opportunities for Northland, with its high Māori and impoverished population, while significantly enriching Auckland.
efficient freight service for the Upper North Island and wider New Zealand economies. Additional criteria were to improve the social and economic prospects of people throughout the region and to achieve goals of emissions reduction, resilience and safety. Our Preferred Option creates enormous new economic opportunities for Northland, with its high Māori and impoverished population, while significantly enriching Auckland and reconnecting the Auckland CBD with its harbour, perhaps the city's most highly valued asset. We are in no doubt our recommendation would pass any robust Benefit:Cost analysis. Our economic advisors, EY, estimate the Benefit:Cost ratio to be 2:1. Further analysis may identify additional benefit and costs and change this ratio up or down, but we have no doubt it will remain well above 1:1.

The Working Group was tasked not only with identifying this best long-term, practical, achievable, resilient, and fiscally and operationally efficient configuration for the Upper North Island Supply Chain. We were also tasked with identifying the best strategy to make it happen. In this, our Final Report, we detail our findings, expand and develop the requirements for our Preferred Option, recommend a potential implementation strategy, and identify the future challenges and actions on which central and local government and industry will need to work together. Our timeframe for implementation of the new configuration is 10-15 years. It would be a failure of the current generation of commercial and political leadership if by 2034 the vision we outline has not been realised.

The Upper North Island Supply Chain
An Overview of the Upper North Island Supply Chain was presented in the Economic Analysis accompanying our Second Interim Report. Key points included:

- The total freight task for New Zealand in 2017/18 was around 280 million tonnes
- On average, freight moves around 100 km nationally
- As the most densely populated and fastest growing part of New Zealand, the Upper North Island contributes around 53% of the New Zealand’s freight flow generated from both imports and exports
- _Road haulage remains by far the dominant mode of transport with rail accounting for just 12% of the total tonne-kilometres of freight moved, less even than coastal shipping._
- _All stakeholders including road freight operators signalled the lack of rail intermodal networks as the key contributor to supply chain inefficiency._

**INSERT TABLE 1: SEE AT END OF DOCUMENT**

The Auckland region generates the largest tonnage of freight moved. This is mainly imports but also includes local products moving to local markets, freight coming into the city to cater for local needs, the movement of goods manufactured in Auckland or being shipped from distribution centres currently located in suburban Auckland, and the movement of goods for export, mainly via the Port of Tauranga. As noted, very large investments in Ports of Auckland, Port of Tauranga and transport infrastructure will be needed for this status quo to remain viable, even ignoring the effects on Auckland congestion. Our economic advisors, EY, estimate these investments sum to $X.X billion by 2034 and a further $X.X billion through to...
2049. The status quo is not free. Nor is it close to being economically, socially or environmentally efficient. Congestion. These sums to $XX billion by 2034.

The Problem

Ports of Auckland Unviable Long Term

It is common ground across all stakeholders that Ports of Auckland is unviable at its current location long-term. Even if it is to remain for a further 30 years, its Chief Executive says it must expand or choke. Its expansion plans to maintain its viability for 30 years are both expensive for its owners, Auckland ratepayers, at a cost of an estimated $XX billion by 2034, and socially divisive. Moreover, expansion of its existing operations will significantly increase Auckland’s roading congestion, with one container truck projected to be leaving its gates into Auckland’s already gridlocked traffic every 23 seconds by 2034.

Even if Ports of Auckland is to remain for a further 30 years, its Chief Executive says it must expand or choke. This does not just undermine the efficiency of Auckland’s roading network for its residents and non-port-related businesses, but for users of the port itself. The prevailing complaint from Auckland supply chain users and trucking companies in particular is the already intolerable traffic congestion within the city. This drives inefficiency, with freight companies advising us that the number of daily deliveries their container trucks can make is falling to just two. This in turn is requiring them to invest in more container trucks, further clogging the already gridlocked motorway system.
This almost certainly cannot be mitigated in full. Mitigating it to even a limited extent will require additional investment by ratepayers and taxpayers into Auckland's roading network, yet this will not then be future-proofed for a post-port era. The spending will be an unnecessary sunk cost and some parts of the network will be stranded assets. Decisions need to be made and begin to be implemented now to avoid this outcome. This strategic infrastructure with long-term planning would in turn would free up taxpayer and ratepayers' funds for non-port-related investment in Auckland's roading and public transport networks desired by the people and businesses of Auckland. Additional revenue for Auckland's roading and public transport networks would come from the rates that the Council would gather were the port's land moved to its highest and best use, far beyond what it earns from the port's dividends, expected to be just $8.7 million in 2020 and $9.4 million in 2021. Our economic advisors, EY, estimate the built-out value of the port's land could be as much as $10 billion and could be rated accordingly. EY further advises that maintaining the port at its current location is therefore costing Auckland ratepayers between $5 billion and $6 billion in lost value.

The costs of doing nothing are therefore massive and ultimately unsustainable. It is increasingly obvious that continuing to fund the status quo will result in continued and worsening inequality in freight movement, as well as poor social and wellbeing outcomes for Aucklanders and Northlanders alike.

Almost certainly related to these issues, the CBD port is losing its social licence as the ongoing fierce political debate over its future demonstrates and as confirmed by our stakeholder engagement and Colmar Brunton study of public opinion. More than 60% of Aucklanders believe moving the port would make...
Aucklanders believe moving the port would make Auckland a better place to live, work and visit.

While unquantified, there is no question there are very significant financial, social, environmental and amenity costs for Aucklanders specifically and New Zealanders generally from delaying decisions about the future configuration of the Upper North Island ports. The best time to make decisions about the future is now.

**Current Port Ownership Creates Perverse Incentives and Prevents Change**

The current ownership structure of the Upper North Island ports is a legacy of government policy dating back to the Port Companies Act 1988 or earlier. This structure has not evolved through private investment or the operation of market forces but by political decisions made by central and also local government, which means that Cabinet and Parliament legitimately remain primary stakeholders.

Parliament’s intention in the 1980s was not that local government should continue to own the ports but that they and the land they occupy would be sold and the market would then rationalise the services they offer leading to the highest and best use of land and other resources.

When it became clear that local government wanted to maintain ownership, including to generate dividends, and as central government policy moved away from privatisation, it was then hoped that competition would nevertheless drive efficiencies and rationalisation. This has not happened because competition lies...
offshore with global shipping lines who take advantage of the existing supply chain and the lack of cooperation between port owners. For example, competition between Auckland and Tauranga is driven by the whim of shipping lines who decide prices, the location of exports and imports, and have the ability to leverage prices between ports in New Zealand.

Consequently, all freight industry stakeholders agree greater cooperation is needed and for port operators to learn how to influence shipping lines rather than the other way round.

However, the competitive model envisaged during the 1980s free-market era, along with legal constraints and the cultural and behavioural norms that have subsequently evolved, have prevented cooperation and created perverse incentives. Operationally, the port companies continue to accept poor commercial arrangements for suppliers moving freight across ports. They maintain inefficient duplication of port operating structures and use their land and other resources sub-optimally, most particularly at Auckland. We have also seen the emergence of strategic cross-ownerships, in particular of NorthPort, which seem largely motivated to block its rational development. NorthPort itself advised us that the current ownership structure constrains it from developing in a way which would be in its and New Zealand’s best interests.³

**INSERT GRAPH 1: SEE END OF DOCUMENT**

We should note at this point our assumption that central government and local government will want the Upper North Island ports to remain in majority public ownership, and that our

³ UNISCS WG Meeting 1, 3 September 2018
recommendation allows for that. It would also allow for additional private investment, such as that in the Port of Tauranga, which has helped fund its growth and success.

While taking majority or at least cornerstone public ownership as a given, we also note the Productivity Commission’s report on international freight services published in April 2011, which recommended that councils should set clear objectives for port ownership. Having decided these objectives, they should choose the level of ownership that offers them the required control rights. Capital raising could then fund growth.

The Productivity Commission went on to say that Councils should consider separation of land ownership from terminal operations. This would maintain the land in public ownership while allowing for increased private investment in operations. This separation has occurred at NorthPort but the 50:50 ownership of the operating company may not be conducive to effective growth. We oppose separation at Ports of Auckland and the suggestion of privatising some or all of a new operating company. This operating company could only have value and thus attract investment if it had a very long-term lease over the company holding the land, which would lock in the status quo with the economic and other costs to Aucklanders and other New Zealanders we outline above. It is difficult for us to see such a land and operations split at Auckland as other than a ruse to maintain the port at its current location, perhaps for another century.

**Current Structure Promotes Trade Deficit**

Auckland generates export revenues mainly from tourism, education and IT...
The current operating rational structure of the Upper North Island ports hampers New Zealand’s efforts to bridge its longstanding trade deficit. New Zealand is a small trading nation relying mostly on agriculture and forestry to supply exports to provide income from the country. These income-earning export products come from New Zealand’s regions. The country’s population and thus its consumers are largely concentrated in Auckland. The city generates export revenues mainly from tourism, education and IT but these services do not require a port.

Of the Upper North Island’s three ports, Tauranga and is close to producers of export commodities and is known best as a successful export port but is also increasingly taking a larger share of Auckland’s import business. Like Tauranga, NorthPort is also close to producers of export products and also handles the importation of all of New Zealand’s fuel, but its expansion is hampered by the absence of a rail connection. The largest of the three, Auckland, is primarily an import port. The effect of this structure is to make it easier to import into New Zealand than to export. At the margins, our recommendation will encourage greater export growth while also allowing for growth in both NorthPort and Tauranga’s import capability to replace that at Auckland. It will help shift the balance from imports to exports.

Additional Drivers of Change

The above makes clear that the status quo is not sustainable. Beyond that reality, we have identified additional drivers of change towards our recommended solution.
Changing Land Values

Economic and population growth drive up city land values and challenge existing land uses. When the first Queen Street wharf was constructed in the 1850s, Auckland had a population of fewer than 10,000 people. Its population has now passed 1.6 million and will be over 2 million within 15 years. Like most large first-world cities, its economy transport activities are no longer based on servicing manufacturing let alone agricultural commodities, but is overwhelmingly dominated by services, e.g., commuting and shopping. The Auckland CBD’s original commercial & industrial buildings have either been replaced with office towers or re-fitted for retailing for the services economy. It is most likely this economic shift from things to ideas and services will continue.

Most first-world harbourside cities have long since shifted their industrial port operations elsewhere to harvest higher-earning uses including residential property, office space, tourism attractions, open space and other public amenities such as museums, opera houses or sports facilities. Auckland is unusual in this respect.

Auckland has two harbours, the Waitemata and Manukau. Much of the Manukau is dry at low tide and the dangerous harbour entry means maritime insurers will not support large ships using it. The land around it is not high value and is used for manufacturing, storage, manufacturing, aircraft services and some tourism. In contrast, the Waitemata has until now provided reasonable access for 20th century shipping up to an including WHAT’S THE LARGEST SHIP IT CAN TAKE WITHOUT DREDGING? and could be made to accommodate larger ships such as the WHAT? with further harbour

When the first Queen Street wharf was constructed in the 1850s, Auckland had a population of fewer than 10,000 people. Its population will be over 2 million within 15 years.
The Waitemata is also used for commuting between West Auckland, the CBD, the North Shore, Whangaparaoa, Howick-Pakuranga and out to Waiheke Island and Beachlands in the east. It is also highly valued by Aucklanders for recreation including sailing, motorboating, fishing and tourism, and also visually. A rough attempt to place a dollar worth on its aesthetic value is that Auckland apartments with a harbour view carry a premium of around $500,000 compared with similar abodes without. Assuming 10% of Auckland's 500,000-plus dwellings have some sort of harbour view, this would suggest an aesthetic value of at least $25 billion. In fact, the Waitemata's true aesthetic value is likely to be significantly higher than $25 billion given the harbour is enjoyed by many more Aucklanders than those who can afford a harbour view.

In Auckland, the existing port operations remain highly industrial, and include the importation and storage of containers, vehicles, coal and cement. These uses produce very poor returns for its proximate owners, Auckland Council, with dividends dropping as low as $8.7 million for the privilege of occupying land with probable value of over $6 billion. It also deprives its ultimate owners, the people of Auckland, of access to and ready use of waterfront land in the heart of their CBD. Returns as low as $8.7 million suggest a valuation of the port company, including its land, of less than $200 million. Even were sustainable dividends to be $50 million, the port company would be valued at only $1 billion, far less than the true value of the land it occupies.
Another way of looking at this is that the current port usage supports a land value of between $350 and $500 per square metre, giving the 77-hectare area a value of between $270 million and $385 million. In contrast, nearby downtown land and land released from port use had values, according to their leasehold documents, of at least $5000 per square metre, at least ten times as much. Some commercial sites not as close to the harbour edge, such as Commercial Bay, are currently valued at $27,000 per square metre, more than fifty times as much as the port. These numbers give values of the port land ranging upwards from $3.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $6 billion as a fair estimate. Even if this value is necessarily uncertain, there is no doubt there are huge financial gains available to Auckland Council and its ratepayers from shifting the use of the land from its currently low-earning port operations to higher and better uses. It is difficult to think of any greater ongoing destruction of Auckland and Aucklanders’ wealth than continuing with port operations in its CBD. Arguments for the status quo cannot be economic but can only be political.

Conversely, there is a vast supply of flat industrial-zoned land adjacent to NorthPort at prices a fraction of those in Auckland and with no such higher alternative uses. While the development of NorthPort we recommend will undoubtedly cause some land-price inflation around Marsden Point and in nearby Whangarei—which may benefit existing homeowners in that city—the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.

Port of Tauranga also has industrial land to cater from its current operations and some growth. Although, as the Bay of Plenty

These numbers give values of the port land ranging upwards from $3.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $6 billion as a fair estimate.

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While the development of NorthPort will undoubtedly cause some land-price.
economy continues to grow strongly, it too is coming under pressure from rising prices paid for residential development land at Mt Maunganui. In the future, this will place limits on its ability to grow and perhaps lead to some questioning of the location of some of its existing operations. This analysis clearly argues for Tauranga to continue with its growth plans but for NorthPort to be the major site to cater for freight growth over the next 15 years and beyond.

**Urban Traffic Congestion**

We have already discussed Auckland’s congestion and the importance stakeholders place on at least not allowing it to get worse. Our judgment is that the traffic situation around NorthPort and also Tauranga is radically more manageable, especially given the rail-supported port configuration we recommend.

Broadly, imported goods currently enter the Auckland region in two different ways. They arrive either directly from the CBD port straight into several sets of traffic lights. Alternatively, they come by rail from Tauranga to Southdown inland port where trucks meet the clogged East-West road network also badly affected by container trucks from the CBD port. While there is no noticeable different in costs for either option, both contribute to Auckland’s urban traffic congestion.

Our recommendation provides for a new inland port in North-West Auckland. This would maintain two points of entry for imported goods, one from Tauranga via Southdown and the other via NorthPort and the new inland port. These would also be connected by rail. This would immediately ease traffic congestion throughout

Inflation around Marsden Point and in nearby Whangarei which may benefit existing homeowners in that city – the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.
Auckland and specifically in the CBD and across the Harbour Bridge. Traffic congestion in Tauranga is not as acute as in Auckland but is an issue that will limit the extent of growth of this port.

Conversely, there is little traffic at all near NorthPort, although our recommendation would increase traffic between Whangarei and NorthPort for perhaps 2000 workers commuting between the two. The State Highway from Marsden Point to Auckland is in a poor state especially through Dome Valley and will need further upgrading under any scenario including the status quo. Already the number of 50MAX trucks on the highway is increasing. The establishment of the North-West inland port would improve the efficiency of the trucks allowing them to avoid the city limits.

However, our configuration is designed primarily for rail under the principle that roads should predominately be for people and railways for freight. The upgrade of the Northland railway and its linking to NorthPort is essential to any change of the port structure but probably also under the status quo given growth in the Northland export economy. We note that the Government has acknowledged this with its recent announcement of initial funding for an upgrade. A fully upgraded Northland rail network will reduce trucks on roads in the same way that rail to Tauranga does now, noting that the Kaimai Tunnel is close to capacity.

**More Efficient Export Servicing**

Given their rail links, there is currently no material difference in direct financial costs to Auckland, Waikato or Bay of Plenty importers or exporters of using either Auckland or Tauranga, with prices broadly set by shipping lines in their logistical and financial

Currently, over 30,000 export containers need to be trucked from Northland to Auckland.
However, there are currently some inefficiencies from the existing port configuration for exporters in Northland. Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export. Volumes are likely to grow with Northland poised for strong growth, including of avocados being grown north of Kerikeri, more kiwifruit around Kerikeri and as underutilised land is turned to dairy. This will add to congestion on State Highway One.

The additional costs of trucking Northland exports to Auckland and then raling them to Tauranga are not transparent, being hidden by various subsidies and commercial deals, but we estimate it may currently be $2000 per container suggesting a current cost to Northland of perhaps $60 million annually. This could be largely mitigated even under the status quo model were the Northland rail line fully upgraded. There are likely to be some extra efficiencies associated with more Northland exports having access to NorthPort in competition with Tauranga but, as noted, we have noted no material differences in costs to importers or exporters when choosing between ports already connected by rail. The overwhelming cost driver for freight is changing modes rather than distance travelled, at least among ports within a few hundred kilometres of each other.

Environmental Issues

The transition from a road- to rail-based configuration for Upper North Island ports will reduce carbon emissions and other pollution. This is important both to contribute to New Zealand’s goal of Zero Carbon by no later than 2050 and to its international marketing efforts as exporter of low-carbon-emission foods and other...
products. A strong transition to rail would be expensive in Auckland given due to land values and we expect improving Auckland’s commuter services is in any case a higher priority for new rail lines for Auckland Council and its ratepayers than transporting containers in and out of its CBD. Indeed, making early decisions about the timeline for the port’s closure would allow for the transition of existing and future rail capacity from international freight to local commuters, as makes sense for a service-based economy.

We also note environmental pressures are likely to lead to a reduction of dairy production in the Waikato and an expansion in Northland.

In Auckland, we anticipate the environmental impact of dredging a further 2 million tons from the Waitemata seabed necessary to allow for modern ships such as TYPE OF SHIPS? to reach the CBD port would be unacceptable to many Aucklanders, not least its tangata whenua / tangata moana. No such dredging is required at NorthPort to allow access by TYPE OF SHIPS? to the CBD.

**Socio-Economic Factors**

Our recommendation will require Auckland port workers to relocate to Northland and also the Bay of Plenty. Relocation will occur over 10-15 years and should be managed constructively by the port companies and unions. There is no need for any redundancies.

In terms of the costs of relocation, in September 2019, median house-prices in Auckland, Northland and Bay of Plenty were $848,000, $477,000 and $605,000 respectively and rents will also.

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reflect these prices. This may make it easier for port workers and those in supporting industries to enter the property market.

It should be noted that our recommendation may have a material upward effect on house prices in Whangarei and a small downward effect on Auckland house prices, but we would regard this as to the benefit of both cities.

The transfer of jobs and any house-price inflation from Auckland to Northland should therefore be seen as a positive in terms of overall national wellbeing and the priority the Coalition places on regional development.

**Managing Future Growth**

Our analysis began not with an assumption of a static freight environment but one with ongoing growth. As noted, New Zealand’s international freight is projected to grow by 55% by 2042, from 237 million tonnes in 2012/13 to 366 million tonnes in 2042/43.

In our Second Interim Report, we estimated that Ports of Auckland would need to spend $500 million to upgrade its infrastructure by 2026 and a further $1 billion over the following 30 years. Given the broad consensus the CBD port is unviable at its current location in the medium-term, this investment risks being a sunk cost and that on which it is spent risk becoming stranded assets. It does not immediately seem to be the best use of $1.5 billion of ratepayers’ money.

This view is reinforced by our consultations with shipping lines and freight forwarders who see Auckland’s ability to meet their needs
becoming redundant in five to ten years not the 30 years described in Ports of Auckland’s future strategy documents. If Auckland is to remain in operation, issues such as dredging and a second harbour crossing are becoming increasingly urgent. Similarly, structural changes are needed at Tauranga to maintain and grow capacity. We estimate it will need to invest up to $1.2 billion over the next 30 years to cope with future growth.

Even if such investments are acceptable to ratepayers and shareholders, the major constraint — especially for Auckland — is land rather than capital. As noted, projected increases in volumes would see a more than doubling of truck trips to the port over the next 30 years, with unacceptable effects on Auckland’s overall roading network; on the roading, cycling and pedestrian networks in the central city; and on the trucking and logistics industry itself.

It is unlikely road connections and rail could be realistically improved to meet this demand which includes one truck trying to leave the port gates every 23 seconds, let alone manage friction with motorists, cyclists and pedestrians. Volumes of motorists, cyclists and pedestrians are also expected to significantly increase in the years ahead, worsening this friction. Ultimately, this situation is unsustainable and Auckland needs to choose whether Quay Street, western Tamaki Drive and the Grafton Gully are to be almost exclusively for container trucks or whether they are for motorists, cyclists and pedestrians. Under the status quo, the growing friction means they cannot be for both long term.

At NorthPort, the lack of effective road and rail linkages have prevented it growing more than it has. These road and rail issues are far more easily addressed for NorthPort than for Auckland, although, Auckland needs to choose whether Quay Street, western Tamaki Drive and the Grafton Gully are to be almost exclusively for container trucks or whether they are for motorists, cyclists and pedestrians. Under their needs becoming redundant in five to ten years

Even if such investments are acceptable to ratepayers and shareholders, the major constraint is land rather than capital.
in any case, we conclude that the lack of effective cooperation between the shareholders of the land owners and port operators is at least as and probably more important in preventing NorthPort from reaching its potential, the status quo, they cannot be for both.

Assessing Solutions for the Upper North Island Supply Chain

In pursuit of a solution to the problems summarised above, we, the UNISC Working Group, developed a number of key principles to guide our understanding of the future state of the Upper North Island Supply Chain. These are outlined below.

Cost efficiency in moving freight

- Moving freight is critical to the New Zealand economy and our future supply chain strategy must keep the costs of moving freight as low as possible. This is particularly important in considering any reconfiguration of the supply chain, as we do not have the ability to direct freight. Freight will flow in the most cost-efficient way possible as the market allows.
- It is important to ensure value for money and minimise costs to taxpayers and ratepayers right across the network, encompassing rail, road, ports, inland ports and freight hubs.

Maintaining the level of competition in the supply chain

Our future supply chain strategy must keep the costs of moving freight as low as possible. A strategy that promotes monopoly is not in the best
A strategy that promotes monopolism is not in the best interests of New Zealand. Healthy competition between supply chain providers is a good driver of innovation and cost effectiveness.

Ports also need to consider the impact of their actions beyond the harbour gate. For example, they should not develop container handling capacity greater than the capacity of the roads to handle it and thereby seek to optimise their efficiencies while socialising the costs of this to the population of Auckland outside their gate.

Reducing the ‘friction’ between freight and passenger movements

- It is important that the strategy must reduce friction between freight and people as much as possible. We therefore have considered a future supply chain that favours the provision of infrastructure that limits the degree to which freight activity impinges on public areas, and reduces the interaction between freight and passenger movements, particularly in congested areas.
- Limiting the extent to which freight activity impinges on public areas requires consideration of the social licence. Social licence and working within the communities that the network is there to serve requires important consideration, particularly in Auckland but also in Tauranga. We are therefore prioritising freight modes such as rail, and coastal shipping where possible, and place particular emphasis on optimal land use.

Maintaining or improving the resilience of the supply chain

- The strategy must ensure that the Upper North Island Supply Chain can continue moving freight in the event of a natural disaster.
disaster or other events that impact areas of the Upper North Island. A two-port system is therefore needed for the Upper North Island. Significant geographical separation is preferable.

- Given the significance of the Upper North Island supply chain to the rest of the country, a strategy that relies on one port is not in the best interests of New Zealand.

**Contributing to overall government objectives**

- Our strategy must contribute to the Government’s overall objectives. *We are therefore giving*
- **Priority is given** to a future supply chain with focus on road safety, reducing carbon emissions.
- **Priority is given to** promoting economic development of the regions, in particular Northland.
- **Priority is given to** reducing congestion in Auckland and promoting the economic and overall wellbeing of its residents.

**Supply Chain Development Options**

Based on these principles, we assessed a number of options and scenarios for the future UNI supply chain:

- **Maintaining the status-quo**, whereby the Upper North Island is serviced by Port of Tauranga and Ports of Auckland, and Northport to a lesser extent;
- **Managed closure of the Ports of Auckland’s freight operations**, with Port of Tauranga expanding capacity to be able to accept the freight of the Ports of Auckland in addition to its own, including appropriate levels of landside infrastructure and freight in the event of a natural disaster
capacity to grow as levels of freight increase. No major development at Northport.

- Managed closure of the Ports of Auckland’s freight operations, with both Northport and Port of Tauranga expanding capacity to accept the freight of the Ports of Auckland, in addition to their own, including appropriate levels of landside infrastructure and capacity to grow as levels of freight increase.

- Managed closure of the Ports of Auckland’s freight operations, development of a new “super” port in the Upper North Island that can handle the Ports of Auckland freight task, along with appropriate landside infrastructure and capacity to grow as levels of freight increase. (The location of this port was considered to be in the Firth of Thames and separately in Manakau Harbour).

We rejected a number of the single UNI port options potential futures based on our economic, multi-criteria analysis and stakeholder consultation. A number of the options considered required significant capital investment in order to meet our design principles. For example, the main reasons for not pursuing single UNI port options were:

- A new super port in the Firth of Thames would require significant capital outlay more than twice the other options to link the port up to the road and rail network and would potentially preclude on-going competition for port operation and freight transport. It would also have significant environmental issues and would not provide regional development.

- Using the Port of Tauranga as a single option would potentially stymie competition and require significant investment in a second tunnel through the Kaimai range in order to satisfy our

We discounted Manukau, given that entry conditions, in particular the shifting bar, have resulted in the maritime insurance industry stating that they would not support any on-going large container shipping through that harbour.
resilience principles. All freight going through Tauranga could improve efficiency, but would do nothing to promote regional development in Northland.

We also discounted shifting POA operations to a port option at Manukau, given that entry conditions, in particular the shifting bar, have resulted in the maritime insurance industry stating that they would not support any on-going large container shipping through that harbour.

Costs of Consumer Goods

We have given special attention to the question of any inflationary effects of closing the port at Auckland, in the heart of the main consumer market, and relying upon NorthPort to the north and Tauranga to the south for the importation of consumer goods. It has been claimed by defenders of the status quo that this could lead to price rises for particular imported consumer goods specifically in Auckland or, alternatively, that it could have a smaller general inflationary effect across the economy. We have found no evidence to support these suggestions. Indeed, the evidence points the other way, to there being no inflationary effect and perhaps a deflationary effect instead.

In terms of specific imported products—whether clothing and footwear; food and drink; or electronic goods and books—in many cases consumer prices are set globally or at least regionally. With the rise of online shopping, the trend towards global equilibrium prices is likely to accelerate. In any case, prices in competitive markets even within the domestic economy are not set on a cost-plus basis. Single consumer prices tend to prevail across the economy. Where

The evidence points to there being no inflationary effect, and perhaps a deflationary effect instead.

Commented [SK24]: This section is good background. I know that it is reactionary to some unfounded criticism that prices could be increased by having a well operated Northport and modern rail to Auckland Metro. But—MOST other people reading the report won’t think of this. So have we risked putting it as a concern in their minds? I suggest that this section be moved to an annex on Goods Shipping and Consumer Prices. The details will all be there, but we can just get on with our strategy.

It is implausible to suggest that the price of any imported good will differ one way or the other between Whangarei, Auckland, Tauranga or anywhere else in New Zealand
they do not, that is primarily the result of decisions taken at the retail level, for example with consumers perhaps being prepared to pay more for the same item purchased at a Newmarket boutique than in a discount store elsewhere in the city. It is implausible to suggest that the price of any imported good will differ one way or the other between Whangarei, Auckland, Tauranga or anywhere else in New Zealand as a result of the implementation of our recommendation. Were any such effect plausible, it would exist already with stakeholders advising us that around 30% of imports destined for Auckland already enter the country through Tauranga with no additional cost to the customer and ultimate consumer.

In terms of any general inflationary effect, our analysis also indicates there would be none. Industry representatives advised us that costs of moving containers from the CBD port to the inland port and through to distribution centres is often underestimated. Moreover, those costs are rising as a result of growing gridlock in the city which is worsening the efficiency of trucking within Auckland, creating a vicious cycle as discussed earlier.

We asked industry representatives to provide some indicative road transport costs for a 20-foot equivalent container (TEU) from each of the Upper North Island ports to the centre of Auckland, as well as to freight hubs. This analysis confirmed our anecdotal evidence that the costs of importing a container via Tauranga to the Auckland freight hub are broadly the same as directly through the CBD port at Auckland. The suggestion that the cost of moving a container from a factory in China to an Auckland freight hub differs depending on whether it enters New Zealand through Tauranga, Auckland or in the future NorthPort is entirely unsupported.
There are in fact no uniform fixed costs for container movements within New Zealand, as prices vary significantly due to volume, availability of back-loading and the regularity of service demand. Quotes for 44-foot containers from the far north to Auckland vary from $200 to $2000 per container. Moreover, the Ministry of Transport’s 2001 report on transport costs and charges found that the average road transport cost per net tonne-kilometre can be much higher for short distances or low tonne-kilometres, and reduces as either the amount moved or travel distance increases. This is not surprising because the share of fixed costs per will be higher for low volumes, either in distance or in net tonne-kilometres.

Moving the main port of entry for imports from Auckland to NorthPort theoretically has two cost-related impacts. First, it reduces the steaming time for vessels from the main shipping lines, with less steaming time meaning less fuel burned. Second, there is the cost of transportation from the port to final destination. Both impacts from our recommendation are marginal and are overwhelmed by the current inflated prices caused by the balance of commercial power being with the international shipping lines rather than New Zealand ports.

If there is to be an economy-wide cost impact of our recommendation taken as a whole, it is more likely to be downward, given the greater efficiency of our two-port model, the shift in commercial power from shipping lines to the ports, and from the change from road to rail.

**Findings and Conclusions**

An economy-wide cost impact is more likely to be downward, given the greater efficiency of our two-port model, the shift in commercial power from shipping lines to the ports, and from the change from road to rail.

Given the enormous ongoing destruction of Aucklanders’ wealth from the status quo and the intolerable congestion they already experience, we recommend that...
Our work has led us conclude strongly and unanimously that the progressive and managed closure of Auckland's freight operations, the continuation of Tauranga's existing expansion plans and the development of NorthPort is in the best interests of Auckland, the rest of the Upper North Island and New Zealand as a whole. Given the enormous ongoing destruction of Auckland Council and Aucklanders' wealth from the status quo and the intolerable congestion they already experience, we recommend that this process begin immediately.

This change to the port configuration of the UNI supply chain would be supported by the development of land-side infrastructure including a rejuvenated North Auckland Rail line and spur to Northport; a new inland freight hub in the Northwest of Auckland to complement Metroport in the South of Auckland; and the continuation and potential acceleration of road improvement projects between Auckland, Whangarei and Northport.

This reconfiguration needs to be a managed transition but it needs to be completed as quickly as possible. Based on our discussions with stakeholders, the time required to build the rail link to Marsden Point, upgrades to the North Auckland Line and construction of a new freight hub in the north-west off the city we assess that it can be fully completed by 2034, with a stretch target of 2029.

As noted, Aucklanders' import needs are already 30% serviced by the port at Tauranga at no additional cost to customers or ultimate consumers. They can be met entirely by ships unloading at NorthPort and Tauranga at no additional cost to customers.
consumers, and perhaps at lower cost. A new freight hub in the north-west of Auckland would provide a complimentary freight terminus to Southdown where rail and road (S0max/HPMV) cargo can be interchanged, cross-shipped and de-vanned for local distribution within the Auckland region using smaller trucks.

Supply chain experts, suppliers and freight forwarders all advised us that the supply chain can and will respond quickly to a reconfiguration, but shipping lines will be fundamental to this reconfiguration.

We have identified a potential rail option for moving freight across Auckland utilising the designated rail corridor or freight tunnel between Avondale and Southdown. While it would not immediately be required in support our recommendation, with road transport potentially able to be used without disrupting the CBD, we strongly recommend it be commissioned immediately in order to deliver the full benefits of our proposal in terms of reduced congestion and carbon emissions. As freight volumes increase in line with forecast growth, a rail connection should be established between the two hubs to facilitate more efficient movement of freight across Auckland.

The immediate benefits to Auckland are clear and recognised by the majority of its residents and the inevitability of change is accepted by all stakeholders. The sooner the timetable for that change is confirmed, the sooner fully informed decisions about future Auckland’s public transport, roading and other infrastructure can be made. The release of waterfront land and regeneration of the port precinct, and the improvements in value of adjacent land, would improve the Auckland Council’s balance sheet by an estimated $6 billion along with its ratings base, giving it greater choices about future investments or household rates reductions.

Commented [SK28]: Like the 5^th time this argument is repeated. In this conclusion section NO More Arguments are allowed. They have been made. Now sell it.
billion along with its ratings base, giving it greater choices about future investments or household rates reductions. Both these factors will deliver sizable reductions in congestion and emissions in the Auckland CBD and wider city.

Potential re-purposing of industrial land in South Auckland could also lead to higher land value uses, higher value jobs, higher productivity and further additional capital value and income for Council. For example, processing of imported cars is currently carried out at multiple sites across South Auckland, all with relatively high land values. If cars were imported to NorthPort instead, these operations could easily be relocated to consolidated processing in Northland where land values and therefore storage and overheads costs would be lower. A workforce currently struggling with Auckland’s high house and rental prices would also benefit significantly from lower house and rental prices as well as potentially lower living costs should they choose to relocate to Whangarei.

The uplift in land values aligns well with economic development strategies and other council growth plans. Growth of the city to the north in particular could benefit from the rejuvenation of the rail corridor, with clear long-term potential to develop both freight and passenger traffic and associated value up-lift from intermediate stations and stopping points.

The establishment of an international container terminal

Monetary aspects aside, the redevelopment of Auckland’s waterfront land would improve its amenity value, restore public access from the CBD to the harbour and improve the overall wellbeing of its residents and visitors.
Benefits to Northland are also significant. Our recommendation necessitates the continued growth and development of transport links between Auckland and the region enabling the enhanced flow of people, goods and ideas between the two. The establishment of an international container terminal at Northport would bring more jobs in immediate port and freight-forwarding operations but also secondary flow-on effects in service industries, and the education and health sectors. The growth of Northland’s horticulture industry would also be potentially enhanced through closer links to its export market through NorthPort. These factors combined would lift the local economy and reduce poverty and inequality, including for Northland’s high Māori population. We anticipate some additional house-price inflation in Whangarei.

Our formal economic analysis of the move to Northport conservatively estimates our recommendation would be worth an additional $200 million to the Northland economy over 30 years in direct and induced economic impacts. There would be around 2,000 additional permanent jobs, plus shorter-term jobs associated with the infrastructure build.

The supply chain would also benefit in being more efficient and resilient with the Auckland CBD and wider region being serviced from two main freight hubs, one in the north-west and one in the south-east. The industry is agnostic about port location as long as freight can be moved efficiently and cost-effectively. Our modelling indicates that NorthPort can accommodate the number and frequency of ships that currently visit Auckland. Rail between NorthPort and Auckland can deliver at least the performance of the status quo in terms of delivery to customers and consumers. It is anticipated that the ultimate design of Northport would allow direct
rail-to-ship and ship-to-rail delivery of containers, reducing freight costs compared to double handling which currently takes place at Auckland. Every stakeholder we spoke to expressed the need for increased investment in and use of rail, particularly to and from the ports, freight hubs and distribution points. In turn, this would also alleviate some of the pressure on the State Highway network and reduce the need to operate relatively expensive 50M AX and high-productivity vehicles.

An important consideration is how Auckland Council views the loss of port operations in Auckland. It will be required to take a lead role in managing the transition, including to:

- Provide a managed release of land from the Ports of Auckland site, to maximise its value and the quality of subsequent development
- Signal the redirection of freight from Auckland which will underwrite the investment in Northport and commence its design activity
- Provide greater confidence for Port of Tauranga to plan for and invest in future freight task requirements
- Ensure certainty for supply chain stakeholders

**Strategic Investment and Action Staging**

It is in Auckland Council’s interests for this process to start immediately and be concluded as soon as possible. The closure of the freight port and the redevelopment of the waterfront is a potential lifeline for the city and people of Auckland. Under our recommendation, there will be a reduced need to build expensive infrastructure assets within the city in the near term, or conduct
dredging of the harbour to accommodate larger container vessels. Moreover, the port company is already proceeding with on-going construction of fixed infrastructure assets such as a car park and other new structures and buildings. Taking the accepted view that the port has a finite life time, which shipping lines estimate to be as little as 5-10 years, these projects are producing expensive stranded assets which will need to be demolished. Perhaps the worst outcome for Auckland would be their recent construction being used politically as a reason not to move away from the environmentally and financially unsustainable status quo.

Questions have been raised about whether Auckland Council should be compensated for its historic investment in its CBD port and for an alleged adverse impact on its economy.

In terms of the first issue, there is no case for compensation given the value for Auckland Council’s balance sheet and rating base our recommendation will deliver in less than 15 years, and the port’s low dividend. Moreover, all stakeholders, including Auckland Council, believe that the CBD port needs to close in the future, so that historic investments can only be seen as sunk costs. Given the $6 billion boost to Auckland Council’s balance sheet and the enhanced ratings base it would gain from the implementation of our recommendation, a case could be made for central Government to capture some of the value of the consequent betterment. We do not support this, and suggest Auckland and Auckland Council be allowed to capture all the benefits of our recommendation.

In terms of the second issue, any impact on Auckland’s wider economy will also be positive. Price Waterhouse Coopers estimates that Wynyard Quarter, on just 35 hectares, will generate $2 billion of
GDP and sustain 19,200 full-time equivalent jobs in 2040. The port currently uses 77 hectares of Auckland waterfront land to generate $150m of GDP and sustain 460 employees. Our recommendation cannot fail but to radically improve this. It would result in significant long-term growth in productivity, employment and incomes for the Auckland Council region.

From a New Zealand-wide perspective, our economic advisors, EY, calculate the benefit:cost ratio of our recommendation to be 2:1.

**An Appetite for Change**

We have talked to all people who wanted to talk to us and we have not heard a valid reason against our recommendation. Any objections we have heard have been based on inaccurate information about the benefits of the status quo and the costs of change. We have addressed these matters through this report.

In summary, our recommendation has wide-reaching benefits that would enable the Auckland, Northland and New Zealand economies to grow and improve the wellbeing of their people:

- It moves 77 hectares of prime Auckland land to its highest and best use; delivers $6 billion in value to Auckland Council; reduces congestion throughout the city; makes Auckland a better city to live, work and visit according to its residents; promotes much-needed economic growth and jobs in Northland; and supports planned growth in the Bay of Plenty.
- It reduces carbon emissions and motorway congestion by creating a port configuration designed for rail rather than road.
- It promotes resilience in the supply chain by providing two distinct North and South entry points for international freight originating in and destined for Auckland.

We have talked to all people who wanted to talk to us and we have not heard a valid reason against our recommendation.
• It reduces transport friction in the Auckland CBD which is currently a congested entry point for freight out of Ports of Auckland, and provides two alternative entry points into the city.
• It potentially further reduces friction with urban personal transport and regional deliveries able to be further reduced by a dedicated freight rail line through the Avondale corridor, connecting the two main freight hubs.
• It improves road safety by increasing rail freight capacity.
• It maintains levels of competition in the Upper North Island Supply Chain, and fosters innovation and cost effectiveness and efficiency of freight delivery.
• It maximises the use of the existing port system and the availability of surrounding land at Northport, noting potential alignment with other strategic projects such as a new dry-dock and rail staging for NZ refinery in west Auckland.
• It avoids the significant capital investment and development that would be required to build a new super port by making the best use of our existing ports.
• It avoids further dredging of the Waitemata Harbour, and the huge capital spend in Auckland needed to get freight off the port to the motorway that is already gridlocked at peak times.
• It does not increase freight costs and may reduce them, meaning it will have no inflationary effect on consumer goods, and perhaps a small deflationary impact.

**Roadmap for Government: Leadership, Investment & Regulation**

With at least 20 similar studies have been carried out over the last decade, the time for procrastination is behind us and the time for decisions and implementation is now. Given the enormous ongoing costs of the status quo, each year’s delay costs the people of Auckland tens of millions of dollars and prevents NorthPort and the people of Northland from benefitting from change.
Change will not occur without Government leadership over a sector that exists in its current shape only because of earlier 1980s’ legislation.

We identify three roles for Government: leadership, investment and – if necessary – regulation.

**Leadership**

The essential first step for central government is to adopt the recommendation as government policy and state its commitment to making it happen by 2034 at the latest. This will provide a vital signal to local government, port companies, supply-chain participants, the public service and the public that it accepts the case for change, for the process to begin immediately and for its implementation to be completed within 10-15 years. That is, the Government needs to be the first prime mover, setting out its commitment to the plan, its commitment to invest when required, and its commitment to regulate if that proves necessary. Without this commitment, it is clear to the Working Group that individual decision-makers will not be, or not remain, sufficiently committed for the change to happen on its own, despite the clear economic benefits to New Zealand and the local economies.

However, much more is needed from Government than this initial first step. It will be necessary for the Government to momentum for the process and the urgency that is required. We recommend that Government facilitate a process through the establishment of project implementation capacity to achieve delivery and resource it accordingly. It should be based in Auckland and staffed by people with extensive experience in difficult multi-billion dollar commercial

**Commented [SK32]: This is the strategy implementation part?**
negotiations and managing major engineering and infrastructure projects, and proven international track-records in meeting deadlines and budgets. The capacity would need to have sufficient mana and independence to facilitate the necessary bilateral or multilateral equity discussions that will be needed among the ports, shipping companies, shareholders, local and central government, KiwiRail, trucking companies, and major port users. It will need to be respected by all sides, and be listened to by ministers. A facilitated process like this would help Government to identify early whether a trigger point had been reached for regulatory options to be pursued.

As part of the follow-on work to develop an appropriate transition plan and delivery structure we also recommend that work is done by Government to ensure that port operations and development, and any other potential Crown or commercial investments in Northport, for example the potential dry dock and / or move of the NZDF naval facility, are fully deconflicted.

As outlined below, our preference is that our recommendation be implemented through agreement among the affected commercial parties and central and local government agencies. However, as a backstop, we recommend that the Government set a one-year deadline, expiring on 1 December 2020, and make clear that if significant progress has not made by that date through commercial negotiations among the parties, Cabinet will introduce legislation to Parliament to amend the Port Companies Act 1988 and take all necessary steps to force the implementation of our recommendation. The Government should also make it clear that it would treat any defensive steps that are taken in the meantime, such as a split of Ports of Auckland into land-holding and operations companies, as reversible through legislation.
Underlining its leadership commitment to our recommendation, we further recommend that the Government immediately confirm it will make the necessary investments in rail and road infrastructure to make it happen. This includes most particularly a fully upgraded Northland rail line and spur to Marsden Point, as well as an acceleration of already planned roading upgrades between Auckland and Marsden Point. This in turn will encourage and build confidence in investments by the port companies and the private sector to give effect to the plan.

The necessary investments and responsibilities are shown in the table.

<table>
<thead>
<tr>
<th>What needs to be built</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail upgrade north with link to Northport</td>
<td>Government / KiwiRail</td>
</tr>
<tr>
<td>Development of Northport</td>
<td>Port companies</td>
</tr>
<tr>
<td>Development of West Auckland inland hub</td>
<td>Private enterprise / NZ refining / KiwiRail</td>
</tr>
<tr>
<td>Road upgrades north (a continuation of current planned investment)</td>
<td>Government / NZTA</td>
</tr>
</tbody>
</table>

Regulation

The Working Group does not propose specific regulatory interventions to give effect to our recommendation. With a clear commitment by Government that the recommendation will be implemented and that it will make the necessary investments in rail and road, there is no reason that agreement cannot be reached among the affected commercial parties and central and local...
government agencies by the proposed 1 December 2020 deadline, avoiding the need for the backstop to take effect. While existing ownership arrangements are dysfunctional—as emphasised throughout this report—the Government can further help facilitate these discussions through the project implementation capacity.

The project implementation capacity would also have the function of recommending to the Government after 1 December 2020 whether or not the backstop needed to be triggered. In making this recommendation, the project implementation capacity would need to consider a range of matters discussed below.

NorthPort [THIS IS A SUB-SUB HEADING]

The Working Group has identified that the current ownership structure constrains the long-term development of NorthPort in a way that isn’t in the shareholders’ or New Zealand’s best interests. The key issue is that the structure makes it too easy for one or other of the shareholders to use their voting interest as a blocking stake, depending on how their individual short-term interests view the particular matter. This will need to change for the recommendation to be successful and for NorthPort to grow.

We again emphasise we would prefer for this change to be made on a commercial basis between the parties involved, and we are confident that this is feasible should the Government pursue the leadership and investment steps outlined above. However, should commercial negotiations fail, regulatory options could include legislation requiring the relevant local authorities and council-controlled organisations to divest, purchase, consolidate or otherwise deal with their shareholdings in the relevant ports, for the purpose of establishing an ownership structure. Investments in rail and road infrastructure to make it happen.
The purpose of establishing an ownership structure that supports growth at NorthPort. This option would have to be carefully communicated that it was a perfectly legitimate step for Parliament to take given the organisations are already creatures of statute, namely the Port Companies Act 1988, and therefore not precedent setting for any other commercial organisations.

**Ports of Auckland and Auckland Council [AS NORTHPORT HEADING ABOVE]**

It is to be hoped that Ports of Auckland’s governance and management will not act as a barrier to the transition. We believe they have important roles to play both in the development of NorthPort and in the success of the new Cruise Ship terminal at Auckland.

One key risk is a potential plan to separate the company into an OpCo and a LandCo, with the floated OpCo holding a long-term lease over the port land and then being privatised based on the value of holding this lease. The split proposal appears to be a defensive strategy to prevent the implementation of our recommendation, and we recommend the Government and Auckland Council oppose it and, if necessary, take steps to prevent it.

Another key challenge is the interests of the shareholder, Auckland Council, which appears to place reliance on dividends from the port. However, while last year it paid a $50 million dividend, it borrowed $75 million to do so. Next year, it will pay an $8.7 m dividend. As outlined in our Second Interim Report, rates and ground leases over the waterfront land would deliver the Council an estimated $100 million while transparent land valuation would dramatically improve
Auckland Council’s balance sheet and ability to fund transport infrastructure.

An interrelated issue is the valuation methodology used for port land. As noted in our FIRST OR SECOND? Interim Report, the Auditor General has commented unfavourably on the variation in approaches to port land valuation. If the land the port currently uses was valued at its highest and best use (as is the case with rating of land in private ownership) it would be in our view unconscionable for a public authority to allow the port land to continue being used in its current manner.

The implementation of our recommendation would be difficult without Auckland Council’s cooperation. The question is whether that cooperation will be voluntary, or whether regulatory or other government intervention will unfortunately be required. There are regulatory options available to the Government to force the issue if necessary. At the more limited end of the spectrum of interventions, there could be a change the required valuation method to be used for the land the Port of Auckland currently uses to highest and best use. At the more significant end, Government could force changes to the ownership of Ports of Auckland’s assets, change its objectives, or require changes to its ownership. These are legitimate given Ports of Auckland is a creature of statute.

Port Cooperation and Other Regulatory Matters

We have not come across unsurmountable regulatory barriers to greater port cooperation or more efficient operation, provided the relevant decision-makers are committed to the outcome and working through any issues carefully and systematically. For
example, inefficiency caused by excessive empty container movements should be able to be resolved through collaborative agreements that are acceptable within the Commerce Act 1986.

The Government must, however, keep an open mind to the need for regulatory reform of legislation relating to port companies. The Port Companies Act 1988 is an old piece of legislation enacted with the expectation of relatively quick port divestment, so applies awkwardly to ports that remain in substantial local government ownership. The Productivity Commission identified some potential, relatively minor, regulatory barriers in the Port Companies act that we recommend that government reconsider. If legislation proves necessary to shift the incentives, we recommend that the Port Companies Act is revised to ensure it remains fit for purpose.
Upper North Island Supply Chain Working Group Members

Wayne Brown (Chair)
Mr Brown, an engineer, builds and owns roads, pipe networks, subdivisions and commercial buildings. He has extensive experience in fixing Auckland infrastructure messes. He was appointed to chair Vector back to reliability and profit following Auckland CBD power failure, chaired Auckland DHB to get the $300 million Auckland City Hospital build back on time and budget; and publicly predicted major electricity supply failure at Penrose before then being appointed to chair Transpower to bring a 400kva line up through Waikato and upgrade supply through Auckland. He was the founding chair of Kordia and drove the introduction of Freeview, and was appointed to chair Land Transport Safety Authority to sort out the digital driving license fiasco. He is also a two-term Mayor of Far North.

Noel Coom
Mr Coom spent 46 years in the shipping, rail, freight and logistics sector. He was previously a senior manager in a number of shipping companies in New Zealand, Los Angeles and Sydney, as well as the previous Group General Manager of TranzRail in New Zealand. Mr Coom is a current Director of Mondiale Freight Services Limited and previously served as a member of the Port Future Study Group commissioned by Auckland Council.

Susan Krumdieck
Professor Krumdieck is the Co-Leader of the Global Association for Transition Engineering and Director of the Advanced Energy and Material Systems Lab at the University of Canterbury. She has spent the last 17 years consulting for local and central government, and community groups on a number of transport, energy and future demand projects. She has strong academic background and in-depth understanding of engineering and transport modelling.

Gregory Miller
Mr Miller has three decades of experience in the logistics and global supply chain sector, having been the Managing Director of Toll New Zealand and the Global Development Manager of Mainfreight Group Limited. He is a Fellow of the Chartered Institute of Transport and Logistics and has a wealth of supply chain knowledge both domestically and internationally to this role. He is the current Chief Executive of KiwiRail.

Shane Vuletich
Mr Vuletich has spent the past 17 years consulting on a number of major events, business strategies and providing advice on provisions of tourism and infrastructure. He is currently the Managing Director of the Fresh Information Company specialising in strategy, measurement, evaluation and forecasting and has a strong analytics and economic background. Mr Vuletich was a member of the Port Future Study.
Vaughan Wilkinson
Mr Wilkinson has 37 years experience in the agriculture and fisheries sector, and has been involved in a range of roles spanning from teaching to research to senior management, most recently with Sanford Limited. He has also held a number of directorships, mostly in the marine and fisheries sector. Mr Wilkinson is also an exporter of fish.
TABLE 1

<table>
<thead>
<tr>
<th>Mode</th>
<th>Million tonnes</th>
<th>Percentage of total</th>
<th>Billion tonne-km</th>
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<td>5%</td>
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<td>12%</td>
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<tr>
<td>Coastal shipping</td>
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<tr>
<td>Road transport</td>
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<tr>
<td>Total</td>
<td>278.7</td>
<td>100%</td>
<td>30.6</td>
<td>100%</td>
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</table>

GRAPH 1

MAP 1
Strategy Recommendation
Logistics Capacity and Dynamic Operation of the Preferred Option – Northport & Tauranga (POINT) for the future of the Upper North Island Supply Chain
Susan Krumdieck

UNISC Working Group Research

The UNISC working group has carried out background research, consulted with a wide range of stakeholders, conducted site visits, commissioned a public opinion poll, and hired consultants to perform economic and Multi-Criteria Decision Assessment of the range of options. We found that the current UNI Supply Chain is inefficient, is near capacity, suffers from induced friction with Auckland City, has excessive opportunity cost in land use, has a self-defeating ownership and governance model, suffers negatively from the execution of competitive port operation, has resilience problems, and is facing the need for investment in the range of $9 billion to maintain current operation using the current assets through Ports of Auckland and Port of Tauranga.

Port cities worldwide deal with urban/freight friction in a range of ways, each unique to the urban and industrial transport geography. Research shows that successfully changing supply chain infrastructure to benefit the whole country requires vision, bold actions by leaders, and cooperative management of the transition.

New Zealand is a signatory to the COP21 agreement to dramatically reduce emissions of greenhouse gases, chiefly CO₂. It is well known that long-haul freight transport by ship is the lowest carbon footprint, and that rail is about four times lower than truck. Freight movement generates truck trips, so utilization and organization of the supply chain are the keys to improved cost, efficiency and emissions.

International shipping interacts with New Zealand through our ports. New Zealand’s economic performance depends on the land side supply chain for exports and imports being intelligently designed for sufficient capacity, minimum friction and efficient operation, starting with high level of service through professionally operated and coordinated ports.

Finding: Business-as-Usual is not an option for a number of reasons, primarily inefficiency, capacity limitations, land use opportunity cost, land-side friction and resilience.
UNISC Working Group Delivery to Terms of Reference

The Working Group is tasked with providing a long-term strategy for the UNISC which exemplifies the broad vision and is practical and achievable and which meets multiple objectives, particularly economic and social development of Northland.

In the 2nd report, the Working Group identified a Preferred Option for development of infrastructure capacity to serve the Upper North Island freight task. The criteria used to arrive at the Preferred Option are the best service of the freight sector, the economy of the Upper North Island, and NZ as a whole. Additional criteria are to improve the social and economic prospects of people throughout the entire region with special consideration for Northland, and to achieve the goals of emissions reduction, resilience and safety.

The Working Group commissioned economic analysis of various options. The Preferred Option, called the Full Move to Northport Scenario, had superior multicriteria analysis score and BCR of 2.

UNISC Strategy: Preferred Option Infrastructure: Northport-Tauranga (POINT)

The Preferred Option Infrastructure – Northport & Tauranga (POINT) is integrated in design and operation. The POINT provides the long-term freight supply chain with fiscal and operational efficiency, and the New Zealand economy with resilience, adaptability and flexibility to develop in strategic ways. The POINT can be realised through major infrastructure investment by central government, and adaptation of operational and ownership structures. The infrastructure investments are substantial. The re-development of the Auckland waterfront is a major benefit in the staged development of the UNI supply chain.
The Upper North Island Supply Chain Strategy

- Near-Term: National Government intervention to set up the POINT operation framework. Transition of control from local councils to a UNI Logistics management corporation and ownership structure that rewards efficiency and cooperation.
- Near-Term: Ports of Tauranga increase rail share for containerised freight traversing Auckland and Hamilton to 55% mode share (from 45%) due to decline of logs exports.
- Near-Term: Full rebuild of the North Auckland Rail Line including the spur to Northport and trans-urban freight line to Southdown.
- Near-Term: New North-West Auckland freight rail terminal with connecting rail line to Southdown.
- Near-Term: Transition of RORO imports to Northport, and re-development of Bledisloe Warf for urban waterfront amenities, commercial and retail and housing.
- Long-Term: Full capacity development of Northport with state-of-the-art design and equipment and professional port operation.
- Long-Term: POA move to Northport - Planned and optimized transition of port operations from Auckland to Northport, staged to take full advantage of fully developed North Auckland Rail capacity with 70% mode share.
- Active operations management of the supply chain through development of new data, logistics and surveying platform.

POINT 1: Capacity

The POINT has the capacity to handle the freight task as projected to 2050 and will be serviceable beyond the end of the century without need of further expansion. The main components of the Preferred Option form a transport network with the capacity to move all of the UNI freight task through Northport and POT, with only passenger and local deliveries landing on POA. Regional exports exit the port of the region, and the containerised, bulk and RORO imports land at either port according to market preference. In the case of a disruption or natural disaster, more than half of the imports from one port can be taken up by the other. 150% of current import TEU can be handled by the POINT. The freight infrastructure and operations also improve passenger transport through synergies and de-congestion.

The 2050 embodiment of the POINT involves full development of the Northport berthage, and expansion of port-side services. There are no land-side constraints at Northport. The number of rail lines and cranes can be developed in stages as POA operations shift to Northport. There is also no constraint on car paved parking and processing area. There is no constraint on efficient placement of a dockside terminal or container hard stand area. Northport is connected to Northland for export of logs and produce by rail, with regional consolidation hubs in strategic locations as required.

POINT 2: Policy

The two main national policy components are; (1) a new governance structure for the UNI ports and supply chain with incentives for co-location and efficient utilization, and (2) the infrastructure investment and build of nationally significant rail lines, improvements and road intermodal connections. The POINT avoids need for investment in already congested land-side infrastructure around POA. The POINT releases significant CBD land for development that would integrate with the development of denser and more environmentally sustainable Auckland. The POINT provides the impetus for establishing a
new governance structure with a NZ-Inc. performance mandate. The environmental benefits are substantial as the POINT can be optimised to handle the long-haul movements by rail, and last-leg truck delivery optimised by logistics management of the freight flow through the system to the terminal nearest the customer.

**POINT 3: Cooperative Operation Management System**

When a new rail, terminal or port is built, there is a transition period where freight may not utilize the new capacity, resulting in poor performance of the supply chain. The infrastructure developments necessarily must be built ahead of utilization. Thus, the strategy includes development of a coordinated port, rail and hub information, tracking and booking system. This kind of system is used by well managed ports and in companies like Federal Express, DHL and Toll. New Zealand must think of itself as an incorporated entity when it comes to freight movement. The new “smart” supply chain system can be developed in New Zealand or commissioned from international vendors.

**Costs and Opportunity Costs**

Re-building the North Auckland Line, the Northport Spur line, the Avondale freight corridor, intermodal terminals and stations is a major national infrastructure investment. This particular investment will be a driver for industrial development to the north of Auckland, for primary production in Northland Region, and for the city of Whangarei.

The infrastructure expenditure is necessary for the regional development. The infrastructure and operational investments are necessary to ensure high utilization efficiency of the new capacity. The most obvious opportunity costs in the freight supply chain are the efficiency losses in the current system, primarily congestion and low truck and rail utilization. The most obvious opportunity cost in land use benefits is the Auckland Waterfront.

The UNISC Working Group have no question at all that the opportunity cost of business-as-usual is at least 4 times higher than the cost of full implementation of the POINT Strategy over the next decade. The UNISC Working Group have no question at all that there are no half-measures available in the POINT Strategy. Any partial application of the strategy would result in stranded assets and unacceptable risks to resilience and fossil fuel reliance. We recommend that the NAL be built as an electric rail system at the outset, in order to future-proof the UNISC. However, we realize that this would be born out through the engineering process, and it is not reflected in our cost estimates.
## UNISC POINT Strategy indicative start and completion dates and costs over the period.

<table>
<thead>
<tr>
<th>POINT</th>
<th>Dates</th>
<th>Costs</th>
<th>Opportunity Costs</th>
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<tbody>
<tr>
<td>National Government Intervention: Port Ownership and Operation</td>
<td>2020 - 2021</td>
<td>&lt; $1M</td>
<td>&gt; $2 BN</td>
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<tr>
<td>POT: Increase Rail Utilization</td>
<td>2020 - 2024</td>
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<td>GPS Transport: NAL Full Rebuild with NP Spur</td>
<td>2019 - 2027</td>
<td>&gt; $3 BN</td>
<td>&gt; $8 BN</td>
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<td>GPS Transport: NW Intermodal Terminal, Avondale Freight Corridor</td>
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<td>POA: Vehicle Imports Halted, Bledisloe Redevelopment</td>
<td>2020 - 2021</td>
<td>&lt; $1M</td>
<td>&gt; $1.5 BN</td>
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<tr>
<td>NorthPort: Build RORO Terminal and Processing Facility</td>
<td>2020 - 2021</td>
<td>&gt; $7M</td>
<td>&gt; 1.5 BN</td>
</tr>
<tr>
<td>NorthPort: Expand Berthage and add high efficiency Container Terminal</td>
<td>2020 - 2027</td>
<td>&gt; $2 BN</td>
<td>&gt; $2 BN</td>
</tr>
<tr>
<td>Whangarei: City and Regional Growth to service Port and Rail Freight Activity</td>
<td>2020 - 2027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POA: Transfer Container Ship Services and Infrastructure to NorthPort</td>
<td>2027 - 2028</td>
<td></td>
<td></td>
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<tr>
<td>Auckland City: Redevelopment of waterfront</td>
<td>2027 - 2035</td>
<td></td>
<td></td>
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<tr>
<td>NZTA: New Zealand Inc. Freight Supply Chain Operation Management System</td>
<td>2020 (R&amp;D) – 2025 (Implement)</td>
<td></td>
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<tr>
<td>Total UNISC Transition</td>
<td>2020-2030</td>
<td>&gt; $12 BN</td>
<td>&gt; $15 BN</td>
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</table>
Guys

Good report, my updates marked in red and yellow highlights

Wayne
Transforming Auckland; Transforming Northland

Final Report of the Upper North Island Supply Chain Strategy Working Group

11 November 2019
Upper North Island Supply Chain Working Group Recommendation

1. Ports of Auckland’s freight operation to progressively be closed and the land it currently occupies be progressively rezoned for higher and better uses.
2. Port of Tauranga’s existing expansion plans to proceed to accommodate growth.
3. NorthPort to be developed to take over much or all of Auckland’s existing and projected future freight business.
4. Auckland’s cruise-ship terminal to be modernised and the Waitemata to become a commuter, tourism and recreation harbour.
5. The new two-port configuration to be supported by a rejuvenated North Auckland rail line and spur to Northport, and a new inland freight hub in northwest Auckland to complement and be connected to Metroport in the south.
6. Transition to begin immediately and be fully completed by no later than 2034, fifteen years hence.
Introduction

The Upper North Island Supply Chain Strategy Working Group was established under the Labour-New Zealand First Coalition Agreement, which included a commitment of “commissioning a feasibility study on the options for moving the Ports of Auckland, including giving Northport serious consideration”.

The Working Group’s study has been carried out in the context of New Zealand’s international freight being projected to grow by 55% by 2042, from 237 million tonnes in 2012/13 to 366 million tonnes in 2042/43.¹

At the same time, Ports of Auckland’s major freight operation is already significantly constrained, especially on the landside. It would require an estimated $3.8 billion in investment over the next 30 years, and the dredging of a further two million tons from Auckland’s Waitemata Harbour, to deal with this growth. Within 15 years, one container truck would be leaving its gates into Auckland’s already gridlocked traffic every 23 seconds, worsening to one every 16 seconds by 2049. Auckland’s freight port is struggling to maintain its social license, with regular public and political calls for it to move or its growth checked.

Beyond Auckland, other very large investments, of $1.2 billion at Port of Tauranga and $8 billion in the Upper North Island’s road and rail networks, would also be needed to maintain the status quo.

The status quo is therefore not free. The question for taxpayers, ratepayers and shareholders of the three Upper North Island ports is...
not whether large sums need to be invested to manage freight growth but how and where that money is best spent.

After nearly 15 months of work and two interim reports, our main recommendation is that:

1. Ports of Auckland’s freight operation is no longer viable at its current site and it is in the interests of taxpayers and ratepayers that it be progressively be closed and the land it currently occupies be progressively rezoned for higher and better uses;
2. Port of Tauranga’s existing expansion plans should proceed to accommodate growth;
3. NorthPort be developed to take over much or all of Auckland’s existing and projected future freight business;
4. Auckland’s cruise-ship terminal should be modernised and the Waitemata become a commuter, tourism and recreation harbour;
5. the new two-port configuration should be supported by a rejuvenated North Auckland rail line and spur to Northport, and a new inland freight hub in northwest Auckland to complement and be connected to Metroport in the south; and
6. this transition should begin immediately and be fully completed by no later than 2034, fifteen years hence.

Our solution envisages a port configuration designed for 21st century rail rather than an overloaded 20th century roading network that emerged from the horse-and-coach era of the 19th century. It would significantly reduce congestion in Auckland and on the Northland roading network based on the principle that roads should
predominately be for people and railways for freight. Our understanding and analysis of how global supply chains operate and consumer prices are set indicates there would be no consumer price effect in Auckland or New Zealand shops. Auckland and Auckland Council would be enriched by around $6 billion and create thousands of jobs in Northland.

We are aware this is not the first report on the future of the Upper North Island Supply Chain and its implications for Ports of Auckland, the Port of Tauranga and NorthPort. Just this decade, at least 20 similar studies have been carried out. Our findings are largely consistent with most of those previous studies. The time for debate about the overall strategic concept we recommend is surely over and the time for Government-led action has arrived.

Our preference is that the details of the transition to the model we recommend should be negotiated by the current owners of the three ports. However, the ports are a product of the Port Companies Act 1988, they have an uncommon and overlapping ownership structure and there may be behavioural and perhaps legal barriers to their cooperating. Moreover, changes to the configuration of the Upper North Island’s ports will both require and strongly influence decisions to be made about the future roading and rail infrastructure of the region.

It is our judgment, therefore, that such a transition to the new configuration will only be successful if clear deadlines are set by the Government for the completion of the commercial negotiations and its own infrastructure investments, and if a regulatory or legislative backstop is communicated or in fact established to legally require the proposed changes to have occurred by a certain date. We
recommend the Government give the ports and their owners until 1 December 2020 to reach agreement, after which it should introduce legislation to Parliament to reform the Port Companies Act 1988 and take all other necessary steps to make our recommendation happen.

Our roadmap for the Government to implement the new configuration is therefore based around the three themes of leadership, investment and regulation.

This report should be read in association with the two interim reports. It recaps the rationale for change, outlines our work and analysis, makes the case for our recommendations, outlines a roadmap and urges the Government to act as soon as possible. In our view, there are few if any other projects that would so positively transform Auckland and Northland as thriving communities for the future. We commend it to the Prime Minister, the Deputy Prime Minister, the Cabinet and Parliament as a whole.

We recommend the Government give the ports until 1 December 2020 to reach agreement, after which it should introduce legislation to Parliament to make our recommendation happen.
Background

The future of the three Upper North Island ports and the implications for the Upper North Island Supply Chain has been contentious for many years. At least 20 studies on the future of the Upper North Island Supply Chain and including its implications for Ports of Auckland, the Port of Tauranga and NorthPort have been carried out since 2010. The future of the freight port in Auckland’s CDB has been a regular topic of fierce political and public debate. There is broadly a consensus that the status quo is not an option yet no long-term strategic decisions have been taken by the ports themselves, their owners, local councils or central government over what should happen.

Perhaps in recognition of this, the Labour-New Zealand First Coalition Agreement included in October 2017 a commitment of “commissioning a feasibility study on the options for moving the Ports of Auckland, including giving Northport serious consideration”.2

Following the formation of the Coalition, the Cabinet considered how best to give effect to this commitment and resolved to establish the Upper North Island Supply Chain Strategy Working Group, which was announced in February 2018 with its members appointed in September that year. In announcing the Working Group, the Government described itself as having a strong interest in the future of New Zealand’s ports, freight services and coastal shipping, seeing them as important to lifting and securing the economic well-being of New Zealanders, promoting opportunities for regional development.

2https://d3n8a8pro7vhmx.cloudfront.net/nzfirst/pages/1911/attachments/original/1508875804/LabourandNewZealandFirstCoalitionAgreement2017.pdf?1508875804
and employment, developing an efficient and effective transport
and logistics infrastructure that is resilient and works in the national
interest, and being mindful of the need to ensure the best use of
scarce resources such as land, especially in metropolitan areas.
Profiles of the members of the Working Group are set out in the
inside back-cover. They are experts in logistics, shipping, transport
and supply-chain management; engineering, infrastructure
investment and management; agri-business, fisheries and tourism;
and corporate governance and strategy.

The Terms of Reference for the Working Group were to set out a
joint view of:

- the current and future drivers of freight and logistics
demand, including the impact of technological change;
- a potential future location or locations for Ports of Auckland,
with serious consideration to be given to Northport, taking a
long-term view given that ports are long-term assets;
- supporting priorities for other transport infrastructure,
across road, rail and other modes and corridors such as
coastal shipping;
- potential priorities for transport-related infrastructure
investment from a national economic and regional
development perspective;
- the optimal regulatory settings, and planning and investment
frameworks across government to give effect to the review
findings;
- future challenges on which government and industry will
need to work together; and
- key actions to be taken over the next five years.
To meet these Terms of Reference, the Working Group undertook a number of site visits, supported by stakeholder engagement and initial analysis and advice in order to gain an understanding of the current system. A number of key themes emerged during this discovery phase that guided the remainder of the review.

The group’s second phase consisted of a strategic investigation and analysis of the Upper North Island Supply Chain. This work focused on determining the possible options available to different stakeholders and whole-system performance.

The group then undertook economic and multi-criteria evaluation of a range of potential future options for the configuration of the Upper North Island Supply Chain. Combining this with further stakeholder consultation, expert advice and research of public opinion, the group identified a preferred option for the design of a future Upper North Island Supply Chain.

A full list of the stakeholders engaged with, along with analysis of those interactions, is presented on page XX.

It became clear early on that port cities worldwide deal with the friction between urban living and freight needs in a range of ways, each unique to the urban, industrial and transport geography. There is no off-the-shelf solution. The broad theme, however, is that cities develop around ports which then tend to move to more distant locations as population grows and waterfront land-values rise. Sydney is a classic example with its transition from Circular Quay to Darling Harbour to Botany Bay, Wollongong and Newcastle. If there is any one common indicator of success it is that successfully changing supply change infrastructure to benefit an entire state or country requires vision, bold actions by leaders and cooperative management of the transition.
country requires vision, bold actions by leaders and cooperative management of the transition. In some areas, New Zealand has a record of achieving bold, visionary and cooperative change while in others it does not.

Our Second Interim Report identified a Preferred Option for the future of the Upper North Island Supply Chain and its three ports. Broadly, we recommended a two-port model supported by specifically configured rail rather than one reliant on a roading network that has evolved to meet other purposes. The criteria used to arrive at the Preferred Option are to ensure the best and most efficient freight service for the Upper North Island and wider New Zealand economies. Additional criteria were to improve the social and economic prospects of people throughout the region and to achieve goals of emissions reduction, resilience and safety. Our Preferred Option creates enormous new economic opportunities for Northland, with its high Māori and impoverished population, while significantly enriching Auckland and Auckland Council, and reconnecting the Auckland CBD with its harbour, perhaps the city’s most highly valued asset. We are in no doubt our recommendation would pass any robust Benefit:Cost analysis. Our economic advisors, EY, estimate the Benefit:Cost ratio to be 2:1. Further analysis may identify additional benefit and costs and change this ratio up or down, but we have no doubt it will remain well above 1:1.

The Working Group was tasked not only with identifying this best long-term, practical, achievable, resilient, and fiscally and operationally efficient configuration for the Upper North Island Supply Chain. We were also tasked with identifying the best strategy to make it happen. In this, our Final Report, we detail our findings, expand and develop the requirements for our Preferred Option,
recommend a potential implementation strategy, and identify the future challenges and actions on which central and local government and industry will need to work together. Our timeframe for implementation of the new configuration is 10-15 years. It would be a failure of the current generation of commercial and political leadership if by 2034 the vision we outline has not been realised.

The Upper North Island Supply Chain

An Overview of the Upper North Island Supply Chain was presented in the Economic Analysis accompanying our Second Interim Report. Key points included:

- The total freight task for New Zealand in 2017/18 was around 280 million tonnes
- On average, freight moves around 100 km nationally
- As the most densely populated and fastest growing part of New Zealand, the Upper North Island contributes around 53% of the New Zealand’s freight flow generated from both imports and exports
- Road haulage remains by far the dominant mode of transport with rail accounting for just 12% of the total tonne-kilometres of freight moved, less even than coastal shipping

Our timeframe for implementation of the new configuration is 10-15 years. It would be a failure of leadership if by 2034 the vision we outline has not been realised.

INSERT TABLE 1: SEE AT END OF DOCUMENT
The Auckland region generates the largest tonnage of freight moved. This is mainly imports but also includes local products moving to local markets, freight coming into the city to cater for local needs, the movement of goods manufactured in Auckland or being shipped from distribution centres currently located in Auckland, and the movement of goods for export, mainly via the Port of Tauranga. As noted, very large investments in Ports of Auckland, Port of Tauranga and transport infrastructure will be needed for this status quo to remain viable, even ignoring the effects on Auckland congestion. Our economic advisors, EY, estimate these investments sum to $X.X billion by 2034 and a further $X.X billion through to 2049. The status quo is not free. Nor is it close to being economically, socially or environmentally efficient.

The Problem

Ports of Auckland Unviable Long Term

It is common ground across all stakeholders that Ports of Auckland is unviable at its current location long-term. Even if it is to remain for a further 30 years, its Chief Executive says it must expand or choke. Its expansion plans to maintain its viability for 30 years are both expensive for its owners, Auckland ratepayers, at a cost of an estimated $X.X billion by 2034, and socially divisive. Moreover, expansion of its existing operations will significantly increase Auckland’s roading congestion, with one container truck projected to be leaving its gates into Auckland’s already gridlocked traffic every 23 seconds by 2034.

This does not just undermine the efficiency of Auckland’s roading network for its residents and non-port-related businesses, but for Very large investments will be needed for the status quo to remain viable, even ignoring the effects on Auckland congestion. These sum to $X.X billion by 2034.
users of the port itself. The prevailing complaint from Auckland supply chain users and trucking companies in particular is the already intolerable traffic congestion within the city. This drives inefficiency, with freight companies advising us that the number of daily deliveries their container trucks can make is falling to just two. This in turn is requiring them to invest in more container trucks, further clogging the already gridlocked motorway system.

This almost certainly cannot be mitigated in full. Mitigating it to even a limited extent will require additional investment by ratepayers and taxpayers into Auckland’s roading network, yet this will not then be future-proofed for a post-port era. The spending will be an unnecessary sunk cost and some parts of the network stranded assets. Decisions need to be made and begin to be implemented now to avoid this outcome. This in turn would free up taxpayer and ratepayers’ funds for non-port-related investment in Auckland’s roading and public transport networks desired by the people and businesses of Auckland. Additional revenue for Auckland’s roading and public transport networks would come from the rates that the Council would gather were the port’s land moved to its highest and best use, far beyond what it earns from the port’s dividends, expected to be just $8.7 million in 2020 and $9.4 million in 2021. Our economic advisors, EY, estimate the built-out value of the port’s land could be as much as $10 billion and could be rated accordingly. EY further advises that maintaining the port at its current location is therefore costing Auckland ratepayers between $5 billion and $6 billion in lost value.

The costs of doing nothing are therefore massive and ultimately unsustainable. It is increasingly obvious that continuing to fund the status quo will result in continued and worsening inefficiency in the efficiency of Auckland’s roading network for its residents and non-port-related businesses, but for users of the port itself.

Freight companies advised us that the number of daily deliveries their container trucks can make is falling to just two, requiring them to invest in more trucks, further clogging the already gridlocked motorway system.

EY advises that maintaining the port at its current location is costing Auckland.
freight movement, as well as poor social and wellbeing outcomes for Aucklanders and Northlanders alike.

Almost certainly related to these issues, the CBD port is losing its social license as the ongoing fierce political debate over its future demonstrates and as confirmed by our stakeholder engagement and Colmar Brunton study of public opinion. More than 60% of Aucklanders believe moving the port would make Auckland a better place to live, work and visit.

While unquantified, there is no question there are very significant financial, social, environmental and amenity costs for Aucklanders specifically and New Zealanders generally from delaying decisions about the future configuration of the Upper North Island ports. The best time to make decisions about the future is now.

**Current Port Ownership Creates Perverse Incentives and Prevents Change**

The current ownership structure of the Upper North Island ports is a legacy of government policy dating back to the Port Companies Act 1988 or earlier. This structure has not evolved through private investment or the operation of market forces but by political decisions made by central and also local government, which means that Cabinet and Parliament legitimately remain primary stakeholders.

Parliament’s intention in the 1980s was not that local government should continue to own the ports but that they and the land they occupy would be sold and the market would then rationalise the ratepayers between $5 billion and $6 billion in lost value.

More than 60% of Aucklanders believe moving the port would make Auckland a better place to live, work and visit.

The current ownership structure of the Upper North Island ports is a legacy of government policy dating back to the Port Companies Act 1988 or earlier. Cabinet and Parliament legitimately remain primary stakeholders.
services they offer leading to the highest and best use of land and other resources.

When it became clear that local government wanted to maintain ownership, including to generate dividends, and as central government policy moved away from privatisation, it was then hoped that competition would nevertheless drive efficiencies and rationalisation. This has not happened because competition lies offshore with global shipping lines who take advantage of the existing supply chain and the lack of cooperation between port owners. For example, competition between Auckland and Tauranga is driven by the whim of shipping lines who decide prices, the location of exports and imports, and have the ability to leverage prices between ports in New Zealand.

Consequently, most industry stakeholders agree greater cooperation is needed and for port operators to learn how to influence shipping lines rather than the other way round.

However, the competitive model envisaged during the 1980s free-market era, along with legal constraints and the cultural and behavioural norms that have subsequently evolved, have prevented cooperation and created perverse incentives. Operationally, the port companies continue to accept poor commercial arrangements for suppliers moving freight across ports. They maintain inefficient duplication of port operating structures and use their land and other resources sub-optimally, most particularly at Auckland. We have also seen the emergence of strategic cross-ownerships, in particular of NorthPort, which seem largely motivated to block its rational development. NorthPort itself advised us that the current ownership structure constrains it from developing in a way which would be in its and New Zealand’s best interests.

Central government and
structure constrains it from developing in a way which would be in its and New Zealand’s best interests.³

**INSERT GRAPH 1: SEE END OF DOCUMENT**

We should note at this point our assumption that central government and local government will want the Upper North Island ports to remain in majority public ownership, and that our recommendation allows for that. It would also allow for additional private investment, such as that in the Port of Tauranga, which has helped fund its growth and success.

While taking majority or at least cornerstone public ownership as a given, we also note the Productivity Commission’s report on international freight services published in April 2011, which recommended that councils should set clear objectives for port ownership. Having decided these objectives, they should choose the level of ownership that offers them the required control rights. Capital raising could then fund growth.

The Productivity Commission went on to say that Councils should consider separation of land ownership from terminal operations. This would maintain the land in public ownership while allowing for increased private investment in operations. This separation has occurred at NorthPort but the 50:50 ownership of the operating company may not be conducive to effective growth. We oppose separation at Ports of Auckland and the suggestion of privatising some or all of a new operating company. This operating company could only have value and thus attract investment if it had a very-long-term lease over the company holding the land, which local government will want the Upper North Island ports to remain in majority public ownership. Our recommendation allows for that and also for additional private investment.

³ UNISCS WG Meeting 1, 3 September 2018
would lock in the status quo with the economic and other costs to Aucklanders and other New Zealanders we outline above. It is difficult for us to see such a land and operations split at Auckland as other than a ruse to maintain the port at its current location, perhaps for another century.

**Current Structure Promotes Trade Deficit**

The current irrational structure of the Upper North Island ports hampers New Zealand’s efforts to bridge its longstanding trade deficit. New Zealand is a small trading nation relying mostly on agriculture and forestry to supply exports to provide income from the country. These income-earning export products come from New Zealand’s regions. The country’s population and thus its consumers are largely concentrated in Auckland. The city generates export revenues mainly from tourism, education and IT but these services do not require a port.

Of the Upper North Island’s three ports, Tauranga and is close to producers of export commodities and is known best as a successful export port but is also increasingly taking a larger share of Auckland’s import business. Like Tauranga, NorthPort is also close to producers of export products and also handles the importation of all of New Zealand’s fuel, but its expansion is hampered by the absence of a rail connection. The largest of the three, Auckland, is primarily an import port. The effect of this structure is to make it easier to import into New Zealand than to export. At the margins, our recommendation will encourage greater export growth while also allowing for growth in both NorthPort and Tauranga’s import capability to replace that at Auckland. It will help shift the balance from imports to exports.
Additional Drivers of Change

The above makes clear that the status quo is not sustainable. Beyond that reality, we have identified additional drivers of change towards our recommended solution.

Changing Land Values

Economic and population growth drive up city land values and challenge existing land uses. When the first Queen Street wharf was constructed in the 1850s, Auckland had a population of fewer than 10,000 people. Its population has now passed 1.6 million and will be over 2 million within 15 years. Like most large first-world cities, its economy is no longer based on manufacturing let alone agricultural commodities, but is overwhelmingly dominated by services. Its original commercial buildings have either been replaced with office towers or re-fitted for refitting for the services economy. It is most likely this economic shift from things to ideas and services will continue.

Most first-world harbourside cities have long-since shifted their industrial port operations elsewhere to harvest higher-earning uses including residential property, office space, tourism attractions, open space and other public amenities such as museums, opera houses or sports facilities. Auckland is unusual in this respect.

Auckland has two harbours, the Waitemata and Manukau. Much of the Manukau is dry at low tide and the dangerous harbour entry
means maritime insurers will not support large ships using it. The land around it is not high value and is used for manufacturing, storage, manufacturing, aircraft services and some tourism. In contrast, the Waitemata has until now provided reasonable access for 20th century shipping up to 5000 TEU and 12.7m draught, including what's the largest ship it can take without dredging but land could be made to accommodate larger ships such as the new Panamax 72,000 TEU ships with 15.7m draught, but this would need further harbour dredging of an estimated 2 million tons at an estimated cost to ratepayers of many millions, assuming that a Resource Consent was granted X. The Waitemata could be made to accommodate larger ships with further harbour dredging of an estimated 2 million tons at an estimated cost to ratepayers of X.

The Waitemata is also used for commuting between West Auckland, the CBD, the North Shore, Whangaparaoa, Howick-Pakuranga and out to Waiheke Island and Beachlands in the east. It is also highly valued by Aucklanders for recreation including sailing, motorboating, fishing and tourism, and also visually. A rough attempt to place a dollar worth on its aesthetic value is that Auckland apartments with a harbour view carry a premium of around $500,000 compared with similar abodes without. Assuming 10% of Auckland’s 500,000-plus dwellings have some sort of harbour view, this would suggest an aesthetic value of at least $25 billion. In fact, the Waitemata’s true aesthetic value is likely to be significantly higher than $25 billion given the harbour is enjoyed by many more Aucklanders than those who can afford a harbour view.

In Auckland, the existing port operations remain highly industrial, and include the importation and storage of containers, vehicles, coal and cement. These uses produce very poor returns for its proximate owners, Auckland Council, with dividends dropping as low as $8.7 million for the privilege of occupying land with probable value of

harvest higher-earning uses

The Waitemata's true aesthetic value is likely to be significantly higher than $25 billion given the harbour is enjoyed by many more Aucklanders than those who can afford a harbour view.

Returns as low as $8.7 million
over $6 billion. It also deprives its ultimate owners, the people of Auckland, of access to and ready use of waterfront land in the heart of their CBD. Returns as low as $8.7 million suggest a valuation of the port company, including its land, of less than $200 million. Even were sustainable dividends to be $50 million, the port company would be valued at only $1 billion, far less than the true value of the land it occupies.

Another way of looking at this is that the current port usage supports a land value of between $350 and $500 per square metre, giving the 77-hectare area a value of between $270 million and $385 million. In contrast, nearby downtown land and land released from port use had values, according to their leasehold documents, of at least $5000 per square metre, at least ten times as much. Some commercial sites not as close to the harbour edge, such as Commercial Bay, are currently valued at $27,000 per square metre, more than fifty times as much as the port. These numbers give values of the port land ranging upwards from $3.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $6 billion as a fair estimate. Even if this value is necessarily uncertain, there is no doubt there are huge financial gains available to Auckland Council and its ratepayers from shifting the use of the land from its currently low-earning port operations to higher and better uses. It is difficult to think of any greater ongoing destruction of Auckland and Aucklanders’ wealth than continuing with port operations in its CBD. Arguments for the status quo cannot be economic but can only be political.

Conversely, there is a vast supply of flat industrial-zoned land adjacent to NorthPort at prices a fraction of those in Auckland and with no such higher alternative uses. While the development of
NorthPort we recommend will undoubtedly cause some land-price inflation around Marsden Point and in nearby Whangarei – which may benefit existing homeowners in that city – the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.

Port of Tauranga also has industrial land to cater from its current operations and some growth. Although, as the Bay of Plenty economy continues to grow strongly, it too is coming under pressure from rising prices paid for residential development land at Mt Maunganui. In the future, this will place limits on its ability to grow and perhaps lead to some questioning of the location of some of its existing operations. This analysis clearly argues for Tauranga to continue with its growth plans but for NorthPort to be the major site to cater for freight growth over the next 15 years and beyond.

**Urban Traffic Congestion**

We have already discussed Auckland’s congestion and the importance stakeholders place on at least not allowing it to get worse. Our judgment is that the traffic situation around NorthPort and also Tauranga is radically more manageable, especially given the rail-supported port configuration we recommend.

Broadly, imported goods currently enter the Auckland region in two different ways. They arrive either directly from the CBD port straight into several sets of traffic lights. Alternatively, they come by rail from Tauranga to Southdown inland port where trucks meet the clogged East-West road network also badly affected by container trucks from the CBD port. While there is no noticeable different in status quo can only be political

While the development of NorthPort will undoubtedly cause some land-price inflation around Marsden Point and in nearby Whangarei – which may benefit existing homeowners in that city – the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.
costs for either option, both contribute to Auckland’s urban traffic congestion.

Our recommendation provides for a new inland port in North-West Auckland. This would maintain two points of entry for imported goods, one from Tauranga via Southdown and the other via NorthPort and the new inland port. These would also be connected by rail. This would immediately ease traffic congestion throughout Auckland and specifically in the CBD and across the Harbour Bridge. Traffic congestion in Tauranga is not as acute as in Auckland but is an issue that will limit the extent of growth of this port.

Conversely, there is little traffic at all near NorthPort, although our recommendation would increase traffic between Whangarei and NorthPort for perhaps 2000 workers commuting between the two. The State Highway from Marsden Point to Auckland is in a poor state especially through Dome Valley and will need further upgrading under any scenario including the status quo. Already the number of 50MAX trucks on the highway is increasing. The establishment of the North-West inland port would improve the efficiency of the trucks allowing them to avoid the city limits.

However, our configuration is designed primarily for rail under the principle that roads should predominately be for people and railways for freight. The upgrade of the Northland railway and its linking to NorthPort is essential to any change of the port structure but probably also under the status quo given growth in the Northland export economy. We note that the Government has acknowledged this with its recent announcement of initial funding for an upgrade. A fully upgraded Northland rail network will reduce trucks on roads in the same way that rail to Tauranga does now.
trucks on roads in the same way that rail to Tauranga does now, noting that the Kaimai Tunnel is close to capacity.

More Efficient Export Servicing

Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export. The additional costs of trucking Northland exports to Auckland and then railing them to Tauranga may currently be $60 million annually. There are likely to be some extra efficiencies associated with more Northland exports having access to NorthPort in competition with Tauranga. But, as noted, we have noted no material differences in costs to importers or exporters when choosing between ports already connected by rail. The overwhelming cost driver for freight is changing modes rather than prices broadly set by shipping lines in their logistical and financial interests. However, there are currently some inefficiencies from the existing port configuration for exporters in Northland. Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export. Volumes are likely to grow with Northland poised for strong growth, including of avocados being grown north of KaitaiaKerikeri, more kiwifruit around Kerikeri and as underutilised land is turned to dairy. This will add to congestion on State Highway One.

Given their rail links, there is currently no material difference in direct financial costs to Auckland, Waikato or Bay of Plenty importers or exporters of using either Auckland or Tauranga, with prices broadly set by shipping lines in their logistical and financial interests. However, there are currently some inefficiencies from the existing port configuration for exporters in Northland. Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export. Volumes are likely to grow with Northland poised for strong growth, including of avocados being grown north of KaitaiaKerikeri, more kiwifruit around Kerikeri and as underutilised land is turned to dairy. This will add to congestion on State Highway One.

The additional costs of trucking Northland exports to Auckland and then railing them to Tauranga are not transparent, being hidden by various subsidies and commercial deals, but we estimate it may currently be $2000 per container suggesting a current cost to Northland of perhaps $60 million annually. This could be largely mitigated even under the status quo model were the Northland rail line fully upgraded. There are likely to be some extra efficiencies associated with more Northland exports having access to NorthPort in competition with Tauranga. But, as noted, we have noted no material differences in costs to importers or exporters when choosing between ports already connected by rail. The overwhelming cost driver for freight is changing modes rather than prices broadly set by shipping lines in their logistical and financial interests. However, there are currently some inefficiencies from the existing port configuration for exporters in Northland. Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export.
distance travelled, at least among ports within a few hundred kilometres of each other.

**Environmental Issues**

The transition from a road- to rail-based configuration for Upper North Island ports will reduce carbon emissions and other pollution. This is important both to contribute to New Zealand’s goal of Zero Carbon by no later than 2050 and to its international marketing efforts as exporter of low-carbon-emission foods and other products. A strong transition to rail would be expensive in Auckland given due to land values and we expect improving Auckland’s commuter services is in any case a higher priority for new rail lines for Auckland Council and its ratepayers than transporting containers in and out of its CBD. Indeed, making early decisions about the timeline for the port’s closure would allow for the transition of existing and future rail capacity from international freight to local commuters, as makes sense for a service-based economy.

We also note environmental pressures are likely to lead to a reduction of dairy production in the Waikato and an expansion in Northland.

In Auckland, we anticipate the environmental impact of dredging a further 2 million tons from the Waitemata seabed necessary to allow for modern ships such as Panamax-type ships to reach the CBD port would be unacceptable to many Aucklanders, not least its tangata whenua / tangata moana. No such dredging is required at NorthPort to allow access by Suezmax ships already visit.

**Socio-Economic Factors**

Relocation will occur over 10-15 years and should...
Our recommendation will require Auckland port workers to relocate to Northland and also the Bay of Plenty. Relocation will occur over 10-15 years and should be managed constructively by the port companies and unions. There is no need for any redundancies.

In terms of the costs of relocation, in September 2019, median house-prices in Auckland, Northland and Bay of Plenty were $848,000, $477,000 and $605,000 respectively and rents will also reflect these prices. This may make it easier for port workers and those in supporting industries to enter the property market.

It should be noted that our recommendation may have a material upward effect on house prices in Whangarei and a small downward effect on Auckland house prices, but we would regard this as to the benefit of both cities.

The transfer of jobs and any house-price inflation from Auckland to Northland should therefore be seen as a positive in terms of overall national wellbeing and the priority the Coalition places on regional development.

**Managing Future Growth**

Our analysis began not with an assumption of a static freight environment but one with ongoing growth. As noted, New Zealand’s international freight is projected to grow by 55% by 2042, from 237 million tonnes in 2012/13 to 366 million tonnes in 2042/43.

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In our Second Interim Report, we estimated that Ports of Auckland would need to spend $500 million to upgrade its infrastructure by 2026 and a further $1 billion over the following 30 years. Given the broad consensus the CBD port is unviable at its current location in the medium-term, this investment risks being a sunk cost and that on which it is spent risk becoming stranded assets. It does not immediately seem to be the best use of $1.5 billion of ratepayers’ money.

This view is reinforced by our consultations with shipping lines and freight forwarders who see Auckland’s ability to meet their needs becoming redundant in five to ten years not the 30 years described in Ports of Auckland’s future strategy documents. If Auckland is to remain in operation, issues such as dredging and a second harbour crossing are becoming increasingly urgent. Similarly, structural changes are needed at Tauranga to maintain and grow capacity. We estimate it will need to invest up to $1.2 billion over the next 30 years to cope with future growth.

Even if such investments are acceptable to ratepayers and shareholders, the major constraint – especially for Auckland – is land rather than capital. As noted, projected increases in volumes would see a more than doubling of truck trips to the port over the next 30 years, with unacceptable effects on Auckland’s overall roading network; on the roading, cycling and pedestrian networks in the central city; and on the trucking and logistics industry itself.

It is unlikely road connections and rail could be realistically improved to meet this demand which includes one truck trying to leave the port gates every 23 seconds, let alone manage friction with motorists, cyclists and pedestrians. Volumes of motorist, cyclists and freight forwarders see Auckland’s ability to meet their needs becoming redundant in five to ten years not the 30 years described in Ports of Auckland’s future strategy documents.
and pedestrians are also expected to significantly increase in the years ahead, worsening this friction. Ultimately, this situation is unsustainable and Auckland needs to choose whether Quay Street, western Tamaki Drive and the Grafton Gully are to be almost exclusively for container trucks or whether they are for motorists, cyclists and pedestrians. Under the status quo, the growing friction means they cannot be for both long term.

At NorthPort, the lack of effective road and rail linkages have prevented it growing more than it has. These road and rail issues are far more easily addressed for NorthPort than for Auckland, although, in any case, we conclude that the lack of effective cooperation between the shareholders of the land owners and port operators is at least as and probably more important in preventing NorthPort from reaching its potential.

Assessing Solutions for the Upper North Island Supply Chain

In pursuit of a solution to the problems summarised above, we developed a number of key principles to guide our understanding of the future state of the Upper North Island Supply Chain. These are outlined below.

Cost efficiency in moving freight

- Moving freight is critical to the New Zealand economy and our future supply chain strategy must keep the costs of moving freight as low as possible. This is particularly important in considering any reconfiguration of the supply chain, as we do not have the ability to direct freight. Freight will flow in the most cost-efficient way possible as the market allows.
• It is important to ensure value for money and minimise costs to taxpayers and ratepayers right across the network, encompassing rail, road, ports, inland ports and freight hubs.

**Maintaining the level of competition in the supply chain**

• A strategy that promotes monopolism is not in the best interests of New Zealand. Healthy competition between supply chain providers is a good driver of innovation and cost effectiveness.

• Ports also need to consider the impact of their actions beyond the harbour gate. For example, they should not develop container handling capacity greater than the capacity of the roads to handle it and thereby seek to optimise their efficiencies while socialising the costs of this to the population of Auckland outside their gate.

**Reducing the ‘friction’ between freight and passenger movements**

• It is important that the strategy must reduce friction between freight and people as much as possible. We therefore have considered a future supply chain that favours the provision of infrastructure that limits the degree to which freight activity impinges on public areas, and reduces the interaction between freight and passenger movements, particularly in congested areas.

• Limiting the extent to which freight activity impinges on public areas requires consideration of the social licence. Social licence and working within the communities that the network is there to serve requires important consideration, particularly in Auckland but also in Tauranga. We are therefore prioritising freight modes
such as rail, and coastal shipping where possible, and place particular emphasis on optimal land use.

**Maintaining or improving the resilience of the supply chain**

- The strategy must ensure that the Upper North Island Supply Chain can continue moving freight in the event of a natural disaster or other events that impact areas of the Upper North Island. A two-port system is therefore needed for the Upper North Island. Significant geographical separation is preferable.
- Given the significance of the Upper North Island supply chain to the rest of the country, a strategy that relies on one port is not in the best interests of New Zealand.

**Contributing to overall government objectives**

- Our strategy must contribute to the Government’s overall objectives. We are therefore giving priority to a future supply chain with focus on road safety, reducing carbon emissions, promoting economic development of the regions, in particular Northland, reducing congestion in Auckland and promoting the economic and overall wellbeing of its residents.

**Options**

Based on these principles, we assessed a number of options and scenarios for the future UNI supply chain:

- Maintaining the status-quo, whereby the Upper North Island is serviced by Port of Tauranga and Ports of Auckland, and Northport to a lesser extent;
• Managed closure of the Ports of Auckland’s freight operations, with Port of Tauranga expanding capacity to be able to accept the freight of the Ports of Auckland in addition to its own, including appropriate levels of landside infrastructure and capacity to grow as levels of freight increase. No major development at Northport.

• Managed closure of the Ports of Auckland’s freight operations, with both Northport and Port of Tauranga expanding capacity to accept the freight of the Ports of Auckland, in addition to their own, including appropriate levels of landside infrastructure and capacity to grow as levels of freight increase.

• Managed closure of the Ports of Auckland’s freight operations, development of a new “super” port in the Upper North Island that can handle the Ports of Auckland freight task, along with appropriate landside infrastructure and capacity to grow as levels of freight increase. (The location of this port was considered to be in the Firth of Thames and separately in Manakau Harbour).

We rejected a number of these potential futures based on our economic, multi-criteria analysis and stakeholder consultation. A number of the options considered required significant capital investment in order to meet our design principles. For example:

- Assuming that a new super port in the Firth of Thames was granted a very contentious Resource Consent it would require massive significant capital outlay to link the port up to the road and rail network, plus electricity, water and sewer services and would potentially preclude on-going competition for port operation and freight transport.

We discounted Manukau, given that entry conditions, in particular the shifting bar, have resulted in the maritime insurance industry stating that they would not support any on-going large container shipping through that harbour.
• Using the Port of Tauranga as a single option would potentially stymie competition and require significant investment in a second tunnel through the Kaimai range in order to satisfy our resilience principles.

We also discounted a port option at Manukau, given that entry conditions, in particular the shifting bar, have resulted in the maritime insurance industry stating that they would not support any on-going large container shipping through that harbour.

**Costs of Consumer Goods**

We have given special attention to the question of any inflationary effects of closing the port at Auckland, in the heart of the main consumer market, and relying upon NorthPort to the north and Tauranga to the south for the importation of consumer goods. It has been claimed by defenders of the status quo that this could lead to price rises for particular imported consumer goods specifically in Auckland or, alternatively, that it could have a smaller general inflationary effect across the economy. We have found no evidence to support these suggestions. Indeed, the evidence points the other way, to there being no inflationary effect and perhaps a deflationary effect instead.

In terms of specific imported products – whether clothing and footwear; food and drink; or electronic goods and books – in many cases consumer prices are set globally or at least regionally. With the rise of online shopping, the trend towards global equilibrium prices is likely to accelerate. In any case, prices in competitive markets even within the domestic economy are not set on a cost-plus basis. Single consumer prices tend to prevail across the economy. Where the evidence points to there being no inflationary effect, and perhaps a deflationary effect instead, it is implausible to suggest that the price of any imported good will
they do not, that is primarily the result of decisions taken at the retail level, for example with consumers perhaps being prepared to pay more for the same item purchased at a Newmarket boutique than in a discount store elsewhere in the city. It is implausible to suggest that the price of any imported good will differ one way or the other between Whangarei, Auckland, Tauranga or anywhere else in New Zealand as a result of the implementation of our recommendation. Were any such effect plausible, it would exist already with stakeholders advising us that around 30% of imports destined for Auckland already enter the country through Tauranga with no additional cost to the customer and ultimate consumer.

In terms of any general inflationary effect, our analysis also indicates there would be none. Industry representatives advised us that costs of moving containers from the CBD port to the inland port and through to distribution centres is often underestimated. Moreover, those costs are rising as a result of growing gridlock in the city which is worsening the efficiency of trucking within Auckland, creating a vicious cycle as discussed earlier.

We asked industry representatives to provide some indicative road transport costs for a 20-foot equivalent container (TEU) from each of the Upper North Island ports to the centre of Auckland, as well as to freight hubs. This analysis confirmed our anecdotal evidence that the costs of importing a container via Tauranga to the Auckland freight hub are broadly the same as directly through the CBD port at Auckland. The suggestion that the cost of moving a container from a factory in China to an Auckland freight hub differs depending on whether it enters New Zealand through Tauranga, Auckland or in the future NorthPort is entirely unsupported.
There are in fact no uniform fixed costs for container movements within New Zealand, as prices vary significantly due to volume, availability of back-loading and the regularity of service demand. Quotes for 44-foot containers from the far north to Auckland vary from $200 to $2000 per container. Moreover, the Ministry of Transport’s 2001 report on transport costs and charges found that the average road transport cost per net tonne-kilometre can be much higher for short distances or low tonne-kilometres, and reduces as either the amount moved or travel distance increases. This is not surprising because the share of fixed costs per will be higher for low volumes, either in distance or in net tonne-kilometres.

Moving the main port of entry for imports from Auckland to NorthPort theoretically has two cost-related impacts. First, it reduces the steaming time for vessels from the main shipping lines, with less steaming time meaning less fuel burned. Second, there is the cost of transportation from the port to final destination. Both impacts from our recommendation are marginal and are overwhelmed by the current inflated prices caused by the balance of commercial power being with the international shipping lines rather than New Zealand ports.

If there is to be an economy-wide cost impact of our recommendation taken as a whole, it is more likely to be downward, given the greater efficiency of our two-port model, the shift in commercial power from shipping lines to the ports, and from the change from road to rail.

**Findings and Conclusions**

An economy-wide cost impact is more likely to be downward, given the greater efficiency of our two-port model, the shift in commercial power from shipping lines to the ports, and from the change from road to rail.

Given the enormous ongoing destruction of
Our work has led us to conclude strongly and unanimously that the progressive and managed closure of Auckland’s freight operations, the continuation of Tauranga’s existing expansion plans and the development of NorthPort is in the best interests of Auckland, the rest of the Upper North Island and New Zealand as a whole. Given the enormous ongoing destruction of Auckland Council and Aucklanders’ wealth from the status quo and the intolerable congestion they already experience, we recommend that this process begin immediately.

This change to the port configuration of the UNI supply chain would be supported by the development of land-side infrastructure including a rejuvenated North Auckland Rail line and spur to Northport; a new inland freight hub in the Northwest of Auckland to complement Metroport in the South of Auckland; and the continuation and potential acceleration of road improvement projects between Auckland, Whangarei and Northport.

This reconfiguration needs to be a managed transition but it needs to be completed as quickly as possible. Based on our discussions with stakeholders, the time required to build the rail link to Marsden Point, upgrades to the North-Auckland Line and construction of a new freight hub in the north-west off the city we assess that it can be fully completed by 2034, with a stretch target of 2029.

We assess that change can be fully completed by 2034, with a stretch target of 2029

Aucklanders’ wealth from the status quo and the intolerable congestion they already experience, we recommend that this process begin immediately

As noted, Aucklanders’ import needs are already 30% serviced by the port at Tauranga at no additional cost to customers or ultimate consumers. They can be met entirely by ships unloading at NorthPort and Tauranga at no additional cost to customers.
consumers, and perhaps at lower cost. A new freight hub in the north-west of Auckland would provide a complimentary freight terminus to Southdown where rail and road (50max / HPMV) cargo can be interchanged, cross-shipped and de-vanned for local distribution within the Auckland region using smaller trucks.

Supply chain experts, suppliers and freight forwarders all advised us that the supply chain can and will respond quickly to a reconfiguration, but shipping lines will be fundamental to this reconfiguration.

We have identified a potential rail option for moving freight across Auckland utilising the designated rail corridor or freight tunnel between Avondale and Southdown. While it would not immediately be required in support of our recommendation, with road transport potentially able to be used without disrupting the CBD, we strongly recommend it be commissioned immediately in order to deliver the full benefits of our proposal in terms of reduced congestion and carbon emissions. As freight volumes increase in line with forecast growth, a rail connection should be established between the two hubs to facilitate more efficient movement of freight across Auckland.

The immediate benefits to Auckland are clear and recognised by the majority of its residents and the inevitability of change is accepted by all stakeholders. The sooner the timetable for that change is confirmed, the sooner fully informed decisions about future Auckland’s public transport, roading and other infrastructure can be made. The release of waterfront land and regeneration of the port precinct, and the improvements in value of adjacent land, would improve the Auckland Council’s balance sheet by an estimated $6 billion along with its ratings base, giving it greater

Supply chain experts, suppliers and freight forwarders all advised us that the supply chain can and will respond quickly to a reconfiguration.

The release of waterfront land and regeneration of the port precinct would improve the Auckland Council’s balance sheet by an estimated $6 billion along with its ratings base, giving it greater
billion along with its ratings base, giving it greater choices about future investments or household rates reductions. Both these factors will deliver sizable reductions in congestion and emissions in the Auckland CBD and wider city.

Potential re-purposing of industrial land in South Auckland could also lead to higher land value uses, higher value jobs, higher productivity and further additional capital value and income for Council. For example, processing of imported cars is currently carried out at multiple sites across South Auckland, all with relatively high land values. If cars were imported to NorthPort instead, these operations could easily be relocated to consolidated processing in Northland where land values and therefore storage and overheads costs would be lower. A workforce currently struggling with Auckland’s high house and rental prices would also benefit significantly from lower house and rental prices as well as potentially lower living costs should they choose to relocate to Whangarei.

The uplift in land values aligns well with economic development strategies and other council growth plans. Growth of the city to the north in particular could benefit from the rejuvenation of the rail corridor, with clear long-term potential to develop both freight and passenger traffic and associated value up-lift from intermediate stations and stopping points.

Monetary aspects aside, the redevelopment of Auckland’s waterfront land would improve its amenity value, restore public access from the CBD to the harbour and improve the overall wellbeing of its residents and visitors.
Benefits to Northland are also significant. Our recommendation necessitates the continued growth and development of transport links between Auckland and the region enabling the enhanced flow of people, goods and ideas between the two. The establishment of an international container terminal at Northport would bring more jobs in immediate port and freight-forwarding operations but also secondary flow-on effects in service industries, and the education and health sectors. The growth of Northland’s horticulture industry would also be potentially enhanced through closer links to its export market through NorthPort. These factors combined would lift the local economy and reduce poverty and inequality, including for Northland’s high Māori population. We anticipate some additional house-price inflation in Whangarei.

Our formal economic analysis of the move to Northport conservatively estimates our recommendation would be worth an additional $200 million to the Northland economy over 30 years in direct and induced economic impacts. There would be around 2,000 additional permanent jobs, plus shorter-term jobs associated with the infrastructure build.

The supply chain would also benefit in being more efficient and resilient with the Auckland CBD and wider region being serviced from two main freight hubs, one in the north-west and one in the south-east. The industry is agnostic about port location as long as freight can be moved efficiently and cost-effectively. Our modelling indicates that NorthPort can accommodate the number and frequency of ships that currently visit Auckland. Rail between NorthPort and Auckland can deliver at least the performance of the status quo in terms of delivery to customers and consumers. It is anticipated that the ultimate design of Northport would allow direct
rail-to-ship and ship-to-rail delivery of containers, reducing freight costs compared to double handling which currently takes place at Auckland. Every stakeholder we spoke to expressed the need for increased investment in and use of rail, particularly to and from the ports, freight hubs and distribution points. In turn, this would also alleviate some of the pressure on the State Highway network and reduce the need to operate relatively expensive 50MAX and high-productivity vehicles.

An important consideration is how Auckland Council views the loss of port operations in Auckland. It will be required to take a lead role in managing the transition, including to:

- Provide a managed release of land from the Ports of Auckland site, to maximise its value and the quality of subsequent development
- Signal the redirection of freight from Auckland which will underwrite the investment in Northport and commence its design activity
- Provide greater confidence for Port of Tauranga to plan for and invest in future freight task requirements
- Ensure certainty for supply chain stakeholders

It is in Auckland Council’s interests for this process to start immediately and be concluded as soon as possible. The closure of the freight port and the redevelopment of the waterfront is a potential lifeline for the city and people of Auckland. Under our recommendation, there will be a reduced need to build expensive infrastructure assets within the city in the near term, or conduct dredging of the harbour to accommodate larger container vessels. Moreover, the port company is already proceeding with on-going

The ultimate design of Northport would allow direct rail-to-ship and ship-to-rail delivery of containers, reducing freight costs compared to double handling which currently takes place at Auckland

It is in Auckland Council’s interests for this process to start immediately and be concluded as soon as possible.
construction of fixed infrastructure assets such as a car park and other new structures and buildings. Taking the accepted view that the port has a finite life time, which shipping lines estimate to be as little as 5-10 years, these projects are producing expensive stranded assets which will need to be demolished. Perhaps the worst outcome for Auckland would be their recent construction being used politically as a reason not to move away from the environmentally and financially unsustainable status quo.

Questions have been raised about whether Auckland Council should be compensated for its historic investment in its CBD port and for an alleged adverse impact on its economy.

In terms of the first issue, there is no case for compensation given the value for Auckland Council’s balance sheet and rating base our recommendation will deliver in less than 15 years, and the port’s low dividend. Moreover, all stakeholders, including Auckland Council, believe that the CBD port needs to close in the future, so that historic investments can only be seen as sunk costs. Given the $6 billion boost to Auckland Council’s balance sheet and the enhanced ratings base it would gain from the implementation of our recommendation, a case could be made for central Government to capture some of the value of the consequent betterment. We do not support this, and suggest Auckland and Auckland Council be allowed to capture all the benefits of our recommendation.

In terms of the second issue, any impact on Auckland’s wider economy will also be positive. Price Waterhouse Coopers estimates that Wynyard Quarter, on just 35 hectares, will generate $2 billion of GDP and sustain 19,200 full-time equivalent jobs in 2040. The port currently uses 77 hectares of Auckland waterfront land to generate
$150m of GDP and sustain 460 employees. Our recommendation cannot fail but to radically improve this. It would result in significant long-term growth in productivity, employment and incomes for the Auckland Council region.

From a New Zealand-wide perspective, our economic advisors, EY, calculate the benefit:cost ratio of our recommendation to be 2:1.

**An Appetite for Change**

We have talked to all people who wanted to talk to us and we have not heard a valid reason against our recommendation. Any objections we have heard have been based on inaccurate information about the benefits of the status quo and the costs of change. We have addressed these matters through this report.

In summary, our recommendation has wide-reaching benefits that would enable the Auckland, Northland and New Zealand economies to grow and improve the wellbeing of their people:

- It moves 77 hectares of prime Auckland land to its highest and best use; delivers $6 billion in value to Auckland Council; reduces congestion throughout the city; makes Auckland a better city to live, work and visit according to its residents; promotes much-needed economic growth and jobs in Northland; and supports planned growth in the Bay of Plenty.
- It reduces carbon emissions and motorway congestion by creating a port configuration designed for rail rather than road.
- It promotes resilience in the supply chain by providing two distinct North and South entry points for international freight originating in and destined for Auckland.
- It reduces transport friction in the Auckland CBD which is currently a congested entry point for freight out of Ports of Auckland, and provides two alternative entry points into the city.
• It potentially further reduces friction with urban personal transport and regional deliveries able to be further reduced by a dedicated freight rail line through the Avondale corridor, connecting the two main freight hubs.
• It improves road safety by increasing rail freight capacity.
• It maintains levels of competition in the Upper North Island Supply Chain, and fosters innovation and cost effectiveness and efficiency of freight delivery.
• It maximises the use of the existing port system and the availability of surrounding land at Northport, noting potential alignment with other strategic projects such as a new dry-dock and rail staging for NZ refinery in west Auckland.
• It avoids the significant capital investment and development that would be required to build a new super port by making the best use of our existing ports.
• It avoids further dredging of the Waitemata Harbour, and the huge capital spend in Auckland needed to get freight off the port to the motorway that is already gridlocked at peak times.
• It does not increase freight costs and may reduce them, meaning it will have no inflationary effect on consumer goods, and perhaps a small deflationary impact.

Roadmap for Government: Leadership, Investment & Regulation

With at least 20 similar studies have been carried out over the last decade, the time for procrastination is behind us and the time for decisions and implementation is now. Given the enormous ongoing costs of the status quo, each year’s delay costs the people of Auckland tens of millions of dollars and prevents NorthPort and the people of Northland from benefitting from change.

Change will not occur without Government leadership over a sector that exists in its current shape only because of earlier 1980s’ legislation.
We identify three roles for Government: leadership, investment and – if necessary – regulation.

**Leadership**

The essential first step for central government is to adopt the recommendation as government policy and state its commitment to making it happen by 2034 at the latest. This will provide a vital signal to local government, port companies, supply-chain participants, the public service and the public that it accepts the case for change, for the process to begin immediately and for its implementation to be completed within 10-15 years. That is, the Government needs to be the first prime mover, setting out its commitment to the plan, its commitment to invest when required, and its commitment to regulate if that proves necessary. Without this commitment, it is clear to the Working Group that individual decision-makers will not be, or not remain, sufficiently committed for the change to happen on its own, despite the clear economic benefits to New Zealand and the local economies.

However, much more is needed from Government than this initial first step. It will be necessary for the Government to give momentum for the process and the urgency that is required. We recommend that Government facilitate a process through the establishment of project implementation capacity to achieve delivery and resource it accordingly. **The project implementation capacity should be based in Auckland and lead and staffed by people with extensive experience in difficult multi-billion dollar commercial negotiations and managing major engineering and infrastructure projects, and proven international track-records in meeting deadlines and budgets.** The capacity would need to have sufficient mana and independence to facilitate the
necessary bilateral or multilateral equity discussions that will be needed among the ports, shipping companies, shareholders, local and central government, KiwiRail, trucking companies, and major port users. It will need to be respected by all sides, and be listened to by ministers. A facilitated process like this would help Government to identify early whether a trigger point had been reached for regulatory options to be pursued.

As part of the follow-on work to develop an appropriate transition plan and delivery structure we also recommend that work is done by Government to ensure that port operations and development, and any other potential Crown or commercial investments in Northport, for example the potential dry dock and / or move of the NZDF naval facility, are fully deconflicted.

As outlined below, our preference is that our recommendation be implemented through agreement among the affected commercial parties and central and local government agencies. However, as a backstop, we recommend that the Government set a one-year deadline, expiring on 1 December 2020, and make clear that if significant progress has not made by that date through commercial negotiations among the parties, Cabinet will introduce legislation to Parliament to amend the Port Companies Act 1988 and take all necessary steps to force the implementation of our recommendation. The Government should also make it clear that it would treat any defensive steps that are taken in the meantime, such as a split of Ports of Auckland into land-holding and operations companies, as reversible through legislation.

**Investment**
Underlining its leadership commitment to our recommendation, we further recommend that the Government immediately confirm it will make the necessary investments in rail and road infrastructure to make it happen. This includes most particularly a fully upgraded Northland rail line and spur to Marsden Point, as well as an acceleration of roading upgrades between Auckland and Marsden Point. This in turn will encourage and build confidence in investments by the port companies and the private sector to give effect to the plan.

The necessary investments and responsibilities are shown in the table.

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<thead>
<tr>
<th>What needs to be built</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>Rail upgrade north with link to Northport</td>
<td>Government / KiwiRail</td>
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<tr>
<td>Development of Northport</td>
<td>Port companies</td>
</tr>
<tr>
<td>Development of West Auckland inland hub</td>
<td>Private enterprise / NZ refining / KiwiRail</td>
</tr>
<tr>
<td>Road upgrades north (a continuation of current planned investment)</td>
<td>Government / NZTA</td>
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**Regulation**

The Working Group does not propose specific regulatory interventions to give effect to our recommendation. With a clear commitment by Government that the recommendation will be implemented and that it will make the necessary investments in rail and road, there is no reason that agreement cannot be reached among the affected commercial parties and central and local government agencies by the proposed 1 December 2020 deadline, avoiding the need for the backstop to take effect. While existing ownership arrangements are dysfunctional – as emphasised
throughout this report – the Government can further help facilitate these discussions through the project implementation capacity.

The project implementation capacity would also have the function of recommending to the Government after 1 December 2020 whether or not the backstop needed to be triggered. In making this recommendation, the project implementation capacity would need to consider a range of matters discussed below.

NorthPort [THIS IS A SUB-SUB HEADING]

The Working Group has identified that the current ownership structure constrains the long-term development of NorthPort in a way that isn’t in the shareholders’ or New Zealand’s best interests. The key issue is that the structure makes it too easy for one or other of the shareholders to use their voting interest as a blocking stake, depending on how their individual short-term interests view the particular matter. This will need to change for the recommendation to be successful and for NorthPort to grow.

We again emphasise we would prefer for this change to be made on a commercial basis between the parties involved, and we are confident that this is feasible should the Government pursue the leadership and investment steps outlined above. However, should commercial negotiations fail, regulatory options could include legislation requiring the relevant local authorities and council-controlled organisations to divest, purchase, consolidate or otherwise deal with their shareholdings in the relevant ports, for the purpose of establishing an ownership structure that supports growth at NorthPort. This option would have to be carefully communicated that it was a perfectly legitimate step for Parliament to take given
the organisations are already creatures of statue, namely the Port Companies Act 1988, and therefore not precedent setting for any other commercial organisations.

*Ports of Auckland and Auckland Council [AS NORTHPORT HEADING ABOVE]*

It is to be hoped that Ports of Auckland’s governance and management will not act as a barrier to the transition. We believe they have important roles to play both in the development of NorthPort and in the success of the new Cruise Ship terminal at Auckland.

One key risk is a potential plan to separate the company into an OpCo and a LandCo, with the floated OpCo holding a long-term lease over the port land and then being privatised based on the value of holding this lease. The split proposal appears to be a defensive strategy to prevent the implementation of our recommendation, and we recommend the Government and Auckland Council oppose it and, if necessary, take steps to prevent it.

Another key challenge is the interests of the shareholder, Auckland Council, which appears to place reliance on dividends from the port. However, while last year it paid a $50 million dividend, it borrowed $75 million to do so. Next year, it will pay an $8.7 m dividend. As outlined in our Second Interim Report, rates and ground leases over the waterfront land would deliver the Council an estimated $100 million while transparent land valuation would dramatically improve Auckland Council’s balance sheet and ability to fund transport infrastructure.
An interrelated issue is the valuation methodology used for port land. As noted in our Interim Report, the Auditor General has commented unfavourably on the variation in approaches to port land valuation. If the land the port currently uses was valued at its highest and best use (as is the case with rating of land in private ownership) it would be in our view unconscionable for a public authority to allow the port land to continue being used in its current manner.

The implementation of our recommendation would be difficult without Auckland Council’s cooperation. The question is whether that cooperation will be voluntary, or whether regulatory or other government intervention will unfortunately be required. There are regulatory options available to the Government to force the issue if necessary. At the more limited end of the spectrum of interventions, there could be a change the required valuation method to be used for the land the Port of Auckland currently uses to highest and best use. At the more significant end, Government could force changes to the ownership of Ports of Auckland’s assets, change its objectives, or require changes to its ownership. These are legitimate given Ports of Auckland is a creature of statute.

Port Cooperation and Other Regulatory Matters

We have not come across unsurmountable regulatory barriers to greater port cooperation or more efficient operation, provided the relevant decision-makers are committed to the outcome and working through any issues carefully and systematically. For example, inefficiency caused by excessive empty container
movements should be able to be resolved through collaborative agreements that are acceptable within the Commerce Act 1986.

The Government must, however, keep an open mind to the need for regulatory reform of legislation relating to port companies. The Port Companies Act 1988 is an old piece of legislation enacted with the expectation of relatively quick port divestment, so applies awkwardly to ports that remain in substantial local government ownership. The Productivity Commission identified some potential, relatively minor, regulatory barriers in the Port Companies act that we recommend that government reconsider. If legislation proves necessary to shift the incentives, we recommend that the Port Companies Act is revised to ensure it remains fit for purpose.
Upper North Island Supply Chain Working Group Members

Wayne Brown (Chair)
Mr Brown, an engineer, builds and owns roads, pipe networks, subdivisions and commercial buildings. He has extensive experience in fixing Auckland infrastructure messes. He was appointed to chair Vector back to reliability and profit following Auckland CBD power failure; chaired Auckland DHB to get the $300 million Auckland City Hospital build back on time and budget; and publicly predicted major electricity supply failure at Penrose before then being appointed to chair Transpower to bring a 400kva line up through Waikato and upgrade supply through Auckland. He was the founding chair of Kordia and drove the introduction of Freview, and was appointed to chair Land Transport Safety Authority to sort out the digital driving license fiasco. He is also a two-term Mayor of Far North.

Noel Coom
Mr Coom spent 46 years in the shipping, rail, freight and logistics sector. He was previously a senior manager in a number of shipping companies in New Zealand, Los Angeles and Sydney, as well as the previous Group General Manager of TransRail in New Zealand. Mr Coom is a current Director of Mondiale Freight Services Limited and previously served as a member of the Port Future Study Group commissioned by Auckland Council.

Susan Krumdieck
Professor Krumdieck is the Co-Leader of the Global Association for Transition Engineering and Director of the Advanced Energy and Material Systems Lab at the University of Canterbury. She has spent the last 17 years consulting for local and central government, and community groups on a number of transport, energy and future demand projects. She has strong academic background and in-depth understanding of engineering and transport modelling.

Gregory Miller
Mr Miller has three decades of experience in the logistics and global supply chain sector, having been the Managing Director of Toll New Zealand and the Global Development Manager of Mainfreight Group Limited. He is a Fellow of the Chartered Institute of Transport and Logistics and has a wealth of supply chain knowledge both domestically and internationally to this role. He is the current Chief Executive of KiwiRail.

Shane Vuletich
Mr Vuletich has spent the past 17 years consulting on a number of major events, business strategies and providing advice on provisions of tourism and infrastructure. He is currently the Managing Director of the Fresh Information Company specialising in strategy, measurement, evaluation and forecasting and has a strong analytics and economic background. Mr Vuletich was a member of the Port Future Study.
Vaughan Wilkinson

Mr Wilkinson has 37 years experience in the agriculture and fisheries sector, and has been involved in a range of roles spanning from teaching to research to senior management, most recently with Sanford Limited. He has also held a number of directorships, mostly in the marine and fisheries sector. Mr Wilkinson is also an exporter of fish.
### TABLE 1

**New Zealand National Freight Demand 2018**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Million tonnes</th>
<th>Percentage of total</th>
<th>Billion tonne-km</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail transport</td>
<td>15.6</td>
<td>5%</td>
<td>3.5</td>
<td>12%</td>
</tr>
<tr>
<td>Coastal shipping</td>
<td>4.8</td>
<td>2%</td>
<td>4.0</td>
<td>13%</td>
</tr>
<tr>
<td>Road transport</td>
<td>258.5</td>
<td>93%</td>
<td>23.1</td>
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<tr>
<td>Total</td>
<td>278.7</td>
<td>100%</td>
<td>30.6</td>
<td>100%</td>
</tr>
</tbody>
</table>

**GRAPH 1**

[Diagram of Upper North Island Port Ownership Structure]

**MAP 1**

[Map showing port ownership structure]
A resilient two port mode

Aligned with the decentralisation of growth, across central Auckland, and towards the north, south and west.

62% of Aucklanders think moving Auckland's second port would make the city better.
Transforming Auckland;
Transforming Northland

Final Report
of the
Upper North Island Supply Chain Strategy
Working Group

11 November 2019
Upper North Island Supply Chain Working Group Recommendation

1. Ports of Auckland’s freight operation to progressively be closed and the land it currently occupies be progressively rezoned for higher and better uses.
2. Port of Tauranga’s existing expansion plans to proceed to accommodate growth.
3. NorthPort to be developed to take over much or all of Auckland’s existing and projected future freight business.
4. Auckland’s cruise-ship terminal to be modernised and the Waitemata to become a commuter, tourism and recreation harbour.
5. The new two-port configuration to be supported by a rejuvenated North Auckland rail line and spur to Northport, and a new inland freight hub in northwest Auckland to complement and be connected to Metroport in the south.
6. Transition to begin immediately and be fully completed by no later than 2034, fifteen years hence.
Introduction

The Upper North Island Supply Chain Strategy Working Group was established under the Labour-New Zealand First Coalition Agreement, which included a commitment of "commissioning a feasibility study on the options for moving the Ports of Auckland, including giving Northport serious consideration".

The Working Group’s study has been carried out in the context of New Zealand’s domestic and international freight being projected to grow by 55% by 2042, from 237 million tonnes in 2012/13 to 366 million tonnes in 2042/43.1

At the same time, Ports of Auckland’s major freight operation is already significantly constrained, especially on the landside. It would require an estimated $5-8 billion in investment over the next 30 years, and the dredging of a further two million tons from Auckland’s Waitemata Harbour, to deal with this growth. Within 15 years, one container truck would be leaving its gates into Auckland’s already gridlocked traffic every 23 seconds, worsening to one every 16 seconds by 2049. Auckland’s freight port is struggling to maintain its social license, with regular public and political calls for it to move or its growth checked.

Beyond Auckland, other very large investments, of $1.2 billion at Port of Tauranga and $2.5 billion in the Upper North Island’s road and rail networks, would also be needed to maintain the status quo.

*We need to establish at the outset that maintaining the status quo is expensive, inefficient and unsustainable. Expensive is easy to

---

establish—the ports and landside investments required to keep things moving are eye-watering. We need to emphasise the massive amounts required to keep POAL in its current location. When we talk about inefficiency, we need to be clear that we’re talking about the location of POAL, not POAL itself. POAL is actually quite an efficient port, but its location is extremely inefficient. The first inefficiency relates to the supply chain—its location requires freight to be moved through the most congested arterials in NZ. You could possibly engineer yourself out of this problem, but it would cost billions. The second inefficiency relates to land use—using Auckland’s best land to move freight is social and economic vandalism. The only solution to the land use problem is relocation. The unsustainable bit relates to the consensus that POAL needs to be relocated. Even POAL doesn’t argue with this—the only disagreement is around timeframes. We’re just saying it needs to happen now to avoid wasting billions of dollars on a sub-optimal location.

The status quo is therefore not free. The question for taxpayers, ratepayers and shareholders of the three Upper North Island ports is whether large sums need to be invested to manage freight growth but how and where that money is best spent.

After nearly 15 years of months of work and two interim reports, our main recommendation is that:

1. **Ports of Auckland’s freight operation is no longer viable at its current site as it’s constrained by landside infrastructure failure—and it is in the interests of taxpayers and ratepayers that it be progressively be closed and the land it currently occupies be progressively rezoned for higher and better uses;**

   **Our solution** envisages a port configuration designed for 21st century rail rather than an overloaded 20th century road network that emerged from the horse-and-coach era of the 19th century.

   **Commented [SV2]:** should we cite the efficiency arguments here? POAL would argue that they are viable, which is technically true. However, they can’t argue against the efficiency arguments above.
2. Port of Tauranga’s existing expansion plans should proceed to accommodate growth;
3. NorthPort be developed to take over much or all of Auckland’s existing and projected future freight business
4. Auckland’s cruise-ship terminal should be modernised and the Waitemata become a commuter, tourism and recreation harbour;
5. the new two-port configuration should be supported by a rejuvenated North Auckland rail line and spur to Northport; and a new inland freight hub in northwest Auckland to complement and be connected to Metroport in the south;
6. this transition should begin immediately and be fully completed by no later than 2034, fifteen years hence.

Our solution envisages a port configuration designed for 21st century rail rather than an overloaded 20th century roading network that emerged from the horse-and-coach era of the 19th century. It would significantly reduce congestion in Auckland and on the Northland roading network based on the principle that roads should predominately be for people and railways for freight. Our understanding and analysis of how global supply chains operate and consumer prices are set indicates there would be no consumer price effect in Auckland or New Zealand shops. Auckland and Auckland Council would be enriched by around $6 billion and create thousands of jobs in Northland.

We are aware this is not the first report on the future of the Upper North Island Supply Chain and its implications for Ports of Auckland, the Port of Tauranga and NorthPort. Just this decade, at least 20 similar studies have been carried out. Our findings are largely

There would be no consumer price effect and Auckland and Auckland council would be enriched by around $6 billion.

The time for debate about the overall strategic concept we recommend is surely over and the time for Government-led action has arrived.

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consistent with most of those previous studies. The time for debate about the overall strategic concept we recommend is surely over and the time for Government-led action has arrived.

Our preference is that the details of the transition to the model we recommend should be negotiated by the current owners of the three ports. However, the ports are a product of the Port Companies Act 1988, they have an uncommon and overlapping ownership structure and there may be behavioural and perhaps legal barriers to their cooperating. Moreover, changes to the configuration of the Upper North Island’s ports will both require and strongly influence decisions to be made about the future road and rail infrastructure of the region.

It is our judgment, therefore, that such a transition to the new configuration will only be successful if clear deadlines are set by the Government for the completion of the commercial negotiations and its own infrastructure investments, and if a regulatory or legislative backstop is communicated or in fact established to legally require the proposed changes to have occurred by a certain date. We recommend the Government give the ports and their owners until 1 December 2020 to reach agreement, after which it should introduce legislation to Parliament to make our recommendation happen.

Our roadmap for the Government to implement the new configuration is therefore based around the three themes of leadership, investment and regulation.
This report should be read in association with the two interim reports. It recaps the rationale for change, outlines our work and analysis, makes the case for our recommendations, outlines a roadmap and urges the Government to act as soon as possible. In our view, there are few if any other projects that would so positively transform Auckland and Northland as thriving communities for the future. We commend it to the Prime Minister, the Deputy Prime Minister, the Cabinet and Parliament as a whole.

Background

The future of the three Upper North Island ports and the implications for the Upper North Island Supply Chain has been contentious for many years. At least 20 studies on the future of the Upper North Island Supply Chain and including its implications for Ports of Auckland, the Port of Tauranga and NorthPort have been carried out since 2010. The future of the freight port in Auckland's CDB has been a regular topic of fierce political and public debate. There is broadly a consensus that the status quo is not an option yet...
no long-term strategic decisions have been taken by the ports themselves, their owners, local councils or central government over what should happen.

Perhaps in recognition of this, the Labour-New Zealand First Coalition Agreement included in October 2017 a commitment of “commissioning a feasibility study on the options for moving the Ports of Auckland, including giving Northport serious consideration”.¹

Following the formation of the Coalition, the Cabinet considered how best to give effect to this commitment and resolved to establish the Upper North Island Supply Chain Strategy Working Group, which was announced in February 2018 with its members appointed in September that year. In announcing the Working Group, the Government described itself as having a strong interest in the future of New Zealand’s ports, freight services and coastal shipping, seeing them as important to lifting and securing the economic well-being of New Zealanders, promoting opportunities for regional development and employment, developing an efficient and effective transport and logistics infrastructure that is resilient and works in the national interest, and being mindful of the need to ensure the best use of scarce resources such as land, especially in metropolitan areas.

Profiles of the members of the Working Group are set out in the inside back-cover. They are experts in logistics, shipping, transport and supply chain management; engineering, infrastructure investment and management; agri-business, fisheries and tourism; and corporate governance and strategy.

¹https://s3n8k86pro7hrx.cloudfront.net/laborandnewzealand/1508875804/LabourandNewZealandFirstCoalitionAgreement2017.pdf?1508875804
The Terms of Reference for the Working Group were to set out a joint view of:

- the current and future drivers of freight and logistics demand, including the impact of technological change;
- a potential future location or locations for Ports of Auckland, with serious consideration to be given to Northport, taking a long-term view given that ports are long-term assets;
- supporting priorities for other transport infrastructure, across road, rail and other modes and corridors such as coastal shipping;
- potential priorities for transport-related infrastructure investment from a national economic and regional development perspective;
- the optimal regulatory settings, and planning and investment frameworks across government to give effect to the review findings;
- future challenges on which government and industry will need to work together; and
- key actions to be taken over the next five years.

To meet these Terms of Reference, the Working Group undertook with a number of site visits, supported by stakeholder engagement and initial analysis and advice in order to gain an understanding of the current system. A number of key themes emerged during this discovery phase that guided the remainder of the review.

The group’s second phase consisted of a strategic investigation and analysis of the Upper North Island Supply Chain. This work focused on determining the possible options available to different stakeholders and whole-system performance.
The group then undertook economic and multi-criteria evaluation of a range of potential future options for the configuration of the Upper North Island Supply Chain. Combining this with further stakeholder consultation, expert advice and research of public opinion, the group identified a preferred option for the design of a future Upper North Island Supply Chain.

A full list of the stakeholders engaged with, along with analysis of those interactions, is presented on page XX.

It became clear early on that port cities worldwide deal with the friction between urban living and freight needs in a range of ways, each unique to the urban, industrial and transport geography. There is no off-the-shelf solution. The broad theme, however, is that cities develop around ports which then tend to move to more distant locations as population grows and waterfront land-values rise. Sydney is a classic example with its transition from Circular Quay to Darling Harbour to Botany Bay. If there is any one common indicator of success it is that successfully changing supply chains or infrastructure to benefit an entire state or country requires vision, bold actions by leaders and cooperative management of the transition. In some areas, New Zealand has a record of achieving bold, visionary and cooperative change while in others it does not.

Our Second Interim Report identified a Preferred Option for the future of the Upper North Island Supply Chain and its three ports. Broadly, we recommended a two-port model supported by specifically configured rail rather than one reliant on a roading network that has evolved to meet other needs. The criteria for distant locations as population grows and waterfront land-values rise. Sydney is a classic example.

Successfully changing supply change infrastructure to benefit an entire state or country requires vision, bold actions by leaders and cooperative management of the transition. Our Preferred Option creates enormous new economic opportunities for Northland, with its
used to arrive at the Preferred Option were designed to ensure the best and most efficient freight service for the Upper North Island and wider New Zealand economies. Additional targeted outcomes were to improve the social and economic prospects of people throughout the region and to achieve goals of emissions reduction, resilience and safety. Our Preferred Option creates enormous new economic opportunities for Northland, with its high Māori and impoverished population, while significantly enriching Auckland and Auckland Council, and reconnecting the Auckland CBD with its harbour, perhaps the city’s most highly valued asset. We are in no doubt our recommendation would pass any robust Benefit-Cost analysis. Our economic advisors, EY, estimate the Benefit-Cost ratio of the Preferred Option to be 2:1. Further analysis may identify additional benefit and costs and change this ratio up or down, but we have no doubt it will remain well above 1:1, and more importantly, well above the alternatives which include the status quo.

The Working Group was tasked not only with identifying this best long-term, practical, achievable, resilient, and fiscally and operationally efficient configuration for the Upper North Island Supply Chain. We were also tasked with identifying the best strategy to make it happen. In this, our Final Report, we detail our findings, expand and develop the requirements for our Preferred Option, recommend a potential implementation strategy, and identify the future challenges and actions on which central and local government and industry will need to work together. Our timeframe for full implementation of the new configuration is 10-15 years. It would be a failure of the current generation of commercial and political leadership if by 2034 the vision we outline has not been fully realised.
The Upper North Island Supply Chain

An Overview of the Upper North Island Supply Chain was presented in the Economic Analysis accompanying our Second Interim Report. Key points included:

- The total freight task for New Zealand in 2017/18 was around 280 million tonnes
- On average, freight moves around 100 km nationally
- As the most densely populated and fastest growing part of New Zealand, the Upper North Island contributes around 53% of the New Zealand’s freight flow generated from both imports and exports
- Road haulage remains by far the dominant mode of transport with rail accounting for just 12% of the total tonne-kilometres of freight moved, less even than coastal shipping

**Insert Table 1: See at End of Document**

The Auckland region generates the largest tonnage of freight moved. This is mainly imports but also includes local products moving to local markets, freight coming into the city to cater for local needs, the movement of goods manufactured in Auckland or being shipped from distribution centres currently located in Auckland, and the movement of goods for export, mainly via the Port of Tauranga. As noted, very large investments in Ports of Auckland, Port of Tauranga and transport Infrastructure will be needed for this status quo to remain viable, even ignoring the effects on Auckland congestion. These investments will be needed for the status quo to remain viable, even ignoring the effects on Auckland congestion. These investments sum to $1.68 billion by 2034 and a further $9.24 billion through to

**Very large investments will be needed for the status quo to remain viable, even ignoring the effects on Auckland congestion. These investments sum to $1.68 billion by 2034 and a further $9.24 billion through to**
2049. Maintaining the status quo is not free, therefore extremely expensive. It is also far from being economically, socially and environmentally efficient. In our view, it would be fiscally irresponsible to invest additional ratepayer or taxpayer money in what is now widely recognised as an unsustainable supply chain configuration.

The Problem

*Ports of Auckland Unviable Long Term*

It is common ground across all stakeholders that Ports of Auckland is unviable at its current location long-term. Even if it is to remain for a further 30 years, its Chief Executive says it must expand or choke. Its expansion plans to maintain its viability for 30 years are both expensive for its owners, Auckland ratepayers, and socially divisive. Moreover, expansion of its existing operations will significantly increase Auckland’s road congestion, with one container truck projected to be leaving its gates into Auckland’s already gridlocked traffic every 23 seconds by 2034.

This does not just undermine the efficiency of Auckland’s road network for its residents and non-port-related businesses, but for users of the port itself. The prevailing complaint from Auckland supply chain users and trucking companies in particular is the already intolerable traffic congestion within the city. This drives inefficiency, with freight companies advising us that the number of daily deliveries their container trucks can make is falling to just two. This in turn is requiring them to invest in more container trucks, further clogging the already gridlocked motorway system.

Even if Ports of Auckland is to remain for a further 30 years, its Chief Executive says it must expand or choke.

Congestion does not just undermine the efficiency of Auckland’s road network for its residents and non-port-related businesses.
This almost certainly cannot be mitigated in full. Mitigating it to even a limited extent will require additional investment by ratepayers and taxpayers into Auckland’s roading network, yet this will not then be future-proofed for a post-port era. The spending will be an unnecessary sunk cost and some parts of the network stranded assets. Decisions need to be made and implemented now to avoid this outcome. This in turn would free up taxpayer and ratepayers’ funds for non-port-related investment in Auckland’s roading and public transport networks desired by the people and businesses of Auckland. Additional revenue for Auckland’s roading and public transport networks would come from the rates that the Council would gather were the port’s land moved to its highest and best use, far beyond what it earns from the port’s dividends, expected to be just $8.7 million in 2020 and $9.4 million in 2021. Our economic advisors, EY, estimate the built-out value of the port’s land could be as much as $10 billion and could be rated accordingly. EY further advises that maintaining the port at its current location is therefore costing Auckland ratepayers between $5 billion and $6 billion in lost value.

The costs of doing nothing are therefore massive and ultimately unsustainable. It is increasingly obvious that continuing to fund the status quo will result in continued and worsening inefficiency in freight movement, as well as poor social and wellbeing outcomes for Aucklanders and Northlanders alike.

Almost certainly related to these issues, the CBD port is also losing its social license to operate, as demonstrated by the ongoing fierce political debate over its future demonstrates and confirmed by our and the results of stakeholder engagement and
Colmar Brunton study of public opinion—more which show that, more than 60% of Aucklanders believe moving the port would make Auckland a better place to live, work and visit.

While unquantified, there is no question there are very significant financial, social, environmental and amenity costs for Aucklanders specifically and New Zealanders generally from delaying decisions about the future configuration of the Upper North Island ports. The best time to make decisions about the future is now.

Current Port Ownership Creates Perverse Incentives and Prevents Change

The current ownership structure of the Upper North Island ports is a legacy of government policy dating back to the Port Companies Act 1988 or earlier. This structure has not evolved through private investment or the operation of market forces but by political decisions made by central and local government, which means that Cabinet and Parliament legitimately remain primary stakeholders.

Parliament’s intention in the 1980s was not that local government should continue to own the ports but that they and the land they occupy would be sold and the market would then rationalise the services they offer leading to the highest and best use of land and other resources.

When it became clear that local government wanted to maintain ownership, including to generate dividends, and as central government policy moved away from privatisation, it was then hoped that competition would nevertheless drive efficiencies and...
rationalisation. This has not happened because competition lies offshore with global shipping lines who take advantage of the existing supply chain and the lack of cooperation between port owners. For example, competition between Auckland and Tauranga is driven by the whim of shipping lines who decide prices, the location of exports and imports, and have the ability to leverage prices between ports in New Zealand.

Consequently, most industry stakeholders agree greater cooperation is needed and for port operators to learn how to influence shipping lines rather than the other way around.

However, the competitive model envisaged during the 1980s free-market era, along with legal constraints and the cultural and behavioural norms that have subsequently evolved, have prevented cooperation and created perverse incentives. Operationally, the port companies continue to accept poor commercial arrangements for suppliers moving freight across ports. They maintain inefficient duplication of port operating structures and use their land and other resources sub-optimally, most particularly at Auckland. We have also seen the emergence of strategic cross-ownerships, in particular of NorthPort, which seem largely motivated to block its rational development. NorthPort itself advised us that the current ownership structure constrains it from developing in a way which would be in its and New Zealand’s best interests. NorthPort advised us that the current ownership structure constrains it from developing in a way which would be in its and New Zealand’s best interests.

**INSERT GRAPH 1: SEE END OF DOCUMENT**

We should note at this point our assumption that central government and local government will want the Upper North Island ports to remain in

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3 UNICS WG Meeting 1, 3 September 2018
ports to remain in majority public ownership, and that our recommendation allows for that. It would also allow for additional private investment, such as that in the Port of Tauranga, which has helped fund its growth and success.

While taking majority or at least cornerstone public ownership as a given, we also note the Productivity Commission’s report on international freight services published in April 2011, which recommended that councils should set clear objectives for port ownership. Having decided these objectives, they should choose the level of ownership that offers them the required control rights. Capital raising could then fund growth.

The Productivity Commission went on to say that Councils should consider separation of land ownership from terminal operations. This would maintain the land in public ownership while allowing for increased private investment in operations. This separation has occurred at NorthPort but the 50:50 ownership of the operating company may not be conducive to effective growth. We oppose separation at Ports of Auckland and the suggestion of privatising some or all of a new operating company. This operating company could only have value and thus attract investment if it had a very-long-term lease, over the company holding the land, which would lock in the status quo with the economic and other costs to Aucklanders and other New Zealanders we outline above. It is difficult for us to see such a land and operations split at Auckland as anything other than a ruse to maintain the port at its current location, perhaps for another century for as long as possible.

Current Structure Promotes Trade Deficit
The current irrational structure of the Upper North Island ports hampers New Zealand's efforts to bridge its longstanding trade deficit. New Zealand is a small trading nation relying mostly on agriculture and forestry to supply exports to provide income fees for the country. These income-earning export products come from New Zealand's regions. The country's population and thus its consumers are largely concentrated in Auckland. The city generates export revenues mainly from tourism, education and IT but these services do not require a port.

Of the Upper North Island’s three ports, Tauranga and is close to producers of export commodities and is known best as a successful export port but is also increasingly taking an increasing larger share of Auckland’s import business. Like Tauranga, NorthPort is also close to producers of export products and also handles the importation of all of New Zealand’s fuel, but its expansion is hampered by the absence of a rail connection. The largest of the three, Auckland, is primarily an import port. The effect of this structure is to make it easier to import into New Zealand than to export. At the margins, our recommendation will encourage greater export growth while also allowing for growth in both NorthPort and Tauranga’s import capability.

Additional Drivers of Change
The above makes clear that the status quo is not sustainable. Beyond that reality, we have identified additional drivers of change towards our recommended solution.

**Changing Land Values**

Economic and population growth drive up city land values and challenge existing land uses. When the first Queen Street wharf was constructed in the 1850s, Auckland had a population of fewer than 10,000 people. Its population has now passed 1.6 million and will be over 2 million within 15 years. Like most large first-world cities, its economy is no longer based on manufacturing let alone agricultural commodities, but is overwhelmingly dominated by services. Its original commercial buildings have either been replaced with office towers or re-fitted for refitting for the services economy. It is most likely this economic shift from things to ideas and services will continue.

Most first-world harbourside cities have long-since shifted their industrial port operations elsewhere to harvest higher-earning uses including residential property, office space, tourism attractions, open space and other public amenities such as museums, opera houses or sports facilities. Auckland is unusual in this respect.

Auckland has two harbours, the Waitemata and Manukau. Much of the Manukau is dry at low tide and the dangerous harbour entry means maritime insurers will not support large ships using it. The land around it is not high value and is used for manufacturing, storage, manufacturing, aircraft services and some tourism. In contrast, the Waitemata has until now provided reasonable access for 20th century shipping up to 5000 TEU and 12,700dwt.

When the first Queen Street wharf was constructed in the 1850s, Auckland had a population of fewer than 10,000 people. Its population will be over 2 million within 15 years. Most first-world harbourside cities have long-since shifted their industrial port operations elsewhere to harvest higher-earning uses.

The Waitemata could be made to accommodate larger ships with...
The Waitemata is also used for commuting between West Auckland, the CBD, the North Shore, Whangaparaoa, Howick-Pakuranga and out to Waiheke Island and Beachlands in the east. It is also highly valued by Aucklanders for recreation including sailing, motorboating, fishing and tourism, and also visually. A rough attempt to place a dollar worth on its aesthetic value is that Auckland apartments with a harbour view carry a premium of around $500,000 compared with similar abodes without. Assuming 10% of Auckland’s 500,000-plus dwellings have some sort of harbour view, this would suggest an aesthetic value of at least $25 billion. In fact, the Waitemata’s true aesthetic value is likely to be significantly higher than $25 billion given the harbour is enjoyed by many more Aucklanders than those who can afford a harbour view.

In Auckland, the existing port operations remain highly industrial, and include the importation and storage of containers, vehicles, coal and cement. These uses produce very poor returns for its proximate owners, Auckland Council, with dividends dropping as low as $8.7 million for the privilege of occupying land worth over $3.6 billion. It also deprives its ultimate owners, the people of Auckland, of access to and ready use of waterfront land in the heart of their CBD. Returns as low as $8.7 million suggest a valuation of the port company, including its land, of less than $200 million. Even were there a sustainable annual dividends to be $50 million.
million, the port company would be valued at only $1 billion, far less than the true value of the land it occupies.

Another way of looking at this is that the current port usage supports a land value of between $350 and $500 per square metre, giving the 77-hectare area a value of between $270 million and $385 million. In contrast, nearby downtown land and land released from port use had values, according to their leasehold documents, of at least $4,000,000 per square metre, at least ten times as much.

Some commercial sites not as close to the harbour edge, such as Commercial Bay, are currently valued at $27,000 per square metre, more than fifty times as much as the port. The true value of the land occupied by Ports of Auckland will depend on a variety of factors, but advice we've been given suggests it is in the order of $8.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $6 billion as a fair estimate. Even at the lower end of this range, if this value is necessarily uncertain, there is no doubt there are huge financial gains available to Auckland Council and its ratepayers from shifting the use of the land from its currently low-earning port operations to higher and better uses. It is difficult to think of any greater ongoing destruction of Aucklanders' wealth than continuing with port operations in its CBD. Arguments for the status quo cannot be economic but can only be political.

Conversely, there is a vast supply of flat industrial-zoned land adjacent to NorthPort at prices a fraction of those in Auckland and with no such higher alternative uses. While the development of NorthPort we recommend will undoubtedly cause some land-price inflation around Marsden Point and in nearby Whangarei — which

These numbers give values of the port land ranging upwards from $3.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $6 billion as a fair estimate. Even at the lower end of this range, if this value is necessarily uncertain, there is no doubt there are huge financial gains available to Auckland Council and its ratepayers from shifting the use of the land from its currently low-earning port operations to higher and better uses. It is difficult to think of any greater ongoing destruction of Aucklanders' wealth than continuing with port operations in its CBD. Arguments for the status quo cannot be economic but can only be political.

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POAL (Ports of Auckland Limited) is a company name. We should use Port of Auckland when referring to the location/port name.
may benefit existing homeowners in that city – the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.

Port of Tauranga also has industrial land to cater from its current operations and some growth. Although, as the Bay of Plenty economy continues to grow strongly, it too is coming under pressure from rising prices paid for residential development land at Mt Maunganui. In the future, this will place limits on its ability to grow and perhaps lead to some questioning of the location of some of its existing operations. This analysis clearly argues for Tauranga to continue with its growth plans but for NorthPort to be the major site to cater for freight growth over the next 15 years and beyond.

**Urban Traffic Congestion**

We have already discussed Auckland’s congestion and the importance stakeholders place on at least not allowing it to get worse. Our judgment is that the traffic situation around NorthPort and also Tauranga is radically more manageable, especially given the rail-supported port configuration we recommend.

Broadly, imported goods currently enter the Auckland region in two different ways. They arrive either directly from the CBD port straight into several sets of traffic lights. Alternatively, they come by rail from Tauranga to Southdown inland port where trucks meet the clogged-congested Fast-West road network which also receives also badly affected by container trucks from the CBD port. While there is no noticeable difference in costs for either option, both contribute to Auckland’s urban traffic congestion.

Inflation around Marsden Point and in nearby Whangarei – which may benefit existing homeowners in that city – the storage of imported vehicles, empty containers and bulk goods can take place around NorthPort at a fraction of the cost possible in Auckland.
Our recommendation provides for a new inland port in North-West Auckland. This would maintain two points of entry for imported goods, one from Tauranga via Southdown and the other via NorthPort and the new inland port. These would also be connected by rail. This would immediately ease traffic congestion throughout Auckland and specifically in the CBD and across the Harbour Bridge. Traffic congestion in Tauranga is not as acute as in Auckland but is an issue that will limit the extent of growth of this port.

Conversely, there is little traffic at all near NorthPort, although our recommendation would increase traffic between Whangarei and NorthPort for perhaps 200 workers commuting between the two. The State Highway from Marsden Point to Auckland is in a poor state especially through Dome Valley and will need further upgrading under any scenario including the status quo. Already the number of 50MAX trucks on the highway is increasing. The establishment of the North-West inland port would improve the efficiency of these large trucks by allowing them to avoid the city limits.

However, our configuration is designed primarily for rail under the principle that roads should predominate for people and railways for freight. The upgrade of the Northland railway network and its linking to NorthPort is essential to any change of the port structure but probably also under the status quo given growth in the Northland export economy. We note that the Government has acknowledged this with its recent announcement of initial funding for an upgrade. A fully upgraded Northland rail network will reduce trucks on roads in the same way that rail to Tauranga does now, noting that the Kaimai Tunnel is close to capacity.

More Efficient Export Servicing

traffic congestion throughout Auckland

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Currently, over 30,000 export containers need to be trucked from Northland to...
Given their rail links, there is currently no material difference in direct financial costs to Auckland, Waikato or Bay of Plenty importers or exporters of using either Auckland or Tauranga, with prices broadly set by shipping lines in their logistical and financial interests. However, there are currently some inefficiencies from the existing port configuration for exporters in Northland. Currently, over 30,000 export containers need to be trucked from Northland to Auckland, then railed to Tauranga for export. Volumes are likely to grow with Northland poised for strong growth due to, including of avocados being grown north of Kerikeri, more fruit and kiwifruit being grown around Kerikeri, and underutilised land being turned into dairy. This will add to congestion on State Highway One.

The additional costs of trucking Northland exports to Auckland and then railying them to Tauranga are not transparent, being hidden by various subsidies and commercial deals, but we estimate it may currently be $2000/2000 per container suggesting a current cost to Northland of perhaps $60 million annually. This could be largely mitigated even under the status quo model were the Northland rail line fully upgraded. There are likely to be some extra efficiencies associated with more Northland exports having access to NorthPort in competition with Tauranga. But, as noted, we have noted no material differences in costs to importers or exporters when choosing between ports already connected by rail. The overwhelming cost driver for freight is changing modes rather than distance travelled, at least among ports within a few hundred kilometres of each other.

Environmental Issues

Auckland, then railed to Tauranga for export

The additional costs of trucking Northland exports to Auckland and then railying them to Tauranga may currently be $60 million annually.

There are likely to be some extra efficiencies associated with more Northland exports having access to NorthPort. The transition from a road-to rail-based configuration for Upper North Island ports will reduce carbon emissions.