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 with some parts of the network left as 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 freight movement, as well as poor social and wellbeing outcomes for Aucklanders and Northlanders alike.

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 ratepayers between $5 billion and $6 billion in lost value.
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 as confirmed by both our and the results of stakeholder engagement and a 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.

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.

Most industry stakeholders agree
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. The conference of international shipping lines frequently act in concert to exploit the lack of governance cooperation between our domestic port companies.

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

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 local government will want the Upper North Island ports to remain in
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,

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3 UNISCS WG Meeting 1, 3 September 2018
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. It would also lead to an enormous loss of value and amenity to Auckland 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 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.
it will help therefore reduce export barriers shift the balance from imports to exports while preserving import flows.

Additional Drivers of Change

The above makes clear that the status quo is not unsustainable. 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 the services economy. It is most likely that 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

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
houses and leisure 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 draft including NGM2, the largest ship it can take without further improvement. Upgrading could be made to accommodate larger ships such as the new Panamax 12,000 TEU ships with 15.2m draft without further dredging of an estimated 2 million cubic metres at an estimated cost to ratepayers of $2 million assuming that a Resource Consent was granted.

The Waitemata could be made to accommodate larger ships with further harbour dredging of an estimated 2 million cubic metres at an estimated cost to ratepayers of $2 million.

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.

Commented [SVB]: This is probably a bit rough to include - would suggest either refining or omitting.
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 $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 with a sustainable annual dividends to beat $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 $3999,500 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 POAL, the Port of Auckland will depend on a variety of factors, but advice we've been given suggests it is in the order of $3.85 billion to a probably unrealistic $20.8 billion. We have conservatively chosen $3.6 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

*Commented [SVJ]: Need to check these values — I think they've revised them recently
*Commented [DJ1089]: These are OK comment above.

It is difficult to think of any greater ongoing destruction of Aucklanders' wealth than continuing with...
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 and but can only
be seen as 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 that 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 limited 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 increased 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
port operations in its CBD.

Arguments for the 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.
and to a lesser extent, 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 East-West road network which is 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.

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 these large trucks by allowing them to avoid the city limits.

Our recommendation provides for a new inland port in North-West Auckland. This configuration is designed primarily for rail under the principle that roads should predominately be for people and railways for freight. A fully upgraded Northland rail network will reduce trucks on roads in the same
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 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 avocados being grown north of Kaitaia-Kerikeri, more gold kiwifruit being grown around Kerikeri, and underutilised land being turned to dairy. This will add to further congestion on State Highway One.

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

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 way that rail to Tauranga does now
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 already commented on, 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 tonnes 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 whenua. No such dredging is required at NorthPort to allow access by ships of similar size. Supermax ships already will.

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 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 unsustainable at its current location in the medium-term, this investment risks being a sunk cost and that on which it is spent risk becoming resulting assets will be stranded—assets—and generally inconsistent with Auckland’s long-term development plans. The recent construction of a multi-storey car park on prime waterfront land is a good example of this. We do not believe that investing in an unsustainable asset is 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 – 4.8 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, 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. As noted above, the structure of its ownership is also a material barrier to achieving its potential. 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 achieving 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

Our future supply chain strategy must keep the costs of moving freight as low as possible.

A strategy that promotes monopolism is not in the best interests of New Zealand.
• 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 road
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 Manukau Harbour).

We discounted Manukau, given that entry conditions, in particular the shifting bar, have resulted in the maritime insurance industry...
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. It would also prove inefficient in serving Auckland’s projected growth in the North and Northwestern areas of the city as all freight entering from the South would need to transit through the city to reach these areas.**

- 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 **dangerous** 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 stating that they would not support any on-going large container shipping through that harbour.

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

An economy-wide cost impact is more likely to be downward, given the greater efficiency of our
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

Our work has led us to conclude strongly and unanimously that the
progressive and managed closure of Auckland’s freight operations,
the development of NorthPort the continuation of Tauranga’s
existing expansion plans and the continuation of Tauranga’s existing
development plans the development of NorthPort is in the best
interests of Auckland, the rest of the Upper North Island and New
Zeland 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 to avoid wasted investment in POAL’s
Port of Auckland’s current location and realise the material benefits
to Auckland and Northland as quickly as possible.

This change to the port configuration of the UNI supply chain would
be supported by the development of land-side infrastructure
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
this process begin immediately.

We assess that change can be fully completed by 2034, with a
including a rejuvenated North Auckland Rail line and spur to Northport; a new inland freight hub in the Northwest of Auckland to complement Metroport/Southdown 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, and perhaps at lower cost, due to the removal of supply chain inefficiencies associated with POAL’s current location. 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 new freight tunnel, between Avondale and Southdown. While it would not immediately be required into 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 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 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. 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, though modest, 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 and high-productivity vehicles.
An important consideration is how Auckland Council views the loss of port freight 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** provide certainty about 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 once-in-a-generation 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 ongoing 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 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.

Auckland and Auckland Council be allowed to capture all the benefits of our recommendation.

Our recommendation would result in significant long-term growth in productivity, employment and incomes for the Auckland Council region.

We have talked to all people who wanted to talk to us and we have not heard a valid Commented [SV13]: I think we should remove this – it doesn’t add anything and is potentially inflammatory.
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 $3-6 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. Further reductions could be achieved 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 even a small deflationary impact.

Roadmap for Government: Leadership, Investment & Regulation

With at least 20 similar studies have been carried out over the last decade, there is now a need for bold leadership and decision-making. 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 provide momentum for the process and the urgency that is required. We recommend that Government facilitate a process through the establishment of the project implementation capacity required to achieve delivery of the recommendation and resources it accordingly. It 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 adopt the recommendation as government policy and state its commitment to making it happen by 2034 at the latest.
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 30 December June 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 international track-records in meeting deadlines and budgets.

Projects, and proven international track-records in meeting deadlines and budgets.

Our preference is that our recommendation be implemented through agreement among the affected commercial parties.

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.
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 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.

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. It 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

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 low-value 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 million 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 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 resolve the issue if necessary. At the more limited end of the spectrum of interventions, there could be a change to the required to the 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 enact 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 insurmountable 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

Commented (SV14): Duplicated above

Implementation would be difficult without Auckland Council’s cooperation. The question is whether that cooperation will be voluntary, or government intervention will unfortunately be required.
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 $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 is an economist with 20 years' experience designing, managing and delivering major public and private sector consulting projects. He advises on a wide range of infrastructure issues in New Zealand and Australia and was an elected member of Auckland Council’s Port Future Study. Mr Vuletich is the Managing Director of Fresh Information Limited which is an economics consultancy specialising in economics, research, forecasting and strategy. He will bring strong analytical and economic perspectives to this role. Mr Vuletich has spent the past 17 years consulting on a number of major events, business strategies and providing advice on provisions of tourism.
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>4.5</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

MAP 1
A resilient two port mode

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

62% of Aucklanders think moving Auckland's only port would make the city better*
Hannah,

As discussed

D

From: Hannah Dear
Sent: Thursday, 7 November 2019 9:15 AM
To: Dan Jenkins
Subject: Re: Professional proof reader + timeline

Morning Dan,

Sounds good

See attached progress PDF for design review only — not to be read closely.
All images are positional at this stage (for you to get a sense of the tone). We’re also conscious the images shouldn’t be too Auckland-centric, so the four marked will definitely be changed.
We’re still working through some internal refinements at the moment, but any immediate feedback from your perspective would be great.

Catch up soon,
Hannah

Hannah Dear
Account Manager

VOICE
- Auckland | Melbourne
- W: voicebrandagency.com

On 7/11/2019, at 8:15 AM, Dan Jenkins wrote:

Hannah

Thanks
Timings have changed overnight - Iâ€™ll discuss when I see you should be at Voice around midday - pressure off to get final versions to Minister as he leaves Wellington tonight. However, we might try to get a laid out version (un-proof read) across this afternoon and I can take final versions to the meeting on Monday.

See you shortly.

D

Get Outlook for iOS

---

From: Hannah Dear  
Sent: Wednesday, November 6, 2019 7:07:37 PM  
To: Dan Jenkins  
Subject: Re: Professional proof reader + timeline

Hi Dan,

We will shift things in order to deliver by 11am, but itâ€™s not leaving much of a gap â€” do you see any flex to push out to midday or 13:00?

The proof reader is lined up to review the document at 13:00, (their scope is purely spelling and grammar checks).

Given the tight timings, suggest you be the conduit for any feedback, as weâ€™ll need to receive the collated comments in one marked up document by c.o.b tomorrow â€” even earlier if thatâ€™s possible.

Any changes will need to be marked either onto tomorrowâ€™s printed proof or into a digital PDF.

At the same time we will receive any changes from the proof reader.

In terms of progress here, weâ€™re still refining the layout and finalising the typesetting at the moment. Iâ€™d like to get you a PDF first thing tomorrow so that you can see where the design is sitting. Given that we donâ€™t have time to redesign, any feedback from a visual perspective would be best by mid afternoon.

Hope that all sounds ok â€” happy to chat, please feel free to call.

Cheers,

Hannah

Hannah Dear
Account Manager

VOICE
-  
Auckland | Melbourne  
-
On 6/11/2019, at 5:29 PM, Dan Jenkins wrote:

Hannah,

Is there an update on the proof reader â€“ I am trying to sort out timings for getting the PDF report across to Ministers on Friday. Ideally it needs to be with them before 11am as they are meeting to consider it on Monday at 9am.

Will that work?

Thanks and speak tomorrowâ€¦!
Dan

---

From: Hannah Dear
Sent: Tuesday, 5 November 2019 6:46 PM
To: Dan Jenkins; Wayne Brown
Cc: ; Jonathan Sagar
Subject: Professional proof reader + timeline

Evening All,

Update on timings for the final report;

Weâ€™re looking for an available proof reader at the moment.

Given the timeframe weâ€™re currently working to, the proof weâ€™ll be delivering to Dan at 13:00 on Thursday will replicate the final Word doc supplied by Dan at 13:29 today (and include Shaneâ€™s edits). Note this means that proof will not have been through a professional proof reader.

In order to meet your deadline, timings will need to happen as follows:

**Thursday 7 November**
- Dan picks up printed layout proof from VOICE at 13:00
- Voice supplies same copy to proof reader**
- All parties to feedback any changes to VOICE by close of business.

**Friday 8 November**
- VOICE to action changes from proof reader / others
- Final PDF supplied to Dan / Wayne

Please note weâ€™re still trying to secure an available proof reader and will have an update on this tomorrow.

Cheers,
Hannah

---

W: voicebrandagency.com
On 5/11/2019, at 4:38 PM, Dan Jenkins wrote:

Yes please.

Dan

From: Hannah Dear
Sent: Tuesday, 5 November 2019 4:37 PM
To: [REDACTED]; Dan Jenkins
Cc: Jonathan Sagar
Subject: Professional proof reader

Hi [REDACTED], Dan,

Matthew Hooton has suggested we engage a professional proof reader to do a final sweep of the report. This falls outside of our current scope. Is this something you’d like us to investigate?

If yes, we’d need to act quickly given the tightening timeframes. Let us know.

Cheers,
Hannah
Upper North Island Supply Chain Strategy Recommendations

1. Ports of Auckland’s CBD freight operation is no longer economically or environmentally viable, and is constrained by land-side infrastructure failure. It is in the interests of taxpayers and ratepayers that it be progressively closed and the land it currently occupies be progressively rezoned for higher and better uses.

2. Northport should be developed to take over much or all of Auckland’s existing and projected future freight business.

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

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, with a stretch target of 2029.

7. The Government should adopt our strategy as policy immediately and announce a clear timetable for the government infrastructure projects necessary to support it.

8. The Government should give the ports and their owners until 1 December 2020 to reach commercial agreement on how the strategy is to be implemented.

9. The Government should announce a backstop that, if commercial agreement is not reached by 1 December 2020, it will introduce legislation to Parliament to reform the Port Companies Act 1988 and take all other necessary steps to make our recommendations happen.

10. The Government should establish a project implementation capacity to facilitate the commercial negotiations and deliver the strategy. This should be based in Auckland and be led and staffed by people with extensive experience in difficult multi-billion-dollar commercial negotiations and managing major engineering and infrastructure projects, and with proven track-records in meeting deadlines and budgets.
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 needs 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 $4 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 port’s 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 to be checked.

Beyond Auckland, other very large investments, of $1.2 billion at Port of Tauranga and $2.8 billion in the Upper North Island’s road and rail networks, would also be needed to maintain the status quo.

Maintaining the status quo is therefore not free. To the contrary, it is expensive, inefficient and ultimately unsustainable. 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 first six recommendations are that:

1. Ports of Auckland’s CBD freight operation is no longer economically or environmentally viable, and is constrained by land-side infrastructure failure. It is in the interests of taxpayers and ratepayers that it be progressively closed and the land it currently occupies be progressively rezoned for higher and better uses.

2. Northport should be developed to take over much or all of Auckland’s existing and projected future freight business.

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

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, with a stretch target of 2029.

Our recommendations envisage 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. Along with planned government investments in commuter rail and other public transport, our recommendations would significantly reduce congestion in Auckland.

$6 billion

There would be no consumer price effect and Auckland and Auckland Council would be enriched by around $6 billion.
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 desired outcome 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 entrenched behavioural and legal barriers to their cooperating. Moreover, changes to the configuration of the Upper North Island’s ports will require, and strongly influence, decisions about the future roading and rail infrastructure of the region.

It is our view, therefore, that such a transition to the new configuration will only be successful with central government leadership including setting of clear deadlines for the completion of the commercial negotiations and its own infrastructure investments, and communicating and if necessary legislating a backstop to legally require the proposed changes to have occurred by a certain date. Our roadmap for the Government to implement the new configuration is therefore based around the three themes of leadership, investment and regulation.
Specifically, we recommend that:

7. The Government should adopt our strategy as policy immediately and announce a clear timetable for the government infrastructure projects necessary to support it.

8. The Government should give the ports and their owners until 1 December 2020 to reach commercial agreement on how the strategy is to be implemented.

9. The Government should announce a backstop that, if commercial agreement is not reached by 1 December 2020, it will introduce legislation to Parliament to reform the Port Companies Act 1988 and take all other necessary steps to make our recommendations happen.

10. The Government should establish a project implementation capacity to facilitate the commercial negotiations and deliver the strategy. This should be based in Auckland and be led and staffed by people with extensive experience in difficult multi-billion-dollar commercial negotiations and managing major engineering and infrastructure projects, and with proven track-records in meeting deadlines and budgets.

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.
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.

There is broadly a consensus that the status quo is not an option yet no long-term coherent 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, fisheries and tourism; and corporate governance and strategy.

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 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 coherent 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;

• 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 first gained a complete 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 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 48.

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 ports move to service the city from the “back door”. Pressure for this move increases 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.

There are numerous other examples where ports have been relocated from the heart of major metropolitan cities around the world so as to improve the amenity and liveability of those cities. 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 vested interests have obstructed progress.
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 primarily reliant on a roading network that has evolved to meet other needs. The criteria 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 Maori and disadvantaged population, while significantly enriching Auckland and Auckland Council, and reconnecting the Auckland CBD with its harbour, perhaps the city’s most highly valued asset.

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 and above all other alternatives, including the status quo.

The Working Group was tasked with identifying this best long-term, practical, achievable, resilient, 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.
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- All stakeholders including road freight operators signalled the lack of rail intermodal networks as the key contributor to supply chain inefficiency.

<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>
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<td>15.6</td>
<td>5%</td>
<td>3.5</td>
<td>12%</td>
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<tr>
<td>Coastal shipping</td>
<td>4.6</td>
<td>2%</td>
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<td>13%</td>
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<tr>
<td>Road transport</td>
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<td>93%</td>
<td>23.1</td>
<td>75%</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>

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 $1.68 billion by 2034 and a further $4.8 billion through to 2049. Maintaining the status quo is therefore extremely expensive. It is also economically, socially and environmentally inefficient. 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 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 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 have been designed for a post-port era. The spending will be an unnecessary sunk cost with some parts of the network left as stranded assets. Decisions need to be made and begin to be implemented now to avoid this outcome. Strategic infrastructure investment with long-term planning would in turn 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.

The CBD port is also losing its social license to operate, as demonstrated by the fierce political debate over its future, and as confirmed by both our stakeholder engagement and a Colmar Brunton study of public opinion. The Colmar Brunton work found 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.

**$5–6 billion**

EY advises that maintaining the port at its current location is costing Auckland ratepayers between $5 billion and $6 billion in lost value.

**60%**

More than 60% of Aucklanders believe moving the port would make Auckland a better place to live, work and visit.
Current Port Ownership Creates Perverse Incentives and Prevents Change

The current ownership and operating 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, any 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. The conference of international shipping lines frequently act in concert to exploit the lack of governance cooperation between our domestic port companies. Consequently, most industry stakeholders agree greater cooperation is needed and for port operators to collectively learn how to influence international 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.

3UNISCS WG Meeting 1, 3 September 2018
Upper North Island
Port Ownership Structure

- Auckland Council
- Public Shares
- Northland RC
- Bay of Plenty RC

- Ports of Auckland Ltd.
- Marsden Maritime Holdings Ltd.
- Port of Tauranga Ltd.

- Northport Ltd.
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 recommendations allow 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, low-value
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 for as long as possible. It would also lead to an enormous loss of value
and amenity to Auckland.

Central government and local
government will want the Upper North
Island ports to remain in majority public
ownership.
Our recommendations allow
for that and also for additional private
investment

It is difficult to see such a land and
operations split at Auckland as anything
other than a ruse to maintain the port at
its current location
Current Structure Creates Export Barriers

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 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 is close to producers of export commodities and is known best as a successful export port but is also taking an increasing 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 recommendations will encourage greater export growth while also allowing for growth in both Northport and Tauranga’s import capability to replace that at Auckland. They will therefore help reduce export barriers while preserving import flows.
The above explains why the status quo is unsustainable. 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. As the population passed 200,000 in the 1920s, businesses, factories, warehouses and housing had clustered around the port. By the 1950s, changing land values meant those activities were moving out of the CBD yet the port remained in its original location. By the 1980s, trucks and cars were clogging motorways not designed to handle those levels of traffic.

Auckland's population has now passed 1.6 million and it 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. Auckland CBD's original industrial and commercial buildings have either been replaced with office towers or re-fitted for the services economy. This economic shift from things to ideas and services will be sustained.

Leading 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 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 draft. It could be made to accommodate larger ships such as the new Panamax 12,000 TEU ships with 15.2m draft but this would demand further harbour dredging of an estimated 2 million tons at a cost to ratepayers of many millions of dollars, assuming a Resource Consent was granted.

**15 years**

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.

**Leading first-world harbourside cities have long-since shifted their industrial port operations elsewhere to harvest higher-earning uses.**

**$2m tons**

The Waitemata could be made to accommodate larger ships with further harbour dredging of an estimated 2 million tons, assuming a Resource Consent was granted.
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 importantly as a visual amenity. A very rough attempt to try 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 could 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 owner, Auckland Council, with dividends dropping as low as $8.7 million for the privilege of occupying land with probable value of $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 with a sustainable dividend of $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 have values, according to their leasehold documents, of at least $5000 per square metre. Some commercial sites not as close to the harbour edge, such as Commercial Bay, are currently valued at $27,000 per square metre. These numbers give values of the port land ranging upwards from $3.85 billion to an almost certainly unrealistic $20.8 billion. Based on advice we have received from property investors in the central city, we have chosen $6 billion as a fair valuation.

Based on advice we have received from property investors in the central city, we have chosen $6 billion as a fair valuation.
While land value ultimately depends on a range of factors, 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 with no higher alternative uses. 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 for its current operations and some limited 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 increased 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.

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 can only be political.

The storage of imported vehicles, empty containers and bulk goods can take place around Northport at a fraction of the cost possible in Auckland.
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 to a lesser extent Tauranga is radically more manageable, especially given the rail-supported port configuration we recommend.

Broadly, imported goods 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 Metroport/Southdown inland port where trucks meet the congested East-West road network which is 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.

Our recommendations provide for a new inland port in North-West Auckland. This would maintain two points of entry for imported goods into Auckland, one from Tauranga via Southdown/Metroport and the other via Northport and the new inland port in North West Auckland. These inland ports would also be connected by rail, immediately easing 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 recommendations 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 these large trucks by allowing them to avoid the city limits.

However, our configuration is designed primarily for rail under the principle that intercity highways 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

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 recommendations allow 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, low-value 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 for as long as possible. It would also lead to an enormous loss of value and amenity to Auckland.
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 an exporter of low-carbon-emission foods and other products. A strong transition to rail would be expensive in Auckland 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.

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 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.

Socio-Economic Factors

Our recommendations will require some 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.

The transfer of jobs and any future 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.

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We do not believe that investing in an unsustainable asset is the best use of $1.5 billion of ratepayers’ money.

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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 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 unsustainable at its current location in the medium-term, this investment will be a sunk cost and the resulting assets will be stranded and generally inconsistent with Auckland’s long-term development plans. The recent construction of a multi-storey car park on prime waterfront land is a good example of this. We do not believe that investing in an unsustainable asset is 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, 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.

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. It is the structure of its ownership that is the much more material barrier to NorthPort achieving its potential.
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, while promoting cooperation among ports

- A strategy that promotes monopolism is not in New Zealand’s best interests. Healthy competition between supply chain providers is a good driver of innovation and cost effectiveness. At the same time, the ports need to cooperate to shift the balance in commercial power from foreign shipping lines back towards New Zealand ports.
- 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 therefore gave 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.

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 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 Manukau Harbour.

We are prioritising freight modes such as rail, and coastal shipping where possible, and place particular emphasis on optimal land use

The strategy must ensure that the Upper North Island Supply Chain can continue moving freight in the event of a natural disaster

We are giving priority to road safety, reducing carbon emissions, promoting economic development of the regions, reducing congestion in Auckland and promoting the economic and overall wellbeing of its residents
We rejected single Upper North Island port options based on our economic analysis, multi-criteria analysis and stakeholder consultation. The main reasons for not pursuing single-port options were:

- Even assuming that a new super port in the Firth of Thames was granted a very contentious Resource Consent it would require a capital outlay more than twice the other options 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. It would have significant environmental issues, not provide for regional development, and be inefficient in serving Auckland’s projected growth in the North and North-West of the city as all freight entering from the South would need to transit through the city to reach these areas.

- 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. It would do nothing to promote regional development in Northland.

We also discounted shifting Ports of Auckland’s freight operations to 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

It has been claimed by defenders of the status quo that 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, 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 therefore given special attention to this question and 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 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.

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 $2,000 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 recommendations 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 recommendations 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

Our work has led us conclude strongly and unanimously that the progressive and managed closure of Auckland’s freight operations, the development of Northport and the continuation of Tauranga’s existing expansion plans is in the best interests of Auckland, the rest of the Upper North Island and New Zealand as a whole. We recommend beginning this process immediately to avoid wasted investment in the Port of Auckland’s current location and realise the material benefits to Auckland and Northland as soon as possible.

This change to the port configuration of the Upper North Island 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 of the city we assess that it can be fully completed by 2034 with a stretch target of 2029.

We recommend beginning this process immediately to avoid wasted investment in the Port of Auckland’s current location and realise the material benefits to Auckland and Northland as soon as possible.

2029

We assess that change can be fully completed by 2034, with a stretch target of 2029.
As noted above, 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 consumers, and perhaps at lower cost due to the removal of supply chain inefficiencies associated with the Port of Auckland’s current location. A new freight hub in the north-west of Auckland would provide a complimentary freight terminus to Metroport/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 new freight tunnel between Avondale and Metroport/Southdown. While it would not immediately be required to support our recommendations, 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 public transport, roading and other infrastructure in Auckland can be made. The release of waterfront land and regeneration of the port precinct, and the improvements in value of adjacent land, would improve Auckland Council’s balance sheet by an estimated $6 billion along with its rating 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 recommendations necessitate 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 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 Maori population. We anticipate some additional though modest house-price inflation in Whangarei as its economy and population grow off the back of our recommendations.
Our formal economic analysis of the move to Northport conservatively estimates our recommendations 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 freight 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
- Provide certainty about 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 once-in-a-generation opportunity for the city and people of Auckland. Under our recommendations, 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 recommendations 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 large boost to Auckland Council’s balance sheet and the enhanced rating base it would gain from the implementation of our recommendations, 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 recommendations.

In terms of the second issue, any impact on Auckland’s wider economy will also be positive. PWC 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 recommendations 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 recommendations 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 recommendations. 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 recommendations have wide-reaching benefits that would enable the Auckland, Northland and New Zealand economies to grow and improve the wellbeing of their people. They:

- Move 77 hectares of prime Auckland land to its highest and best use; deliver $6 billion in value to Auckland Council; reduce congestion throughout the city; make Auckland a better city to live, work and visit according to its residents; promote much-needed economic growth and jobs in Northland; and support planned growth in the Bay of Plenty.
- Reduce carbon emissions and motorway congestion by creating a port configuration designed for rail rather than road.
- Promote resilience in the supply chain by providing two distinct North and South entry points for international freight originating in and destined for Auckland.
- Reduce transport friction in the Auckland CBD which is currently a congested entry point for freight out of Ports of Auckland, and provide two alternative freight entry points into the city.
- Potentially further reduce friction with personal transport and regional deliveries. Further reductions could be achieved by a dedicated freight rail line through the Avondale-Southdown corridor, connecting the two main freight hubs.
- Improve road safety by increasing rail freight capacity.
- Maintain levels of competition in the Upper North Island Supply Chain, and foster innovation and cost effectiveness and efficiency of freight delivery.
- Maximise 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 reduces carbon emissions and motorway congestion by creating a port configuration designed for rail rather than road.
• Avoid 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.

• Avoid 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.

• Do not increase freight costs and may reduce them, meaning it will have no inflationary effect on consumer goods, and perhaps a small deflationary impact.
With at least 20 similar studies carried out over the last decade, there is now a need for bold leadership and decision-making. 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 provide momentum for the process and the urgency that is required. We recommend that Government establish the project implementation capacity required to deliver the recommendations, and resources it accordingly. It should be based in Auckland and be led and staffed by people with extensive experience in difficult multi-billion-dollar commercial negotiations and managing major engineering and infrastructure projects, and proven 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 recommendations 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 been made by that date through commercial negotiations among the parties, Government 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.
We recommend that the Government immediately confirm it will make the necessary investments in rail and road infrastructure to make it happen.

We 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>
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<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>
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</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 split proposal appears to be a defensive strategy to prevent the implementation of our recommendations, and we recommend the Government and Auckland Council oppose it.

Northport

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. It 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.
It would be unconscionable for a public authority to allow the port land to continue being used in its current manner.

Implementation would be difficult without Auckland Council’s cooperation. The question is whether that cooperation will be voluntary, or government intervention will be required.

Ports of Auckland and Auckland Council

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, low-value 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 the port paid a $50 million dividend, it borrowed $75 million to do so. Next year, it will pay an $8.7 million 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 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 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 required to the 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. Again, such steps would be legitimate given Ports of Auckland is a creature of statute.

**Port Cooperation and Other Regulatory Matters**

We have not come across insurmountable regulatory barriers to greater port cooperation or more efficient operations, provided the relevant decision-makers are committed to the outcome and working through the 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 government reconsiders. If legislation proves necessary to shift the incentives, we recommend that the Port Companies Act is revised to ensure it remains fit for purpose.
Stakeholder Consultation

We spoke with, and listened to, a wide ranging cross-section of representatives of the upper north island supply chain.

Who we met

- Northport
- Ports of Auckland
- Port of Tauranga
- Auckland Council
- Northland Regional Council
- Marsden Maritime Holdings
- Bay of Plenty Regional Council
- Quayside Holdings
- Road Freight Transport Forum
- Toll
- Mainfreight
- Transport Investments Ltd
- On Truck
- NZ Shipping Federation
- Pacifica/Swire Shipping
- International Container Lines Committee
- NZ Shippers Council
- Lodestar, Oje Fibre Solutions
- Auckland Transport
- NZTA
- KiwiRail
- Tainui Group Holdings Ltd
- Richard Pearson (CK Hutchison Group)
- Geoff Vazey (ex CE POAL)
- Waikato Regional Council
- Mahurangi East Residents & Ratepayers Association
- Urban Auckland
- Auckland Business Chamber
- Auckland Waterfront Consortium
- Custom Brokers and Freight Forwarders
- Fonterra / Kotahi
- Talleys/Open Country Dairy/AFFCO
- CODA
- PTS Group
- Motor Industry Association
- Imported Motor Vehicle Industry Association
- Dolphin Shipping New Zealand
- Ian Craig, Kiwifruit representative
- Juken New Zealand

What they told us

- It’s the role of our shareholder [Auckland Council] to determine an alternative location for the port - Ports of Auckland
- We are in favour of moving the port of there is a viable alternative and it doesn’t have a negative economic effect on Auckland – Auckland Council
- We are not opposed to the relocation of Ports of Auckland or the car import trade shifting from Auckland if a business case stacks up and it is a commercial decision – Auckland Business Chamber
- We can’t take our social licence for granted - Port of Tauranga
- This [ownership] structure can create imbalances in effective competition, and tensions about investment, that don’t necessarily optimise outcomes for the New Zealand freight system - Marsden Maritime Holdings Ltd.
- Northland also has tremendous opportunity ready to be unlocked - Northland Regional Council
- Without considerable money and planning, the political revelation of a plan to barge thousands of imported vehicles from Auckland wharves to East Tamaki seems unrealistic and irresponsible – Michael Barnett, Chief Executive of the Auckland Business Chamber
- The biggest issue we face is congestion within Auckland city and port congestion – Transport Investments Ltd.
- The key improvement should be how to reduce the bottleneck issue in Auckland city and pressures on road infrastructure - Juken New Zealand
- Shifting a port is not unique to Auckland. Cities outgrow their ports and the consequence of this is that a port shifts. What is unique to Auckland is the extent to which the port takes up the waterfront, which is substantial – Urban Auckland
- Recovering value is an important consequence of a port shift. Inner city waterfront land is far more valuable than the port - Urban Auckland
- Wherever we go, we need to be pushing it now as we are likely to be okay in the short-term but in 10-15 years we won’t be - International Container Lines Committee
- “Decisions need to be made now” International Container Lines Committee
- Moving [from Ports of Auckland] to Northport would add about $100 per vehicle – Motor Vehicle Industry. We note this compares to the around $250 per each used car for the new precautions due to the marmorated stink bug.
- The addition of the rail line from Whangarei to Northport…will assist Northland business in the movement of export and domestic cargo by international and coastal shipping. It will be a catalyst for coastal shipping operators to introduce regular weekly coastal shipping services... - Pacifica
- There is potential growth to 50 million trays and we have confidence the market could take the growth – Kiwifruit industry representative on Northland Kiwifruit growth
- Potential for Northland to become the avocado centre of New Zealand – NZ Avocado
- A prior study of trucks in and out of the Ports of Auckland showed only 12 percent were full, and a study of trucking companies in New Zealand showed 55 percent of trips are unpaid (nothing on the back of them) – Geoff Vazey
- Implication of the UNICS is less reliance on the existing harbour crossing corridor for freight, which may delay the need for an additional harbour crossing – New Zealand Transport Agency
- [Ports of Auckland] is spending ‘like drunken sailors’ – The National Business Review
- Competition should not be between NZ ports, the competition is off-shore – Don Braid
- NZ needs to learn how to manage the power of the shipping lines – Don Braid
Our analysis of the common themes is:

**Strengths**
- The Upper North Island is well served by the current 3-port system and inland hubs
- The current port system provides health competition and options for exporters and importers
- The ports are well located in terms of geographical spread and proximity to the market
- The Upper North Island ports are the largest and most efficient in NZ moving around 50% of NZ total freight task

**Weaknesses**
- UNI Ports competing rather than work together, largely driven at discretion of overseas based shipping lines drives costs
- Key parts of the land-side network are congested, particularly surrounding Ports of Auckland, Port of Tauranga and the wider Auckland region
- There are concerns around Ports of Auckland's and Port of Tauranga's social licence to operate in their urban environment
- Northport is not currently a viable competitor due to lack of port and supporting road and rail infrastructure
- There has been inadequate investment in infrastructure by Government as a result there is uncertainty around future investment in infrastructure and the resulting supply chain
- Auckland City short of cash but POAL sitting on valuable land

**Opportunities**
- Improved transport network between ports and inland ports, both road and rail
- Universal support for more rail freight infrastructure
- Increased collaboration / cooperation across the supply chain
- Greater use of coastal shipping to reduce reliance on road and rail freight, particularly for inter-island routes
- Greater use of the available industrial land surrounding Northport, will drive potential cost efficiencies in storage
- Optimisation of the number of empty containers being moved around the Upper North Island

**Threats**
- Overcapitalisation of port infrastructure and potential for stranded assets
- Disruptions to the supply chain through natural events e.g. Earthquake risk in Kaimai tunnel, proximity to White Island
- Increasing levels of congestion
- Growing pressures on social licence
- Availability of truck drivers
- Road safety concerns due to increased freight movements
- Uncertainty levels leading to deferred investments e.g. New Zealand becoming a hub for a super port in Australia
- Political indecision and short-term thinking are delaying action that will only make long term value more and more expensive and leaving stranded assets
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.
Vaughan Wilkinson

Mr Wilkinson has 38 years of experience in the marine and seafood sector with the majority of those spent in senior management roles, most recently with Sanford Limited. He has extensive experience of the functional operation of transport and logistic supply chains relating to both the export and import of primary products, principally seafood. Since the mid-1980's he has also been directly associated with the extensive redevelopment of both the Viaduct and Wynyard Quarter precincts of the Auckland waterfront. Mr Wilkinson also has wide ranging governance and public policy experience having for many years chaired both major domestic and international seafood industry stakeholder bodies. He continues to hold a number of directorships, mostly relating to the seafood and hospitality sectors.

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 is an economist with 20 years’ experience designing, managing and delivering major public and private sector consulting projects. He advises on a wide range of infrastructure issues in New Zealand and Australia and was an elected member of Auckland Council’s Port Future Study. Mr Vuletich is the Managing Director of Fresh Information Limited which is an economics consultancy specialising in economics, research, forecasting and strategy. He will bring strong analytical and economic perspectives to this role.

Vaughan Wilkinson

Mr Wilkinson has 38 years of experience in the marine and seafood sector with the majority of those spent in senior management roles, most recently with Sanford Limited. He has extensive experience of the functional operation of transport and logistic supply chains relating to both the export and import of primary products, principally seafood. Since the mid-1980's he has also been directly associated with the extensive redevelopment of both the Viaduct and Wynyard Quarter precincts of the Auckland waterfront. Mr Wilkinson also has wide ranging governance and public policy experience having for many years chaired both major domestic and international seafood industry stakeholder bodies. He continues to hold a number of directorships, mostly relating to the seafood and hospitality sectors.
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Also note this is dated October, which also matches the printed fold-outs.

Cheers,
Hannah

Hannah Dear
Account Manager

VOICE
Auckland | Melbourne

W: voicebrandagency.com
Upper North Island Supply Chain Strategy

- **$8.5m**: The dividend received from $6bn worth of Auckland port land.
- **$4bn**: The capital needed to just keep the Port of Auckland open.
- **$6bn**: Uplift to Auckland City balance sheet from port move.
- **2million m³**: Port shift avoids 2m cubic meters of dredging in the Waitematā channel.
The New Zealand economy is the 57th largest and 41st most complex. Top imports are fuel, vehicles, machinery and consumer goods. Top exports are agriculture, forestry and horticulture.
The New Zealand economy

- Most imports enter via Auckland to service urban consumers needs. Exports, contributing to economic growth, are produced in rural areas and leave via regional ports.

- Auckland accounts for 33% of New Zealand's popualtion, 38% of GDP and only 6% of exports.

- The primary sector, mainly forestry and dairy, are the biggest user of domestic freight. Dairy is mainly located in Waikato, Taranaki, Manawatu and Canterbury and account for 20% of freight movements.

- Forestry in Northland, Waikato, Bay of Plenty, Gisborne, Hawke's Bay and Nelson/Tasman accounts for 35% of regional freight.

- The Upper North Island region accounts for 53% of all freight movements. Northland is experiencing high growth in population and horticulture.

- Northport's layout will be designed to favour rail over trucks.
Cabinet appoints a Working Group to review freight and logistics sector in Upper North Island, formally known is the Upper North Island Supply Chain Strategy (UNISCS).

The Ministry of Transport appoint a consortium to economically evaluate a range of investment scenarios.

The Supply Chain Strategy is presented to key stakeholders.
The role of freight
We heavily rely on efficient supply chain to connect our goods to the world. Currently 50 tonnes per capita of freight is moved and this is expected to grow significantly over time, impacting roads and rail infrastructure.
The pipeline from Marsden Point to Auckland presently accounts for more tonnage per capita than rail. Rail would increase dramatically if a fit-for-purpose railway was built.

50 tonnes per capita each year
Regional freight %
Road dominates as a mode

Road dominates for both inter and intra-regional freight with over 95% share of market, with the exception of the Bay of Plenty and Auckland due to proximity to good rail and ports. This suggests intermodal capacity dominates mode choice.
Biggest impacts and drivers of change

1. City congestion in Auckland
2. Shifting land value demands usage changes
3. Lack of cooperation between port owners
4. Lack of rail infrastructure and poor state highways in Northland
5. Need for easier export routes
6. Climate change: rail versus trucks
Commercial realities

- Changes to the Upper North Island supply chain and port structure need to maximise land values in the Auckland CBD.

- Auckland needs more than one point of entry for goods if the city is serious about reducing congestion.

- Cost to consumer for perceived increase in freight charges, if the existing port structure is moved to Northport, is nominal to nil.

- Rail to port investment has historically been footed by the taxpayer. Tauranga, most recently benefitted from a $4bn investment.

- Rate payers subsidise Ports of Auckland $500,000 annually.

- Auckland Port only has 10 years of operational life remaining.
Ports are the crucial international link

Today, New Zealand ports link 99.5% of the country’s trade with international markets. In 2014, Auckland, Tauranga and Northport accounted for 45% of New Zealand’s total freight export weights. The Port of Tauranga alone shipped 30% of national export weights. More significantly, the three ports handled 68% of total national import weights in 2012.

The key issue is optimal land use

Freight and logistics capabilities are just part of what needs to be considered. The most important factor is: where will expansion deliver the greatest positive impacts to the regional and national economy?
The Port of Auckland

77
hectares
alternative better value use

- Current land use runs on a low yield model
- Current port infrastructure generates mass CBD congestion
- Future port growth constrained by lack of available land
- 800,000 truck movements through the city via the port each year

There are currently 33 million tonnes of inbound and 30 million tonnes of outbound freight between Auckland and Northland, Waikato, BOP and Gisborne.
The Port of Auckland largely handles containers, and bulk and break-bulk volumes, and is the largest container importer in New Zealand.

The combination of increased road freight activity within Auckland and significant growth in population has led to congestion problems in Auckland. This is important because the majority of The Port of Auckland trade volumes are distributed via the road network.

Projections predict a 10-year maximum possible usage of the port at its current depth. Future use will require significant harbour dredging, with major environmental and economical impact.
Northport

180 hectares available to expand

- Large area of underutilised industrial land available
- Rail line in need of upgrade. No current rail spur.
- The shorter run to the outskirts of Auckland will bring future efficiencies when compared to Tauranga
- Port depth is of suzemax, able to accommodate the deepest draft ships

There are currently 8 million tonnes of inbound and 10 million tonnes of outbound freight between Northland and Auckland, Waikato, BOP and Gisborne. Currently, 1/3 of logs are processed locally and there is economic potential in wood processing, logging, saw-milling, wood-chipping, veneer and plywood manufacture.

Freight in the region is forecast to increase by almost 40% in the region between 2012 and 2042.

Road transport remains the main means of moving freight and people. Right now, there are approximately 30,000 Northland export containers trucked to Auckland then sailed to Tauranga which is both inefficient and costly for exporters. At present, there is no connectivity between Northport and the rest of the rail network. Addressing this will have material impact on the development of Northport and Northland region as well as helping maintain other transport infrastructure, especially roads.
The Port of Tauranga

107 hectares available to expand

- Already a major export port
- Congestion is becoming more and more of an issue
- Kaimai Tunnel represents significant earthquake risk

There are currently 21 million tonnes of inbound and 18 million tonnes of outbound freight between BOP and Auckland, Northland, Waikato and Gisborne. The Port of Tauranga is New Zealand’s fastest growing and most productive port, however the port has an import-export imbalance. Import volumes are less than two thirds of its export volumes, meaning significant empty containers. Dairy is a major driver of exports in Tauranga but is expected to remain relatively flat.

By 2025, imports into The Port of Tauranga are likely to decrease as Genesis Energy has pledged to stop using coal to generate electricity at Huntly Power Station.

Road traffic congestion is a city-wide problem in Tauranga, and forecast growth in both passenger and freight travel means it is likely to get worse. The Port of Tauranga in comparison to The Port of Auckland and Northport has a high volume of freight entering and exiting the port via rail, at nearly 50 percent.
Upper North Island Supply Chain Strategy

The recommended options:

1. The managed closure of the Port of Auckland freight
2. The development of Northport
3. Continued operation of the Port of Tauranga
4. Rejuvenated North Auckland rail line
5. A new inland freight hub in North West Auckland
Three primary objectives:

1. To develop efficient and effective transport and logistics infrastructure that works in the national interest.

2. To ensure the best use of scarce resources such as land, especially in metropolitan areas.

3. To promote opportunities for regional development and employment.
A resilient two port mode

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

› Promotes regional development and employment across the region
› Shifts jobs north where housing is more affordable than Auckland
› Northport site could be used to develop industrial parks and production facilities, stimulating additional economic growth in the local area
› Local businesses will have easier and faster access to regional, inter-regional, and international markets
› Maximises the existing port system and surrounding land at Northport
› Positive cultural impact by supporting Māori enterprises across forestry, agriculture and fishing sectors, as well as health and community services

Benefits to Tauranga

› Promotes further growth in the Bay of Plenty
› Tauranga benefits from the new infrastructure by an expected uplift in freight, and an improvement in supply chain efficiency as a whole

Benefits to New Zealand

› Two distinct north and south entry points for international freight
› Potentially improves road safety by increasing rail freight capacity
› Maintains competition, fosters innovation and cost effectiveness/efficiency of freight delivery
› Greenhouse gas emissions will decrease by diverting road freight onto rail
## Benefits to Auckland

- Less congestion in the Auckland CBD and motorway network
- Releases huge land value to Auckland City Council's balance sheet
- Less friction with urban personal transport and regional deliveries with a dedicated freight rail line through the Avondale corridor
- Returns the harbour to the people and helps Auckland become a more 'liveable city'
- More resilient and sustainable supply chain
- Stronger balance sheet
- Creation of higher paying jobs through better land use of the port area
## Financial implications at a glance

<table>
<thead>
<tr>
<th>What needs to happen?</th>
<th>Who pays?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rail upgrade north with link to Northport</td>
<td>Government/KiwiRail</td>
</tr>
<tr>
<td>2. Extend Northport wharf length</td>
<td>Port companies</td>
</tr>
<tr>
<td>3. Set up of North West Auckland inland port</td>
<td>Private enterprise/Refining NZ/KiwiRail</td>
</tr>
<tr>
<td>4. Encourage port owners to cooperate in New Zealand’s best interests OR legislate</td>
<td>No cost</td>
</tr>
</tbody>
</table>
Upper North Island Supply Chain Strategy
A strategic recommendation for the future of our ports

Thank you
7 November 2019

Hon Grant Robertson
Minister of Finance

Hon Shane Jones
Minister for Regional Economic Development

Hon Phill Twyford
Minister for Transport

Parliament
Wellington
NEW ZEALAND

**Upper North Island Supply Chain Study: Final Report**

I am writing to you as Chair of the Upper North Island Supply Chain Study and enclose a copy of the Working Group’s final report. As you will be aware we came together in September 2018 and have worked constructively to understand, evaluate and deliver a supply chain strategy which fits with the terms of reference that Cabinet provided to us.

We make a number of recommendations to Government within our report all based around our preferred option for the future Upper North Island supply chain. We see this providing the greatest level of long-term economic and social benefits to both Auckland and Northport over and above the other options considered, including the status-quo which we regard as a costly alternative to fund given it is ultimately expected to close.

Our preferred option consists of the progressive and managed closure of freight operations at the Port of Auckland, the development of Northport and continuation of freight operation of the Port of Tauranga. The progressive closure of the Port of Auckland freight operations will coincide with the progressive release of the land it occupies. The intent is for Auckland Port to become a cruise, tourism and commuter harbour.

This port configuration will be supported by the development of land-side infrastructure consisting a rejuvenated the North Auckland Rail line and spur to Northport, and a new inland freight hub in the Northwest of Auckland to complement Metroport in the South of Auckland. This reconfiguration needs to be a managed transition but it needs to start now. We think it can be fully completed within 10-15 years.

Our specific recommendations are:

1. Ports of Auckland’s CBD freight operation is no longer economically or environmentally viable, and is constrained by land-side infrastructure failure. It is in the interests of taxpayers and ratepayers that it be progressively closed and the land it currently occupies be progressively rezoned for higher and better uses.
2. Northport should be developed to take over much or all of Auckland’s existing and projected future freight business.
3. Port of Tauranga’s existing expansion plans should proceed to accommodate growth.
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, with a stretch target of 2029.
7. The Government should adopt our strategy as policy immediately and announce a clear timetable for the government infrastructure projects necessary to support it.
8. The Government should give the ports and their owners until 1 December 2020 to reach commercial agreement on how the strategy is to be implemented.
9. The Government should announce a backstop that, if commercial agreement is not reached by 1 December 2020, it will introduce legislation to Parliament to reform the Port Companies Act 1988 and take all other necessary steps to make our recommendations happen.
10. The Government should establish a project implementation capacity to facilitate the commercial negotiations and deliver the strategy. This should be based in Auckland and be led and staffed by people with extensive experience in difficult multi-billion-dollar commercial negotiations and managing major engineering and infrastructure projects, and with proven track-records in meeting deadlines and budgets.

I look forward to meeting with you and your colleagues to discuss our findings, I have asked that the Working Group’s secretariat make our evidence base, analysis and notes available to the Ministry of Transport and Treasury Officials to support briefing and on-going planning work as required.

I anticipate that our work is received positively by your Cabinet colleagues and thank you for the opportunity to Chair such a nation-building project.

Yours sincerely

Wayne Brown
Chair UNISCS
Hi Dan,

Updated PDF attached

Report PDF is incoming

Hannah Dear
Account Manager

VOICE
Auckland | Melbourne
W: voicebrandagency.com

On 8/11/2019, at 10:52 AM, Dan Jenkins wrote:

Hannah,

Thanks looking good one other change (sorry)

On the fold out and on the slide we have a statement on slide 8:

“Rail to port investment has historically been footed by the taxpayer. Tauranga, most recently benefitted from a $4bn investment.”

Can we change that to “Rail and road to port investment has historically been footed by the taxpayer. Tauranga, has benefitted from around $4bn of Crown investment.”

Thanks,
Dan

Thanks Dan,

Updated PDF attached.
Note ‘port mode’ also appears on the fold-out brochure, so we’ll action that update on the artwork file now too.
On 8/11/2019, at 10:05 AM, Dan Jenkins wrote:

Hannah,

Thanks – I would remove the version number from the front and the future state map title should be “A resilient two port model” not “mode”.

Thanks,
Dan

From: Hannah Dear
Sent: Friday, 8 November 2019 9:52 AM
To: Dan Jenkins
Subject: Presentation PDF

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Almost there with the report PDF

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Hannah

Hannah Dear
Account Manager

VOICE
-
Auckland | Melbourne

W: voicebrandagency.com
Erin,

The information regarding Avocado industry from the Upper North Island Study Working Group.

Best,
Dan

Get [Outlook for iOS](https://www.office.com)

From: Dan Jenkins
Sent: Wednesday, March 13, 2019 8:06 AM
To: [Redacted]
Subject: Fwd: 2019 Industry summary Northland focus.pdf

Avocados attached.

Dan

Dan Jenkins
Manager, Analytics & Modelling
Ministry of Transport - Te Manatu Waka
[Redacted] | [www.transport.govt.nz](http://www.transport.govt.nz)

Enabling New Zealanders to flourish

From: Wayne Brown
Sent: Tuesday, March 12, 2019 11:19 AM
To: Dan Jenkins; 'Vaughan Wilkinson'; 'Greg Miller'; 'shane'; 'susan.krumdieck'; [Redacted]
Cc: Bryn Gandy
Subject: 2019 Industry summary Northland focus.pdf

Hi UNISCS team

Herewith Avocado industry briefing showing that avocados are undergoing a major change from a lot of small orchards in the BoP to several very large ones in the Far North where 1000ha has been planted and iwi and other groups are getting ready for a whole lot more.

This is part of the increasing export production from Northland.

I have re-read the POAL study and it amazes me that they got so much info and made such wrong choices from that info.

It does not consider anything from the NZ Inc point of view nor does it consider the impact of POAL’s decisions beyond the port gates.

Goff worries that it cost $1m so must be good, he should ask for his money back

WB
All,

Please see attached detail from EY regarding the UNISCS analysis.

Any immediate questions to Jonathan / Chris at EY, else see you on Friday morning.

Best,
Dan

---

Chris Money
Partner
Transaction Advisory Services Ltd
100 Willis Street, Wellington 6011, New Zealand

Website: [http://www.ey.com](http://www.ey.com)
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Initial assessment for potential rates generated by a fully completed port deve

1) Total GFA per development type

<table>
<thead>
<tr>
<th></th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Analysis GFA (m²)*</td>
<td>36,270</td>
</tr>
<tr>
<td>Partial Intervention GFA (m²)</td>
<td>6,949</td>
</tr>
<tr>
<td>Final Interventions GFA (m²)</td>
<td>43,020</td>
</tr>
<tr>
<td>% of GFA (m²)</td>
<td>3%</td>
</tr>
</tbody>
</table>

2) Proportion of building grade per development type

<table>
<thead>
<tr>
<th>Grade of Development Proportion</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>60%</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>40%</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

3) Total GFA per grade of development type

<table>
<thead>
<tr>
<th>Total GFA per development grade</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>25,812</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>17,208</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>43,020</td>
</tr>
</tbody>
</table>

4) Average cost per m², by development type, by grade

<table>
<thead>
<tr>
<th>Development Cost per sqm ($/m²)</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>14,000</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>8,500</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0</td>
</tr>
</tbody>
</table>

5) Total final development cost (2019 $)

<table>
<thead>
<tr>
<th>Total Development Cost</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>$361,369,683</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>$146,268,681</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>$507,638,364</td>
</tr>
</tbody>
</table>

6) Average cost per m² per development type

<table>
<thead>
<tr>
<th>Average Development Cost per m²</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>$11,800</td>
</tr>
</tbody>
</table>
7) Number of developments/units

<table>
<thead>
<tr>
<th>Key Assumptions</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Port area will accommodate 3% of future Akl hotel room demand (20,150 rooms*, 3% = approx 605 rooms).</td>
<td></td>
</tr>
<tr>
<td>- Average hotel = 200 rooms</td>
<td></td>
</tr>
<tr>
<td>Number of individual units</td>
<td>3.0</td>
</tr>
</tbody>
</table>

8) Land area and value

Proposed Plot Built Area

<table>
<thead>
<tr>
<th>Area (m²)</th>
<th>Pier 1</th>
<th>60,450</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Land value*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Value per m²</td>
<td></td>
<td>$4,918</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area Allocated per use type</th>
<th>Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Land</td>
<td>$43,485,326</td>
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</table>

9) Total Capital Value Estimate

<table>
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<th>Capital value (Land + Improvements)</th>
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<tr>
<td></td>
<td>$551,123,690</td>
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10) Rates Calculation

<table>
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<tr>
<th>Charges based on CV</th>
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<tbody>
<tr>
<td>Commercial</td>
<td>$3,796,233.67</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>Charges based on number of units</th>
<th>Hotel</th>
</tr>
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<tr>
<td>Commercial</td>
<td>$1,928.87</td>
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<table>
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<th>Total Rates Generated</th>
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<tr>
<td>All development types ($ 2019)</td>
<td>$3,798,163</td>
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Development (in 2019 $ values)

<table>
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<tr>
<th></th>
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<th>Retail</th>
<th>Total GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>812,000</td>
<td>227,550</td>
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<tr>
<td></td>
<td>963,121</td>
<td>269,899</td>
<td>23,959</td>
<td>1,300,000</td>
</tr>
<tr>
<td>%</td>
<td>74%</td>
<td>21%</td>
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See '2050 projections QP and PDAL' tab

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<td></td>
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<td>50%</td>
<td>20%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>50%</td>
<td>80%</td>
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<tr>
<td></td>
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<tr>
<td>%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
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<th>Retail</th>
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<tr>
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<td>134,950</td>
<td>4,792</td>
<td>483,384</td>
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<td>23,959</td>
<td>1,300,000</td>
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<table>
<thead>
<tr>
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<th>Retail</th>
<th>Total</th>
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<td></td>
<td>10,000</td>
<td>8,000</td>
<td>6,000</td>
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<tr>
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<table>
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<th>Retail</th>
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<td></td>
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<td>809,697,816</td>
<td>76,670,134</td>
<td>3,488,595,464</td>
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<td></td>
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<tr>
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<table>
<thead>
<tr>
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<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total</th>
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<tr>
<td></td>
<td>7,170</td>
<td>7,000</td>
<td>4,400</td>
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<thead>
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<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total</th>
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<td>240</td>
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See '2050 projections QP and POAL' tab

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<td>27,400</td>
<td>39,350</td>
<td>140,000</td>
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<table>
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<th>Retail</th>
<th>Total GFA</th>
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<td>197,958</td>
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<td>$973,534,174</td>
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<thead>
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<th>Retail</th>
<th>Total Value</th>
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<td>$2,162,112,269</td>
<td>$129,639,895</td>
<td>$10,721,988,393</td>
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<td>$857,759,071</td>
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<tr>
<td>$107,219,884</td>
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</table>

<table>
<thead>
<tr>
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<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15,263,259.23</td>
<td></td>
<td>$892,981.63</td>
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<td>$15,263,259</td>
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</table>

<table>
<thead>
<tr>
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<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total Value</th>
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</thead>
<tbody>
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<td>$152,901.81</td>
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</table>

<table>
<thead>
<tr>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$22,275,744</td>
<td>$15,065,238</td>
<td>$1,045,883</td>
<td>$42,185,029</td>
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<tr>
<td>$22,275,744</td>
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<tr>
<td>W+M assumption</td>
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<tr>
<td>-------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
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<tr>
<td></td>
<td>Direct &amp; Indirect Impacts</td>
<td>Direct, Indirect Impacts</td>
<td>Direct Impacts</td>
</tr>
<tr>
<td>Output (Sm)</td>
<td>65.1</td>
<td>90.3</td>
<td>97.4</td>
</tr>
<tr>
<td>Value Added (Sm) (GRP)</td>
<td>22.6</td>
<td>32.0</td>
<td>36.0</td>
</tr>
<tr>
<td>Sustained Employment (Jobs)</td>
<td>277</td>
<td>379</td>
<td>414</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2a) Partial Move: Port operator salaries

| Output (Sm) | 19.4 | 23.9 | 26.1 |
| Value Added (Sm) (GRP) | 10.1 | 12.1 | 13.4 |
| Sustained Employment (Jobs) | 230.6 | 250.7 | 262.1 |
| | 17 | 18 | 19 | 19 |

2b) Partial Move: Driver salaries

| Output (Sm) | 6.1 | 7.5 | 8.2 |
| Value Added (Sm) (GRP) | 3.2 | 3.8 | 4.2 |
| Sustained Employment (Jobs) | 72.5 | 78.8 | 82.4 |
| | 6 | 6 | 7 | 6 |

2c) Partial Move: Port operator jobs

| Output (Sm) | 67.1 | 80.7 | 87.4 |
| Value Added (Sm) (GRP) | 49.1 | 56.1 | 59.9 |
| Sustained Employment (Jobs) | 273.0 | 325.4 | 359.1 |
| | 21 | 25 | 28 | 22 |

2d) Partial Move: Driver jobs

| Output (Sm) | 22.7 | 30.0 | 32.2 |
| Value Added (Sm) (GRP) | 8.4 | 10.9 | 12.2 |
| Sustained Employment (Jobs) | 130.0 | 155.5 | 166.9 |
| | 10 | 12 | 13 | 11 |

2) Partial Move: Impact on the Economy of Employment

| Output (Sm) | 115.3 | 142.1 | 154.0 |
| Value Added (Sm) (GRP) | 70.8 | 82.9 | 89.6 |
| Sustained Employment (Jobs) | 706.1 | 810.5 | 870.5 |
| | 54 | 62 | 66 | 57 |

3) Full Move: Impact on the Economy of Capital Expenditure

| Output (Sm) | 3,596.8 | 4,989.1 | 5,381.9 |
| Value Added (Sm) (GRP) | 1,249.7 | 1,767.9 | 1,987.8 |
| Sustained Employment (Jobs) | 15,280.0 | 20,924.1 | 22,896.0 |
| | 831 | 1,138 | 1,245 | 2,342 |

4a) Full Move: Port operator salaries

| Output (Sm) | 119.1 | 146.4 | 160.4 |
| Value Added (Sm) (GRP) | 62.2 | 74.3 | 82.1 |
| Sustained Employment (Jobs) | 1,415.5 | 1,539.0 | 1,609.1 |
| | 133 | 145 | 151 | 191 |
### 4b) Full Move: Driver salaries

<table>
<thead>
<tr>
<th></th>
<th>Output ($m)</th>
<th>Value Added ($m) (GRP)</th>
<th>Sustained Employment (Jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>105.7</td>
<td>130.0</td>
<td>142.4</td>
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<tr>
<td></td>
<td>55.2</td>
<td>66.0</td>
<td>72.9</td>
</tr>
<tr>
<td></td>
<td>1,256.2</td>
<td>1,365.9</td>
<td>1,428.0</td>
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<table>
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<th>128</th>
<th>134</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>170</td>
<td></td>
<td></td>
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### 4c) Full Move: Port operator jobs

<table>
<thead>
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<th>Output ($m)</th>
<th>Value Added ($m) (GRP)</th>
<th>Sustained Employment (Jobs)</th>
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<tr>
<td></td>
<td>410.7</td>
<td>494.4</td>
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<tr>
<td></td>
<td>300.4</td>
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<table>
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<th>223</th>
<th>246</th>
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<tbody>
<tr>
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<td>226</td>
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### 4d) Full Move: Driver jobs

<table>
<thead>
<tr>
<th></th>
<th>Output ($m)</th>
<th>Value Added ($m) (GRP)</th>
<th>Sustained Employment (Jobs)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>392.1</td>
<td>517.7</td>
<td>556.8</td>
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<td></td>
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<table>
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<th>194</th>
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<tbody>
<tr>
<td></td>
<td>304</td>
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### 4) Full Move: Impact on the Economy of Employment

<table>
<thead>
<tr>
<th></th>
<th>Output ($m)</th>
<th>Value Added ($m) (GRP)</th>
<th>Sustained Employment (Jobs)</th>
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</thead>
<tbody>
<tr>
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<tr>
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<td>563.1</td>
<td>672.5</td>
<td>732.2</td>
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<th>725</th>
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<tr>
<td></td>
<td>891</td>
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### Freight Forecast, Full Move: Northport / Whangarei Ports

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<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
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<tr>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Exports - Bulk</td>
<td>3,093</td>
<td>3,164</td>
<td>3,238</td>
<td>3,313</td>
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<td>3,982</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Exports - Containerised</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>145</td>
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<td>426</td>
<td>572</td>
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<td>8</td>
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<td>370</td>
<td>741</td>
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<td>1,512</td>
<td>1,914</td>
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<td><strong>Ports of Auckland</strong></td>
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<td>1,426</td>
<td>1,443</td>
<td>1,461</td>
<td>1,331</td>
<td>1,198</td>
<td>1,061</td>
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<td>777</td>
<td>629</td>
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<td>2,318</td>
<td>2,394</td>
<td>2,426</td>
<td>2,458</td>
<td>2,242</td>
<td>2,020</td>
<td>1,791</td>
<td>1,556</td>
<td>1,314</td>
<td>1,065</td>
</tr>
<tr>
<td>Exports - Containerised</td>
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<td>1,237</td>
<td>1,260</td>
<td>1,282</td>
<td>1,305</td>
<td>1,321</td>
<td>1,337</td>
<td>1,218</td>
<td>1,096</td>
<td>971</td>
<td>842</td>
<td>711</td>
<td>575</td>
</tr>
<tr>
<td>Imports - Containerised</td>
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<td>3,149</td>
<td>3,252</td>
<td>3,359</td>
<td>3,469</td>
<td>3,516</td>
<td>3,583</td>
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<td>2,596</td>
<td>2,255</td>
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</tr>
<tr>
<td>Cars</td>
<td>255,487</td>
<td>240,237</td>
<td>231,452</td>
<td>221,345</td>
<td>211,720</td>
<td>207,989</td>
<td>212,158</td>
<td>195,598</td>
<td>177,701</td>
<td>158,862</td>
<td>136,501</td>
<td>113,638</td>
<td>91,811</td>
</tr>
<tr>
<td><strong>Bay of Plenty Export</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports - Bulk</td>
<td>9,038</td>
<td>9,351</td>
<td>9,674</td>
<td>10,009</td>
<td>10,355</td>
<td>10,297</td>
<td>10,240</td>
<td>10,331</td>
<td>10,425</td>
<td>10,524</td>
<td>10,627</td>
<td>10,734</td>
<td>10,845</td>
</tr>
<tr>
<td>Exports - Containerised</td>
<td>5,768</td>
<td>5,968</td>
<td>6,174</td>
<td>6,388</td>
<td>6,609</td>
<td>6,572</td>
<td>6,535</td>
<td>6,634</td>
<td>6,736</td>
<td>6,842</td>
<td>6,952</td>
<td>7,065</td>
<td>7,182</td>
</tr>
<tr>
<td>Imports - Containerised</td>
<td>2,163</td>
<td>2,192</td>
<td>2,222</td>
<td>2,252</td>
<td>2,282</td>
<td>2,296</td>
<td>2,309</td>
<td>2,684</td>
<td>3,069</td>
<td>3,464</td>
<td>3,868</td>
<td>4,283</td>
<td>4,709</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21,733</td>
<td>44,425</td>
<td>68,084</td>
<td>91,001</td>
<td>113,638</td>
<td>137,717</td>
</tr>
<tr>
<td><strong>Firth of Thames</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports - Bulk</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>148</td>
<td>299</td>
<td>455</td>
<td>614</td>
<td>777</td>
<td>943</td>
</tr>
<tr>
<td>Imports - Bulk</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>249</td>
<td>505</td>
<td>768</td>
<td>1,037</td>
<td>1,314</td>
<td>1,598</td>
</tr>
<tr>
<td>Exports - Containerised</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>135</td>
<td>274</td>
<td>416</td>
<td>562</td>
<td>711</td>
<td>863</td>
</tr>
<tr>
<td>Imports - Containerised</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>361</td>
<td>732</td>
<td>1,113</td>
<td>1,503</td>
<td>1,904</td>
<td>2,316</td>
</tr>
<tr>
<td>Cars</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21,733</td>
<td>44,425</td>
<td>68,084</td>
<td>91,001</td>
<td>113,638</td>
<td>137,717</td>
</tr>
</tbody>
</table>

### Freight Forecast, Full Move: Ports of Auckland

![Graph of Freight Forecast, Full Move: Northport / Whangarei Ports](image1)

![Graph of Freight Forecast, Full Move: Ports of Auckland](image2)
<table>
<thead>
<tr>
<th>Year</th>
<th>2031</th>
<th>2032</th>
<th>2033</th>
<th>2034</th>
<th>2035</th>
<th>2036</th>
<th>2037</th>
<th>2038</th>
<th>2039</th>
<th>2040</th>
<th>2041</th>
<th>2042</th>
<th>2043</th>
<th>2044</th>
<th>2045</th>
<th>2046</th>
<th>2047</th>
<th>2048</th>
<th>2049</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>10,108</td>
<td>10,561</td>
<td>10,984</td>
<td>11,416</td>
<td>11,573</td>
<td>11,732</td>
<td>11,893</td>
<td>12,057</td>
<td>12,223</td>
<td>12,391</td>
<td>12,562</td>
<td>12,735</td>
<td>12,766</td>
<td>12,797</td>
<td>12,828</td>
<td>12,859</td>
<td>12,891</td>
<td>12,922</td>
<td>12,954</td>
<td>12,986</td>
</tr>
<tr>
<td>Data</td>
<td>1,029</td>
<td>1,189</td>
<td>1,350</td>
<td>1,513</td>
<td>1,528</td>
<td>1,543</td>
<td>1,558</td>
<td>1,573</td>
<td>1,589</td>
<td>1,605</td>
<td>1,621</td>
<td>1,637</td>
<td>1,651</td>
<td>1,665</td>
<td>1,679</td>
<td>1,693</td>
<td>1,708</td>
<td>1,722</td>
<td>1,737</td>
<td>1,752</td>
</tr>
<tr>
<td>Data</td>
<td>2,748</td>
<td>3,181</td>
<td>3,618</td>
<td>4,065</td>
<td>4,111</td>
<td>4,157</td>
<td>4,205</td>
<td>4,252</td>
<td>4,301</td>
<td>4,349</td>
<td>4,399</td>
<td>4,448</td>
<td>4,471</td>
<td>4,494</td>
<td>4,516</td>
<td>4,539</td>
<td>4,562</td>
<td>4,585</td>
<td>4,608</td>
<td>4,631</td>
</tr>
</tbody>
</table>

| Data | 477 | 522 | 163 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Data | 547 | 547 | 277 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Data | 1,174 | 793 | 401 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total | 69,554 | 46,851 | 23,346 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Data | 10,960 | 11,080 | 10,937 | 10,808 | 10,526 | 10,254 | 9,992 | 9,739 | 9,495 | 9,260 | 9,033 | 8,815 | 8,788 | 8,762 | 8,736 | 8,711 | 8,686 | 8,661 | 8,637 | 8,613 |
| Data | 5,303 | 5,622 | 5,959 | 6,302 | 6,370 | 6,439 | 6,508 | 6,578 | 6,649 | 6,721 | 6,793 | 6,866 | 6,939 | 6,992 | 6,960 | 6,991 | 7,023 | 7,055 | 7,086 | 7,118 |
| Data | 7,303 | 7,428 | 7,386 | 7,353 | 7,178 | 7,009 | 6,846 | 6,690 | 6,539 | 6,394 | 6,254 | 6,120 | 6,094 | 6,082 | 6,071 | 6,059 | 6,048 | 6,037 | 6,026 |

| Data | 5,146 | 5,593 | 6,055 | 6,527 | 6,958 | 6,670 | 6,743 | 6,817 | 6,892 | 6,967 | 7,044 | 7,121 | 7,154 | 7,188 | 7,221 | 7,255 | 7,289 | 7,324 | 7,358 | 7,392 |
| Data | 1,114 | 1,289 | 1,465 | 1,644 | 1,661 | 1,678 | 1,695 | 1,713 | 1,730 | 1,748 | 1,766 | 1,784 | 1,800 | 1,815 | 1,831 | 1,847 | 1,862 | 1,879 | 1,895 | 1,911 |
| Data | 1,809 | 2,188 | 2,490 | 2,798 | 2,829 | 2,861 | 2,894 | 2,927 | 2,960 | 2,993 | 3,027 | 3,062 | 3,093 | 3,108 | 3,124 | 3,140 | 3,156 | 3,172 | 3,188 |

From: Dan Jenkins
Sent: Friday, June 28, 2019 10:22 AM
To: Chris Money
Subject: FW: New / new-used vehicle registrations

Chris,

Ref: basis of car numbers import to Auckland.

Can you forward on to Patrick / Jonathan / Advisian as required please (Grand Total column most relevant). Happy to discuss the Auckland split / sensible assumption probably needed (or actuals projected but the overall trend is what is required). Source reference should be MOT.

Thanks,
Dan

From: [Redacted]
Sent: Friday, 28 June 2019 10:05 AM
To: [Redacted]
Subject: RE: New / new-used vehicle registrations

Hi Dan,

Below are our base case projection for registrations until 2035. So in 2034, would about 270k light registrations, including roughly 130k NZ New and 140k used imports. About 65% of light NZ New registrations and more than 80% of light used registrations would be EVs.

When heavy registrations are included, would be 135k New and 140k used.

<table>
<thead>
<tr>
<th>Year</th>
<th>EV</th>
<th>Fossil fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heavy</td>
<td>Light</td>
</tr>
<tr>
<td>2018</td>
<td>38</td>
<td>16</td>
</tr>
<tr>
<td>2019</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td>61</td>
<td>27</td>
</tr>
<tr>
<td>2021</td>
<td>78</td>
<td>35</td>
</tr>
<tr>
<td>2022</td>
<td>109</td>
<td>48</td>
</tr>
<tr>
<td>2023</td>
<td>155</td>
<td>60</td>
</tr>
<tr>
<td>2024</td>
<td>239</td>
<td>103</td>
</tr>
<tr>
<td>2025</td>
<td>350</td>
<td>158</td>
</tr>
<tr>
<td>2026</td>
<td>463</td>
<td>213</td>
</tr>
</tbody>
</table>
Cheers,
Haobo

From: Dan Jenkins [REDACTED]
Sent: Friday, 28 June 2019 9:46 AM
To: Haobo Wang [REDACTED]
Subject: New / new-used vehicle registrations

Haobo,

Can you give me an estimate of new / new-used registrations likely in 2034 please.

Thanks,
Dan

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

[www.transport.govt.nz]

Enabling New Zealanders to flourish
Initial assessment for potential rates generated by a fully completed port development (in 2019 $ values)

1) Total GFA per development type

<table>
<thead>
<tr>
<th>Original Analysis GFA (m²)*</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36,270</td>
<td>812,000</td>
<td>227,550</td>
<td>20,200</td>
<td>1,096,020</td>
</tr>
<tr>
<td>Partial Intervention GFA (m²)</td>
<td>6,949</td>
<td>155,581</td>
<td>43,599</td>
<td>3,870</td>
<td>210,000</td>
</tr>
<tr>
<td>Final Interventions GFA (m²)</td>
<td>43,020</td>
<td>963,121</td>
<td>269,899</td>
<td>23,959</td>
<td>1,300,000</td>
</tr>
<tr>
<td>% of GFA (m²)</td>
<td>3%</td>
<td>74%</td>
<td>21%</td>
<td>2%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Key:
W+M assumption

See '2020 projections QP and PODA tab'

2) Proportion of building grade per development type

<table>
<thead>
<tr>
<th>Grade of Development Proportion</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>60%</td>
<td>13%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>40%</td>
<td>34%</td>
<td>50%</td>
<td>80%</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

3) Total GFA per grade of development type

<table>
<thead>
<tr>
<th>Total GFA per development grade</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>25,812</td>
<td>317,830</td>
<td>134,950</td>
<td>4,792</td>
<td>483,384</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>17,208</td>
<td>327,461</td>
<td>134,950</td>
<td>19,168</td>
<td>498,786</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0</td>
<td>317,830</td>
<td>0</td>
<td>0</td>
<td>317,830</td>
</tr>
<tr>
<td>Total</td>
<td>43,020</td>
<td>963,121</td>
<td>269,899</td>
<td>23,959</td>
<td>1,300,000</td>
</tr>
</tbody>
</table>

4) Average cost per m², by development type, by grade

<table>
<thead>
<tr>
<th>Development Cost per sqm ($/m²)</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>14,000</td>
<td>10,000</td>
<td>8,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>8,500</td>
<td>7,500</td>
<td>6,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0</td>
<td>4,000</td>
<td>4,000</td>
<td>3,000</td>
</tr>
</tbody>
</table>

5) Total final development cost (2019 $)

<table>
<thead>
<tr>
<th>Total Development Cost</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Specification</td>
<td>$361,369,683</td>
<td>$3,178,299,666</td>
<td>$1,079,597,088</td>
<td>$28,751,300</td>
<td>$4,648,017,737</td>
</tr>
<tr>
<td>Medium Specification</td>
<td>$146,268,683</td>
<td>$2,455,958,833</td>
<td>$809,697,816</td>
<td>$76,670,134</td>
<td>$3,488,595,464</td>
</tr>
<tr>
<td>Standard Specification</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,271,319,866</td>
</tr>
<tr>
<td>Total</td>
<td>$507,638,366</td>
<td>$6,905,578,503</td>
<td>$1,889,294,903</td>
<td>$105,421,434</td>
<td>$9,407,933,067</td>
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</tbody>
</table>

6) Average cost per m² per development type

<table>
<thead>
<tr>
<th>Average Development Cost per m²</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>$11,800</td>
<td>$7,170</td>
<td>$7,000</td>
<td>$4,400</td>
<td>$7,237</td>
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</tbody>
</table>
7) Number of developments/units

<table>
<thead>
<tr>
<th>Key Assumptions</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port area will accommodate 3% of future A1 hotel room demand (60,250 rooms, approx 605 rooms).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average dwellings size is 70m²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assume 1000m² per commercial premises</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assume 300m² per retail unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individual units</td>
<td>3.0</td>
<td>13,759</td>
<td>270</td>
<td>240</td>
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</table>

See Table 7A5 projections OP and ROAL tab

8) Land area and value

<table>
<thead>
<tr>
<th>Proposed Plot Built Area</th>
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<tbody>
<tr>
<td>Area (m²)</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>60,450</td>
</tr>
</tbody>
</table>

Land value* | $4,918
Average Value per m² | |

See Land Value tab

<table>
<thead>
<tr>
<th>Area Allocated per use type</th>
<th>Hotel</th>
<th>Residential</th>
<th>Commercial + Cultural</th>
<th>Retail</th>
<th>Total GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,842</td>
<td>197,958</td>
<td>55,475</td>
<td>4,925</td>
<td></td>
<td>267,200</td>
</tr>
<tr>
<td>Value of Land</td>
<td>$43,485,326</td>
<td>$973,534,174</td>
<td>$272,817,366</td>
<td>$24,218,461</td>
<td>$1,314,055,326</td>
</tr>
</tbody>
</table>

9) Total Capital Value Estimate

<table>
<thead>
<tr>
<th>Capital value (Land + Improvements)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>$551,123,690</td>
</tr>
</tbody>
</table>

10) Rates Calculation

<table>
<thead>
<tr>
<th>Charges based on CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
<tr>
<td>Residential</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charges based on number of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
<tr>
<td>Residential</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Rates Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>All development types ($ 2019)</td>
</tr>
</tbody>
</table>
### Summary Figures for CBA, $m

<table>
<thead>
<tr>
<th></th>
<th>Base Case: POAL</th>
<th>Base Case: Other</th>
<th>Northport</th>
<th>Tauranga</th>
<th>New Port in Firth of Thames</th>
<th>Split Northport / Tauranga</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Medium Term</td>
<td>Long Term</td>
<td>Medium Term</td>
<td></td>
<td></td>
<td>Medium Term</td>
</tr>
<tr>
<td>Ports</td>
<td>630</td>
<td>428</td>
<td>29</td>
<td></td>
<td></td>
<td>28.22</td>
</tr>
<tr>
<td>Rail</td>
<td><strong>200</strong></td>
<td></td>
<td>36</td>
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Iris and Andrew

ditional to base case)

't include FoT construction costs, so 20 June figures used

ditional to base case)
Hi Chris,

Ahead of tomorrow morning’s meeting, we thought it would be useful to provide some comment on your email below. MoT and Treasury have discussed and we provide some comment next to each of yours.

We thought it might be useful to have a pre-meet in the morning ahead of the 9am meeting – how about 8:30am at the café at Jet Park?

**EY comment:**
- 5A: Auckland’s avoided Road infrastructure costs from Northport Move should count and this significantly reduces the benefit cost ratio
  - We’d welcome the opportunity to discuss what exactly officials have done here as the statements in the briefing on the face of it don’t fully gel.
  - We’ve had to piece together what we think has happened here, and it seems to hinge on an incomplete understanding and subsequent application of Advisian’s comment to them that “the base case infrastructure costs will be required regardless.”
  - Our report basically took at the planned infrastructure in the UNI and looked at when it would be needed under the different scenarios. *Very few investments are new as a result of the scenarios, and very few are no longer needed as a result of the scenarios.* What fundamentally changes is the timing and sequencing of these investments.
  - Advisian were entirely correct to advise that the investments in the base case would be required regardless. But many of these investments are not needed as soon as they would be under the base case. These investments have been pushed out (i.e. saving money) in the same way that investments have been brought forward (i.e. costing money) to service the Northport option. Its worth noting some costs get pushed outside the analysis period, but others are brought into the period from outside.
  - What appears to have happened in response to Advisian’s comment is put all the road investments back on their original timing, which is not correct. It also appears that they’ve also included all the accelerated costs (i.e. those outside the analysis period on the do-min) which would further inflate the Northport costs relative to the benefits. This is also not correct.

**MoT/Treasury response:**
- An email from EY to Treasury and MoT on 25 September confirmed previous discussions that the POAL investment requirements under the base case (including port, road and rail) over the medium and long term were not included in any of the full move scenarios due to POAL operations being discontinued. I attach the email chain with this confirmation, as well as subsequent responses from EY and Advisian.
- This is also clear from the model that EY provided; I’ve provided the relevant screen shots below from the ‘Inf_costs’ tab and ‘Sum_Diff’ tab (and also attached)
- When we included the road costs back into the full move to Northport scenario, this resulted in the decreased BCR, as our advice set out.
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### Scenario 2.1 - Full move to Northport

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**EY comment**
- **5B: 70% rail mode share**