UPPER NORTH ISLAND FREIGHT STORY

Reducing the cost of doing business in New Zealand through an upper North Island lens

SUMMARY OF CRITICAL ISSUES

April 2013

Developed by the Upper North Island Strategic Alliance

in partnership with Auckland Transport, KiwiRail and the NZ Transport Agency
Foreword

The upper North Island of New Zealand is critical to New Zealand’s economic success. More than 55% of New Zealand's freight travels through the Northland, Auckland, Waikato and Bay of Plenty regions, and collectively these regions generate over 50% of New Zealand’s gross domestic product. The freight task in the upper North Island is predicted to double by 2035.¹

The Upper North Island Strategic Alliance (UNISA) is made up of Northland Regional Council, Whangarei District Council, Auckland Council, Waikato Regional Council, Hamilton City Council, Bay of Plenty Regional Council and Tauranga City Council. UNISA is collaborating with Auckland Transport, KiwiRail and the NZ Transport Agency on initiatives to reduce the cost to do business in New Zealand – through an upper North Island lens.

“It is crucial that we establish a culture of long term collaboration on significant strategic issues across the upper North Island. We need to work together through collective priority and focus on areas and issues where we can add the most value to enhance New Zealand’s economic performance.”

Upper North Island Strategic Alliance mayors and regional chairs and chief executives

The goal is that by delivering freight efficiencies, this will in turn reduce costs of trade – with the result being cheaper goods for New Zealanders and a competitive advantage for New Zealand importers and exporters.

“The efficient movement of freight through the upper North Island is vital to New Zealand’s economic success. This partnership is an example of the kind of collaboration and joined up thinking that we’ll need to see more of in the years ahead to deliver the high performing transport system that New Zealand needs to grow and prosper.”

Geoff Dangerfield, Chief Executive NZ Transport Agency

All the organisations involved share the view that to invest smarter and deliver better certainty for industry and investors, we need to understand the picture at an upper North Island scale and work together, with the sector, on the critical issues that will add the most value.

“In delivering an efficient freight network for New Zealand it is important that we work together with other network and land use providers to find integrated solutions. Because rail is such an integral part of the country’s freight networks it is an important opportunity to work across the sector to better understand freight flows and industry requirements into the future.”

Jim Quinn, Chief Executive KiwiRail

This approach has had and continues to have discussions with industry, freight operators and ports, to ensure their views are included, and that their needs can be better understood.

¹ Upper North Island Freight Study 2010.
# Contents

1. Upper North Island Freight Story Overview .................................................................................. 8
2. Purpose of the Upper North Island Freight Story .......................................................................... 9
   2.1 Purpose of this document – ‘Summary of Critical Issues’ .......................................................... 9
   2.2 Upper North Island Strategic Alliance (UNISA) ........................................................................ 9
   2.3 Key themes ............................................................................................................................... 10
3. Key Strategic Questions .................................................................................................................. 11
4. Building the Upper North Island Freight Story .............................................................................. 13
   4.1 Collective partnership approach ............................................................................................... 13
   4.2 Regional workshops ................................................................................................................. 13
   4.3 Technical analysis ..................................................................................................................... 14
   4.4 Upper North Island Freight Story schematic .......................................................................... 14
5. Key Facts ......................................................................................................................................... 15
6. Upper North Island Map ................................................................................................................ 16
7. Key Industry Strengths .................................................................................................................... 17
8. Key Infrastructure Strengths .......................................................................................................... 18
9. Upper North Island Regional Summaries ....................................................................................... 19
   9.1 Northland Region ...................................................................................................................... 19
   9.2 Auckland region ....................................................................................................................... 20
   9.3 Waikato region ......................................................................................................................... 21
   9.4 Bay of Plenty region .................................................................................................................. 22
10. Critical Issues ............................................................................................................................... 23
    10.1 Upper North Island scale criteria ........................................................................................... 23
    10.2 Prioritised critical issues ......................................................................................................... 23
    10.3 Other critical issues being addressed through existing processes ....................................... 23
    10.4 Critical issues not progressed ............................................................................................... 25
11. Prioritised Critical Issues ............................................................................................................. 26
    11.1 Critical issue: Strategic road and rail network constraints .................................................... 26
    11.2 Critical issue: Delivery of the High Productivity Motor Vehicle (HPMV) programme ........... 28
    11.3 Critical issue: Utilisation of industrial land ............................................................................ 30
    11.4 Critical issue: Lack of strategic integrated land use and transport planning and investment 32
    11.5 Critical issue: Lack of shared and accurate data ..................................................................... 33
    11.6 Critical issue: Need to understand freight supply chain costs for significant industries in the upper North Island ................................................................. 34
11.7 Critical issue: Challenging local government and central government funding structures.... 35

12. Upper North Island Independent Port Technical Study .................................................. 38
12.1 Purpose of the Study ........................................................................................................ 38
12.2 Key findings of the Study ................................................................................................ 38
12.3 Link to Upper North Island Freight Story ................................................................. 39
12.4 Productivity Commission report on international freight services ....................... 39

13. Critical Issues – Summary Action Table ....................................................................... 40

14. Acknowledgements ........................................................................................................... 44

15. Bibliography ..................................................................................................................... 45

Disclaimer
The information and data contained in this document, has been produced for the Upper North Island Strategic Alliance, in partnership with Auckland Transport, KiwiRail and the NZ Transport Agency and is for the purpose of information only.

While every attempt has been made to ensure the accuracy and completeness of the information, it cannot be guaranteed and may be subject to change without notice. Any use of this document by a third party is without liability and independent advice should be sought.
Executive Summary

New Zealand is a trading nation, exporting and importing significant quantities of goods from across the world. We are also distant from our markets and freight transport costs are a sizable component of the total trading costs for New Zealand.

The freight task is growing and improving freight efficiency is a key Government policy outcome for land transport. Improving freight efficiency reduces the cost of trade, which can result in reducing the cost of goods for all New Zealanders and increasing the competitive advantage for our country’s importers and exporters.

By delivering freight efficiencies the cost of doing business is reduced. Better and more reliable access to new or existing markets can also grow trade and create new business opportunities. This will grow our economy and our wealth as a country.

The Upper North Island Freight Task

The upper North Island is critical to New Zealand’s economic success, generating more than half the country’s gross domestic product and containing just over half the population. As a result, more than half of New Zealand’s freight moves either through the Northland, Auckland, Waikato and/or Bay of Plenty regions. This volume of freight is expected to double by 2035. Despite these big numbers, the Upper North Island Freight Story (the Story) points to New Zealand being able to respond by a process of evolution and not revolution to this growth.

This evolution will be possible because the upper North Island is unlikely to radically shift in terms of the current mix of freight, or the way it is handled. The Story has not uncovered any evidence to suggest a significant shift in our major sectors or their product type. Broader changes that will impact on freight, such as increasing cost of fuel, changes in fuel sources and the rise of internet shopping, will also occur gradually.

An independent technical study which explored current and future freight demand for ports and port-related infrastructure in the upper North Island has recently been completed (see section 12 for further information).

A key finding of this study was that the upper North Island port network (covering the Port of Auckland, Port of Tauranga and the Whangarei Ports) has the capacity to meet the projected freight task over the next 30 years, provided that efficiency gains, incremental investments in infrastructure and the uptake of already consented works are undertaken in a planned and timely manner.

This context does not mean we should be complacent about looking for ways to reduce the cost of doing business in New Zealand. Rather, we need to keep making improvements to our current systems to enable further efficiencies.

The Upper North Island Freight Story (the Story)

The purpose of the Story is to take a collective partnership approach within an upper North Island ‘freight lens’ to determine issues or areas that are limiting our ability to ‘reduce the cost to do business in New Zealand’.

---

2 Upper North Island Freight Study 2010
The Story is about stakeholders and partners identifying those critical freight related issues within the upper North Island and then developing a shared evidence base to support future discussions and decision making.

The Productivity Commissions International Freight Transport Services Inquiry Report 2012 endorses the approach taken in the development of the Story. The Commission notes that to better coordinate investment in freight transport infrastructure, greater use should be made of ‘facilitated discussion models’, such as this.

**The Critical Issues**

The development of the Story has identified seven critical freight related issues as outlined in the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Critical Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Strategic Road and Rail Network Constraints</strong></td>
</tr>
<tr>
<td></td>
<td>There are a number of constraints on the upper North Island strategic freight road and rail network that are limiting our ability to enhance economic performance and reduce the cost to do business in New Zealand.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Delivery of the High Productivity Motor Vehicle (HPMV) programme</strong></td>
</tr>
<tr>
<td></td>
<td>There is a need to develop a more coordinated approach to the implementation and communication of the upper North Island HPMV programme. Freight operators require a fast and seamless permitting process, appropriate rules and enforcement, consistent coordination between agencies and regular communication on the status of routes ('whole of journey' network approach).</td>
</tr>
<tr>
<td>3</td>
<td><strong>Utilisation of industrial land</strong></td>
</tr>
<tr>
<td></td>
<td>There is a need to understand the likely supply and demand for industrial land (amount, type and location) across the upper North Island so that land and public investment can be provided and staged at appropriate times.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Lack of strategic, integrated land use and transport planning and investment</strong></td>
</tr>
<tr>
<td></td>
<td>There is a lack of a comprehensive, integrated approach to current and future land use and land transport (road and rail) planning and investment at an upper North Island scale. A more strategic approach would increase certainty for industry and public sector agencies and support effective industry, local government and central government planning and investment.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Lack of shared and accurate data</strong></td>
</tr>
<tr>
<td></td>
<td>A lack of shared and accurate data (e.g. freight flows, commodities, origins and destinations for both road and rail) means it is difficult for public agencies to make well-informed, collective decisions about land use and transport planning and investment that will increase efficiencies for business and public investment.</td>
</tr>
<tr>
<td>No.</td>
<td>Critical Issue</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Need to understand costs of freight supply chains for critical industries in the upper North Island</td>
</tr>
<tr>
<td></td>
<td>There is a need to better understand the costs of the freight supply chain for the upper North Island’s key economic industries in order to support development / alignment of initiatives by industry and the public sector to reduce the cost to do business.</td>
</tr>
<tr>
<td>7</td>
<td>Challenging local government and central government funding structures</td>
</tr>
<tr>
<td></td>
<td>The current range of central and local government funding structures and requirements (i.e. legislation, policy and application) are hindering ‘smart investment’ decisions due to their multitude and complexity.</td>
</tr>
</tbody>
</table>

**Upper North Island Freight Story – Shared Evidence Base**

A shared evidence base has been developed by the ten partner organisations within the Story. This document provides decision makers with a greater depth of information relating to the critical issues identified in the Story and will be used as a key reference for any relevant freight related decisions by the partner organisations.

The *Upper North Island Freight Story - Shared Evidence Base* is a separate supporting document, which can be sourced from the Story partners.
1. Upper North Island Freight Story Overview

The New Zealand government has a strong focus on improving freight efficiency to promote economic growth and productivity and ensure New Zealand has a prosperous future. An example of this is the recent Productivity Commission Inquiry into International Freight Transport (2011-12).

For this vision to be achieved, key decision makers across New Zealand need to work, plan and invest together in the delivery of shared priorities and outcomes.

New Zealand needs to continue to enhance its competitive position in international markets and, as decision makers, we need an integrated land use and transport planning and investment focus on the areas and assets that will give us the highest productivity returns.

We need to provide further certainty and transparency around infrastructure and industry projects to build confidence across the public and private sector and support joined up investment.

And we need to do this together...

In essence, the Upper North Island Freight Story is a process of high level, upfront conversations, looking at key issues and opportunities at an upper North Island scale where partners can collectively focus attention and add value with a direct view to reduce the costs to do business and in turn deliver freight efficiencies and improve the economic performance of New Zealand.

The purpose of the Upper North Island Freight Story is for key partners in the upper North Island to work together on:

- a Story, based on ‘reducing the cost to do business in New Zealand’ – through an upper North Island lens’ to support informed decision making on key land use, infrastructure and investment, to improve the economic performance of the upper North Island and New Zealand
- a shared approach for key partners to make decisions together.
2. Purpose of the Upper North Island Freight Story

The purpose of the Upper North Island Freight Story (the Story) is to take a collective partnership approach within an upper North Island ‘freight lens’ to determine issues or areas that are limiting our ability to ‘reduce the cost to do business in New Zealand’.

The Story is about identifying the critical issues at an upper North Island scale with stakeholders and partners, and then developing a shared evidence base to support discussions and decisions.

The Story is purely about supporting better informed decision making from a freight perspective through a factual and evidence based position. Any relevant responses and/or decisions on the identified issues remain with the organisation(s) responsible in partnership with their stakeholders, including how the freight conversation sits within other competing outcomes and areas of focus.

The Productivity Commission’s International Freight Transport Services Inquiry Report 2012 endorses the approach taken in the development of the Story. The Commission notes that to better coordinate investment in freight transport infrastructure, greater use should be made of ‘facilitated discussion models’, such as this.

2.1 Purpose of this document – ‘Summary of Critical Issues’

This document provides a summary of the critical issues focused on through the development of the Story.

These issues were identified, ranked and analysed through multiple forums and groups, and are put forward as areas that could benefit from further work though a collective partnership approach such as has been established in the upper North Island.

Each critical issue includes the following:

- Problem definition;
- Overall proposal;
- Benefit from collective partner focus;
- Key evidence and findings (if relevant); and
- Completed and future actions

This document does not include detailed information on freight and the freight task in New Zealand. This is covered by a number of studies and work completed in recent years, which the Story used as references.

2.2 Upper North Island Strategic Alliance (UNISA)

The Upper North Island Strategic Alliance (UNISA), made up of the three Regional Councils (Northland, Waikato and Bay of Plenty), Auckland Council and the three City/District Councils (Whangarei, Hamilton and Tauranga), have joined together to establish a long term collaboration for responding to and managing a range of inter-regional and inter-metropolitan issues.
The top four ‘first order issues’ identified by the Strategic Alliance include:

- Economic development linkages
- Transport, including rail, roads, freight
- Ports, including inland ports
- Tourism

The Story is one of the projects and approaches the Strategic Alliance has undertaken to support the first order issues in partnership with Auckland Transport, KiwiRail and the NZ Transport Agency.

A number of other initiatives and projects have also been undertaken and/or planned for by the Strategic Alliance including the completion of an *Independent Port Technical Study* in 2012 (see section 12 for further information on this Study).

2.3 Key themes

Throughout the development of the Story, five key themes continually emerged. These include:

- **Collaborate** across public and private sectors
  
  Increase collaboration between public and private sector players, to enable better informed decisions, leading to increased freight efficiency and productivity.

- **Connect** and protect routes and nodes
  
  Identify and protect key routes and strategic nodes to establish a connected multi-modal freight network now and into the future.

- **Efficient** freight supply chains
  
  Increase understanding of each link in the supply chain and implement interventions to improve efficiency, thereby reducing the cost to do business in New Zealand.

- **Certainty** in planning and investment
  
  Provide increased certainty in the planning for and investment in freight transport (road and rail) and landuse infrastructure and supply to enable decision makers to respond to the changing nature of the freight task in a more informed manner.

- **Smart** investment
  
  Increase understanding as to the tools, mechanisms and options available as decision makers to ensure we invest in the right place, at the right time for the best return on investment.
3. **Key Strategic Questions**

In addition to the seven critical freight-related issues identified in the Story, a number of key strategic questions arose, through the Story discussions, which cannot be addressed by the project partners alone.

Even though these questions remain unanswered in the Story, they are intended to frame and encourage further conversations, where public and private sector partners could choose to continue working together on freight related issues and outcomes.

1. Domestic freight costs are seen as a small proportion of the total cost of getting goods to international markets, although the cost varies for each sector and by source/destination region. Where can gains be made to reduce this cost that are worth the investment? Are there other areas in which the Story partners could make a greater contribution to reducing the cost of doing business in New Zealand?

2. How do central government, NZ Transport Agency and local government work more collaboratively with industry in New Zealand to deliver the High Productivity Motor Vehicle programme?

3. How do we develop a robust, integrated way in New Zealand to gather, share, monitor and use freight data across public and private sectors?

4. What information can industry share with local, regional and central government to assist the public sector in understanding the needs of the freight sector?

5. How can we plan and deliver a more integrated transport network in New Zealand?
   a. Why is there a difference between KiwiRail and NZ Transport Agency mandate with government and funding structures?
   b. How can we best keep track of longer term changes to land use and freight demand and make sure these are taken into account in planning by agencies?
   c. Is the current split of responsibilities between agencies for transport planning, investment and maintenance the best split to deliver desired transport outcomes?
   d. Are the current funding structures and tools for central and local government the most effective to deliver desired transport outcomes?

6. How do we improve the strategic integration between land use and infrastructure planning in the upper North Island?
   a. Is the current split of responsibilities between agencies for land use and transport planning and investment the best split to deliver integrated land use and transport outcomes?
   b. How can strategic planning processes required under the LTMA, RMA and LGA be better integrated?

7. The Story identifies approximately 13,000 hectares of industrial land either existing or planned for in the upper North Island over the short to long term. How can local government work together, and with industry, to better understand the need and future plans for this land as well as identify what attracts and/or places barriers on industry to develop?
8. How do we improve planning, monitoring and adaptation to significant land use changes that are happening within the upper North Island and New Zealand as a whole, which might have an impact on freight trends?

9. What effect will additional transport demand from continued population growth in urban areas in the upper North Island have on freight efficiency and how can this issue be best managed?
4. Building the Upper North Island Freight Story

4.1 Collective partnership approach

A collective partnership approach was taken to develop the ‘Story’, to reflect that all partners had an equal role, voice and responsibility throughout the process.

This approach enabled each of the partner organisations to tell ‘their part of the story’ and, working with industry, operators, ports and wider local government partners, identify issues and areas where a collective priority and focus could add value.

A Technical Working Group was established in April 2012 to lead development of the Story. This group currently comprises of officer representation from the ten partner organisations including the seven Upper North Island Strategic Alliance (UNISA) councils, Auckland Transport, KiwiRail and the NZ Transport Agency.

The following diagram outlines the collective partnership approach developed to support informed decision making in the upper North Island.

4.2 Regional workshops

Workshops were held in each of the upper North Island regions of Northland, Auckland, Waikato and Bay of Plenty during April to July 2012 to support the development of the Story.

Approximately 120 people attended from across multiple sectors, including central and local government, industry, freight operators and ports.
To support development of the story the workshops focused on the following questions:

4. What are the key economic/industry strengths of the region?
5. What are the key infrastructure strengths of the region?
6. What are the key issues limiting the enhancement of these strengths?

The participants then ranked their responses to each of these questions in order to determine the key areas to focus on to ‘enhance economic performance’ and ‘reduce the cost to do business in the upper North Island’.

4.3 Technical analysis

Throughout the development of the story the Technical Working Group has validated each of the critical issues with evidence. This is outlined in the supporting document titled ‘Shared Evidence Base’.

The addition of supporting quantitative and qualitative evidence ensured that each of the issues progressed were relevant at an upper North Island scale. This meant the collective partnership focused on the critical issues where they could add the most value in reducing the cost to do business.

The remainder of this document provides the summary of these conversations, partnering, workshops and technical analysis.

4.4 Upper North Island Freight Story schematic
5. Key Facts

Today (circa 2012) → Future

2,348,400 people (53% NZ)
Statistics NZ as at June 2011

2,928,900 people (2031) (56.4% of NZ)
Statistics NZ

126 million tonnes of freight (2006/07) (56% of NZ)
Upper North Island Freight Study 2010

This is expected to double by 2035.
Upper North Island Freight Study 2010

$102 billion GDP (52% NZ)
Infometrics December 2011

A corresponding statistic looking future years out was unable to be sourced from available data found.

1,110,300 employed (51% NZ)
Infometrics December 2011

A corresponding statistic looking future years out was unable to be sourced from available data found.
6. Upper North Island Map
7. Key Industry Strengths

Each region’s industry strengths were identified through the regional workshops by participants and then updated, where relevant and ranked based on technical evidence. They comprise the top industries based on their contribution to the gross domestic product (GDP) of that region.

<table>
<thead>
<tr>
<th>Industry strength</th>
<th>Regional ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture/horticulture</strong></td>
<td></td>
</tr>
<tr>
<td>Ability to grow/produce food</td>
<td></td>
</tr>
<tr>
<td>• Dairy and meat (Waikato, Northland, Bay of Plenty)</td>
<td>Waikato (1st)</td>
</tr>
<tr>
<td>• Kiwifruit (Bay of Plenty)</td>
<td>Bay of Plenty (1st)</td>
</tr>
<tr>
<td>• Avocados (Northland, Bay of Plenty)</td>
<td>Northland (2nd)</td>
</tr>
<tr>
<td><strong>Forestry</strong></td>
<td></td>
</tr>
<tr>
<td>Trees, timber, processing, wood and paper product manufacturing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Northland (1st)</td>
</tr>
<tr>
<td></td>
<td>Waikato (2nd)</td>
</tr>
<tr>
<td></td>
<td>Bay of Plenty (2nd &amp; 3rd)</td>
</tr>
<tr>
<td><strong>Business and Property services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auckland (1st)</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
</tr>
<tr>
<td>Including: fuel, cement, clay and high value manufacturing (eg, agri-tech and stainless steel)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auckland (2nd)</td>
</tr>
<tr>
<td></td>
<td>Northland (3rd)</td>
</tr>
<tr>
<td></td>
<td>Waikato (3rd)</td>
</tr>
<tr>
<td><strong>Finance and Insurance Services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auckland (3rd)</td>
</tr>
</tbody>
</table>

The upper North Island area’s industry strengths are largely based on producing primary commodities (food and wood) and associated processing industries (into higher value goods), as well as strong business, property and financial sectors in Auckland.

In Auckland, heavy freight accounts for only 30% of freight movement, the remaining 70% is by ‘light’ freight (couriers, distribution of unconsolidated freight over the ‘last mile’, business to business) reflecting Auckland’s business and wholesale/distribution role.
### 8. Key Infrastructure Strengths

Each region's infrastructure strengths were identified through the regional workshops by participants and then updated, where relevant and ranked based on technical evidence.

They comprise the key infrastructure that supports regional economic productivity (including gross domestic product (GDP) contribution) contribution within a freight related context.

<table>
<thead>
<tr>
<th>Infrastructure strengths</th>
<th>Regional ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic transport network</strong></td>
<td></td>
</tr>
<tr>
<td>• Road network</td>
<td>Northland (1st)</td>
</tr>
<tr>
<td>• Rail network</td>
<td>Waikato (1st)</td>
</tr>
<tr>
<td>• Rail network</td>
<td>Bay of Plenty (2nd)</td>
</tr>
<tr>
<td>• Rail network</td>
<td>Auckland (3rd)</td>
</tr>
<tr>
<td><strong>Essential distribution network for whole of upper North Island</strong></td>
<td>Auckland (1st)</td>
</tr>
<tr>
<td>Regardless of where product/freight originates from</td>
<td></td>
</tr>
<tr>
<td><strong>Ports (sea, air and inland) including associated/surrounding land</strong></td>
<td>Bay of Plenty (1st)</td>
</tr>
<tr>
<td>• Port of Tauranga</td>
<td>Auckland (2nd)</td>
</tr>
<tr>
<td>• Port of Auckland/Auckland Airport</td>
<td>Northland (2nd)</td>
</tr>
<tr>
<td>• Northport</td>
<td></td>
</tr>
<tr>
<td><strong>Availability/readiness of industrial land for freight generating activities</strong></td>
<td>Waikato (2nd)</td>
</tr>
<tr>
<td>Road and rail enabled freight precincts/hubs/inland ports</td>
<td></td>
</tr>
<tr>
<td><strong>Processing plants</strong></td>
<td>Waikato (3rd)</td>
</tr>
<tr>
<td>Dairy and wood</td>
<td></td>
</tr>
<tr>
<td><strong>Northland oil refinery and pipeline</strong></td>
<td>Northland (3rd)</td>
</tr>
<tr>
<td><strong>Transport storage and distribution capacity</strong></td>
<td>Bay of Plenty (3rd)</td>
</tr>
</tbody>
</table>
### 9. Upper North Island Regional Summaries

#### 9.1 Northland Region

- **8th most populated region in NZ**
  - Stats NZ as at June 2011

- **$5 billion GDP (2.6% NZ)**
  - Infometrics Dec 2011

- **158,200 people (3.6% NZ)**
  - Stats NZ as at June 2011

- **64,136 employed (incl. self employed) (3.0% NZ)**
  - Infometrics Dec 2011

#### Northland significant industries

<table>
<thead>
<tr>
<th>Northland industry 1</th>
<th>Forestry</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wood, timber, processing</td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northland industry 2</th>
<th>Agriculture/Horticulture</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dairy, beef, avocados, kumara</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northland industry 3</th>
<th>Manufacturing</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Including: fuel, cement, clay</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>

#### Northland significant infrastructure

<table>
<thead>
<tr>
<th>Northland infrastructure 1</th>
<th>Nationally strategic road and rail network</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northland infrastructure 2</th>
<th>North port</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Including associated and surrounding land</td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northland infrastructure 3</th>
<th>Oil refinery and pipeline</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>
### Auckland region

**Most populated region in NZ**
Stats NZ as at June 2011

**$70 billion GDP**
(35.6% NZ)
Infometrics Dec 2011

**1.5 million people**
(33.7% NZ)
Stats NZ as at June 2011

**721,100 employed**
(incl. self employed)
(33.2% NZ)
Infometrics Dec 2011

### Auckland significant industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Current (C)</th>
<th>Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auckland industry 1</strong></td>
<td>Business and property services</td>
<td>C</td>
</tr>
<tr>
<td><strong>Auckland industry 2</strong></td>
<td>Manufacturing</td>
<td>C</td>
</tr>
<tr>
<td><strong>Auckland industry 3</strong></td>
<td>Financial and insurance services</td>
<td>C</td>
</tr>
</tbody>
</table>

### Auckland significant infrastructure

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Current (C)</th>
<th>Emerging (E)</th>
</tr>
</thead>
</table>
| **Auckland infrastructure 1**   | Essential distribution network  
for whole of the upper North Island | C            |
| **Auckland infrastructure 2**   | Ports  
including Port of Auckland, inland ports and Auckland Airport | C            |
| **Auckland infrastructure 3**   | Nationally strategic road and rail network | C            |

---

3. Auckland’s Economic Development Strategy (Figure 1: Auckland’s current industrial mix (by GDP contribution for year ended September 2011)).
## Waikato region

### 4th most populated region in NZ
Stats NZ as at June 2011

### $17 billion GDP (8.5% NZ)
Infometrics Dec 2011

### 413,100 people (9.4% NZ)
Stats NZ as at June 2011

### 191,800 employed (incl. self employed) (8.8% NZ)
Infometrics Dec 2011

---

### Waikato significant industries

<table>
<thead>
<tr>
<th>Waikato industry 1</th>
<th>Primary food commodities</th>
<th>Dairy and meat</th>
<th>C &amp; E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waikato industry 2</td>
<td>Forestry</td>
<td>Logs and manufacturing/processing</td>
<td>C</td>
</tr>
<tr>
<td>Waikato industry 3</td>
<td>High value manufacturing</td>
<td>Agri-tech and stainless steel</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>

### Waikato significant infrastructure

<table>
<thead>
<tr>
<th>Waikato infrastructure 1</th>
<th>Nationally strategic road and rail network</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waikato infrastructure 2</td>
<td>Availability/readiness of industrial land for freight generating activities</td>
<td>C &amp; E</td>
</tr>
<tr>
<td>Waikato infrastructure 3</td>
<td>Processing plants</td>
<td>Dairy and wood</td>
</tr>
</tbody>
</table>
9.4 Bay of Plenty region

5th most populated region in NZ
Stats NZ as at June 2011

$10 billion GDP (5.2% NZ)
Infometrics Dec 2011

277,100 people (6.3% NZ)
Stats NZ as at June 2011

133,300 employed (incl. self employed) (6.1% NZ)
Infometrics Dec 2011

Bay of Plenty significant industries

<table>
<thead>
<tr>
<th>Bay of Plenty industry 1</th>
<th>Agriculture and horticulture</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kiwifruit, avocados, dairying</td>
<td>C &amp; E</td>
</tr>
<tr>
<td>Bay of Plenty industry 2</td>
<td>Forestry and logging</td>
<td>C</td>
</tr>
<tr>
<td>Bay of Plenty industry 3</td>
<td>Wood and paper product manufacturing</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>

Bay of Plenty significant infrastructure

<table>
<thead>
<tr>
<th>Bay of Plenty infrastructure 1</th>
<th>Port of Tauranga</th>
<th>Current (C) Emerging (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay of Plenty infrastructure 2</td>
<td>Strategic road and rail network</td>
<td>C</td>
</tr>
<tr>
<td>Bay of Plenty infrastructure 3</td>
<td>Transport, storage &amp; distribution capacity</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>
10. Critical Issues

10.1 Upper North Island scale criteria

The following four criteria were applied to ensure consistency in the scale of and approach used to identify the critical issues:

- Contributes to the economic productivity of the upper North Island and/or NZ.
- Reduces costs to do business at a regional and/or interregional scale.
- Needs a cross regional partnership to resolve and/or deliver.
- Decision or consequence of a decision will impact at a regional and/or interregional scale.

10.2 Prioritised critical issues

The critical issues outlined in the tables below were identified through regional workshops by participants, tested against the criteria above with regard to upper North Island scale and then further refined, where relevant, based on technical evidence.

The focus of this exercise was to identify the issues, at an upper North Island scale, that are limiting economic productivity and New Zealand’s ability to reduce the cost to do business, and build a shared evidence base to support future discussions and decision making.

The seven critical issues focused on in the Story are:

<table>
<thead>
<tr>
<th>No.</th>
<th>Critical Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Strategic Road and Rail Network Constraints</strong></td>
</tr>
<tr>
<td></td>
<td>There are a number of constraints on the upper North Island strategic freight road and rail network that are limiting our ability to enhance economic performance and reduce the cost to do business in New Zealand.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Delivery of the High Productivity Motor Vehicle (HPMV) programme</strong></td>
</tr>
<tr>
<td></td>
<td>There is a need to develop a more coordinated approach to the implementation and communication of the upper North Island HPMV programme. Freight operators require a fast and seamless permitting process, appropriate rules and enforcement, consistent coordination between agencies and regular communication on the status of routes (‘whole of journey’ network approach).</td>
</tr>
<tr>
<td>3</td>
<td><strong>Utilisation of industrial land</strong></td>
</tr>
<tr>
<td></td>
<td>There is a need to understand the likely supply and demand for industrial land (amount, type and location) across the upper North Island so that land and public investment can be provided and staged at appropriate times.</td>
</tr>
<tr>
<td>No.</td>
<td>Critical Issue</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td><strong>Lack of strategic, integrated land use and transport planning and investment</strong></td>
</tr>
<tr>
<td></td>
<td>There is a lack of a comprehensive, integrated approach to current and future</td>
</tr>
<tr>
<td></td>
<td>land use and land transport (road and rail) planning and investment at an upper</td>
</tr>
<tr>
<td></td>
<td>North Island scale. A more strategic approach would increase certainty for</td>
</tr>
<tr>
<td></td>
<td>industry and public sector agencies and support effective industry, local</td>
</tr>
<tr>
<td></td>
<td>government and central government planning and investment.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Lack of shared and accurate data</strong></td>
</tr>
<tr>
<td></td>
<td>A lack of shared and accurate data (e.g. freight volume and value for both</td>
</tr>
<tr>
<td></td>
<td>road and rail) means it is difficult for public agencies to make well-informed,</td>
</tr>
<tr>
<td></td>
<td>collective decisions about land use and transport planning and investment that</td>
</tr>
<tr>
<td></td>
<td>will increase efficiencies for business and public investment.</td>
</tr>
<tr>
<td>6</td>
<td>**Need to understand costs of freight supply chains for critical industries in</td>
</tr>
<tr>
<td></td>
<td>the upper North Island**</td>
</tr>
<tr>
<td></td>
<td>There is a need to better understand the costs of the freight supply chain for</td>
</tr>
<tr>
<td></td>
<td>the upper North Island’s key economic industries in order to support development</td>
</tr>
<tr>
<td></td>
<td>/alignment of initiatives by industry and the public sector to reduce the cost</td>
</tr>
<tr>
<td></td>
<td>to do business.</td>
</tr>
<tr>
<td>7</td>
<td><strong>Challenging local government and central government funding structures</strong></td>
</tr>
<tr>
<td></td>
<td>The current range of central and local government funding structures and</td>
</tr>
<tr>
<td></td>
<td>requirements (i.e. legislation, policy and application) are hindering ‘smart</td>
</tr>
<tr>
<td></td>
<td>investment’ decisions due to their multitude and complexity.</td>
</tr>
</tbody>
</table>

**10.3 Other critical issues being addressed through existing processes**

The following critical issues were raised through the regional workshops by participants, but are being addressed through other existing processes.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Other process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of joined up leadership/vision in the upper North Island</td>
<td>Dealt with through the Upper North Island Strategic Alliance (UNISA) partnership and initiatives including the Upper North Island Freight Story and the future sector led freight plan being facilitated by the NZ Transport Agency.</td>
</tr>
<tr>
<td>Improve conversations/working with industry through an open mind approach</td>
<td>Dealt with through the Upper North Island Strategic Alliance (UNISA) partnership and initiatives including the Upper North Island Freight Story and the future sector led freight plan being facilitated by the NZ Transport Agency.</td>
</tr>
</tbody>
</table>

- Look outside your patch
- Integrate across boundaries
<table>
<thead>
<tr>
<th>Issue</th>
<th>Other process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of a mechanism to manage congestion on the Auckland road network</td>
<td>Dealt with through actions already underway with Auckland Council, Auckland Transport and the NZ Transport Agency.</td>
</tr>
<tr>
<td>Lack of an overall national direction for the strategic function of the three sea Ports in the upper North Island</td>
<td>Supported through the Upper North Island Independent Port Technical Study 2012 undertaken by the Upper North Island Strategic Alliance.</td>
</tr>
<tr>
<td>• Port of Auckland, Port of Tauranga, Northport</td>
<td></td>
</tr>
<tr>
<td>Alternative funding mechanisms</td>
<td>Initial work being undertaken through the Auckland Council ‘Getting Auckland Moving’ initiative as well as national initiatives including through the Ministry of Transport, Treasury and the NZ Transport Agency.</td>
</tr>
<tr>
<td>• Risk that funding may not be available for necessary transport infrastructure to meet future freight requirements</td>
<td></td>
</tr>
<tr>
<td>• Need for better understanding of the alternative funding mechanisms available to decision makers in New Zealand</td>
<td></td>
</tr>
</tbody>
</table>

10.4 Critical Issues not progressed

The following critical issues were raised through the regional workshops by participants, however have not been progressed at this stage due to reasons noted in the table.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Reason for not progressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet optimisation / better use of technology</td>
<td>An industry action that could be included in the future sector led Upper North Island Freight Plan being facilitated by the NZ Transport Agency.</td>
</tr>
<tr>
<td>Industry to work together on opportunities for better use of technology and fleet optimisation</td>
<td></td>
</tr>
<tr>
<td>Varying transport costs across the four upper North Island regions having an effect on industry’s ability to do business</td>
<td>Not progressed at this time, due to evidence analysis not supporting this issue at an upper North Island scale.</td>
</tr>
<tr>
<td>Costs of land transport to do business i.e. regulation, vehicle operating costs, road wear and tear costs on vehicles and the differences across regions.</td>
<td></td>
</tr>
</tbody>
</table>
11. Prioritised Critical Issues

11.1 Critical issue: **Strategic road and rail network constraints**

**Problem definition**

There are a number of constraints on the upper North Island strategic freight road and rail network that are limiting our ability to enhance economic performance and reduce the cost to do business in New Zealand.

**Approach undertaken**

Identify the strategic road and rail network constraints at an upper North Island scale limiting the ability to enhance economic performance.

**Benefit from a collective partner focus**

Partners can collectively focus on the key areas where we could reduce the cost to do business, now and into the future.

**Note:** It is imperative to note that this focus is not about investment. Investment decisions sit with the relevant organisations, need to be weighed up along with other investment priorities, and in most cases are governed by legislation or Government policy.

**Summary of evidence to support issue**

- Upper North Island strategic road and rail constraints benefit for collective partner focus methodology.
- Comparative list of corridors for collective partner focus.
- Upper North Island strategic road and rail network constraints table (key information on each constraint).

**Upper North Island Independent Port Technical Study 2012**

The Upper North Island Strategic Alliance commissioned an independent technical study in 2012, which explored current and future freight demand for ports and ports related infrastructure in the upper North Island. The study was undertaken by PricewaterhouseCoopers (PwC).

Evidence and information on corresponding issues was shared, where relevant and appropriate, between this Study and the Story throughout the development of both. One of these key areas was the strategic road and rail network constraints critical issue.

Refer to section 12 for further information on the Upper North Island Independent Port Technical Study 2012 including key conclusions of the Study.

---

### Completed Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identification of strategic road and rail network constraints through regional workshops and technical analysis.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>2</td>
<td>Development of a ‘strategic road and rail network constraints table’ including key information on each of the constraints.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>3</td>
<td>Development of methodology to identify benefit at a corridor level for further collective partner focus in reducing the cost to do business.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
</tbody>
</table>

### Future Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Continue to work in partnership through future discussions on the identified road and rail network constraints.</td>
<td>Lead: NZ Transport Agency KiwiRail Upper North Island Strategic Alliance Councils Auckland Transport</td>
<td>from 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lead: Auckland Transport</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Look at opportunities for the development of an integrated system and / or model to support a shared evidence base for future decision making on critical road and rail network constraints. When system or model in place, test back against the growth projections of the Upper North Island Independent Port Technical Study 2012.</td>
<td>Lead: NZ Transport Agency KiwiRail Upper North Island Strategic Alliance Councils Auckland Transport</td>
<td>from 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lead: Auckland Transport</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Include strategic constraints information into the Upper North Island Freight Plan and into relevant strategic transport planning processes and decision making.</td>
<td>NZ Transport Agency KiwiRail Upper North Island Strategic Alliance Councils Auckland Transport</td>
<td>from 2013</td>
</tr>
</tbody>
</table>
11.2 Critical issue: **Delivery of the High Productivity Motor Vehicle (HPMV) programme**

**Problem definition**

There is a need to develop a more coordinated approach to the implementation and communication of the upper North Island HPMV programme. Freight operators require a fast and seamless permitting process, appropriate rules and enforcement, consistent coordination between agencies and regular communication on the status of routes (‘whole of journey’ network approach).

**Approach undertaken**

Develop a high level strategic summary of existing and proposed end-to-end HPMV routes (state highways and local roads) across the upper North Island to support communication with stakeholders, and provide better certainty for planning and investment across the partners, industry, operators and ports.

**Benefit to collective partner focus**

This will provide key partners, primarily from the freight sector, with succinct, relevant end-to-end HPMV route application process and information to support their communications, planning and investment.

It is important to note that HPMV was raised as the primary concern of freight operators at all of the Story regional workshops.

*Note:* An independent review commissioned by the NZ Transport Agency and Ministry of Transport in 2011 concluded that the uptake of HPMVs allowed for productivity improvements in the order of a 20% decrease in truck trips for over-mass HPMVs and a 14% decrease in trips for over-dimensioned HPMVs.

These benefits included reduced fuel consumption (for the freight moved), reduced vehicle operating and capital cost and reduced driver hours.

The NZ Transport Agency and Ministry of Transport are working on commissioning an update of this review during 2013.

**Summary of evidence to support issue**

- HPMV high level overview.
- HPMV National Land Transport Programme investment routes map.
- HPMV National Land Transport Programme investment routes table (key information on each route).
- HPMV approved routes and respective vehicle types table (key information from destination to destination).

---

## Completed Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Document and agree a high level HPMV overview for the upper North Island including summary detail on each of the routes.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
</tbody>
</table>

## Future Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Identify relevant local authorities with a local roading connection and use existing forums i.e. regional advisory groups to ensure improved communication, consistency and coordination of HPMV delivery across the network. Where required, team up with the Upper North Island Strategic Alliance Councils, to support ongoing partnering conversations to ensure a one network approach.</td>
<td>Lead: NZ Transport Agency, Upper North Island Strategic Alliance Councils, Auckland Transport</td>
<td>mid 2013</td>
</tr>
<tr>
<td>3</td>
<td>Deliver a ‘whole of network’ (state highways and local roads) HPMV programme for New Zealand including customer driven stakeholder information.</td>
<td>NZ Transport Agency</td>
<td>2013</td>
</tr>
<tr>
<td>4</td>
<td>Communicate the high level upper North Island HPMV programme with relevant partners and industry through existing NZ Transport Agency and partner relationships and forums.</td>
<td>Lead: NZ Transport Agency, Upper North Island Strategic Alliance Councils, Auckland Transport</td>
<td>ongoing</td>
</tr>
</tbody>
</table>
11.3 Critical issue: **Utilisation of industrial land**

**Problem definition**

There is a need to understand the likely supply and demand for industrial land (amount, type and location) across the upper North Island so that land and public investment can be provided and staged at appropriate times.

**Approach undertaken**

Document existing and proposed industrial land developments 50 hectares and above to better understand the supply and demand of significant industrial land developments across the upper North Island including size, location, timing, staging, purpose and uptake.

**Benefit to collective partner focus**

Partners across the upper North Island are better informed in terms of the cross regional industrial land picture to support future planning and investment decision making.

**Summary of evidence to support issue**

- Summary of key messages on evidence findings.
- Key assumptions used to build the evidence.
- Upper North Island industrial land table (key information on each development).
- Upper North Island industrial land maps (x5 – upper North Island and 4 regions).
- Upper North Island industrial land future demand – summary of regional work undertaken.

The industrial land evidence set is a significant amount of data that can support future work and analysis on this critical issue. However it is important to note that this is just the beginning of a conversation at this pan-regional scale.

Areas that the collective partnership is interested in having further conversations on and/or analysis include:

- Further understand for each of the sites, primarily where the land is yet to be developed, exactly what is planned for in the future i.e. some of the industrial land sites may never be developed due to being used as buffer zones for existing industry and assets.
- Work closer with industry to better understand:
  - Where we expect major growth to be in the future and what impacts, if any, this may have on freight flows.
  - What attracts industry to particular sites / areas, what is the market looking for and what are seen as barriers to industrial land development.
- Understand further the statutory rule frameworks across the various regions and local government agencies for industrial land development to determine areas of alignment or misalignment.

---

6 Refer to document: Upper North Island Freight Story - Shared Evidence Base (April 2013).
### Completed Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Document consistent assumptions used to develop industrial land table.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>2</td>
<td>Development of an ‘Upper North Island industrial land table’ including key information on each of the developments.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>3</td>
<td>Document relevant work already undertaken across the upper North Island on identifying current status of requirements for industrial land.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>4</td>
<td>Document key findings from the evidence and technical analysis.</td>
<td>Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
</tbody>
</table>

### Future Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Scope a specific piece of work to ascertain a realistic understanding for industrial land in the Upper North Island.</td>
<td>Upper North Island Strategic Alliance &lt;br&gt;<strong>Lead:</strong> Hamilton City Council with support from Whangarei District Council</td>
<td>2013 - 2014 (as part of UNISA work programme)</td>
</tr>
</tbody>
</table>
11.4 Critical issue: **Lack of strategic integrated land use and transport planning and investment**

**Problem definition**

There is a lack of a comprehensive, integrated approach to current and future land use and land transport (road and rail) planning and investment at an upper North Island scale. A more strategic approach would increase certainty for industry and public sector agencies and support effective industry, local government and central government planning and investment.

**Approach undertaken**

Develop a high level strategic inventory of significant land use, transport (road and rail) and transport investment (both current and future) for the upper North Island, built off existing partner organisations’ strategies and plans.

**Benefit to collective partner focus**

Supports decision makers across multiple sectors by providing easy access to integrated and collective information. It also supports a higher level of certainty of strategic planning and investment across the upper North Island – particularly to the private sector.

**Summary of evidence to support issue**

- Upper North Island Freight Story – Shared Evidence Base document

**Future Actions**

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop a high level strategic inventory of significant land use,</td>
<td>Upper North Island Strategic Alliance</td>
<td>2013 (as part of UNISA work programme)</td>
</tr>
<tr>
<td></td>
<td>transport and transport investment for the upper North Island built</td>
<td>Lead: Bay of Plenty Regional Council</td>
<td></td>
</tr>
<tr>
<td></td>
<td>off existing partner organisation’s strategies and plans aligned</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to the spatial plan conversations already underway within the four</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>upper North Island regions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

11.5 Critical issue: **Lack of shared and accurate data**

**Problem definition**

A lack of shared and accurate data (e.g. freight flows, commodities, origins, destinations for road and rail) means it is difficult for public agencies to make well-informed, collective decisions about land use and transport planning and investment that will increase efficiencies for business and public investment.

**Approach undertaken**

Agree and document the shared data and sources used to build the evidence for each prioritised critical issue.

**Benefit from a collective partner focus**

Will support well informed decision making across multiple organisations and provide opportunities for joined up outcomes and return(s) on investment.

**Completed Actions**

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
</table>
| 1   | Collate a detailed shared evidence base of key data and sources used to support each critical issue including:  
  • summary of evidence (source, owner, purpose) used to support each critical issue  
  • bibliography sorted by region. | Technical Working Group | Complete (included in Summary of Critical Issues and Shared Evidence Base) |
| 2   | Identify and agree a process for maintaining the currency of this evidence base for each critical issue. | Technical Working Group | Complete (evidence will be held and maintained by the lead agency identified for each issue) |

**Future Actions**

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
</table>
| 3   | Develop a robust and systematic partnership approach to data management, including making it easy to discover, access and use secure, quality, shared data. | Lead: NZ Transport Agency  
 Upper North Island Strategic Alliance Councils  
 Auckland Transport  
 KiwiRail | 2013 |
11.6 Critical issue: **Need to understand freight supply chain costs for significant industries in the upper North Island**

**Problem definition**

There is a need to better understand the costs of the freight supply chain for the upper North Island’s key economic industries in order to support development / alignment of initiatives by industry and the public sector to reduce the cost to do business.

**Approach undertaken**

Work with industry through current relationships, forums and processes to better understand the freight supply chain costs they face and how these may be reduced.

**Benefit to collective partner focus**

Supports better informed decision making through a collective focus on the critical areas to reduce the cost to do business, including alignment of planning and investment with industry and operators.

**Completed Actions**

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Work with Independent Port Technical Study consultants (PwC) to share information where appropriate.</td>
<td>Technical Working Group</td>
<td>Complete</td>
</tr>
</tbody>
</table>

**Future Actions**

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Use existing and ongoing relationships to engage with significant industry in the upper North Island to build understanding and collaboration as well as better understanding of freight supply chains and costs to do business.</td>
<td>Upper North Island Strategic Alliance Councils Auckland Transport KiwiRail NZ Transport Agency</td>
<td>2013 and ongoing</td>
</tr>
</tbody>
</table>
11.7 Critical issue: **Challenging local government and central government funding structures**

**Problem definition**

The current range of central and local government funding structures and requirements (i.e. legislation, policy and application) are hindering ‘smart investment’ decisions due to their multitude and complexity.

**Approach undertaken**

- Document the current framework(s) for planning and investing in transport outcomes in New Zealand.
- Raise awareness of the opportunity to develop a ‘one land transport investment framework (road and rail)’ to enable planning and investment across regional boundaries to maximise benefits.
- Upper North Island Strategic Alliance (UNISA) to keep a watching brief on national initiatives currently underway in this area.

**Benefit to collective partner focus**

Supports future work to identify the best ways to deliver transport outcomes including where efficiencies and improvements could be found in the current framework(s).

**Summary of evidence to support issue**

- The Central and Local Government Funding Structures for Land Transport Paper.

**Current National Initiatives**

Initiatives currently underway at a national level focusing on roading infrastructure and investment include:

1. **Long-term investment in New Zealand’s transport system**
   
   Working together to describe funding arrangements to support both the Government Policy Statement (GPS) for transport expenditure targets and the funding tools available to support the future investment levels for the transport system over the long term.
   

2. **Financial assistance rate (FAR) review**
   
   Undertaking a comprehensive review of the general approach used to set funding assistance rates (FARs). FAR’s are used to determine the proportion of costs approved organisations (primarily local government) will receive from the National Land Transport Fund for approved activities.

   This review is currently underway with the aim that the review outcomes, whether they include changes to FARs or not, can be reflected in the National Land Transport Programme 2015–18.

---

3. Road Efficiency Group (REG)

The NZ Transport Agency is working with local government and industry groups to identify ways to get better value for money from road maintenance, operations and renewals.

A Roading Efficiency Group has been formed to implement the recommendations of the Road Maintenance Task Force and findings from the NZ Transport Agency Highways and Network Operation’s Maintenance and Operations Review. The role of the group is to create policies, procedures, guidelines and tools that can help road controlling authorities achieve efficiencies and value for money.

- Lead: NZ Transport Agency.

4. Private public partnerships (PPP)

Explain the value that PPPs could bring to the transport sector in New Zealand. The overall principles are aimed at delivering greater innovation and better outcomes for the public sector in partnership with the private sector, using appropriate private sector disciplines.

- Timing: to be determined

5. Local Government Development Contributions review

A review of the Local Government Development Contributions system is underway. The purpose of this review is to ensure that the way infrastructure is financed is appropriate to meet future demands and does not have undue impact on growth or housing affordability.

Feedback is currently being sought and will inform the development of government policy on the future of the development contributions system.

- Lead: Department of Internal Affairs
- Timing: commenced February 2013

Completed Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Document the current planning and investment structure in New Zealand for land transport.</td>
<td>NZ Transport Agency on behalf of the Technical Working Group</td>
<td>Complete (included in Shared Evidence Base)</td>
</tr>
<tr>
<td>2</td>
<td>Document in summary current initiatives underway at a national level looking at this issue.</td>
<td>Technical Working Group</td>
<td>Complete (included above)</td>
</tr>
</tbody>
</table>
### Future Actions

<table>
<thead>
<tr>
<th>No.</th>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Identify opportunities across the sector to discuss and raise awareness of the opportunity to develop a 'one land transport investment framework (road and rail)'.</td>
<td>Upper North Island Strategic Alliance Councils, Auckland Transport, NZ Transport Agency, KiwiRail</td>
<td>ongoing</td>
</tr>
<tr>
<td>4</td>
<td>Keep a proactive watching brief on the initiatives underway at a national level.</td>
<td>Upper North Island Strategic Alliance Councils</td>
<td>ongoing</td>
</tr>
<tr>
<td>5</td>
<td>Keep the Upper North Island Strategic Alliance updated on initiatives currently underway at a national level.</td>
<td>NZ Transport Agency</td>
<td>ongoing</td>
</tr>
</tbody>
</table>
12. Independent Port Technical Study 2012

The Upper North Island Strategic Alliance (UNISA) commissioned an independent technical study in 2012, which explored current and future freight demand for ports and ports related infrastructure in the upper North Island\(^9\). The study was undertaken by PwC (PricewaterhouseCoopers).

12.1 Purpose of the Study

The primary objective of the Study was to develop a credible and consistent understanding of the upper North Island’s freight and port supply chain system.

The key deliverable was a final report (copy available from each of the UNISA councils) which contains analysis, modeling and data about current and future freight demand for ports and port-related infrastructure in the upper North Island, incorporating scenarios to meet that demand (in the context of various constraints) and the potential implications of these scenarios at a preliminary level.

The study period of the report is 30 years and includes projections out to 2041. The ports under consideration are the Port of Auckland, Port of Tauranga and the Whangarei Ports which include Northport and NZ Refining at Marsden Point.

12.2 Key findings of the Study

A key finding of the Study was that the upper North Island port network (covering the Port of Auckland, Port of Tauranga and the Whangarei Ports) has the capacity to meet the projected freight task, provided that efficiency gains, incremental investments in infrastructure and the uptake of already consented works are undertaken in a planned and timely manner. Other key findings include:

- There is strong growth projected for the upper North Island ports over the next 30 years. All upper North Island ports will be required to meet the projected freight task.
- A rapid and ongoing increase in transhipping means that pressure is likely to be more on port infrastructure than on distribution networks and land transport infrastructure to these ports.
- Pressure on land transport infrastructure is likely to be driven by non-port traffic, competing land uses, and (potentially) reverse sensitivity. General congestion may be a factor in the medium to longer term, which will impact ports as users of the network.
- The upper North Island port network has the capacity to meet the projected freight task, provided that efficiency gains, incremental investments in infrastructure and the uptake of already consented works are undertaken in a planned and timely manner.
- The greatest opportunities for efficiency gains to access additional capacity are in relation to container trade. Furthermore, the development of inland ports can help drive efficiencies in the distribution network, and aid competition and substitutability between ports.
- A third rail line between Southdown and Wiri (dedicated to freight) is at the strategic planning stage and if it were to proceed could provide additional capacity to address emerging rail congestion issues. This portion of the network is currently under pressure as it must cope with rail

freight between the Port of Auckland and Wiri, Port of Tauranga and Metroport, as well as commuter traffic from both branches of the southern line.

- Substantial, systemic change to the upper North Island port system within the next 30 years (for example, establishing a new upper North Island port) is likely to be significantly less cost effective than incremental change.

- Over the next 30 years, the most efficient and cost effective options for meeting the projected freight task are likely to be based around improved efficiency, incremental growth at each port, planned improvements in the land transport system, complemented by changes in relative prices that direct customers to where spare capacity exists in the upper North Island port system.

Each UNISA Council has received the report and it is for each individual council to decide what (if any) further work it wishes to pursue as a result of the Study.

12.3 Link to Upper North Island Freight Story (the Story)

To ensure a shared evidence base on corresponding issues between this Study and the Story, evidence and information was shared, where relevant and appropriate, throughout. One of these key areas was the strategic road and rail network constraints critical issue.

To ensure the partners continue to build on from this work it is recommended that once an Upper North Island Freight Flow Model is further developed and is in use across the partners, then the evidence would benefit from testing against the growth projections outlined in the Independent Port Technical Study to determine what, if any impacts would occur within the constraints and corridors.

12.4 Productivity Commission’s report on international freight services

In 2011, the New Zealand Government tasked the Productivity Commission to undertake an inquiry into the accessibility and efficiency of international freight transport services available to New Zealand firms, paying particular attention to costs, efficiency, productivity and the effectiveness of current regulatory regimes. The final report was released in April 2012.

In the final report the Commission made a number of recommendations for improvement. One of these within the ‘investment planning and coordination section’ included the following:

“To better coordinate investment in freight infrastructure, greater use should be made of ‘facilitated discussion’ models, such as the Upper North Island Freight Plan. These are based on information sharing and relationship building but do not bind the participants to particular outcomes”

The Government’s response to the final report recommendations included the following statement:

“The Government agrees with this recommendation and intends to develop this roundtable approach, which brings into the planning process all the key decision-makers across the freight system. The value of this approach will be to draw on each others’ knowledge and insights, challenge assumptions and develop a common public/private sector view of what the future freight system should look like. Roundtable discussion will help to develop a shared long-term view of the trends, challenges and opportunities to improve the safety and efficiency of freight movements.”

10 New Zealand Productivity Commission’s International Freight Transport Services Report 2012
11 Government response to the New Zealand Productivity Commission’s recommendations on International Freight Transport Services December 2012
### 13. Critical Issues – Summary Action Table

<table>
<thead>
<tr>
<th>Key focus area</th>
<th>Action(s)</th>
<th>Timing (✓ completed)</th>
<th>Action lead</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic road and rail network constraints</strong></td>
<td>• Identify strategic road and rail network constraints.</td>
<td>✓</td>
<td>Upper North Island Freight Story Technical Working Group</td>
</tr>
<tr>
<td></td>
<td>• Develop a strategic network constraints table.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Development of methodology to identify benefit at a corridor level for further collective partner focus in reducing the cost to do business.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continue to work in partnership through future discussions on the identified road and rail network constraints.</td>
<td>from 2013</td>
<td>Lead: NZ Transport Agency, KiwiRail</td>
</tr>
<tr>
<td></td>
<td>• Look at opportunities for the development of an integrated system and / or model to support a shared evidence base for future decision making on critical road and rail network constraints. When system or model in place, test back against the growth projections of the Upper North Island Independent Port Technical Study 2012.</td>
<td>from 2013</td>
<td>Upper North Island Strategic Alliance (UNISA) Councils, Auckland Transport</td>
</tr>
<tr>
<td></td>
<td>• Include strategic constraints information into the Upper North Island Freight Plan and into relevant strategic transport planning processes and decision making.</td>
<td>from 2013</td>
<td>NZ Transport Agency, KiwiRail</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lead: NZ Transport Agency, Auckland Transport</td>
</tr>
<tr>
<td><strong>Delivery of the High Productivity Motor Vehicle (HPMV) programme</strong></td>
<td>• Document and agree a high level HPMV overview for the upper North Island including summary detail on each of the routes.</td>
<td>✓</td>
<td>Upper North Island Freight Story Technical Working Group</td>
</tr>
<tr>
<td></td>
<td>• Identify relevant local authorities with a local roading.</td>
<td>2013</td>
<td>Lead: NZ Transport Agency</td>
</tr>
<tr>
<td>Key focus area</td>
<td>Action(s)</td>
<td>Timing</td>
<td>Action lead</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>and communication of the upper North Island</td>
<td>connection and use existing forums to ensure improved communications,</td>
<td>2013</td>
<td>Upper North Island Strategic Alliance (UNISA)</td>
</tr>
<tr>
<td>HPMV programme. Freight operators require a</td>
<td>consistency and coordination. Where required, team up with the Upper</td>
<td>ongoing</td>
<td>Councils</td>
</tr>
<tr>
<td>fast and seamless permitting process,</td>
<td>North Island Strategic Alliance, to support ongoing partnering</td>
<td></td>
<td>Auckland Transport</td>
</tr>
<tr>
<td>appropriate rules and enforcement,</td>
<td>conversations to ensure a one network approach.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>consistent coordination between agencies and</td>
<td>• Deliver a ‘whole of network’ (state highway and local roads) HPMV</td>
<td></td>
<td>Lead: NZ Transport Agency</td>
</tr>
<tr>
<td>regular communication on the status of routes</td>
<td>programme for New Zealand including customer driven stakeholder</td>
<td></td>
<td>Upper North Island Strategic Alliance (UNISA)</td>
</tr>
<tr>
<td>(‘whole of journey’ network approach).</td>
<td>information.</td>
<td></td>
<td>Councils</td>
</tr>
<tr>
<td></td>
<td>• Communicate the high level story and programme with relevant partners</td>
<td></td>
<td>Auckland Transport</td>
</tr>
<tr>
<td></td>
<td>and industry through existing NZ Transport Agency and partner relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and forums.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Utilisation of industrial land</td>
<td>2013 - 2014</td>
<td>Upper North Island Freight Story Technical</td>
</tr>
<tr>
<td></td>
<td>There is a need to understand the likely supply and demand for</td>
<td>(as part of</td>
<td>Working Group</td>
</tr>
<tr>
<td></td>
<td>industrial land (amount, type and location) across the upper North</td>
<td>UNISA work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Island so that land and public investment can be provided and staged at</td>
<td>programme)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>appropriate times.</td>
<td></td>
<td><strong>Supported by:</strong> Whangarei District Council</td>
</tr>
<tr>
<td></td>
<td>• Document consistent assumptions used to develop industrial land table.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop an upper North Island industrial land table including key</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>information on each development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Document key findings from the evidence and technical analysis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Document relevant work already undertaken across the upper North Island</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>four regions on identifying current and future requirements for</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>industrial land.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Scope a specific piece of work to ascertain a realistic understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for industrial land in the Upper North Island.</td>
<td>2013 - 2014</td>
<td>Upper North Island Strategic Alliance (UNISA)</td>
</tr>
</tbody>
</table>

**Upper North Island Freight Story – Summary of Critical Issues (April 2013)**
<table>
<thead>
<tr>
<th>Key focus area</th>
<th>Action(s)</th>
<th>Timing</th>
<th>Action lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of strategic, integrated land use and transport planning and investment</td>
<td>There is a lack of a comprehensive, integrated approach to key land use, land transport (road and rail) and investment (both current and future), at an upper North Island scale. A more strategic approach would increase certainty and effective industry, local government and central government planning and investment.</td>
<td>2013</td>
<td>Upper North Island Strategic Alliance (UNISA) Lead: Bay of Plenty Regional Council</td>
</tr>
<tr>
<td></td>
<td>Develop a high level strategic inventory of significant land use, transport and transport investment for the upper North Island built off existing partner organisation’s strategies and plans aligned to the spatial plan conversations already underway within the four upper North Island regions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of shared and accurate data</td>
<td>A lack of shared and accurate data (e.g. freight flows, commodities, origins and destinations) means it is difficult to make well informed, collective decisions that will increase efficiencies for business and public investment.</td>
<td>2013</td>
<td>Upper North Island Freight Story Technical Working Group Lead: NZ Transport Agency</td>
</tr>
<tr>
<td></td>
<td>• Collate and document a detailed shared evidence base of key data and sources used to support each critical issue.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Include a bibliography.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify and agree a process for maintaining the currency of this evidence base for each critical issue.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop a robust and systematic partnership approach to data management, including making it easy to discover, access and use secure, quality, shared data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key focus area</td>
<td>Action(s)</td>
<td>Timing</td>
<td>Action lead</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Need to understand freight supply chain costs for significant industries in the upper North Island** | - Work with Independent Port Technical Study consultants (PwC) to share information where appropriate.  
- Use existing and ongoing relationships to engage with significant industry in the upper North Island to build understanding and collaboration as well as better understanding of freight supply chains and costs to do business. | ✓                           | Upper North Island Freight Story Technical Working Group  
Upper North Island Strategic Alliance (UNISA)  
Councils  
Auckland Transport  
KiwiRail  
NZ Transport Agency |

There is a need to better understand the costs of the freight supply chain for the upper North Island’s key economic industries in order to support development / alignment of initiatives by industry and the public sector to reduce the cost to do business.

| **Challenging local government and central government funding structures** | - Document the current planning and investment structure in New Zealand for land transport.  
- Document in summary current initiatives underway at a national level looking at this issue.  
- The Upper North Island Strategic Alliance chief executives to take a proactive watching brief on the national workstreams, to understand purpose and progress and seek early involvement where relevant.  
- Keep the Upper North Island Strategic Alliance up to date on national workstreams currently underway in this area. | ✓ | Upper North Island Freight Story Technical Working Group  
Upper North Island Strategic Alliance (UNISA)  
NZ Transport Agency |
14. Acknowledgements

The Story has been developed via a collective partnership approach including:

- Upper North Island Strategic Alliance
  - Northland Regional Council
  - Whangarei District Council
  - Auckland Council
  - Waikato Regional Council
  - Hamilton City Council
  - Bay of Plenty Regional Council
  - Tauranga City Council
- Auckland Transport
- KiwiRail
- NZ Transport Agency.

The ten organisations within the Story partnership wish to acknowledge the many industry, operators, ports and local government attendees from across the four upper North Island regional workshops, held in April - July 2012, as well as the multiple forums, groups, committees and industry spoken and/or presented to throughout the development of the Story.
15. Bibliography

Upper North Island wide

Automobile Association. Roadwatch & Journey Times (Road closures & locations of constraints). [weblink]


Hon Bill English MP. 2012. Next steps in KiwiRail’s Turnaround Plan. [weblink]


KiwiRail. The KiwiRail Turnaround Plan. [weblink]

Local Councils. Council Funding. [weblink]


Ministry of Transport. 2012. Our Work - Rail. [weblink]


Ministry of Transport. Transport Monitoring Indicator Framework - Indicator NR002 - Reliability of travel time. [weblink]


NZ Productivity Commission. 2012. International freight transport services. [weblink]


NZTA. 2012. Bridge Improvement Programme. Opus, Wellington

NZTA. 2012. Existing upper North Island HPMV routes. [weblink]

NZTA. 2012. Guidance maps showing network capability for full and limited HPMV permits. [weblink]. May.


NZTA. 2012. NLTP Extract report. [weblink]. Transport Investment On-line

NZTA. National Road Classification System (NRCS) tables.
NZTA. National State highway classification criteria. [weblink](#) and [weblink](#)


NZTA. 2012. Transport’s proportion of total costs for New Zealand businesses. [weblink](#). NERA Economic Consulting, Pinnacle Research and Policy Ltd


NZTA. 2012. Upper North Island HPMV Investment Routes. [weblink](#)

NZTA. 2012. Value Capture Mechanisms to Fund Transport Infrastructure. NERA


NZTA. 2011. Planning & Investment Knowledge Base. [weblink](#)


PricewaterhouseCoopers 2012. Independent Port Technical Study. [weblink](#)

The Treasury. 2012. Budget Economic and Fiscal Update. [weblink](#)

The Treasury. KiwiRail Group Turnaround Plan. [weblink](#)

**Northland**


NZTA. 2010. Northland Flood Mitigation Areas Project.

Northland Regional Council. 2010. 30 Year Transport Strategy for Northland. [weblink](#)


Whangarei District Council. 2010. Sustainable Futures 30/50. [weblink](#)


**Auckland**


Auckland Transport. 2012. *Integrated Transport Programme*

Auckland Transport and NZTA. 2012. *Multi Modal East West Solution (MMEWS). Network Plan*


Auckland Transport. 2011. *South-western Multi-modal Airport Rapid Transit (SMART).* [weblink](#) & [weblink](#)

Auckland Transport and NZTA. 2010. *Western Ring Route (North West) Network Plan.* [weblink](#)

NZTA. Auckland Network Performance Monitoring Monthly Reports

NZTA. Auckland Travel Time Survey Performance Monitoring Reports & Maps.

NZTA. State Highway project web sites:


**Waikato**


Thames-Coromandel District Council et al. 2010. *Coromandel Peninsula Local Area Blueprint Strategy*


Waikato District Council. 2010. *North Waikato Industrial Land Study*


**Bay of Plenty**


Port of Tauranga. 2010. Port operations presentation to Regional Advisory Group. August


SmartGrowth. September 2012. *Industrial Land Research.* McDermott Consultants

Tauranga City Council. 2007. *Tauranga City Centre Strategy.* [weblink](#)


**Upper North Island Maps**

**Upper North Island wide**

<table>
<thead>
<tr>
<th>Layer</th>
<th>State Highway Centreline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>NZTA</td>
</tr>
<tr>
<td>Year</td>
<td>2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Layer</th>
<th>Railway Centreline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>KiwiRail</td>
</tr>
<tr>
<td>Year</td>
<td>2012</td>
</tr>
</tbody>
</table>
Layer: Railway Stations  
Owner: KiwiRail  
Year: 2012

*Primary Industry and Transport Network map*

Layer: Shipping Imports and Exports  
Owner: Ministry of Transport  
Year: 2011

Layer: Inland Ports  
Owner: NZTA  
Year: 2012

Layer: Airports  
Owner: Land Information NZ  
Year: 2011

Layer: Fuel Storage Locations  
Owner: NZTA  
Year: 2012

Layer: Major Wood Processing Plants  
Owner: Ministry of Primary Industries  
Year: 2010, 2011

Layer: Major Dairy Processing Plants  
Owner: Ministry of Primary Industries  
Year: 2010

Layer: Major Meat Processing Plants  
Owner: Ministry of Primary Industries (Beef & Lamb NZ)  
Year: 2008, 2010
**Layer:** Large Aggregate and Quarry areas  
**Owner:** GNS Science (Mines layer)  
**Year:** 2009

**Industrial Land maps**

**Layer:** Auckland Business Land  
**Owner:** Auckland Council  
**Year:** 2012

**Layer:** Bay of Plenty Business Land  
**Owners:** Tauranga City Council  
Bay of Plenty Regional Council  
**Year:** 2012

**Layer:** Northland Business Land  
**Owners:** Whangarei District Council  
Far North District Council  
**Year:** 2012

**Layer:** Waikato Business Land  
**Owners:** Waikato Regional Council  
Hamilton City Council  
South Waikato District Council  
Taupo District Council  
**Year:** 2012

**Layer:** Business Land Development Timing  
**Owner:** Hamilton City Council  
**Year:** 2012  
**Author:** NZTA Geospatial Team