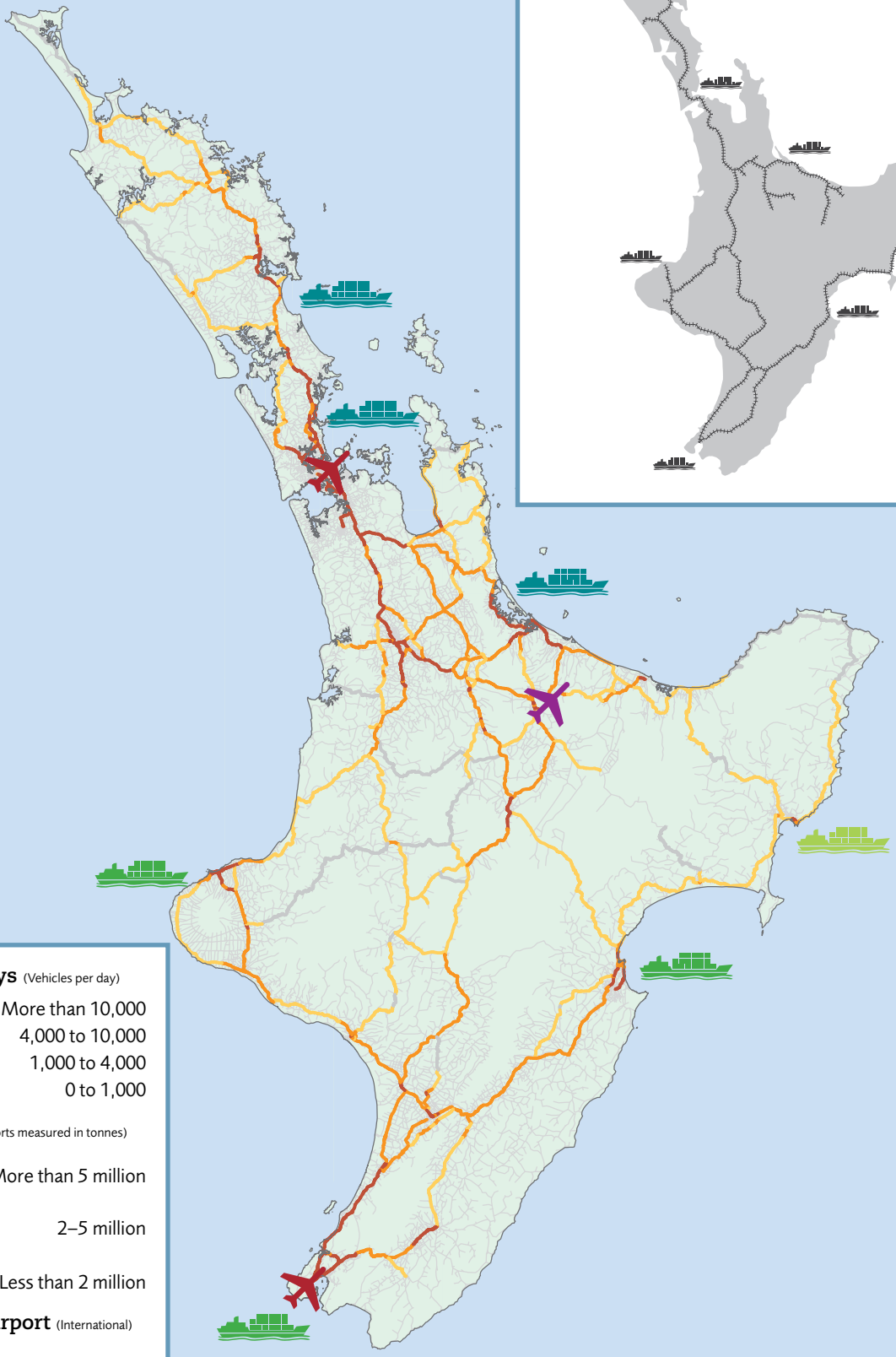
CONNECTING NEW ZEALAND

A summary of the government's policy direction for transport

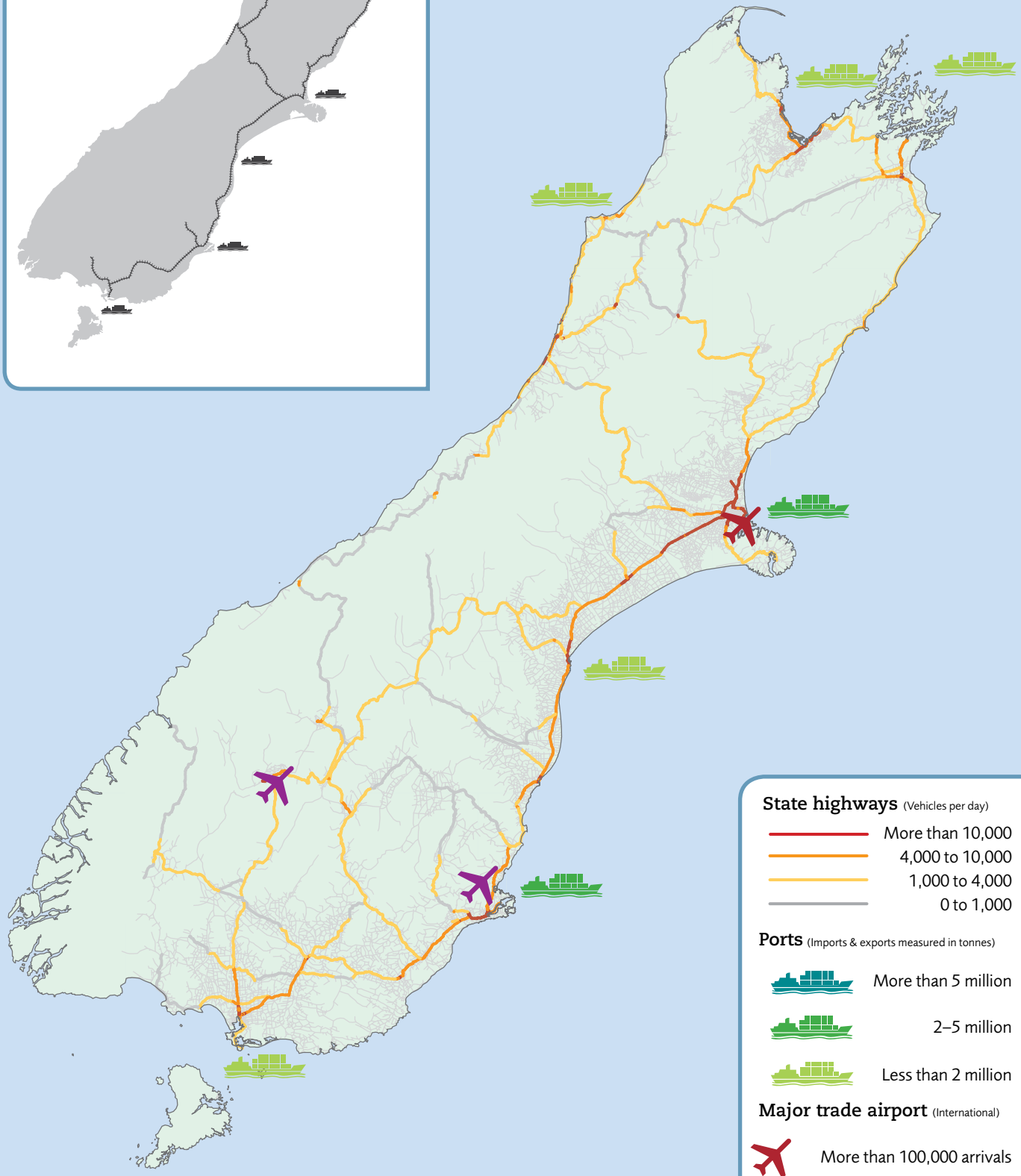
New Zealand Government

Major North Island transport network connections



Major South Island transport network connections

Rail to port connection



State highways (Vehicles per day)

- More than 10,000
- 4,000 to 10,000
- 1,000 to 4,000
- 0 to 1,000

Ports (Imports & exports measured in tonnes)

- More than 5 million
- 2–5 million
- Less than 2 million

Major trade airport (International)

- More than 100,000 arrivals
- Less than 100,000 arrivals

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Minister's foreword

Moving our freight and people as safely and efficiently as possible, with a minimum of hold ups, is vital to speeding up economic growth. Growing the economy is central to both:

- **the government's overall goal for New Zealand — to grow the economy to deliver greater prosperity, security and opportunities for all New Zealanders**
- **the government's objective for transport — an effective, efficient, safe, secure, accessible and resilient transport system that supports the growth of our economy, in order to deliver greater prosperity, security and opportunities for all New Zealanders**

The transport system is an important enabler of economic growth and all that it can provide for all New Zealanders. The government has been working hard over the last 2 or so years to ensure that transport agencies are focused on our three priorities for transport: economic growth and productivity; value for money and road safety. These are the areas that we need to see the greatest improvement from in the transport system over the next decade.

Connecting New Zealand is intended to help transport stakeholders to better understand what the government is seeking from the transport system. It does that by drawing together the government's transport policy direction as set out in a number of guidance documents, including the *National Infrastructure Plan, Government Policy Statement on Land Transport Funding 2012/13–2021/22* and *Safer Journeys: New Zealand's Road Safety Strategy 2010–2020*. Together these documents outline the government's strategic direction and priorities for transport.

The roading network is the backbone of the transport system. It is responsible for moving 70 percent of our freight tonne-kilometres. Eighty-four percent of the trips that we make as individuals are by motor vehicle. The government will invest more than $36 billion in the land transport system over the next decade via the National Land Transport Fund. However, with the freight task expected to double over the next 3 decades, significant population growth in the top half of the North Island, and an ageing population, we need the whole of the transport system to lift its game and deliver greater value for money.

As a trading nation, we need to make sure that access to our key rail hubs, air and sea ports remain free moving. These are the lifeline of our exporting businesses and we need efficient aviation and maritime sectors that can meet the changing needs of our businesses.

For our urban centres, public transport is important in reducing congestion and providing access and mobility to our communities. We want to grow public transport patronage but reduce its reliance on government subsidies. We also recognise the role that walking and cycling play for many New Zealanders.

Each of the transport modes needs to operate efficiently to meet the needs of its users. More than that we need an integrated transport system whose total contribution to our country is more than the sum of its individual parts. To help achieve this, the government will work in partnership with local government and the transport sector to make that a reality.

The government is committed to delivering New Zealanders the transport system they need. We have identified our policy direction for transport and the investment we need to make in the transport system. But we need all participants in the transport system — be they infrastructure or service providers, or transport consumers — to play their part.

Looking to the decade ahead, there are some exciting opportunities before us. We need to make the most of them if we are to realise the greater prosperity, security and opportunities we all seek.

Hon Steven Joyce
Minister of Transport

Executive summary

Purpose of *Connecting New Zealand*

The purpose of *Connecting New Zealand* is to summarise for stakeholders the government's broad policy direction for the transport sector over the next decade. It will assist stakeholders to better understand how the government sees the transport system developing over that period. *Connecting New Zealand* draws together the policy direction set out in a number of other guidance documents, including the *National Infrastructure Plan* and the *Government Policy Statement on Land Transport Funding 2012/13–2021/22* (GPS 2012).

Government's overall objective for transport

The government is seeking an effective, efficient, safe, secure, accessible and resilient transport system that supports the growth of our country's economy, in order to deliver greater prosperity, security and opportunities for all New Zealanders.

Challenges for transport in New Zealand

New Zealand is a trading nation, but geographically we are further away from the economic centres of the world than any other developed country. To be internationally competitive, we need to improve the efficiency of our transport networks. We need to achieve this at a time when:

- our population is ageing
- people are changing where they live in New Zealand
- fuel prices are expected to remain volatile while generally increasing
- the freight task is predicted to double in the next 30 years
- international responses to issues such as greenhouse gas emissions and transport security can impose additional transport costs on our exporters

Government's three key areas of focus for transport

To deliver on its transport objective, the government is focusing on three key areas.

Economic growth and productivity — transport has an important role to play in enabling the government's overall goal to grow the New Zealand economy to deliver greater prosperity, security and opportunities for all New Zealanders. The transport system provides connections — both domestically and internationally — for our communities and businesses, and meets the travel needs of our international tourists.

Value for money — improving the performance of the transport system is critical. The government needs to be confident that the transport sector (central and local government in particular) is delivering the right infrastructure and services to the right level, and for the best possible price.

Road safety — implementing the Safer Journeys road safety strategy and its new Safe System approach, so we have a sustained reduction in deaths and serious injuries on our roads over time.

Key government actions

The key government actions set out in *Connecting New Zealand* for the next decade are detailed below.

Road

- Invest $36 billion in land transport over the next decade via the National Land Transport Fund. This includes $19.5 billion in State highways and $12.5 billion in subsidies for regional and local roads and public transport.
- Complete the first set of Roads of National Significance (RoNS).
- Drive greater performance and value for money from the NZ Transport Agency (NZTA).
- Continued reduction in emissions of carbon dioxide from land transport over time.

Maritime

- Focus on port productivity.
- Drive greater performance and value for money from Maritime New Zealand.
- Establish a sustainable funding basis for Maritime New Zealand.
- Improve maritime safety, by introducing a new seafarer qualifications and operational limits framework, and a new maritime operator safety system.
- Improve public information on the performance of maritime and freight transport.

Aviation

- Negotiate air services agreements to provide more access to key trade and tourist markets.
- Improve safety regulation in key areas, including adventure and agricultural aviation.
- Develop and promulgate a national airspace policy, and an airspace and air navigation plan.
- Drive greater performance and value for money from the Civil Aviation Authority and the Aviation Security Service.
- Review any market barriers to trade.

Road safety

Implement the new Safe System approach, including:

- increasing the safety of young drivers
- reducing the impact of alcohol and drug-impaired drivers
- improving the safety of our roads and roadsides
- increasing the safety of motorcycling
- helping people drive to the conditions and encouraging them to comply with safe speed limits

Rail

- Make progress on the implementation of the *KiwiRail Turnaround Plan*.
- Complete $2.3 billion investment in metro rail infrastructure in Auckland and Wellington.

Public transport

- Improve efficiency in the operation of the public transport system.
- Grow public transport patronage with less reliance on subsidies.

Purpose

Connecting New Zealand summarises the government's broad policy direction for transport over the next decade.

Connecting New Zealand sets out the government's objective for an effective, efficient, safe, secure, accessible and resilient transport system that supports the growth of our country's economy, in order to deliver greater prosperity, security and opportunities for all New Zealanders.

The purpose of *Connecting New Zealand* is to summarise the government's broad policy direction for the transport sector over the next decade. This will assist stakeholders to better understand how the government wants the transport system to develop, and enable them to consider this when they make their own transport decisions.

Connecting New Zealand draws together the government's policy direction that has been set out in a number of policy decisions and guidance documents over the last 2 years. These include the *National Infrastructure Plan*, the GPS 2012, the *KiwiRail Turnaround Plan* and *Safer Journeys: New Zealand's Road Safety Strategy 2010–2020.* Each of these documents provides detailed guidance on their particular areas of the transport system.

Transport not only enables economic activity by moving people and goods around the country, but it also connects us as a trading nation to our overseas markets. Growing the economy is central to lifting New Zealand's standard of living and providing a better future for New Zealanders.

The government is seeking an effective, efficient, safe, secure, accessible and resilient transport system that supports the growth of our country's economy, in order to deliver greater prosperity, security and opportunities for all New Zealanders.

New Zealand's place in the world

Most New Zealanders want to live in a country where rates of employment are high and living standards are improving. We need to build a strong, growing competitive economy to achieve those aspirations. Vital to this is our connection with international markets and inbound tourism. Our domestic transport system is part of the greater international supply chain, so we need to think globally to deliver a transport system that helps our exporters to compete.

Geographically, New Zealand is further from the economic centres of the world than any other developed country. Our trading partners have become much more diversified over the last few decades *(Figure 1)*.

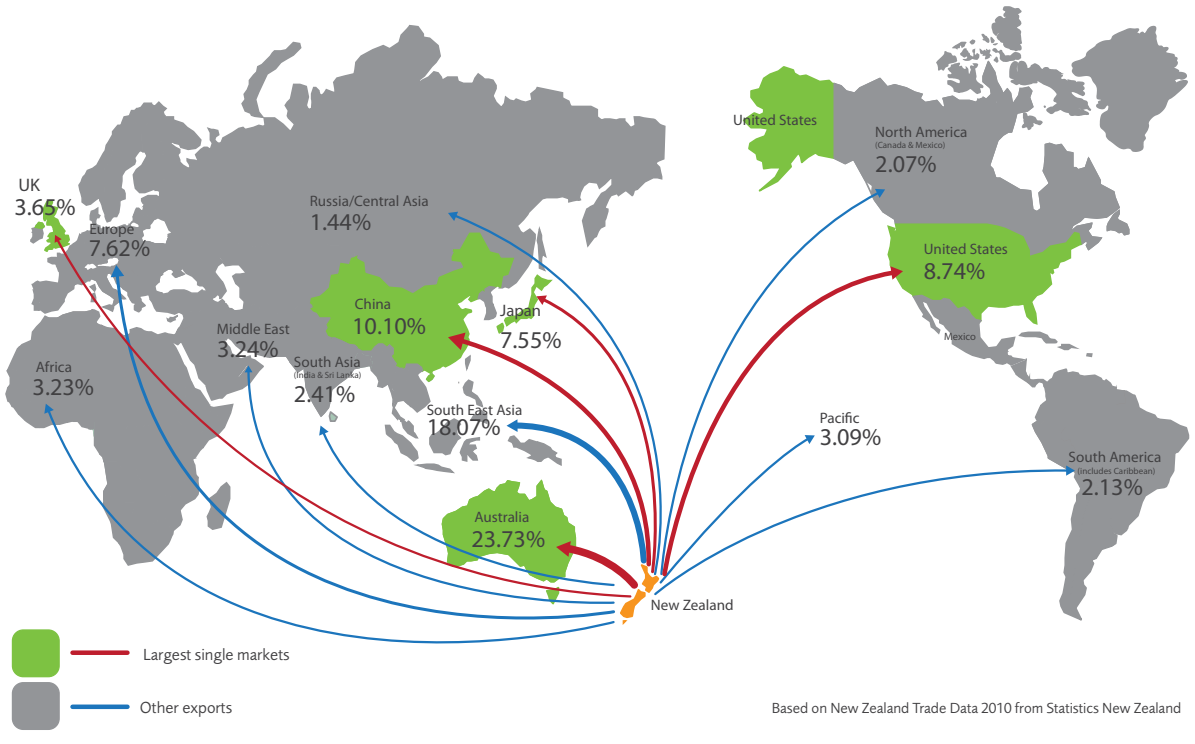
Transport costs are significant for our exporters. A survey of six key exporters indicated that they consume almost five percent of total turnover (four percent is due to the international transport component). To reduce that cost, we need to be constantly searching for ways to achieve efficiencies across and between the transport modes. The shape of our country and the nature of our population means that our transport infrastructure is expensive to build, operate and maintain compared to many other countries. To account for these issues, it is essential that our air and sea ports are well connected to our road and rail networks.

With the global economy emerging from the recession, there is potential for new markets to open up in East Asia and South America. It is essential that New Zealand is in the best possible position to capitalise on these new opportunities.

As a country we have limited financial resources. It is critical that we continue to invest wisely in our transport infrastructure to drive the lift in productivity and competitiveness that New Zealand needs.

As a trading nation that is far away from our international markets, New Zealand, and our exporting businesses, need an efficient transport system.

Figure 1 – Where our exports go



Based on New Zealand Trade Data 2010 from Statistics New Zealand

State of our infrastructure

New Zealand's transport infrastructure is generally well developed, and compares favourably with other developed countries. We have good road and rail networks that link well to our air and sea ports. We have a transport network that includes:

- 11,000km of State highways
- 80,000km of local roads
- 7 international airports
- 28 regional airports with scheduled services
- 4,000km of rail track
- 14 exporting sea ports

The recent earthquakes in Canterbury have reinforced the need to ensure that our transport infrastructure is resilient. Transport is a lifeline utility. Disruptions can have serious consequences for businesses and communities.

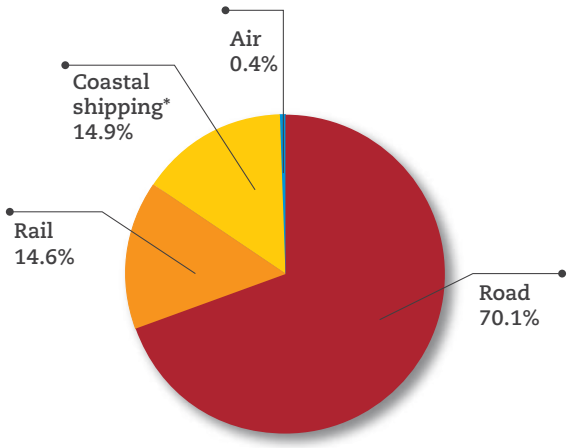
The concept of resilience is wider than natural disasters. It covers the capacity of public, private and civic sectors to:

- withstand disruption
- absorb disturbance
- act effectively in a crisis
- adapt to changing conditions, including climate change
- grow over time

However, there are also congestion and pressure points within our networks which we are working to address. Alongside that, the freight task has been projected to double by 2040. Any level of significant growth in the freight task will have an impact on the transport modes and how they contribute to the movement of our goods *(Figure 2)*.

The growth in the level of freight that originates in, and is attracted to, our regions will also vary, placing different demands on the transport system in the future. Waikato, Canterbury, Northland and Auckland are projected to have the greatest growth in freight volumes *(Figures 3 and 4)*.

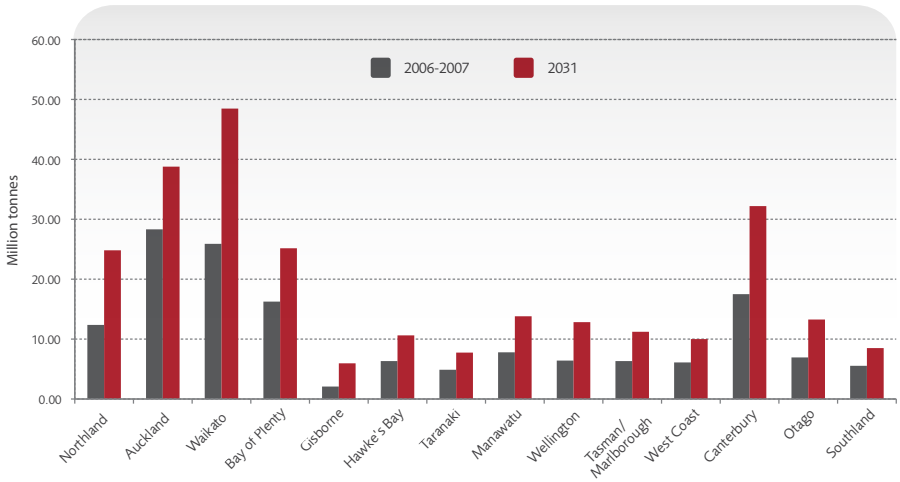
Figure 2 – Freight tonne-kilometres by mode 2006/07



* Not including Cook Strait traffic

Source: National Freight Demands Study 2008

Figure 3 – Forecast growth in freight traffic generated in regions 2006–2007 to 2031

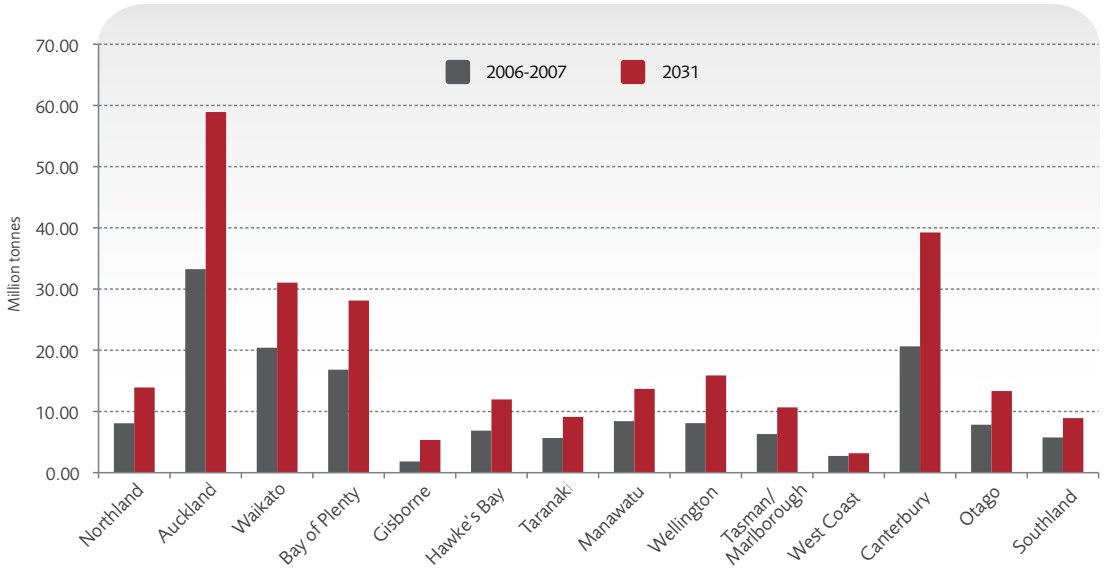


Source: National Freight Demands Study 2008

Our transport infrastructure is generally well developed. However, there are key congestion and pressure points. The government is working to address historical under-investment in transport infrastructure.

Transport infrastructure is expensive to establish and maintain, and it is widely recognised that we have under invested in the transport network in recent decades. To address this, the government has made record levels of investment in land transport in recent times *(Figure 5)*.

Figure 4 – Forecast growth in freight traffic attracted to regions 2006–2007 to 2031



Source: National Freight Demands Study 2008

Figure 5 – Total government transport expenditure as a percentage of gross domestic product

Note: Includes National Land Transport Fund, SuperGold card, KiwiRail Turnaround Plan expenditure, metro rail expenditure and other non-National Land Transport Fund expenditure. Excludes costs associated with the purchase of KiwiRail.

Source: Ministry of Transport, NZ Transport Agency, Statistics New Zealand

Why roading is important

The roading network is, in many ways, the backbone of the domestic transport system. It is the means by which most New Zealanders get about by car, bus or bicycle and connect with family, friends and employment. Eighty-four percent of personal daily journeys are by road. The roading network is also responsible for moving 70 percent of freight tonne-kilometres within New Zealand *(Figure 6)*.

Together, our local roads and State highways provide access to and from our air and sea ports for the majority of our exports and imports. They also service the needs of our international tourists. Our State highways account for just 12 percent of all roads, but they carry 50 percent of all motor vehicle kilometres. A number of our highways are affected by congestion, unreliable journey times or have a poor safety record. The new State Highway Classification System identifies our highways as either 'national strategic', 'regional strategic', 'connector', or 'distributor', by taking in a range of factors including freight volumes, daily traffic volumes, centres of population, ports, airports, and international tourism. This classification will enable the NZTA to set an appropriate and consistent level of service for each category and, over time, help drivers understand what to expect and how to behave on different categories of road.

New Zealand's 'high-volume highways' total just over 700 kilometres of road. They are just 6.5 percent of the State highway network and are less than 1 percent of the total road network. However, they carry:

- 35 percent of the total vehicle kilometres on highways
- 17 percent of the total vehicle kilometres travelled on the whole New Zealand roading network
- 19 percent of the freight volume kilometres on the whole New Zealand network

The roading system also supports the 100 million bus trips that New Zealanders take each year. The government has invested significant funding in recent years to improve the quality of our public transport infrastructure. This includes bus and rail terminals and other infrastructure, and establishing new services such as the Northern Busway in Auckland.

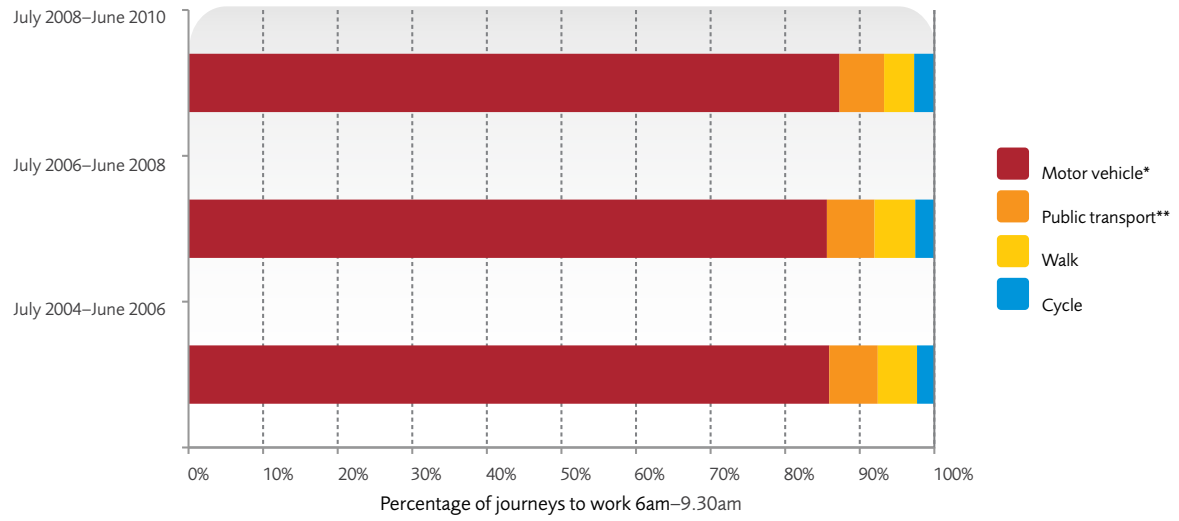
The government invests approximately $1.6 billion a year on the constructing, maintaining and renewing of State highways, including provision for walking and cycling.

In partnership with local authorities, the government provides subsidies of $600 million towards the constructing, maintaining and renewing of our local roading networks that link into our highways, including provision for walking and cycling. Local authorities invest a similar amount.

The government also provides subsidies of $275 million for public transport, again with local authorities investing a similar amount.

Roads are the backbone of the transport system. They carry 70 percent of freight tonne-kilometres and more than 100 million bus trips each year. Eighty-four percent of all trips made by individuals are by motor vehicles.

Figure 6 – Mode share of journeys to work: full-time workers' travel 6am–9.30am



* Includes motorcycles, private vehicles and passengers in private vehicles.
** Includes journeys which may involve driving, walking or cycling to and from public transport centres.
Note: Each period is a 2 year (July to June) annual average.

Source: New Zealand Household Travel Survey, Ministry of Transport

Resurgence of rail freight

When the government purchased the rail system in 2008, the business was in poor shape. After careful review, the incoming government invested substantially in the rail network. Through the *KiwiRail Turnaround Plan,* $4.6 billion will be invested in rail over 10 years to improve the quality of rail infrastructure and to support KiwiRail to become a commercially viable business.

Rail currently moves 15 percent of the national freight task. With projected growth in freight over the next 3 decades, an efficient rail freight network will play an important and complementary role to road freight to maintain access to our key ports. Rail is well placed to move heavy products over longer distances.

The Turnaround Plan aims to improve rail's overall capacity and ability to efficiently and effectively meet the requirements of freight shippers. A successful turnaround will enable rail to complement, as well as compete with, other modes.

Our rail, maritime and aviation sectors also have a critical role to play in our supply chains and moving our people daily. We need to ensure the different modes are fully integrated.

Role of maritime and aviation

Maritime and aviation connect New Zealand's exporters and importers to international markets. Our sea ports are responsible for the movement of 99 percent of our exports by weight, worth $36 billion per annum. Coastal shipping is well placed to be able to move commodities, such as oil and cement, and can also operate as a competitive alternative to road and rail in some situations. The coastal shipping industry moves approximately 15 percent of New Zealand's freight each year. Ferries also play an important role in freight movements between the North and South Islands, and in moving people. Ferry services operating in Auckland and across Cook Strait carry over 5 million passengers annually.

The aviation sector moves $6 billion of time-sensitive exports each year. The aviation sector is also critical to New Zealand's $5.6 billion tourism industry.

We need sea and air ports to be linked effectively to the overall transport network to support efficient nationwide movement of passengers, domestic goods, and exports and imports. Alongside that they need to be able to respond to technological changes and changing international safety and security standards. We also need to realise the safety, efficiency and environmental benefits that will be available from adopting new technologies.

Integrated transport

For the transport system as a whole to operate efficiently and effectively, we need more than the individual transport modes operating well in their own right. Transport users need to be able to access services across the modes to make optimal decisions for their personal and business mobility, and to move their goods to market efficiently and on time. To support this, the infrastructure that underpins transport services needs to be resilient.

Logistics operators have an important role in how we move our goods. Transport operators in different modes need to be able to both compete and operate in an integrated manner for the benefit of transport users.

Big issues for transport systems in the future

A number of global trends and issues will drive changes and developments in new technologies; shifts in vehicle use, patterns of personal mobility, aviation use and shipping. Some of these global trends and issues are outlined below.

Population growth — the world's population is expected to grow from seven billion in 2010 to nine billion in 2040, with 64 percent of the world living in urban areas by that time.

Ageing population — the proportion of the world's population aged 60 and over is expected to double between 2007 and 2050. The number of 60-year-olds and over is expected to reach two billion by 2050. This has significant implications for future transport needs, safety and the transport workforce.

Global freight growth — global freight movements are expected to grow by 350 percent by 2050.

Fuel prices and volatility — fuel prices are expected to rise with continued volatility, and this will impact on demand for transport and for new fuel technologies.

Transport emissions — the transport sector will likely need to respond to future demands to reduce transport greenhouse gas emissions.

Security — how transport security can be enhanced to provide the optimum protection for an uncertain world, having regard to cost and the threat environment.

New technology — how transport systems can adapt quickly to take advantage of new technologies to address many of the key issues facing the transport sector, including new fuel sources, safety and security.

New Zealand will benefit from some of these global trends, such as population growth leading to greater demand for our agricultural products. However, we will need to mitigate the negative impacts that other trends, such as increased costs driven by international emissions or security policy, could have on our trade. To achieve these mitigations we need effective international relations. We need to work cooperatively with other like-minded countries and have a strong voice in international transport forums, such as the International Maritime Organization and the International Civil Aviation Organization, that set the international rules for transport.

Population growth, the ageing population, and increased demand for freight are already recognised as being significant issues in New Zealand *(Figures 7 to 10)*.

The projected growth in both freight and population in Auckland, Hamilton and Tauranga over the coming decades will drive changes, over time, in how and where the government invests in the transport system.

Figure 7 – New Zealand population projections by age until 2031 (millions)

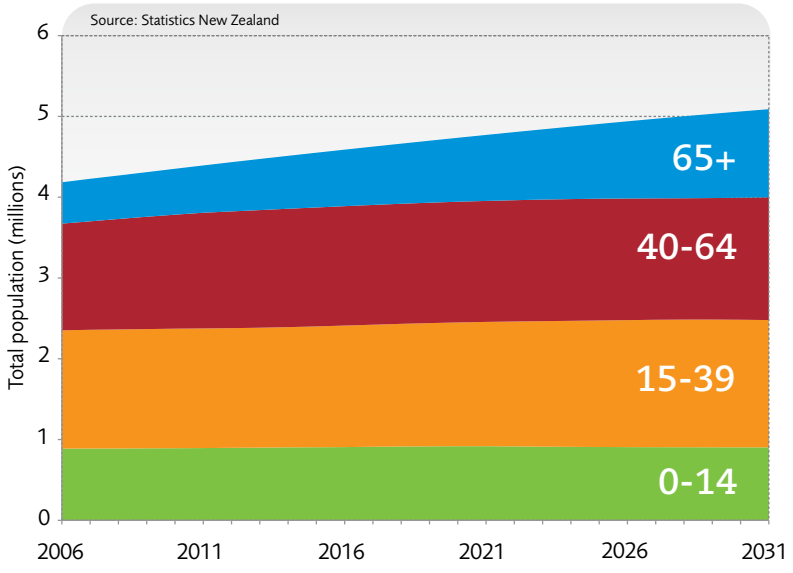
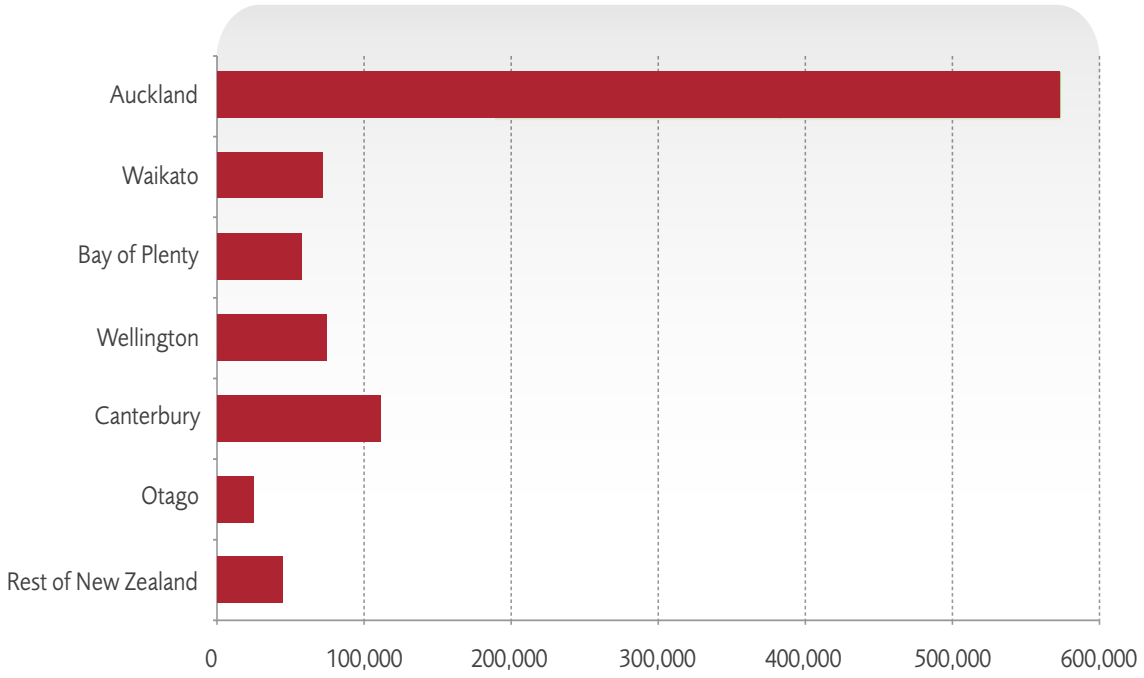
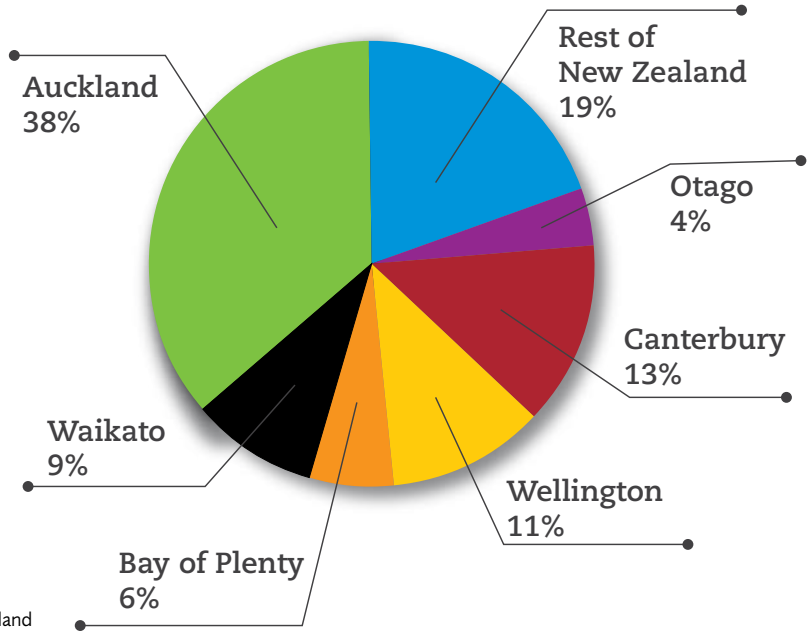


Figure 8 – Projected population growth in New Zealand by 2031



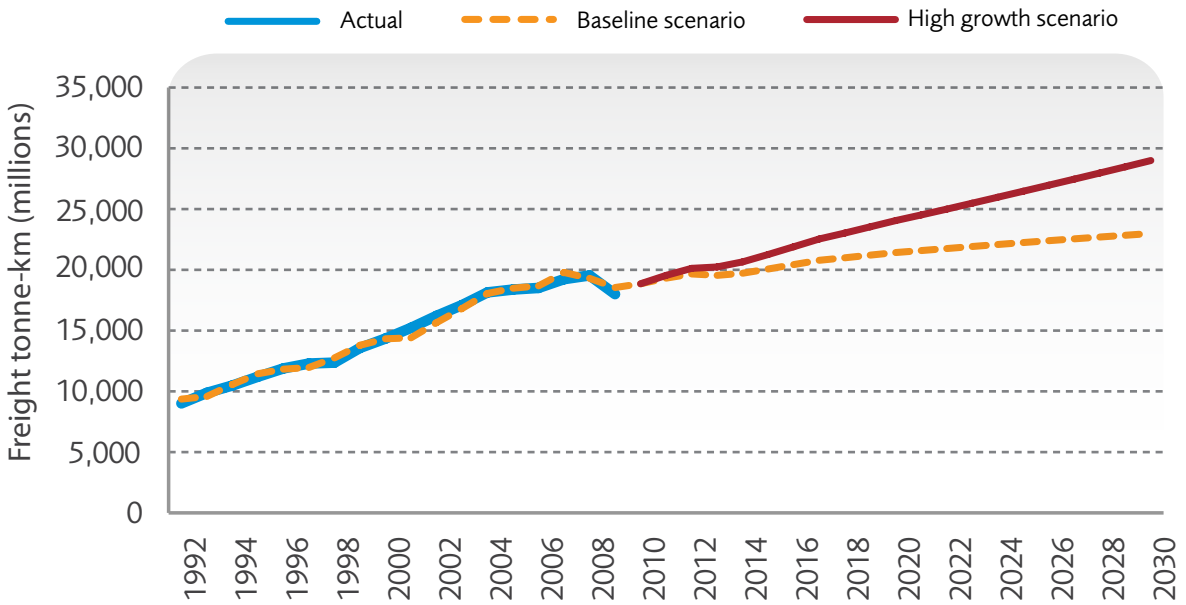
Source: Statistics New Zealand

Figure 9 – Projected New Zealand population in 2031



Source: Statistics New Zealand

Figure 10 – Freight tonne-kilometre projections



Source: Ministry of Transport

By 2021 New Zealand's population is expected to grow by 300,000, and to a total population of 5.1 million in 2031. At the same time the population will be getting older, with the percentage of people over 65 years of age growing from 13 percent of the population in 2009 to 21 percent in 2031, totalling more than 1 million people at that time.

Auckland is expected to have the strongest population growth (almost 600,000 by 2031), while some other parts of the country will have little or no growth *(Figures 8 and 9)*.

Together, the Auckland, Hamilton, Tauranga golden triangle will likely be home to 53 percent of the population in 2031, while Canterbury is predicted to have one of the oldest age profiles in the country. The freight task will grow significantly in Auckland, the Waikato and the Bay of Plenty *(Figure 10)*. The extent to which the Canterbury earthquakes will impact on population changes and the future freight task is unknown, and we are likely to encounter other changes that we cannot foresee.

New Zealand's response to these issues is likely to be through a range of smaller, incremental changes over time rather than through disruptive major policy or service changes that create economic loss. However, the cumulative effect of these responses is likely to result in a significant evolution in where and how the government invests in the transport system.

Other developments are also likely to impact, over time, on some transport trips and the demands that we place on the transport system. This includes the government's investment in ultra-fast broadband over the next decade which will enable much greater social connectivity for rural and urban communities online.

The government will work with the transport sector over the next decade to support the transport system in adapting to its changing environment and to meet the changing needs of transport users.

Central and local governments' role in the transport system

Central government's role

Central government performs a number of important roles in the transport system, alongside local government, the private sector and individual transport consumers.

Central government's roles include:

- setting the policy and regulatory framework for the transport system, including legislative frameworks, participating in international transport forums and negotiating international transport agreements
- ownership responsibility for transport Crown entities, including the NZTA, KiwiRail, the Civil Aviation Authority, Maritime New Zealand, and the Transport Accident Investigation Commission
- key infrastructure provision (including for State highways, KiwiRail, Airways New Zealand), a majority shareholding in Air New Zealand, joint venture owner of six airports and shareholder in four corporatised airports
- investing in transport infrastructure and services provided by others including subsidising public transport services, and transport infrastructure provided by local government

In fulfilling its roles, the government has a range of issues that it:

can control — including transport law through Parliament, performance of its transport Crown entities and their transport infrastructure, and funding of land transport services

can influence — including through its participation in international forums that set standards which impact on New Zealand's transport system, by negotiating international agreements that enhance our international connectivity, and by providing information that enables the market to make better transport decisions

needs to respond to — these are issues that are beyond the government's direct control including the price of oil, an ageing population and the effects of climate change. The government will continue to respond to these issues carefully and proactively

The government plays a number of roles in the transport system and works in partnership with local government, including subsidising local roads and public transport by, on average, 50 percent.

Local government's role

Much of the planning and development of the land transport system is undertaken through a partnership between central and local government. Local authorities have responsibility for regional and local transport planning. They own the local roading network, which provides access to the wider network from the properties of ratepayers. Some local authorities also have an ownership interest in sea and air ports.

Central and local government in partnership

Central government owns the State highway network which links individual towns and areas together. Each network carries about 50 percent of the country's traffic.

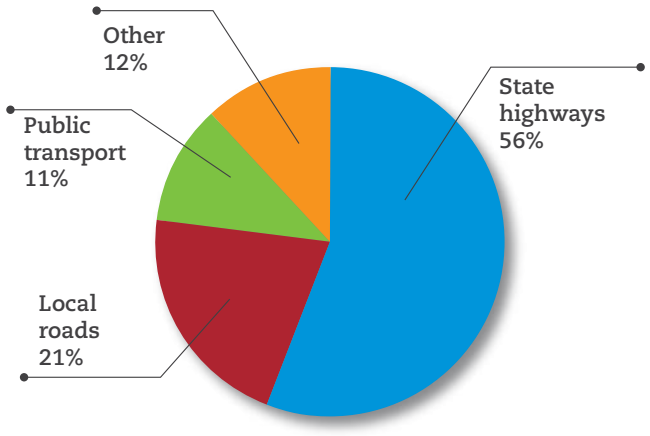
Central government pays for 100 percent of the costs of developing and maintaining the highway network, and an average of 50 percent of the cost of the local roading network, with the other 50 percent being paid by ratepayers. Central government and local authorities are each expected to spend approximately $12.5 billion over the next decade on local roads and public transport. The NZTA has responsibility for State highway planning and development, and engages closely with individual local authorities.

Central government agencies also influence the development of communities and the demand for transport through their decisions on where to locate schools, hospitals, social housing and other infrastructure and services. Central government transport investment decisions can also influence demand for transport and local land use patterns, and have long-term economic impacts.

Most government funding for transport comes from the National Land Transport Fund, most of which comprises fuel excise duty, road user charges and motor vehicle registration and licensing fees *(Figure 11)*. Legislative changes in 2008 provided for hypothecation of all revenue from these sources into the National Land Transport Fund, to be used for land transport purposes only under a permanent legislative authority. The principle that revenue raised from road users should be spent on the roads they use also allows funding of some related infrastructure and services, such as road safety promotion and public transport (which benefits road users by reducing traffic congestion).

Figure 11 – Likely National Land Transport Fund expenditure

(excludes direct government funding referred to below)



Source: Government Policy Statement on Land Transport Funding 2012/13–2021/22

The government also invests separately from the National Land Transport Fund (for example, rail). This investment covers rail infrastructure that is not paid for by road users. In addition to the fund, the government is investing:

- $1.6 billion in the development of Auckland's metro rail system, which comprises:
  - $600 million for Project Developing Auckland's Rail Transport (DART)
  - $500 million for the infrastructure required to support electrification
  - $500 million loan funding for the purchase of electric trains
- $400 million for Wellington's metro rail upgrade, which has included double-tracking to Waikanae and the purchase of 48 new two-car Matangi trains
- a further $88.4 million for upgrades to the Wellington metro rail network as part of a funding and ownership package with the Greater Wellington Regional Council
- $750 million of funding for the first 3 years of KiwiRail's $4.6 billion 10 year Turnaround Plan. The government also does not expect to receive shareholder returns for the period of the plan, allowing KiwiRail to provide the rest of the $4.6 billion investment from customer revenues

The role of transport consumers

Individuals, as transport consumers, have the pre-eminent role in shaping the transport system through their use of it. It is important, therefore, that price signals are as transparent as possible and users are able to respond to the costs associated with their transport options.

Major New Zealand companies influence the efficiency of the transport system through their decisions on whether to transport their goods by road, rail or coastal shipping, and through which ports they choose to export. Different types of freight can be more suitable for particular modes. Rail, for example, is suited to the movement of heavy bulk goods such as coal that move from point to point, while road can deliver goods to multiple points and offers more flexibility around the timing of movements. The decisions of our companies are also influenced by shipping companies as they make decisions on which ports they will service and when.

Some transport providers (such as KiwiRail) are working closely with key consumers of their services (for example, Fonterra) to develop transport solutions that improve productivity and reduce transport times. This can involve modifications to the existing network.

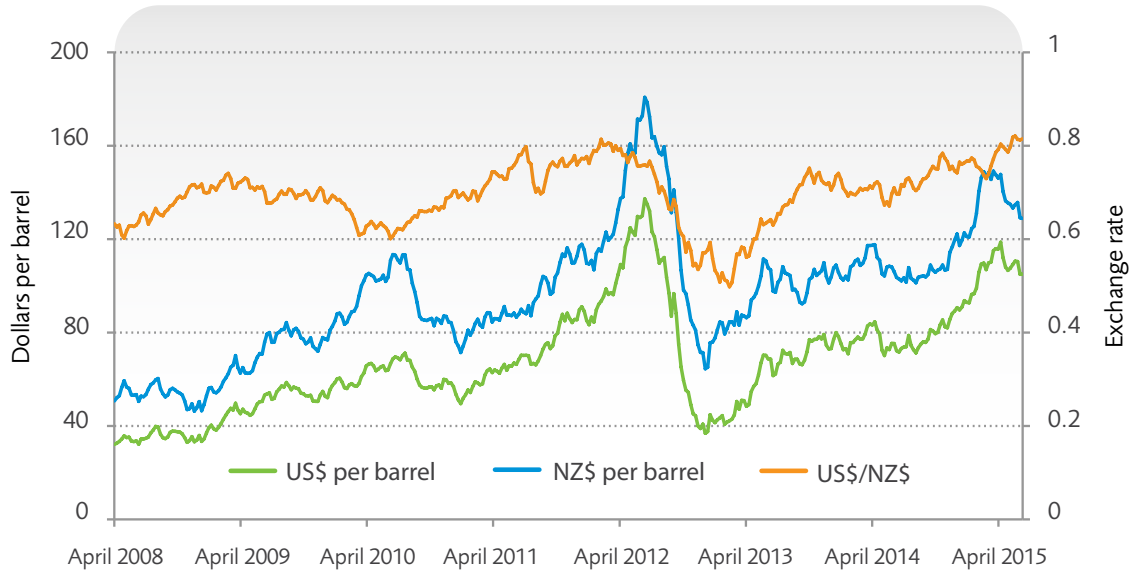
Similarly, the decisions made by individuals and families as to where they live and work, and where firms locate, shape New Zealand's land use and transport needs. It is important to acknowledge the powerful influences of price and consumer choice in determining the shape of the transport system, particularly within our urban communities.

The government wants the costs associated with transport choices to be as clear as possible, and for the price of using each mode to match actual cost as much as possible. This will enable businesses and individuals to make the transport decisions that best meet their needs.

The impact of higher fuel prices

New Zealand has experienced a period of unprecedented high and volatile world oil prices, which has affected exporters, businesses and households. This underpins the need to improve the efficiency of the New Zealand supply chain, including the efficiency of transport activities and fuel consumption. It also contributes to the reasons why New Zealand is investing in a mixed portfolio of transport options. The government is investing in metropolitan and rail freight to ensure the transport supply has sufficient capacity and resilient alternatives as the economy and the population grows *(Figure 12)*.

Figure 12 – Dubai crude oil price and exchange rates



Data source: Ministry of Economic Development

The decisions of transport consumers, from both large businesses to individuals, shape the transport system. It is important that the price for using a transport mode should match actual cost as much as possible.

Key aspects of the government's policy direction

The government seeks to invest wisely in the areas of the transport system that will bring the greatest benefits to New Zealand. To drive the economy forward, the government has three key areas of focus across the transport system:

- economic growth and productivity
- value for money
- road safety

Economic growth and productivity

Transport has an important role to play in achieving the government's overall goal for New Zealand. The transport system connects us both domestically and internationally. It links employees, employers and businesses together, and enables individuals to access services.

Transport is a critical part of the supply chain that delivers goods to both domestic and international markets, and meets the travel needs of our international tourists. Better transport infrastructure and services can lower costs and increase accessibility for businesses by expanding markets and improving access to suppliers. The quality of infrastructure, and how comprehensive the transport network is, will influence the role transport plays and its contribution to the functioning of a successful competitive economy[1].

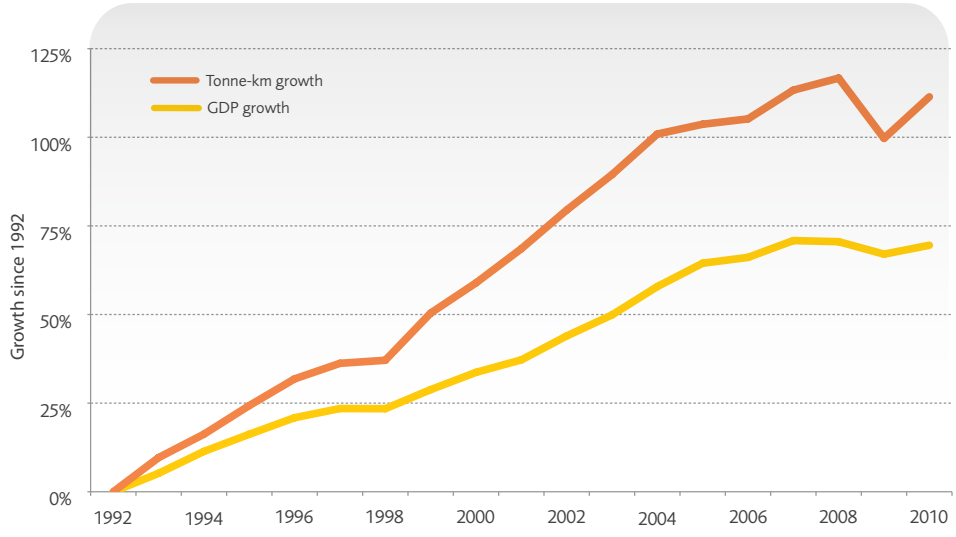
Transport infrastructure will become an increasingly influential factor in urban areas as the population and urban density increases in New Zealand. But as our economy grows, so do freight tonne-kilometres, and at a faster rate *(Figure 13)*.

We need to make sure that the arteries of our cities do not become clogged and that access to our key rail hubs, air and sea ports remain free moving, and that the corridors along our key supply chains also remain protected from congestion. In some cases, the government is taking a lead infrastructure approach to land transport investments, leading improvements in capacity ahead of them being required to encourage economic growth. In doing so, the government is being careful to respond to predicted incremental changes in transport demand and trends, rather than seeking wholesale mode shift for non-economic reasons. The latter would lead to a deadweight economic loss by encouraging inefficient transport choices.

The government will focus on ensuring the price of using different modes matches actual costs as much as possible to ensure that demand for different modes reflects the economically efficient choices of individual stakeholders. In the freight area, this means KiwiRail covering its own costs from its freight customers, and roading developments being paid for by road users through the fuel excise and road user charges system, rather than from general taxation.

However, maximising transport's contribution to economic growth and productivity requires more than just central government investment in the transport system. Considered,

Figure 13 – Relative growth in tonne-kilometres and gross domestic product since 1992



Source: Ministry of Transport and Statistics New Zealand

[1] The Eddington Transport Study, Main report, Sir Rod Eddington December 2006, page 3.

clearly-signalled funding, planning and land-use decisions from central and local government will encourage the investment plans of private transport operators. This will support the integration of multiple modes, efficient supply chains, high-quality infrastructure, and a safe and effective transport sector.

The development of long-term plans, such as the Bay of Plenty SmartGrowth strategy, which was developed by the regional community, can be a good tool to send clear signals to the market. Auckland is currently developing its own spatial plan which will set out a 30 year vision for the region and, through a collaborative approach, address a range of issues including the existing and future land use pattern — residential, business, rural production, and industrial.

CASE STUDY: Waikato Expressway

The Waikato Expressway provides productivity improvements for Auckland, Waikato and the Bay of Plenty and is an example of a Road of National Significance stimulating and enabling economic growth. A conservative estimate, based on potential trip destinations, indicates that 18,000 vehicles will save 15 minutes per day. The cost of travel time is $25/hour across all time periods and road user types, so the conservative direct yearly benefit is around $40 million.

The Te Rapa Section of the Waikato Expressway helps develop the Rotokauri growth cell, an area of approximately 1,000 hectares to the north and west of Hamilton. The growth cell comprises approximately 485 hectares of residential development and 270 hectares of industrial development with the balance comprising a suburban centre, major facilities, education and 140 hectares of reserves. The Te Rapa Section also supports the Horotiu Industrial Park within Waikato District to the north which is planned to provide approximately 150 hectares of industrial land that will benefit from the Waikato Expressway and improved connectivity.

The Hamilton Section of the Waikato Expressway, to the east of the city, will enable a step-change in the region's economic performance through improved freight movement, benefiting the movement of goods originating in the region and also those transiting to or from the major ports.

Value for money

It is essential that we get the best possible value from the $3 billion of taxpayers' money that the government invests in the transport system each year through the National Land Transport Fund — or around $36 billion over the next 10 years. This also applies to investments that the government makes outside of that, for example, for metro rail infrastructure in Auckland and Wellington.

Improving performance and productivity right across the public service is a high priority for the government, including the transport sector. The government needs to be confident that the transport sector (central and local government in particular) is delivering the right infrastructure and services to the right level and for the best possible price. This includes providing integrated transport services that allow more seamless options for transport consumers. Achieving this requires a greater focus — not only on what infrastructure and services are provided — but also on how activities and projects are delivered, how assets are managed and the extent to which costs are minimised over time.

Road safety

New Zealand has made substantial progress over the last 20 years, with the road toll having fallen from 729 in 1990 to 375 in 2010. The improvements since 1990 are even better than the bare numbers suggest, as they have been achieved over a time when the number of vehicle kilometres driven each year has grown. However, our road toll remains too high, and our young people (15–17 years) have the highest road death rate in the Organisation for Economic Co-operation and Development (OECD).

Road crashes carry a high cost — in terms of loss of life, serious injuries sustained, and impacts on families. Road crashes also have an economic impact. The total social cost of road crashes is estimated to be $3.7 billion per annum. Reducing the cost of road crashes is a key priority for the government.

Both the government and our communities are demanding a safer road transport system. The government released the Safer Journeys road safety strategy in 2010 and adopted a vision of 'a safe road system that is increasingly free of serious injury and death'.

The safety of the road system is also important to our productivity and the daily operation of our businesses, through its impact on the movement of goods, and people, to and from as part of their employment.

The government will drive improved performance across the transport system by focusing on three areas: economic growth and productivity, value for money, and road safety.

Mode by mode — the policy direction in practice

Land transport infrastructure and services

Summary of the government's key actions

The government's key land transport actions include:

- investing $36 billion in land transport over the next decade, including $19.5 billion in State highways and $12.5 billion in subsidies for regional and local roads, and public transport
- completing the first set of RoNS
- growing public transport patronage with less reliance on subsidies
- driving greater performance and value for money from the NZTA
- continued reduction in emissions in carbon dioxide from land transport over time

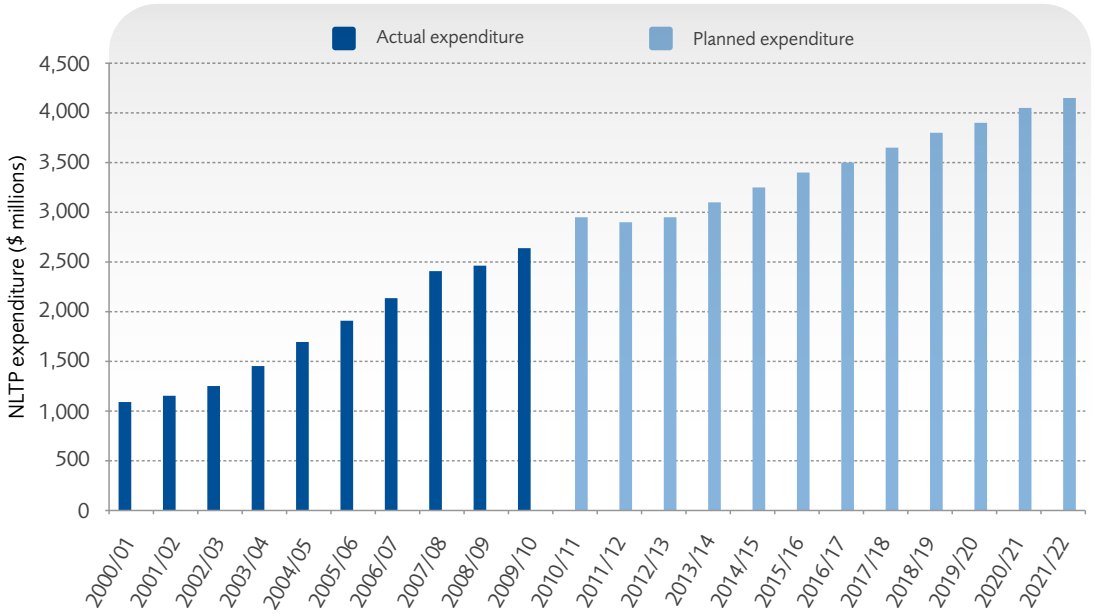
Land transport is a critical area of focus for government given the level of government investment, land transport's important role in our supply chains, tourism, and the various ways in which it connects individuals and communities. Government investment in land transport has increased significantly in recent years *(Figure 14)*.

Over the next 10 years, the government will continue to invest in the land transport system throughout the country, from rural New Zealand to our metropolitan centres. Through the National Land Transport Programme, the government expects to spend approximately $36 billion, including:

- $19.5 billion on State highway development, renewals and maintenance
- $8.5 billion on local road subsidies
- $4 billion on public transport subsidies (bus, ferry and commuter rail)
- $3 billion on road policing

In addition to the National Land Transport Fund, $7 billion is being directly invested in rail. This includes $2.3 billion for the commuter rail networks in Auckland and Wellington for new rolling stock, traction systems and signal systems, and $4.6 billion of capital investment in KiwiRail to implement the company's Turnaround Plan. The government is providing $750 million of initial capital for the Turnaround Plan but the majority of this funding will be reinvested revenue from the freight business.

Figure 14 – National Land Transport Programme expenditure



Source: Ministry of Transport

The government is investing record amounts in the transport system, and will invest more than $36 billion through the National Land Transport Fund over the next decade, including: $19.5 billion on State highways, $8.5 billion on local roads, and $4 billion on public transport.

Christchurch re-build

The Christchurch earthquake on 22 February 2011 and subsequent aftershocks have been catastrophic for the city and the Canterbury region, and will have a significant impact on New Zealand's economy for some years to come.

Initial estimates are that the transport rebuild may cost the government around $400 to $500 million, but the final cost will become clearer over time. The government's commitment to rebuilding Christchurch may require some reprioritisation of previously planned transport expenditure for the next few years. The rebuild may also require reordering planned transport projects in and around Christchurch city to respond to any changes in land-use patterns.

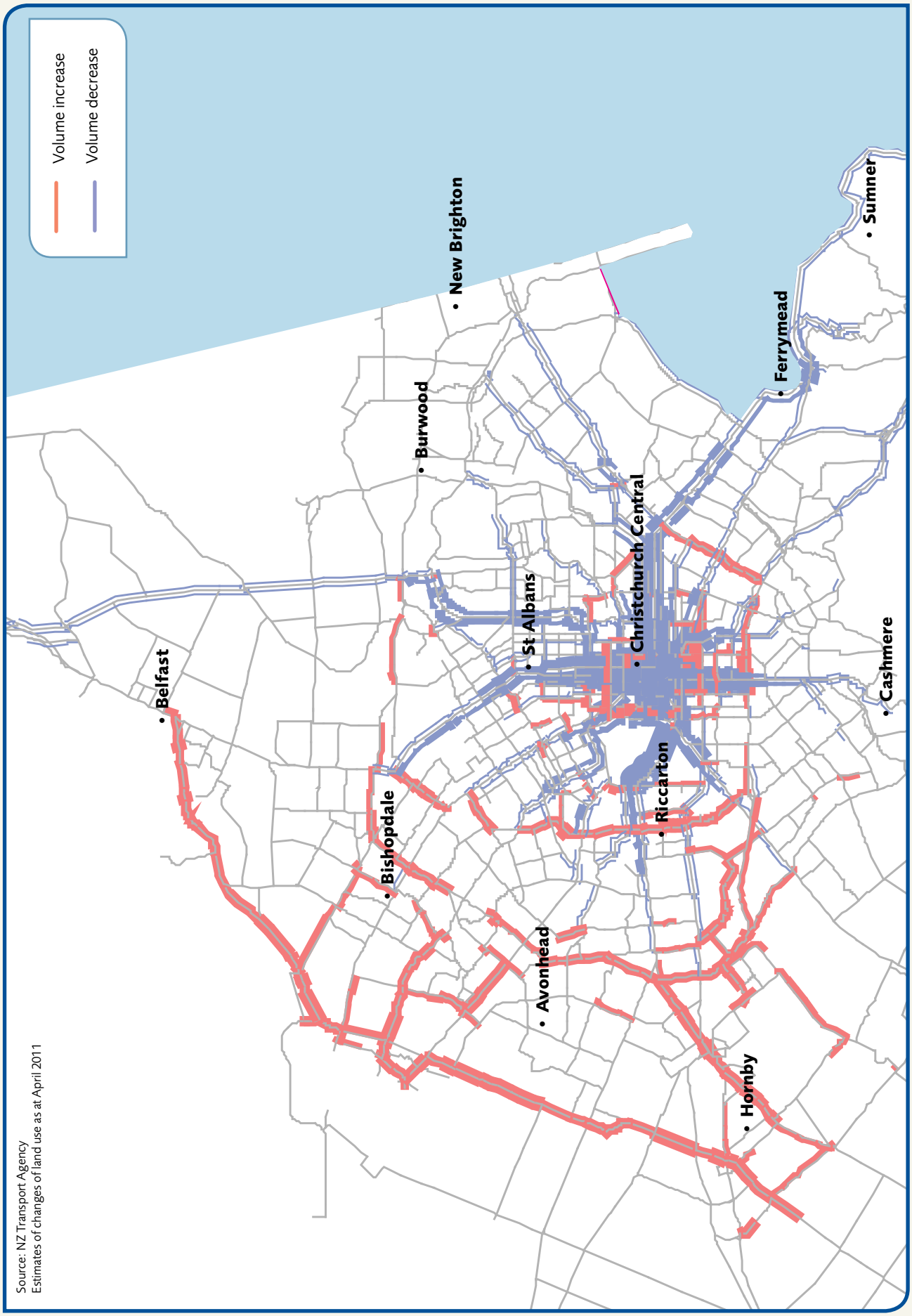
The government is also investing in the Christchurch motorway network through the RoNS programme. Rapid growth, particularly in the Selwyn and Waimakariri districts in recent years has placed significant demand on the State highways to the north and south of the city, and around its western edge. This has restricted efficient access to both the airport and Lyttelton sea port. To ensure that Christchurch continues to be a great place to live and do business, the government initiated a $600 million highway construction programme as one of the RoNS.

Over the next decade this investment will increase the capacity of roads to handle higher freight levels, as well as improving safety for all road users. As Christchurch rebuilds following the earthquakes, it is likely that the city will spread westwards and that the need for this highway construction programme will become more acute.

Quake damage to the ANZAC Drive Bridge.

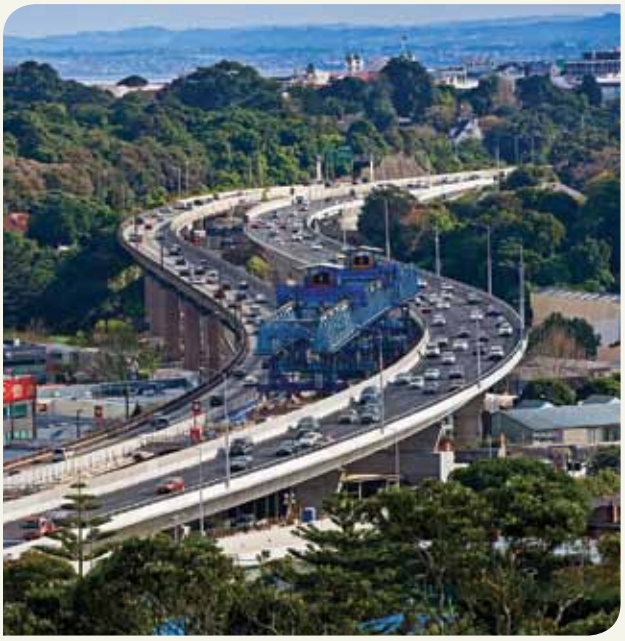
The Lyttelton Tunnel canopy destroyed by the quake.

Daily traffic volume difference after Christchurch earthquake as at April 2011



Source: NZ Transport Agency
Estimates of changes of land use as at April 2011

Auckland transport



New Zealand's future success is tied to Auckland as our largest city and biggest local economy. Home to 1.4 million people (a third of the population), Auckland's population is projected to grow to 2 million by 2030–2035, accounting for 60 percent of New Zealand's population growth. Getting Auckland transport working well is crucial to improving the contribution the city can make to national economic growth.

The government is investing over $1 billion a year in the Auckland transport system with the aim of enabling efficient and effective use of the transport network. Including Crown commitments to rail investment, Auckland currently receives 46 percent of government transport funding.

The government's current and planned record levels of investment in major capital improvements to Auckland's State highway and commuter rail networks will help the city to lift its economic performance. Once the current projects are completed (around 2015/16), a step-change in transport performance in Auckland is expected.

The government is investing more than $1 billion a year in Auckland. Including Crown commitments to rail, Auckland currently receives 46 percent of government transport funding.

The government's investment in Auckland will improve our supply chains and help us to improve our economic growth and productivity.

Major recently completed and current Auckland projects, at the time of publication, include:

- **State Highway 1**
  - Victoria Park Tunnel (current)
  - Newmarket Viaduct (current)
  - Auckland Harbour Bridge structural upgrade (completed)
  - additional lane State Highway 1 Newmarket to Greenlane (completed)
  - additional lane State Highway 1 Manukau and Constellation Drive to Greville Rd (planned)

- **Western Ring Route (State Highways 20,16 and 18)**
  - Manukau Harbour Crossing (completed 2010)
  - Manukau Extension (completed 2010)
  - Waterview connection (current)
  - Hobsonville deviation (completed 2011)
  - State Highway 16 widening from Western Springs to Westgate (current)

- **advanced traffic management systems (ramp signalling programme)**
  - continued roll-out across the whole motorway network

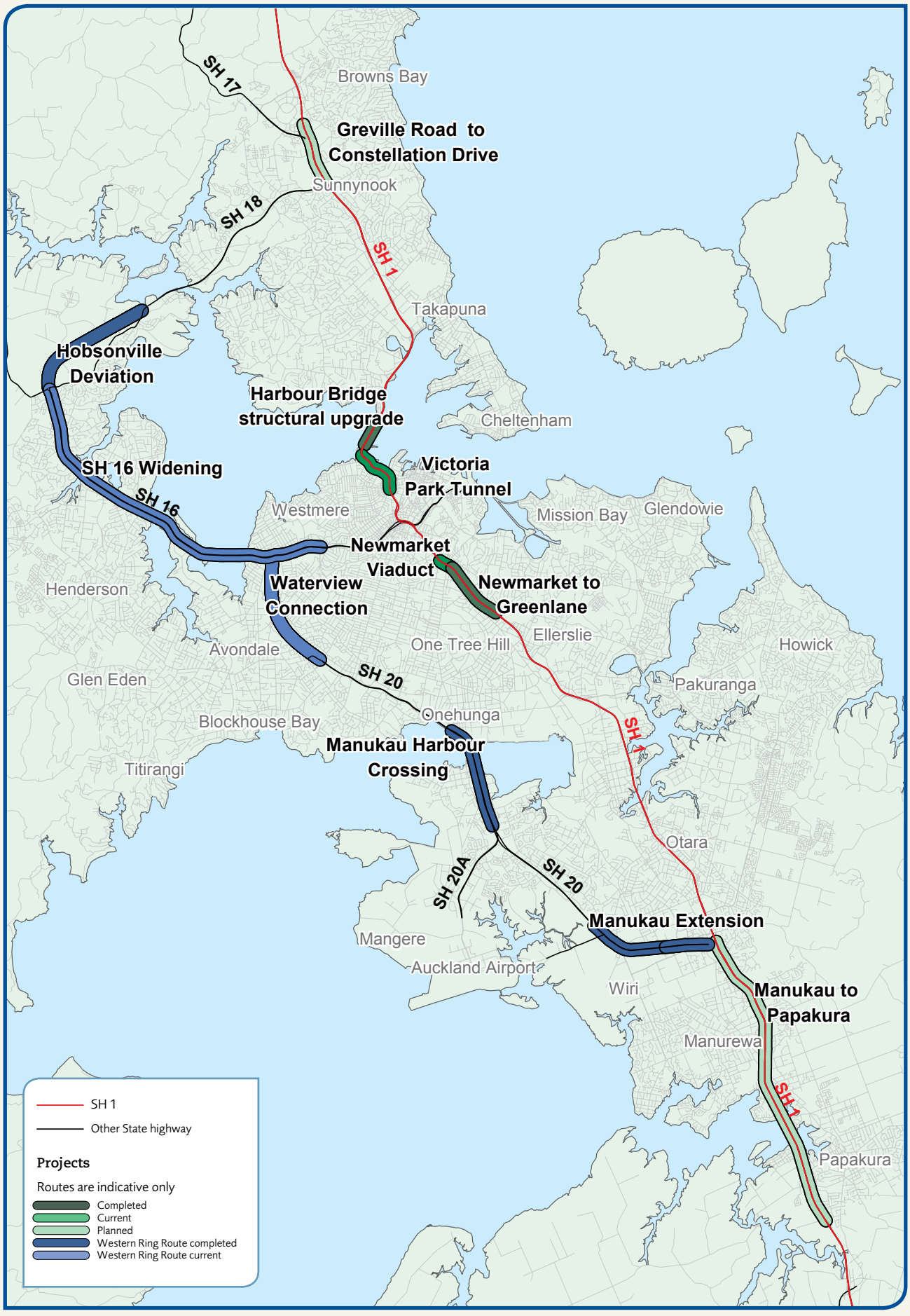
- **Public transport**

  Rail:
  - upgrade and extension of the existing metropolitan rail network) (current)
  - Auckland Electrification Project (electrification of the network) (current)
  - Electric Multiple Unit procurement (current)
  - investment in new and upgraded rail stations, including Newmarket, New Lynn, Grafton (completed 2010)
  - reopening the Onehunga branch line (completed 2010)
  - building the Manukau rail line (current)

  Other public transport:
  - integrated ticketing, real time passenger information systems, and multi-modal passenger information systems

Attention is now turning to which major projects and developments will need to be prioritised after these current projects are completed. This includes consideration of a third harbour crossing, improved central business district access including a possible city centre rail link, and further infrastructure to support ferries and bus transport. Careful prioritisation will be needed to provide the right solutions at the right time, and to ensure that we are maximising the efficient and effective use of existing networks.

Major recently completed and current Auckland projects (at the time of publication)



Roads of National Significance (RoNS)

The government is investing $9 billion in our RoNS. Our high-use highways make up only 6.5 percent of our total roading network, but carry 17 percent of total kilometres travelled, and 19 percent of all freight volume kilometres.

The State highway network is critical for heavy vehicles which move the majority of our freight *(Figure 15)*. The government's seven RoNS are our high-use highways, as identified in the State Highway Classification System. The RoNS are a critical step to addressing the needs of our key supply chain routes, and a substantial part of the government's *National Infrastructure Plan*.

The RoNS programme represents a $9 billion investment by the government that will ease prominent traffic bottlenecks within and around our five largest metropolitan areas, and link our major sea and air ports more effectively into the State highway system. This will better support all transport users, and enable greater efficiencies.

The seven RoNS are:

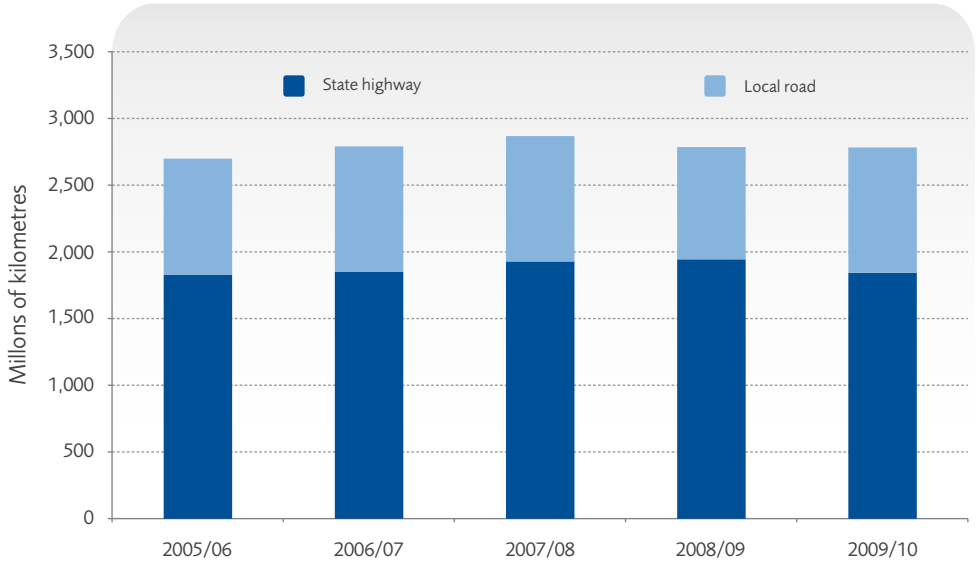
- Auckland Western Ring Route — State Highways 20, 16 and 18
- Auckland Victoria Park bottleneck — State Highway 1
- Christchurch motorway projects
- Puhoi to Wellsford — State Highway 1
- Tauranga Eastern Corridor — State Highway 2
- Waikato Expressway — State Highway 1
- Wellington Northern Corridor (Levin to Wellington) — State Highway 1

As RoNS projects are completed, new ones could be added to the programme where major capacity improvements and safety upgrades are required to improve reliability, safety, and economic growth. Based on the State Highway Classification System, possible future RoNS could include:

- Hamilton to Tauranga
- Cambridge to Taupo
- further development of the Hawke's Bay expressway
- State Highway 1 — north and south of the current Christchurch motorway projects

The RoNS will ease prominent traffic bottlenecks within and around our five largest metropolitan areas, and link our major sea and air ports more effectively into the State highway system.

Figure 15 – Heavy vehicle travel on State highways and local roads



Source: Ministry of Transport

Regional roading projects

Regional roading projects are also important and provide new or improved infrastructure that enhance regional economic growth, remove bottlenecks around regional centres and improve route security and safety. Continuing to develop and maintain both regional and local transport networks so they are more reliable, safe and efficient is an important enabler of growth in regional economies.

Supporting the growth of regional economies through regional roading projects is also important to improving economic productivity.

Regional projects recently completed or under construction include:

- **Caversham Highway improvements in Dunedin** — these will improve safety, ease traffic congestion and reduce travel times for road users on State Highway 1 between Andersons Bay Road and Lookout Point. Stage 1 is mid way into construction.
- **Kamo Bypass on State Highway 1** — this will help to move traffic away from the Whangarei city centre and surrounding residential areas currently experiencing congestion. It will also provide a high-quality route north for visitors to the city.
- **East Taupo Arterial on State Highway 1** — this reduces the number of heavy vehicles travelling through the Taupo central business district and along the lake front, and reduces traffic congestion during the holiday season and events.
- **Pyes Pa Road in Tauranga** — this is providing a safer environment for residents and a more efficient route for through traffic.
- **SH2 Matahorua Gorge Realignment between the Hawke's Bay and Gisborne regions** — this project is improving safety, route security and reliability for freight and other road users.

Bell Block bypass.

- **Bell Block Bypass in Taranaki** — this is improving safety, relieving congestion, and improving journey times through Bell Block. It also separates through traffic from local traffic, and provides a grade separated interchange which allows for a single direct access to the Bell Block Township.

Other regionally significant activities planned for the future include:

- **Tiverton Road/Wolverton Street Route Upgrade in Auckland** — supports the Western Ring Route.
- **Lincoln Road Corridor improvements in Auckland.**
- **Dominion Road Improvements** — upgrade, urban design and passenger transport improvements.
- **Replacement of the Atiamuri Bridge on State Highway 1 north of Taupo** — will improve road safety and ensure route security. It will also support economic development and productivity by assisting with the efficient movement of freight. The bridge is part of a significant freight route with high-volumes of heavy vehicles.
- **Rotorua Eastern Arterial** — this would provide an improved link to the Rotorua International Airport and key freight route linking Taupo and Rotorua with the Port of Tauranga.
- **Auckland-Manukau Eastern Transport Initiative (AMETI) Phase 1** — will improve the efficiency of public transport in eastern Auckland, and forms part of the wider project improving connectivity with the southeastern growth areas.
- **Neilson Street upgrade in Auckland's industrial heartland** — will provide for improved bus, high occupancy vehicle and freight connections between the southern and south-western motorways.
- **Wairere Drive in Hamilton** — will complete the Ring Road network and will provide local roading alternatives to the Waikato Expressway for local trips.
- **New Waitaki Bridge** — a new twin lane bridge across the Waitaki River at Kurow is being designed. The new bridge would replace two aging wooden single lane structures and will have a footpath – cycle way along its downstream side and offer greater safety and reduce travel times between Hakataramea and Kurow.

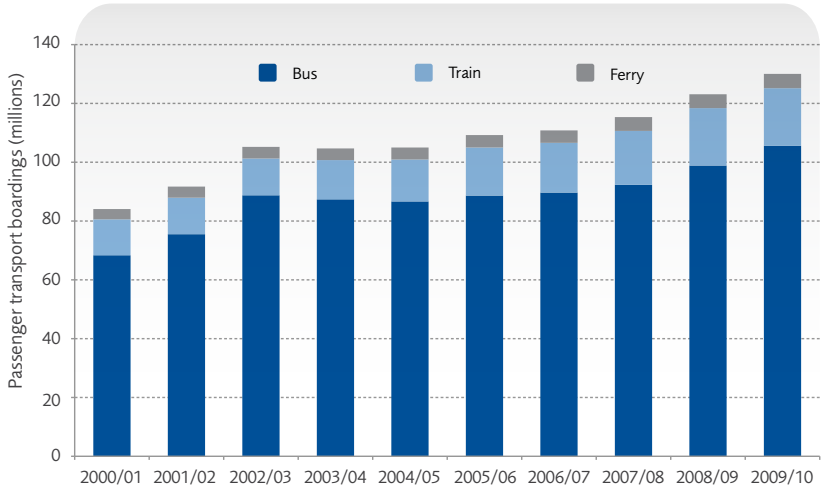
Rail freight

Rail use for freight movement is predicted to increase by 70 percent over the next 20 years. Rail can play a significant role in future freight options for our exporters and contribute to easing congestion in Auckland and Wellington. However, the rail system in New Zealand has suffered from a long period of under-investment, limiting its ability to provide fast and reliable freight and passenger services. Rail needs to pay its own way like the other transport modes. As a result, the government's main focus over the next decade is on the *KiwiRail Turnaround Plan*.

The *KiwiRail Turnaround Plan* is an ambitious project to make KiwiRail, within 10 years, a financially sustainable rail freight business that can fund its ongoing operating and capital expenditure from customer revenues. This requires $4.6 billion of investment over the next 10 years, most of which will come from the company's own cash flows. The government has committed in principle a total package of $750 million for 3 years as seed capital for the Turnaround Plan. Final funding decisions are subject to individual business cases that meet the government's performance measures as the shareholder in the rail network.

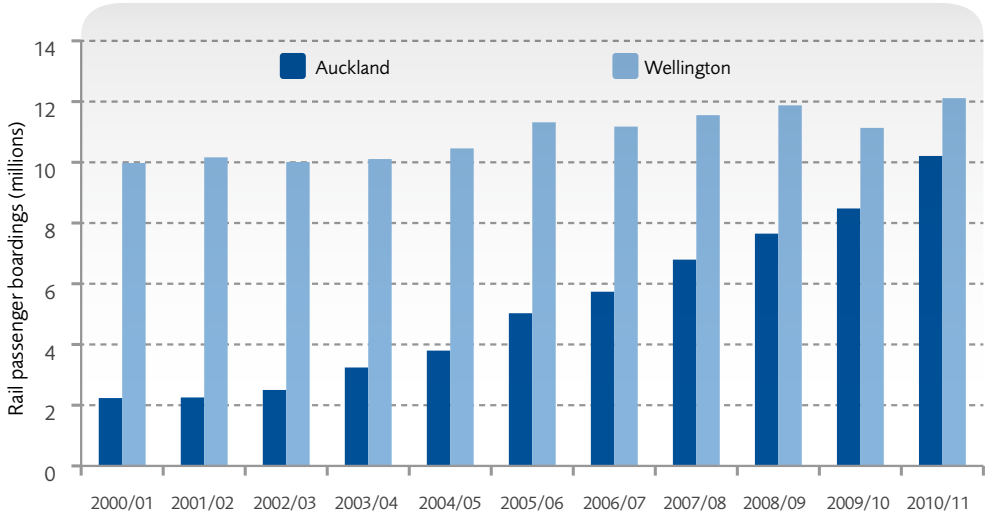
The successful implementation of the *KiwiRail Turnaround Plan* will support KiwiRail to operate as a commercially viable business within the next 10 years, and move increasing amounts of freight in the future.

Figure 16 – Total passenger transport boardings



Source: Ministry of Transport

Figure 17 – Rail passenger boardings in Auckland and Wellington



Source: Ministry of Transport

Public transport services

The car is the dominant form of travel for New Zealanders. For public transport, buses lead the way with more than 106 million boardings in 2009/10 *(Figure 16)*. Passenger rail is showing good growth in Auckland *(Figure 17)*.

The government will spend approximately $3 billion on public transport subsidies for urban bus, ferry and rail services over the next 10 years. This includes the off-peak travel on public transport that is available to SuperGold card holders.

The NZTA and regional councils are expected to deliver more efficient and effective services over the next 10 years. The government is seeking to reduce subsidies paid by taxpayers and ratepayers by providing incentives to stakeholders to encourage patronage growth. Over the last decade, public transport subsidies increased by 260 percent while patronage only increased by 63 percent. We need to be able to grow patronage with less reliance on subsidies to achieve a more sustainable public transport system *(Figure 18)*.

The government is working with the public transport sector to develop a new public transport operating model. This model will help to close the gap between funding and patronage growth, and to generate the desired economic benefits associated with better use of public transport, such as reduced congestion. As part of this, the government is placing a strong emphasis on the sector working in true public private partnerships. This should help give road users and ratepayers confidence that they are receiving value for money.

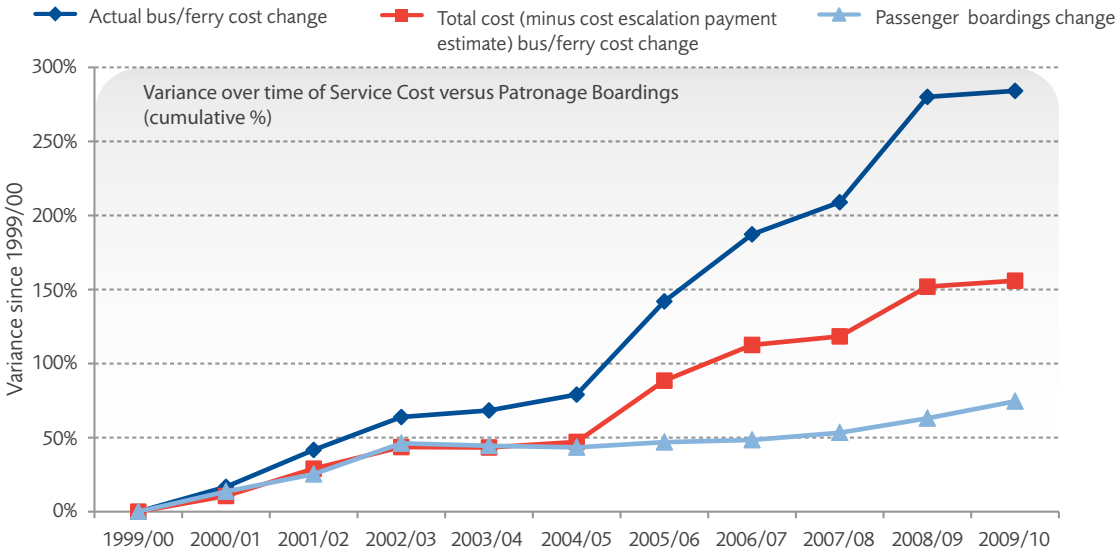
While the car is the dominant mode for personal travel, public transport has an important role to play in our major urban centres.

The government is also making a major investment in improving the performance of the metro rail networks in Auckland and Wellington. In Auckland, more than $1.6 billion is being spent to modernise and extend the network. This includes double-tracking, electrification and providing funding to enable Auckland Transport to acquire new trains. Investment in new trains, platforms and information systems is also providing significant accessibility improvements for people with disabilities, helping them to better participate in the workforce and their community.

The government is implementing a new metro rail operating model and wants growth in public transport use, with less reliance on subsidies from road users.

In Wellington some $485 million is being spent on the electrification and double-tracking to Waikanae, as well as infrastructure upgrades to accommodate the new Matangi rolling stock purchased by the Greater Wellington Regional Council (GWRC) with government support. A rail funding and ownership package was recently agreed for Wellington that fairly shares the costs and responsibilities for delivering any future improvements to Wellington's commuter rail system.

Figure 18 – Variance over time of service cost versus patronage boardings



Source: NZ Transport Agency

One of the significant shifts is that the GWRC will become the owner of much of the above-track infrastructure and the maintenance facilities, and will assume responsibility for funding the refurbishment of the Ganz Mavag fleet. This change will give the GWRC more independence and flexibility in how it configures its services, alongside the NZTA. The NZTA remains the means of providing on-going public funding other than that provided by rates.

The government will assess future metro rail investments on a case-by-case basis. Any Crown capital contributions to future major metro rail projects will be sourced from the consolidated fund and compete with other capital commitments accordingly.

Walking and cycling

Investment in walking and cycling also makes a contribution to economic growth and productivity. To maximise these benefits, the government will direct funding to reduce congestion and/or improve pedestrian and cyclist safety. Investment is being concentrated on fewer, more targeted activities, for example in model communities, rather than spreading the funding across a greater number of activities with a lower overall level of return.

Good progress has already been made in New Zealand's first two model communities — Hastings and New Plymouth. The planned walking and cycling infrastructure for these two communities is expected to be completed over the course of *Connecting New Zealand*. The government will also develop further model community initiatives as funding allows.

These targeted investments will encourage more people to walk and cycle more often, and more safely. They will also help to offer people more transport choices — an important consideration during times of high fuel prices.

The government will support groups with specific transport needs by improving the efficiency and safety of the roading network, continuing to invest in public transport initiatives such as the SuperGold card, and supporting the development of built environments that are walking and cycling friendly.

Transport needs of people with disabilities

In 2008, the government ratified the United Nations Convention on the Rights of Persons with Disabilities. In response, the government has established a Ministerial Disability Committee. A key focus of this Committee is the development of a Disability Action Plan with a specific focus on Canterbury. The transport focus is on the accessibility of the built environment and re-designing disability supports and services. Accessibility of public transport including land transport infrastructure will be considered.

Removing regulatory barriers

The Ministry of Transport has established a cross-modal Regulatory Reform Programme that responds to the government's goals for better and less regulation. The programme is made up of projects and activities concerned with potential short to long-term issues with the regulatory framework for transport. The key purpose of the Regulatory Reform Programme is to improve the way the transport sector performs its regulatory function.

Transport regulation has a large impact on the economy and society. Poor regulation can place unnecessary burdens on business and hinder the government achieving its priorities for the economy and its ambitions for improvements in the quality of regulation. Transport agencies have a duty to consider whether the regulatory system is 'fit for purpose' and, if not, what further opportunities might exist for improving regulatory outcomes. This involves thinking more broadly about what constitutes regulation and what outcomes the government and transport sector want from the regulatory system.

The government is amending key land transport legislation including the Land Transport Management Act, Road User Charges Act and the Public Transport Management Act to improve systems and reduce compliance costs. The transport rules development process is also being revised to speed up rule-making. The intention of these and other legislative changes are to improve the efficiency and effectiveness of the land transport system and to remove unnecessary regulatory interventions.

Reducing land transport greenhouse gas emissions

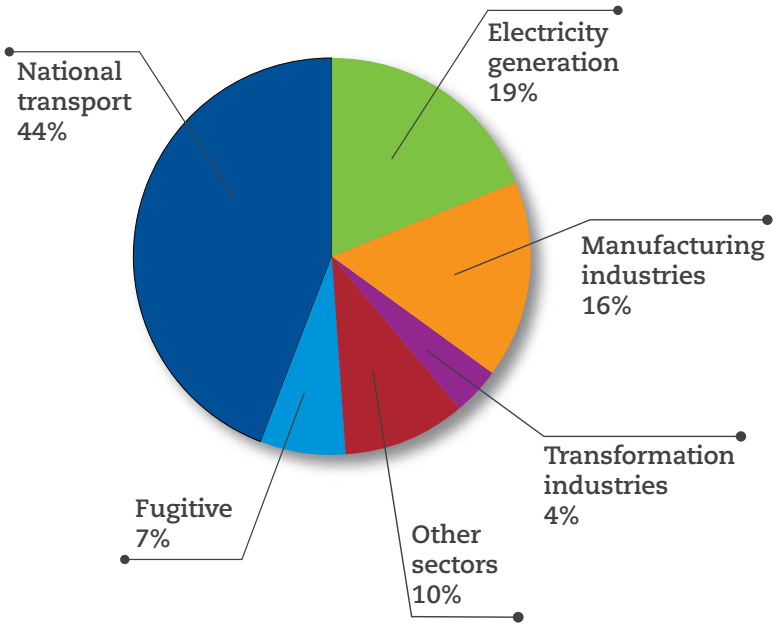
The government has set a target for a 50 percent reduction in New Zealand's greenhouse gas emissions from 1990 levels by 2050. That target will need to be achieved in a future where we expect:

- the cost of greenhouse gas emissions to be increasingly factored into world markets
- technological advances to occur in energy production, electricity systems, and energy management in transport
- the price of oil to rise and become more volatile
- non-renewable energy sources will continue to be an important part of the global energy mix

With transport being responsible for 44 percent of New Zealand's energy sector greenhouse gas emissions, the sector has an important role to play in New Zealand achieving its emission reduction target *(Figure 19)*.

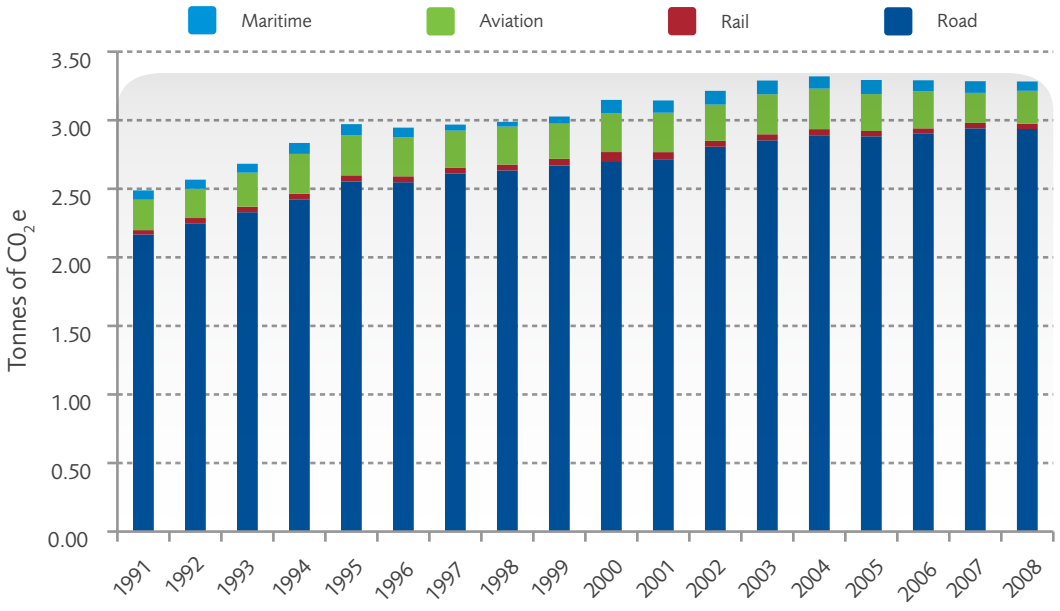
Road vehicles are responsible for the majority of carbon dioxide emissions from transport *(Figure 20)*. The government wants an energy-efficient transport system, and will focus on improving vehicle fuel efficiency.

Figure 19 – Energy emissions by sector in 2009



Source: New Zealand Energy Greenhouse Gas Emissions. Ministry of Economic Development; 2010; p10
(The supply and consumption of energy accounted for 44 percent of total New Zealand emissions in 2009.)

Figure 20 – Tonnes of CO_2 e* per capita from domestic transport



* carbon dioxide equivalent emissions

Source: Ministry of Transport

The government wants a more energy-efficient transport system over time, and for the efficiency of light vehicles entering the fleet to have further improved from 2010 levels.

In addition to improving the efficiency of vehicles, the government will:

- improve modal choice in our main urban areas, so people can make greater use of public transport, walking and cycling, thereby reducing their emissions
- encourage the uptake of more efficient vehicles and low-carbon fuels and technologies, and other efficiency measures in the freight sector
- improve the efficiency and reliability of key freight corridors and the metro passenger networks, and seek better integration of regional freight movement across road, rail, sea, and air

Value for money and sustainable funding

The government, through the GPS 2012 and the NZTA, is sharpening the focus on value-for-money funding decisions. This will drive more fit-for-purpose infrastructure and services. This focus will also encourage better monitoring and contract management to ensure we are getting the standard of delivery, and outcomes, that we are paying for.

The government wants greater value for money from its investment in the transport system. This includes an ongoing focus on lifting the performance of the land transport sector and making best use of existing transport networks.

Our State highways provide critical economic links for our exporters and are a backbone for our tourism market. State highways account for 12 percent of the total roading network but carry half the kilometres driven each year. Over the next 10 years the government will spend more than $19.5 billion on building, maintaining and operating our State highways.

The government is focused on ensuring that we receive the best possible prices for the work that is contracted out for the development and maintaining of our State highways. The NZTA has developed a new State Highway Classification System. This will support better planning, smarter investment, improved customer service and safer roads over the coming decade.

The NZTA and local authorities are expected to ensure that cost-effective measures to improve the efficiency of existing networks are considered as well as investment in new infrastructure. This includes carefully considering sequential developments so that small, iterative investments in existing infrastructure do not take place when more significant investment in redeveloping the same infrastructure is shortly planned to start.

State Highway 2 Matahorua Gorge Realignment between the Hawke's Bay and Gisborne regions.

The new Road Maintenance Sector Task Force will be key to identifying opportunities for efficiencies in the area of road maintenance, operations and renewal activity. This includes innovative products and methods of procurement, and encouraging their uptake through the country.

The government is working to ensure a sustainable funding base for the National Land Transport Fund will continue in future. The revenue generated from road user charges, fuel excise duty and motor vehicle registrations is spent on land transport. However, this will come under some pressure as New Zealanders move to more efficient vehicles, public transport, and alternative fuels, resulting in lower levels of fossil fuel consumption and associated revenue. The introduction of longer-term technology changes will also have an impact.

Driving value for money from our investments in transport is part of the answer, as is making the right choices about what we invest in to get the maximum contribution to our economic growth. Over the coming years, the government will continue to focus on how to manage and respond to demands on the land transport system, and how to best fund it in the future. In doing so, the government needs to ensure that transport consumers receive and are able to respond to price signals, and that they are aware of the cost of their transport choices.

The government will examine the merits of demand management and road pricing mechanisms in their various forms, and the extent to which these could drive improvements in the performance of the transport system of the future.

The government will focus on ensuring transport consumers receive the right price signals and will examine the merits of demand management and road pricing mechanisms over the next decade.

Civil aviation

Summary of the government's key actions

The government's key aviation actions include:

- negotiating air services agreements to provide more access to key trade and tourist markets
- improving safety regulation in key areas, including adventure and agricultural aviation
- developing and promulgating a national airspace policy and an airspace and air navigation plan
- driving greater performance and value for money from the Civil Aviation Authority and Aviation Security Service
- reviewing any market barriers to trade

The aviation sector is largely led by the private sector, although some local authorities have an ownership interest in their local airports, and these arrangements are likely to continue.

International trade in air services is vital to supporting growth in the tourism industry — which has more than doubled since 1990 — and trade in goods carried by air. In a global system that dates back to the 1940s, inter-government arrangements must be in place before international airlines can operate scheduled air services. New Zealand already has around 48 such relationships.

Since 1998, 'open skies' arrangements have been negotiated with many of New Zealand's major developed country markets, including Australia, the United Kingdom, the United States, Germany and Canada.

The government is looking to further remove restrictions within existing arrangements, while at the same time opening up new relationships well ahead of demand, so that airlines and airports can plan with certainty about rights being available and respond with speed to changing market demands. Figure 21 overleaf shows growth in visitor arrivals at New Zealand's ports.

In particular, the government will give priority to expanding opportunities in the fast-growing economies of South and East Asia, and South America.

The government recognises that enhanced air services between these regions has led to the potential for Auckland Airport to play a greater role as a stopover or transit point between Asia and South America. New technology, including ultra-long-range aircraft, is expected to be well suited to developing such air routes in the future. For example, at the time of publication the Boeing 787 is about to enter service after a long development process and Air New Zealand has this aircraft on order.

The government will continue to negotiate new air services agreements to provide more access to our key and future trade markets.

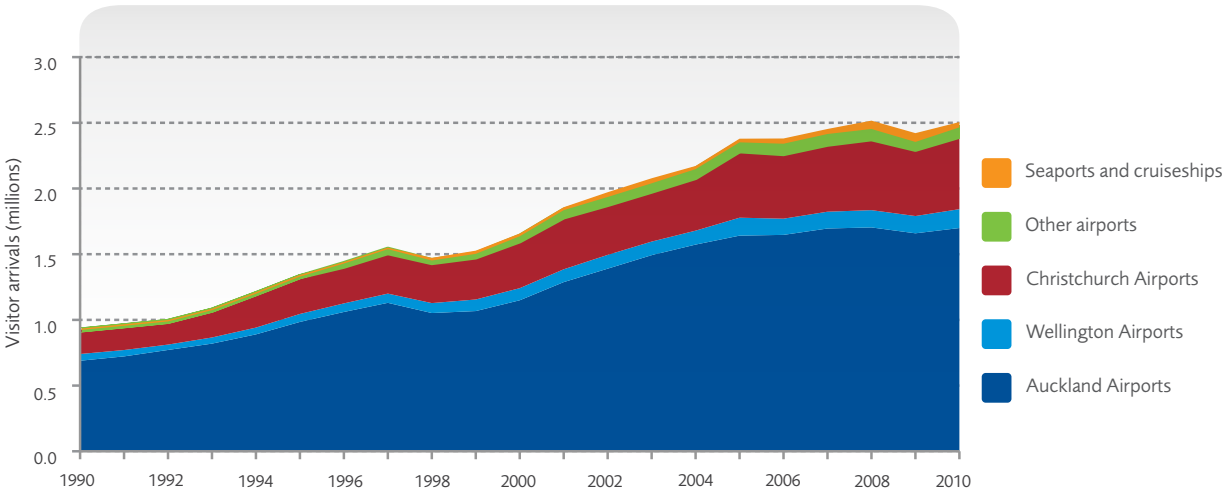
CASE STUDY: International air services licensing

Air services are vital to New Zealand's economy, with almost all tourist arrivals, and 14 percent of exports by value, being carried by air. Air services licensing is the process where airlines are allocated the rights negotiated under air services agreements and are able to offer services to New Zealand.

In 2010/11 alone, four airlines (Air Asia X, China Southern Airlines, Jetstar Asia and China Airlines) were licensed to operate to New Zealand. Between them these airlines are already offering 4,280 seats a week into New Zealand with the ability — and in the case of China Southern, the announced intention — to increase this.

Additional air services can make a significant contribution to economic growth. Work conducted for Auckland Airport estimated that the three services per week operated by China Southern on start-up are expected to bring an additional 25,000 visitors per year to New Zealand and generate $75 million for the New Zealand economy, as well as providing additional freight capacity in the belly hold of these aircraft.

Figure 21 – Visitor arrivals



Source: Statistics New Zealand

The government will also play its role to ensure links between domestic and international transport at airports are as efficient and effective as possible. Our airports are responsible for moving 0.2 million tonnes of exports and imports with a combined value of more than $14 billion each year.

The government is placing an increasing focus on ensuring that all transport Crown entities provide greater value for money. In 2010, value-for-money reviews were initiated for the Civil Aviation Authority and the Aviation Security Service, with follow-up actions to be implemented in 2011/12. The government will continue to initiate this type of review as part of a regular programme over the coming decade to ensure that the Civil Aviation Authority and the Aviation Security Service continue to improve their performance and value for money over time.

The government expects that better and smarter services will be delivered by air transport agencies. Alongside that, the government will reduce the regulatory burden with the aim of improving operational efficiencies of transport Crown entities and reducing private sector compliance costs.

A review of the Aviation Security Service's passenger security charges has reduced the cost of international and domestic air transport. On 1 April 2010, the international passenger security charge was reduced from $15 to $10 (GST inclusive), and the domestic passenger security charge reduced from $4.66 to $4.35. Further reductions from 1 July 2011 saw the international passenger security charge further reduce to $8 per departing international passenger, and the domestic charge reduce to $3.70 per departing domestic passenger (GST inclusive).

The aviation sector operates at much higher and internationally-aligned safety and security standards than is possible on our roads. However, the government is not complacent, and will continue to implement changes to our aviation rules to keep New Zealand requirements aligned with international safety and security standards where that is appropriate and in New Zealand's interests.

The government will shortly introduce new rules for the adventure and agricultural aviation sectors to improve operating standards and regulatory oversight.

Technology changes in air transport and its related infrastructure are driving major advances in efficiency and productivity. The government will work to ensure the aviation regulatory regime adapts to this change in a way that enables high standards of safety and security to be delivered, while ensuring that compliance costs are fully justified. The government will also keep key aviation legislation under review to improve the efficiency and effectiveness of the aviation system, remove unnecessary regulatory interventions and address any aviation market barriers to trade.

National Airspace Policy

Every day, approximately 1,400 flights — including 100 international flights — use New Zealand's domestic controlled airspace. Worldwide, there is a step-change underway in air navigation and airspace management, principally led by satellite-based navigation systems for aircraft. At the same time, satellite-based air traffic management systems and other new technologies are making ground-based instrument approaches and departures at airports less relevant. En route traffic surveillance by primary or secondary radar also becomes less relevant. Together, these developments — some of which are already implemented in New Zealand — will improve safety and bring operational efficiencies to domestic and international air transport, reducing aircraft fuel consumption and emissions to the benefit of the environment.

The aviation regulatory regime will adapt to technological changes to maintain our high standards of safety and security, while ensuring compliance costs are fully justified.

Airspace is a finite resource, similar to the radio spectrum, and without appropriate design, classification and management, the air transport system cannot function effectively. There is currently no system-wide policy development and planning to achieve the optimum levels of safety and efficiency offered by the new technologies. Unless this is addressed, there is potential for operational inefficiency, less than optimum safety, and wasted or delayed investment by the aviation sector.

The government will develop a National Airspace Policy, which would be complementary to the *National Infrastructure Plan* and the GPS 2012. The National Airspace Policy will outline the future direction of airspace design and designation, and the principles that will be followed in decision making on airspace matters. A National Airspace and Air Navigation Plan will be developed to guide the aviation sector regarding future airspace design and the new and emerging technologies for air traffic management systems. The Plan will provide certainty for the sector's future investments in air navigation and air traffic management equipment acquisitions.

Maritime transport

Summary of the government's key actions

The government's key maritime actions include:

- focusing on port productivity
- driving greater performance and value for money from Maritime New Zealand
- establishing a sustainable funding basis for Maritime New Zealand
- improving maritime safety, including a new seafarer qualifications and operational limits framework, and maritime operator safety system
- improving public information on the performance of maritime and freight transport

The maritime sector is largely led by the private sector, although a number of local authorities have an ownership interest in their local ports, and these arrangements are likely continue.

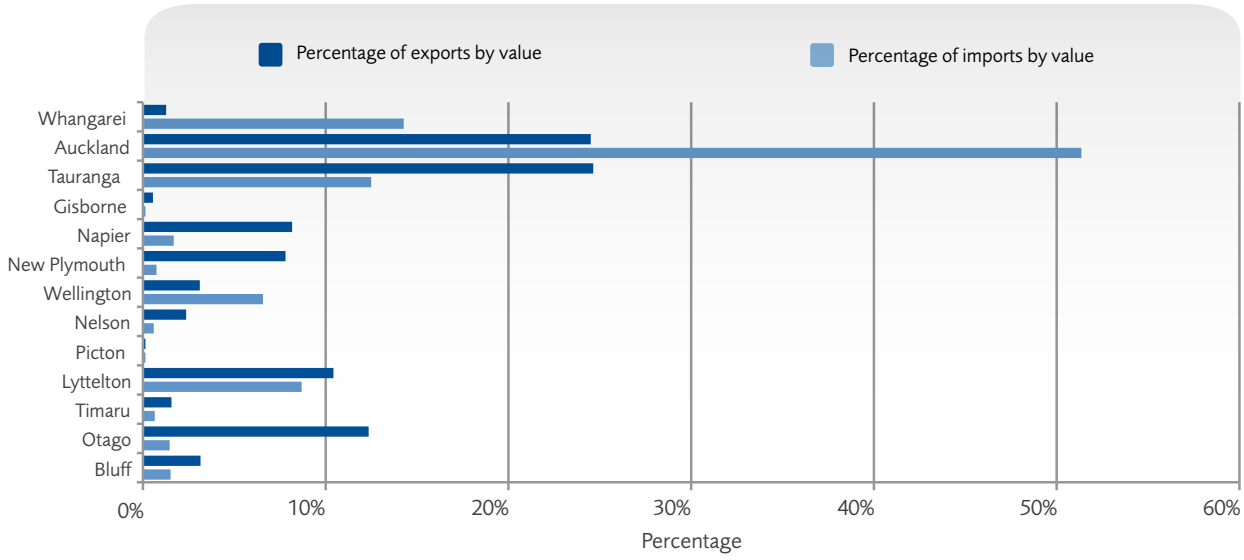
The government will be focusing on improving public information on maritime and freight transport, including research into freight transport futures, to support more informed decision making. The government is also focusing on the productivity of New Zealand sea ports, with a view to how this can be improved.

Our sea ports are responsible for moving more than 46 million tonnes of exports (99 percent by weight of all exports) and imports, with a combined value of more than $66 billion each year *(Figures 22 and 23)*.

Initial work in this area includes the Freight Information Gathering System, which will produce better, more current, information on international and domestic freight flows through New Zealand ports, and the transport modes used for those freight flows. This will help improve future landside investment decisions.

Decisions around the role and number of ports in New Zealand will continue to be made by port owners operating in a commercial environment.

Figure 22 – Distribution of seabourne trade by value 2009/10



Source: Statistics New Zealand

Port productivity

Work is underway to examine the productivity of container movements at the six ports which comprise more than 90 percent of total container volumes in New Zealand. Initial results suggest that New Zealand ports compare well with Australia, but are medium-to-low by world standards.

The new Productivity Commission's work programme recognises that freight transport costs, including port charges, represent a sizeable proportion of international trading costs for New Zealand firms. The Productivity Commission is evaluating factors influencing the accessibility and efficiency of international freight transport services available to New Zealand firms, and opportunities to increase the accessibility and efficiency of these services.

Value for money from the maritime sector

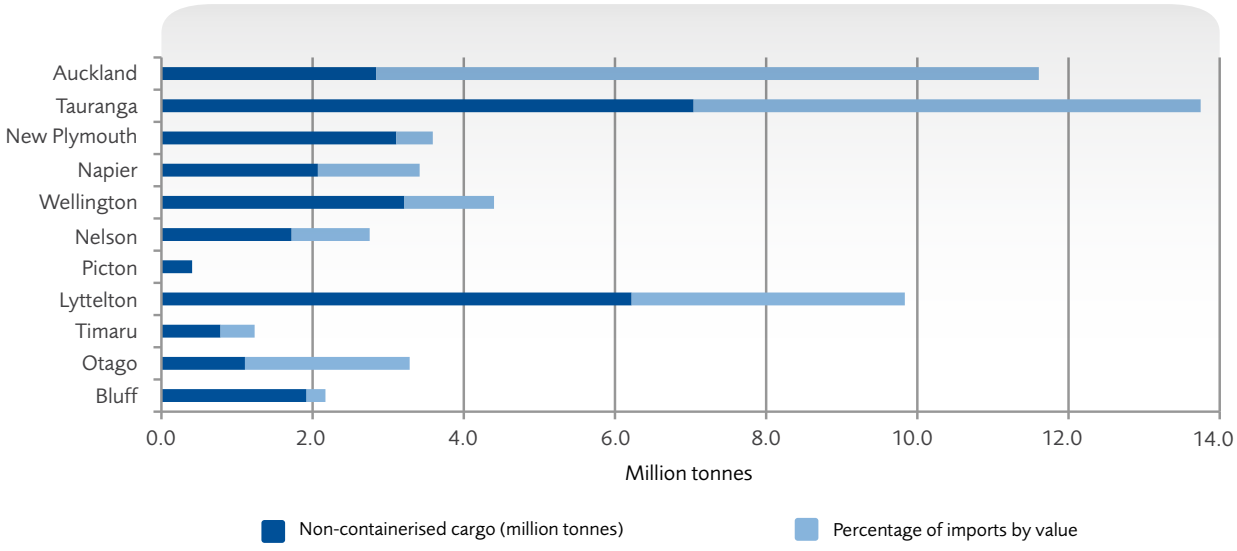
In 2010, Maritime New Zealand undertook a value-for-money review to build a better understanding of its current direction, performance and issues, and to identify some areas for improved future performance and effectiveness.

The review found Maritime New Zealand is a small organisation with a broad range of safety and environmental regulatory responsibilities spread across a diverse maritime sector. Overall, the review concluded that Maritime New Zealand delivers value for money, and identified some areas for improvement.

Maritime New Zealand has developed a programme of work designed to address the change required and reports quarterly on progress. A major project within this programme is the 2011/12 review of Maritime New Zealand funding. The purpose of this review is to ensure that Maritime New Zealand develops a sustainable funding regime that will enable it to deliver on its vision and goals.

The government is focused on port productivity issues, improving public information on maritime and freight transport, and improving the safety of the maritime sector.

Figure 23 – Cargo volumes by port 2008/09



Source: New Zealand Port Sector Report 2010, Rockpoint Corporate Finance Ltd

Note: Excludes Whangarei (6.7 million tonnes) and Gisborne (0.8 million tonnes) according to Statistics New Zealand

Improving maritime safety, security and environmental protection

The government wants to improve safety, security and protection of the marine environment and is working with the marine community to develop a culture that actively embraces these values. The government is moving away from the current model of highly prescriptive rules to a model that allows standards to be developed and changed more rapidly with input from the related sector.

Changes in technology and industry practice are a constant, and having the flexibility to change standards is a key requirement if the industry is to remain viable. Maritime New Zealand will work cooperatively with industry to ensure seafarer competency standards, vessel and equipment standards, and safe operating practices are appropriately tailored to meet the risks of each sector or operation.

Two key building blocks of the new model are the development of a new seafarer qualifications and operational limits framework, and the introduction of a new maritime operator safety system for operators of domestic commercial vessels.

Seafarer qualifications and operational limits framework
Maritime New Zealand is developing a new seafarer qualifications and operational limits framework that meets the requirements of a modern maritime sector — both now and into the future. Implementation of the new system is due in early 2013. It will make it easier for customers to understand and it will also make it easier for Maritime New Zealand to administer, maximising the use of technology to provide accurate online information and enable quick turnaround times.

The benefits to the sector of the new approach include:

- greater emphasis on competence and proven ability
- greater emphasis on practical and assessment components and recognition of quality of sea services
- reduced number of hours of sea service required for entry-level qualifications
- alignment with international standards to ensure portability of qualifications

Maritime Operator Safety System
A new Maritime Operator Safety System (MOSS) for domestic commercial vessel operators is under development and is expected to be introduced in the first half of 2013. The MOSS will enable Maritime New Zealand to work more closely with domestic commercial maritime operators to achieve safety goals. The new system will be flexible and more responsive to industry change, and will require operators to develop safe operating plans that are relevant for their operation and related to their risks.

The proposed new system will be simpler for operators and will be more transparent about who has responsibility for each part of the system. Surveyors will be responsible and accountable for the issue of fit-for-purpose certificates for vessels, and Maritime New Zealand will be responsible for issuing maritime transport operator certificates and subsequent audits. Operators will be responsible for ensuring their vessels operate in accordance with their approved plans.

New Zealand's maritime sector operates to internationally-aligned safety standards. The government will continue to implement changes to our transport rules to keep New Zealand requirements aligned with international safety, security and environmental protection standards, where that is appropriate and in New Zealand's interests. As an island nation that is dependent on foreign flagged vessels to carry our trade, we need to ensure that the safety and marine environment protection standards applied to those vessels are effective.

CASE STUDY: Long-term sea freight scenarios

There has been considerable debate within the maritime transport sector about the sector's future. This is being driven by developments in overseas markets, the growing freight task in New Zealand, and by uncertainty and concerns for New Zealand's supply chains. In most cases, however, the debate focuses on short-term issues and impacts only on the sector.

The government commissioned research on some of the main ideas in the debate, and to undertake a high-level assessment of their potential impact on New Zealand's economy in the longer term (20 to 30 years).

The research found that none of the alternatives improved on the base case, which is the natural evolution of the market-led sector. Although the differences involved were marginal across the whole economy, there were inherent inefficiencies in the alternatives. These included, among others, extra delays in ports and reduced competition in ports and shipping markets.

The main conclusions:

- New Zealand's economic development could potentially be worse off under some of the alternatives being raised for restructuring the maritime transport sector. The best approach for the government is to leave final decisions in the hands of shippers and let ports react to those with their own investment decisions.
- The government's role should be to ensure the right price signals are in place and land-based infrastructure, such as road and rail, can meet the needs of the freight industry as it evolves.
- Much of the debate has focused on supply-side factors, which essentially is the 'build it and they will come' approach. The report stressed the need to consider both demand-side as well as supply-side factors in thinking about long-term sea freight scenarios.

Road safety

Summary of the government's key action

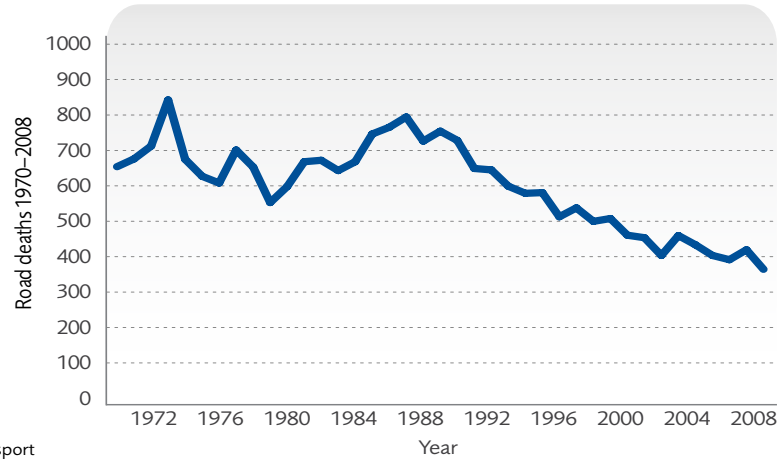
The government's key road safety action is to implement the new Safe System approach, including:

- increasing the safety of young drivers
- reducing the impact of alcohol and drug-impaired drivers
- improving the safety of our roads and roadsides
- increasing the safety of motorcycling
- helping people to drive to the conditions and encouraging them to comply with safe speed limits

New Zealand has made good progress in reducing the road toll, more than halving the number of road deaths since the early 1970s *(Figure 24)*.

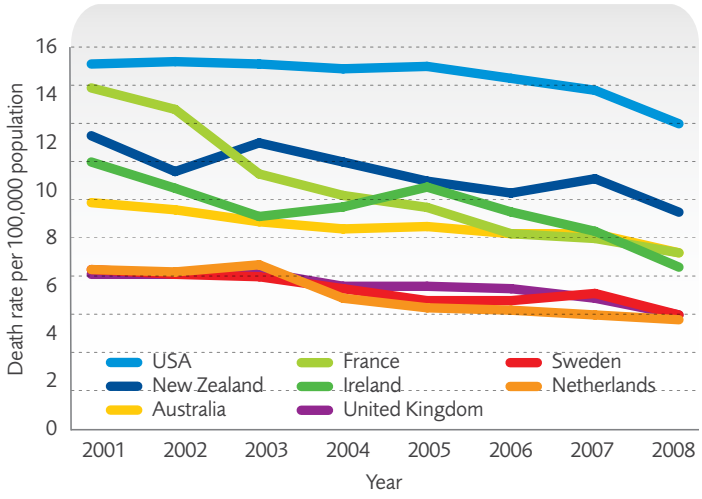
However, despite that improvement, our road death rate remains one of the highest in the OECD *(Figure 25)*.

Figure 24 – Number of road deaths 1970–2008



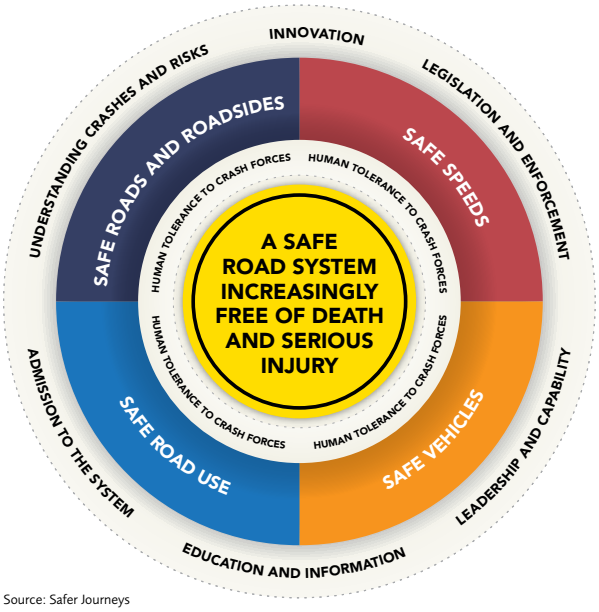
Source: Ministry of Transport

Figure 25 – Road deaths per 100,000 population



Source: Safer Journeys: New Zealand's Road Safety Strategy 2010–2020

Figure 26 – The Safe System



Source: Safer Journeys

The carnage on our roads has a significant economic impact — the total social cost of motor vehicle injury crashes in 2009 is estimated at approximately $3.7 billion. This includes $1.38 billion for fatalities, $1.53 billion for serious injuries, and $0.76 billion for minor injuries.

Young drivers between 15 to 19 years of age are over-represented in all types of crashes. While they make up 6 percent of all licensed car drivers, they account for 14 percent of minor injury crashes, 15 percent of serious injury crashes and 12 percent of fatal crashes.

The government is committed to delivering a safer transport system for all New Zealanders. Road safety is a priority because of the numbers of deaths and injuries we suffer each year. The government released the Safer Journeys road safety strategy in March 2010. Safer Journeys and its associated action plan sets out the government's comprehensive approach to improving safety on our roads over the next decade, and the government's vision for 'a safe road system that is increasingly free of serious injury and death'. We want to see a sustained reduction in deaths and serious injuries on our roads over time.

Safer Journeys is based on a new Safe System approach to road safety in New Zealand *(Figure 26)*. The Safe System approach means we need to work across all elements of the road system — roads and roadsides, speeds, vehicles, and road users — to reduce the likelihood of crashes occurring, and to minimise the consequences of crashes that do happen.

The total government investment available to improve road safety under the GPS 2012 is $540 to $700 million per year from 2012/13.

The government is implementing the Safer Journeys road safety strategy and is making a major financial investment in road safety. This is to both deliver a sustained reduction in deaths and serious injuries on our roads over time, and to reduce the $3.7 billion annual social cost of road accidents.

Safe roads and roadsides

The government will work to improve our roads so that each type of road will eventually have a recognisable and distinctive set of self-explaining features such as signage, lane width, road markings and speed limits. This work will ensure roads are predictable, so that road users can expect particular safety features on each type of road. This should encourage people to travel at speeds that best fit the design and function of the road.

The government will also work to make roads forgiving, so that they help to reduce the consequences of those crashes that do occur. We will do this through installing median barriers and removing or protecting roadside objects in known black spot areas.

Safe speeds

A Safe System manages the forces of a crash to a level that the human body can tolerate without serious injury. The impact of a crash depends on the conditions of the road, the vehicle, the vulnerability of the road user and the travel speed. Small reductions in speeds greatly reduce the likelihood of a crash and increase the chances of surviving crashes that do occur. Our long-term goal is a significant reduction in speed-related crashes. The government will initiate a range of actions including ensuring the uptake of effective safe speed limits in high-risk urban and rural areas.

Safe vehicles
A Safe System means we have a vehicle fleet where all of the cars, vans, motorcycles, buses and trucks have the latest proven vehicle safety technologies. Overseas manufacturers, importers and dealers have an important role to play in providing safe vehicles to the market at an affordable price.

Under a Safe System where everyone has a responsibility for road safety, proven safety features should not be offered as optional extras or sacrificed for performance and appearance. Workplaces also have a responsibility to provide safe vehicles for their employees. This links with the government's *Workplace Health and Safety Strategy for New Zealand to 2015*, which has workplace vehicles as one of its eight national priorities.

Safe road use
A Safe System assumes that even responsible road users will sometimes make mistakes. However, this does not mean that road users have no role to play in improving road safety. A Safe System demands safe and responsible road use, so reducing unsafe behaviour is crucial. Responsible users are competent, alert, comply with the road rules and are unimpaired by alcohol, drugs, distraction or fatigue. They take steps to improve their own safety and the safety of others. As citizens they demand and expect safety improvements, for example from vehicle manufacturers and road controlling authorities.

A Safe System assumes road users receive adequate information and education so they understand how to be a responsible road user.

The government will initiate a range of actions, including:

- making the restricted licence test more difficult, to encourage 120 hours of supervised driving practice
- strengthening the theory, basic handling and restricted licence test for motorcyclists
- implementing an alcohol interlock programme
- developing education and enforcement programmes for use with communities at risk (regions, ethnic groups and age groups)
- collecting data on drivers with a blood alcohol concentration between 0.05 and 0.08 for further decision making by government
- implementing a zero blood alcohol concentration for drivers under 20 years of age

The action plan sets out a range of actions that will be undertaken to progress the focus areas. Further action plans will be prepared and released to cover the years 2013 to 2020.

CASE STUDY:

Safer road engineering is a crucial part of the Safe System approach to road safety. Once completed, the current RoNS programme will lift the percentage of kilometres travelled on four star roads in New Zealand from 28 percent to 36 percent. This increase will also contribute to a reduction in the percentage of kilometres travelled on three star roads from 40 percent to 35 percent. Significant investment continues to be made in numerous smaller projects to engineer better safety outcomes on our roads. Over the next 3 years the government intends to invest between $450 and $720 million on maintaining or improving the safety of our State highway system. This investment will benefit families, individuals, and businesses that use the roading system on a daily basis.

Muldoon's Corner

Improvements to a section of the Rimutaka Hill Road, which takes in the infamous Muldoon's Corner, are being undertaken. The section being worked on extends for one kilometre from the summit down the Upper Hutt side of the hill. It will greatly improve safety for motorists by easing a number of tight bends as well as providing greater forward visibility. It will solve the current problem of narrow lanes and shoulders as well as easing the tight curves which make it difficult for trucks to pass safely when travelling in opposite directions. The improvements have been designed around an average speed of 55km per hour which is a significant improvement on the current corner advisory speeds of 25 to 35km per hour.

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The images on the cover (top left and bottom right) and on pages 14, 19, 21, 22, 24, 27, 32, 41 and 42 are courtesy of the NZ Transport Agency.

Image on page 10 is courtesy of KiwiRail.

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