CHAPTER 13

AUCKLAND’S TRANSPORT
### STRATEGIC DIRECTION 13

CREATE BETTER CONNECTIONS AND ACCESSIBILITY WITHIN AUCKLAND, ACROSS NEW ZEALAND AND TO THE WORLD

<table>
<thead>
<tr>
<th>TARGETS</th>
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<tr>
<td>Double public transport from 70 million trips in 2012 to 140 million trips by 2022 (subject to additional funding)</td>
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<td>Increase the proportion of trips made by public transport into the city centre during the morning peak, from 47% of all vehicular trips in 2011 to 70% by 2040</td>
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<td>Reduce road crash fatalities and serious injuries from 506 (2010) to no more than 410 in 2020</td>
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<td>Reduce congestion levels for vehicles on the strategic freight network to at or below the average of 2006-2009 levels (average daily speed of 45kph and average delay of 32 seconds per kilometre) by 2021</td>
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<td>Increase the proportion of people living within walking distance of frequent public transport stops from 14% (2011) to 32% by 2040</td>
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<th>PRIORITIES</th>
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<td>1</td>
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<td>Manage Auckland’s transport as a single system</td>
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AUCKLAND EXPECTS SIGNIFICANT IMPROVEMENTS IN ITS TRANSPORT SYSTEM SO THAT IT WORKS WELL FOR BUSINESS, RESIDENTS AND VISITORS, SUPPORTS AUCKLAND’S DEVELOPMENT, AND CONTRIBUTES TO THE HEALTH AND SAFETY OF ITS PEOPLE AND THE CHARACTER OF ITS PLACES.

KO TE ARO WHAKAARO O TĀMĀKI MAKAURAU, KA PIKI NGĀ PĀINGA, TE PŪNAHA RERENGA-Ā-WHENUA, KIA PUTA AI ŌNA HUA KI TE AO PAKIHI, IWI KĀINGA, MANUHIRI HOKI ME TŌNA ĀWHINA I TE TUPU O TĀMĀKI MAKAURAU. KA WHAKARATO I TE HAUORA ME TE WHAKAMARUMARU I NGĀ IWĪ ME TE ĀHUA O ŌNA WĀHI KATOA.

735. Auckland’s transport system is overburdened and inefficient. Years of underinvestment in public transport, existing settlement patterns and the narrow isthmus, compounded by decisions taken over the past half century, mean that Aucklanders rely heavily on private cars as their primary transport mode. Roads and motorways are heavily congested and further expansion is severely constrained. The projected population growth over the next thirty years will exacerbate the problems unless radical transformation occurs.

736. Auckland requires an integrated transport network that enables people and goods to move freely and efficiently, while respecting the need for place-making. The network comprises motorways, roads and streets, public transport (ferries, buses and trains), footpaths and cycle-ways, ports and airports. A goal of the Auckland Plan is to integrate all transport components using a single system approach. This requires strategic investment and close co-operation between the Auckland Council and central government.

737. The three components required to address current congestion problems, accommodate future business and population growth, and move to a single transport system are, to:

- improve and complete the existing road and rail network
- encourage a shift towards public transport
- support environmental and health objectives through walking and cycling.
The transport system must integrate with land use to ensure that transport links support growth centres and transport corridors as set out in this Plan. This will necessitate improvements to the existing road and rail system. Several connections must be completed to optimise investment to serve the needs of Aucklanders; for example, the City Rail Link and the Auckland Manukau Eastern Transport Initiative (AMETI).

Currently, 85% of trips in Auckland are made by private car, and around 15,000 extra cars join Auckland’s roads every year. Although motor vehicles will remain an important element of the transport system, improving public transport options and connections along key transport corridors will encourage commuters to use public transport. Such a shift will reduce congestion, and free up the roads for freight transport and commercial travel (thus improving productivity and competitiveness), and journeys where there is no alternative to using cars.

Aucklanders are already turning to public transport, with patronage increasing from 65 million to 70 million between 2011 and 2012. By 2040, the number of public transport trips per person per annum will have increased from 44 to 100, with all Aucklanders making two trips by public transport every week, compared to only one trip at present. To reach this target, it will be important for patronage in Auckland to reach 140 million trips by 2022 - a doubling from current levels. This will require a greater allocation of funding to public transport than has happened in the past.

Investment in public transport will improve the resilience of the transport system through strengthening its capacity to handle unexpected events. Pollutants from motor vehicles must be reduced. Increased public transport use, walking and cycling reduce fossil fuel consumption, improve energy efficiency and decrease dependence on imported fuels. Increasing the proportion of travel by public transport will reduce carbon emissions and mitigate the effect of transport on climate change. Transport currently accounts for 39.7% of Auckland’s greenhouse gas emissions (see Chapters 7: Auckland’s Environment, and 8: Auckland’s Response to Climate Change). The transport sector needs to reduce its own emissions by 40% by 2040 (based on 1990 levels), to help Auckland achieve its reduction targets.

As well as encouraging Aucklanders to use public transport, the Auckland Plan incorporates measures to improve the safety, personal security and attractiveness of walking and cycling alternatives. Across all of Auckland by 2040, 45% of trips in the morning peak are targeted to be non car-based (walking, cycling or public transport) compared to 23% at present. To achieve this requires good street design and integrated planning. Cycleways and footpaths complement the public transport network and the single system approach. These measures will enhance the quality and character of Auckland and help build healthy communities and enable more active lifestyle choices.

Achieving the vision for Auckland’s transport system requires the Auckland Council to work closely with central government and the New Zealand Transport Agency (NZTA) to optimise funding and maximise the benefits from current and future transport investment. Aucklanders overwhelmingly support the need to improve the transport system. Different means of funding this investment are being considered.
Through the co-ordinated activity enabled by the Auckland Plan, much can be achieved within one decade of action:

- in 2016 a new, all-electric fleet will provide reliable, high-quality and fairly priced train services. The modern and environmentally clean service will attract 48,000 passengers a day or 17.5 million passenger trips p.a.
- in 2016 Waterview, the final major motorway connection, will be opened. This will enable an alternative north-south link, both within the region and between regions, significantly reducing the pressure on State Highway 1 and local roads.
- in 2021 the City Rail Link will be completed. Britomart will become a through station and Auckland’s entire rail network will benefit from rapid rail access. The link will encourage new development close to stations. The metro rail service will reduce pressure on bus services to the city centre, and add to the appeal of public transport over private cars.
- Auckland’s transport system will be managed as a ‘single system’ that optimises all major routes and gives customers real-time information on travel choices.
- the provision of universal ultra-fast broadband will aid telecommuting, allowing increasing numbers of Aucklanders to work from home or to travel at off-peak times, thus reducing peak congestion.
- increasing attention to the needs of cyclists and pedestrians will improve the safety of Auckland’s streets and encourage people to commute by walking and cycling. This will benefit their health and reduce pollution and traffic congestion.

What follows in this chapter are:

- the four strategic transport priorities for Auckland:
  1. Manage Auckland’s transport as a single system
  2. Integrate transport planning and investment with land-use development
  3. Prioritise and optimise investment across transport modes
  4. Implement new transport funding mechanisms
- the three-decade outline of transport investment and action aligned to the broader outcomes sought in this Plan.
A single, integrated transport system is required to successfully balance need, optimise what we already have, and align effort. Managing and developing the transport system in future as a single system is a key feature of this Plan.

Auckland Transport and the NZTA must forge strong working relationships to implement the single system approach.

Improvements to Auckland’s transport system are expected to reduce traffic congestion over the next 10 years. However, growth in population and employment activity means that congestion is forecast to worsen. A combination of measures will be required to manage congestion in Auckland:

- investing in, and integrating public transport and walking and cycling networks to provide convenient and efficient alternatives (supporting intensive land use)
- completing the state highway network, upgrading the regional arterial road network, and selected improvements to roads where network benefits would be achieved
- putting in place traffic management techniques (such as signal optimisation, ramp metering, freight priority lanes) to optimise the road network
- providing travel demand management programmes (such as school travel plans, parking management, pricing, increasing vehicle occupancy, and viable alternatives to driving/owning a car).
1. Use a single system approach in the planning, design, management and development of our transport system (motorways, state highways, arterial and local roads, freight, rail, bus and ferry services, walking and cycling, ports and airports).

2. Use travel demand management techniques, such as travel plans for schools and businesses, to manage the growth in demand for private vehicle travel and improve the way existing infrastructure networks operate, before providing additional capacity to the transport system.

3. Achieve the appropriate balance between movement and place, considering capacity (incorporating the safe movement of people and goods), and character (recognising the role of road/street in the urban setting and types of buildings/landscape present or planned), and acknowledging the role of transport to assist in place-shaping (see paragraph 751 of this chapter and the design principles in Chapter 10: Urban Auckland).

4. Ensure that long-term land use and activities drive long-term transport functionality, (taking into account the existing and proposed transport network), and that transport investment aligns with growth as envisaged in this Plan.

5. Optimise existing and proposed transport investment.

6. Establish corridor management plans that account for place-shaping.

7. Recognise existing community investment and the need to enable connectivity between and within communities.

8. Align community expectations in urban areas with urban levels of service, particularly with realistic expectations around levels of congestion.

9. Align community expectations in rural areas with rural levels of service, particularly acknowledging limited opportunities for alternatives to motor vehicle travel.

10. Ensure that transport is sustainable in the long term, minimises negative impacts on people’s health and the built and natural environment, and reduces our dependence on fossil fuels (see Priority 2 Chapter 7: Auckland’s Environment).

11. Improve the capability of the transport system to withstand adverse events. (See Priority 4, Chapter 7: Auckland’s Environment, and Priorities 1 and 2, Chapter 8: Auckland’s Response to Climate Change).

749. When developing policy and priorities for initiatives and investment, all transport planning and delivery partners are expected to implement the principles in Box 13.1.

750. Transport impacts on the quality of our urban and rural places. Motor vehicles have tended to take precedence over other road users.

751. In addition to the single system principles above, transport planning and delivery partners are expected to achieve a balance between movement and place functions. Where they conflict, greater emphasis will be given to place function than has traditionally occurred in Auckland. At times, in a town centre for example, road reserve (includes carriageway and footpath) has a critically important place function in addition to its movement function. This Plan determines that, in such cases, pedestrians will be considered first.

752. Streets that serve local communities, for example in local centres, have a strong place function and must have high levels of amenity. All transport infrastructure improvements and redevelopments should be assessed against the good design and environmental design principles outlined in Box 13.1 and Chapter 10: Urban Auckland.

**Directive 13.1**

Manage Auckland’s transport system in accordance with the principles in Box 13.1 and review existing policies to reflect Auckland’s single system transport approach and principles.
To plan for Auckland’s future transport, the role and function of each mode in the system should be determined, in order to manage and develop transport effectively as a single system. This helps determine the balance between movement and place.

In addition to the balance between movement and place, the layout of blocks/streets and parking arrangements affect the quality of our urban and rural places. Chapter 10: Urban Auckland addresses these issues.

**DIRECTIVE 13.2**

Manage Auckland’s transport system according to the following transport functions:

- international – seaports and airport
- national – inter-regional connections by road, rail, sea and air
- Auckland-wide – those parts of the transport system that provide safe and efficient movement of people and goods through all or parts of Auckland
- local – those parts of the transport system that provide safe, local access and connectivity, and that support communities.
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AUCKLAND'S TRANSPORT

...
INTEGRATE TRANSPORT PLANNING AND INVESTMENT WITH LAND-USE DEVELOPMENT

PRIORITY 2

755. For the transport system to support Auckland’s vision and future growth and development, it must support the six transformational shifts and the land-use directives of this Plan. The following must be effected:

- transport investment and services, especially public transport and regional arterial roads, must align with areas of future growth and development
- the system must be easily accessible and ensure reliable journey times
- particular emphasis must be given to freight movement and other related business travel on international, national, and Auckland-wide transport corridors
- public transport services, especially bus services, must be provided for communities most in need (see Chapter 1: The Southern Initiative)
- the system must be designed for safe and universal access for all, including children, older persons and those with disabilities
- the system must be designed to reduce exposure to poor air quality and to increase the use of renewable transport fuels
- in particular, safe and convenient walking and cycling routes must be developed, to encourage those modes of travel for commuters and others
- appropriate levels of service must be provided for those communities with limited public transport options, especially rural communities

- transport projects must recognise and contribute to place-shaping
- transport, particularly roads, walkways and cycleways, must create connections between and within communities
- a change in parking strategy and standards is required to encourage intensification, mixed-use development, more efficient use of land, and shifts to walking, cycling and public transport (see Chapter 10: Urban Auckland)
- a more rapid rate of investment is needed, requiring new forms of revenue.

DIRECTIVE 13.3
Develop Auckland’s transport system in line with the directions set out under Priority 2 and the sequenced investments set out under Priority 3 of this Chapter.

756. Three particular transport projects are critical to Auckland’s future growth – the City Rail Link, the AMETI and East-West Link combined project, and an additional Waitematā Harbour Crossing.
The City Rail Link (CRL) will significantly improve the Auckland rail network. It is a proposed 3.5 kilometre underground rail link between Britomart and Mt Eden Station on the western rail line, which will provide three new stations in the central city. It will address the capacity constraints at Britomart, enable future increases in rail service frequency across the whole rail network, and add new rail lines to the network (such as rail to the Airport).

Eighty per cent of submitters to the Draft Auckland Plan who referred to the CRL supported its construction. The CRL is the foremost transformational project in the next decade. It creates the most significant place-shaping opportunity, as the entire city centre would be within 10 minutes’ walk of a railway station. As well, many more rail trips across Auckland could take place as a continuous ride without needing to transfer.

As shown in Table 13.1, the CRL will dramatically reduce travel times to and through the city centre, and people will have rail access to more parts of the city centre. For example, a public transport trip from New Lynn to the future Aotea Station will reduce by 55% from 51 to 23 minutes, while a public transport trip from Panmure to Newton will decrease by 33% from 40 minutes to 27 minutes.

The CRL will facilitate new commercial and residential development, and access to employment and educational opportunities not just for the city centre, but for all communities on the rail network. For example, Manukau and New Lynn town centres become more attractive as places to live and work because of the improved rail access to the city centre and across the network. The Auckland Council sees the CRL as a key enabler of increasing employment in the City Centre and metropolitan centres on the rail network.

The CRL will help address congestion in the central city road network and enhance the ability of road corridors to handle the number of buses moving to/from the city centre, which, if left unaddressed, would limit the growth of the city centre and Auckland. This supports the planned refocusing of the bus network in outer areas to act as feeders to the rapid transit network. In addition, the CRL will improve transport choices for Aucklanders and reduce the environmental impact of the transport system.

Significant redevelopment has resulted from the initial upgrade of Auckland’s rail network, including the double-tracking of the western line and the reopening of the Onehunga line, especially around Britomart, Newmarket and New Lynn stations, demonstrating a positive market response to investments in rail. The CRL will focus growth around Auckland’s rail lines, supporting a more intensive city centre; the regeneration of traditional town centres; and the further development of newer centres, such as Sylvia Park.

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**Table 13.1 Travel Times to the Future City Rail Link Stations**

<table>
<thead>
<tr>
<th>From</th>
<th>To Intended Location</th>
<th>Travel by Train (minutes)</th>
<th>% Improvement in Travel Times</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Before CRL</td>
<td>After CRL</td>
</tr>
<tr>
<td>New Lynn</td>
<td>Aotea Station</td>
<td>51</td>
<td>23</td>
</tr>
<tr>
<td>Morningside</td>
<td>Aotea Station</td>
<td>39</td>
<td>14</td>
</tr>
<tr>
<td>Onehunga</td>
<td>K’ Road Station</td>
<td>47</td>
<td>27</td>
</tr>
<tr>
<td>Manukau Centre</td>
<td>K’ Road Station</td>
<td>61</td>
<td>42</td>
</tr>
<tr>
<td>Newmarket</td>
<td>Aotea Station</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Panmure</td>
<td>Newton Station</td>
<td>40</td>
<td>27</td>
</tr>
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</table>

* Based on 2010 analysis.
The Auckland Council will underwrite the cost of protecting the City Rail Link route, acquire properties and prepare an updated business case for the CRL, compared with alternative options. The CRL, together with the purchase of new trains and improvements to the rail network, is estimated to cost $2.4 billion, and new funding tools to help pay for this project will be required. Auckland Council and Auckland Transport are developing a business case to support the funding and implementation of the CRL.

The CRL proposal is being developed as part of an integrated land-use and multi-modal transport approach, which includes:

- developing an integrated multi-modal package to optimise the accessibility of the city centre by all modes of transport. This includes improvements to the city centre bus network to address emerging capacity issues on key bus corridors, and to deliver customers closer to key city centre destinations
- identifying the potential for more housing and employment around railway stations and their catchments, and ensuring that land-use planning rules support this
- working with private sector partners to develop exemplar transit-oriented development projects around both the CRL and suburban railway stations
- reconfiguring bus services to act as feeders to rail at interchanges such as New Lynn, Onehunga, Manukau and Panmure
- providing additional park and ride sites to allow access to rail in locations without good public transport options.

The CRL is the top priority transport project for Auckland, with a targeted date to become operational in 2021.
Growth of business, employment and residential development in eastern Auckland has created a pressing demand for transport investment. The Auckland-Manukau Eastern Transport Initiative (AMETI) and the East-West Link are closely related because of their geographic location and interdependencies, particularly in relation to freight and east-west traffic movements. AMETI is a package of transport improvements proposed for the Glen Innes - Panmure - Pakuranga - Botany corridor, to serve the eastern suburbs. These areas have a forecast population growth of up to 25,000 people over the next 20 years, and good transport options will be needed to cater for them. AMETI aims to provide a strategic transport link between the eastern suburbs, unlocking the economic potential of the area. AMETI will provide for local journeys and public transport on the Panmure Bridge route, while Waipuna Bridge and the south-eastern highway will become the primary freight and business traffic route through to central Auckland.

The East-West Link is a proposed strategic transport corridor that will connect the Western Ring Route (SH20) at Onehunga and the Southern Motorway (SH1), providing improved access to the rail freight hub at Metroport and major employment areas, such as East Tāmaki. This link will address the high traffic and freight movements on congested local roads, provide efficient freight movements between SH20 and SH1, and between industrial areas and the port and airport. This link will also enable east-west improvements for public transport, walking and cycling. The total cost of both projects is estimated to be $2.6 billion.

**DIRECTIVE 13.4**

Undertake a detailed business case and progress planning, route protection, land acquisition and an above-ground, land-use plan to support the development and completion of the City Rail Link by 2020.

**DIRECTIVE 13.5**

Jointly progress planning for AMETI and the East-West Link and implementation by 2021.
Auckland is likely to need an additional harbour crossing by approximately 2030 to move increasing volumes of freight and a growing population. The capacity of the transport network will need to increase, to respond to the pressure on the state highway network and remove constraints on economic growth. While this Plan foresees significant business and employment growth in the north, large numbers of future employees will still travel from the North Shore around the Auckland isthmus and further south. The additional crossing must make provision for road and public transport (rail), and will require significant investment beyond that which can be delivered by traditional funding methods, requiring new revenue tools.

An additional harbour crossing would improve the resilience of Auckland’s transport infrastructure and provide new and better connectivity into and through the central city. Several feasibility study reports on the next crossing have been completed, including a 2010 study comparing a bridge with a tunnel, without recommending either option. Submissions to the Auckland Unleashed discussion document show that Aucklanders prefer a tunnel to a bridge.

The tunnel option aligns the west of the city centre from Esmonde/Onewa Roads to the Wynyard Quarter, emerging around Wellington Street. It has provision for rail, and is estimated to cost $5.8 billion. This alignment would future-proof suburban rail for a Gaunt Street station and involve the removal of the Victoria Park viaduct completely when the additional crossing opens. With the western alignment, there will be complementary improvements for rail and road access to the port undertaken in the second decade (see Figure 13.2). Auckland Council acknowledges that there are different views on the alignment of the new crossing, particularly around a possible eastern alignment.

The additional Waitematā Harbour Crossing will make provision for rail, because of the anticipated population and business growth north of the bridge. It will also form a key component of the single system approach to Auckland’s transport. Rail to the North Shore will impact on future growth opportunities in northern Auckland, and initial rail route options are being investigated. Long-term urban density possibilities, and the demand for travel by rapid transit, will be taken into account when considering these route options. Further detailed studies will look at the economic, social and environmental benefits and costs associated with the various options. Regardless of the option decided on in the future, rail to the north will be a substantial investment. It is unlikely that any physical work on rail north of the crossing will commence within the period of this Plan.
DIRECTIVE 13.6

Jointly progress planning for an additional Waitematā Harbour Crossing with further investigation of tunnels and future-proofing of rail.

757. The upper North Island comprises four regions — Northland, Auckland, Waikato, and Bay of Plenty. Combined, these regions host the majority of New Zealand’s population and economic output. The upper North Island contains:

- New Zealand’s three largest ports (by volume) and the largest international airport, which on a combined basis, accounted for 53% of total trade in 2010 by volume and 67% by value
- a steel mill, oil refinery, and one of two cement plants
- a high and growing proportion of New Zealand’s population (53%)
- a significant proportion of employment (50%), and GDP (53%).

758. Inter-regional freight in the upper North Island is forecast to grow by 100% over the next 25 years, with roads expected to account for 86% of transport movements.

759. A strategic alliance has been formed between the four regions to maximise the sustainable development opportunities for the Upper North Island, and their contribution to New Zealand. Transport is a key component in making the movement of goods and people within and between regions more cost-efficient and sustainable.

760. Our international and inter-regional connections are as important as our internal connections (see Box 13.5). Auckland has the country’s principal international trade seaport (Ports of Auckland) and airport (Auckland Airport). These, together with the ports of neighbouring Northland, Waikato and Bay of Plenty, comprise a significant proportion of New Zealand’s trading ports.

761. Port and airport facilities constitute huge private and public investment, and are essential for New Zealand’s economy. Their long-term operations must be protected, as well as the transport networks that service them.

762. Ports of Auckland plays a significant role in the national freight system and creates economic value for Auckland, the upper North Island and New Zealand.

763. The upper North Island must be able to meet the short- and long-term growth requirements of an export-driven economy, through the capacity of its ports and the freight transport system. Integrated and co-ordinated capacity development is needed to meet future freight demand and maintain the necessary port infrastructure capacity.

764. To determine the long-term role (longer than 30 years) of the Ports of Auckland in the upper North Island freight network, and inform the long-term strategic choices for the Auckland waterfront (including the Unitary Plan), Auckland Council, in conjunction with upper North Island stakeholders, will lead a study of port development options for Auckland which will:

- take a long-term (30-100 year) view
- assess future freight demand to jointly agree on likely future port infrastructure capacity requirements
- based on the above information, model a range of development options for the Ports of Auckland
- address the community’s view on port development, noting that the current provisions of the Regional Plan: Coastal contain the following policies:

  “Any application to reclaim land in any Port Management Area shall demonstrate that:

  - there is no practicable alternative to the proposed reclamation, including the use of existing facilities and existing land-based areas in the region; and
  - it is the most appropriate form of development; and
  - adverse environmental effects will be avoided, remedied or mitigated.”
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DIRECTIVE 13.7
Provide for the long-term needs of the Port of Auckland and Auckland Airport in an appropriate and environmentally sustainable manner, to support New Zealand’s international freight, trading competitiveness, and visitor industry.

765_ Based on current information, Auckland will continue to need a major port on the Waitematā Harbour to meet the overall freight demand of the upper North Island. The study of Auckland’s position within the upper North Island may confirm the status quo, identify different configuration alternatives at the current port locations, or identify as yet unexplored alternative locations for port infrastructure.

766_ The Resource Management Act (1991) planning framework for the port area will be developed as part of the Auckland Council’s Unitary Plan. That plan will take account of the Port of Auckland study. Any proposed development of the port will be subject to the full resource consent process.

767_ The Auckland Plan does not endorse any specific port expansion proposal. The Plan acknowledges the Waitematā Harbour and Hauraki Gulf as Auckland-defining assets it seeks to protect and enhance, and expects the study of long-term options for the port to take this, and other stated outcomes, into account.

BOX 13.5 KEY INTER-REGIONAL CONNECTIONS

- Northland Rail Line – the rail freight operation along the Northland Rail Line is an important strategic inter-regional freight connection between Auckland and Northland, reducing traffic pressure on the road network and providing access to the North Port.

- North Island Main Trunk Line (NIMT) – this is a key inter-regional connection. A third rail line will be required for rail freight movements (on the Eastern Rail Line and the NIMT Line between Westfield and Papakura), to remove conflict with increasing rail passenger movements.

- Pūhoi to Wellsford – this project is nationally important and aims to help revitalise the Northland economy. This project would address road safety issues, reduce journey times for freight, and improve access to Warkworth and the surrounding areas.

- Road connections to Waikato and Bay of Plenty – these routes (particularly State Highways 1 and 29) are of strategic importance, as they provide for movements between Auckland, Hamilton and Tauranga. They require upgrading and safety improvements to support future demand.

- Inter-regional passenger transport connections.

- Effective transport access to the Auckland airport and ports.

- Key walking and cycling inter-regional connections (see Map 13.3) - these present opportunities to connect to the National Cycle Trails. There are links with neighbouring hinterland in the movement of people, goods and services to and from Auckland, such as the proposed rail link between Pukekohe and Tuakau.

768_ Several strategic inter-regional connections other than the port and airport are critical to Auckland and the upper North Island, and are listed in Box 13.5.

769_ Additionally, we will protect the operations of our smaller airports such as Ardmore and Dairy Flat, (currently used for recreation), as they can provide a flexible alternative for future freight movements. Whenuapai Airbase is expected to continue its defence operations.

DIRECTIVE 13.8
Support and advocate for effective inter-regional connections that support future growth and demand, and increased freight efficiencies.

See Chapter 6: Auckland’s Economy, and Chapter 12: Auckland’s Physical and Social Infrastructure.
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TAHOKA - WHENUA O TAIWAI - MAKUARU

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CHAPTER 13 AUCKLAND’S TRANSPORT

PRIORITISE AND OPTIMISE INVESTMENT ACROSS TRANSPORT MODES

Transport is a critical shaper and enabler of Auckland’s future. Realising the vision for Auckland requires substantial public sector investment in transport, to enable the development of an integrated system that provides effective choices for people and businesses. It demands:

- a transformational improvement in the speed, capacity, reliability and connectivity of the public transport system
- selective improvement to the capacity of the strategic roading network, where alternative management options are not sufficient to address growth in travel demand
- improving the safety and efficiency of the regional arterial road network with the development of the freight, cycle, and public transport networks, and improved conditions for pedestrians
- increasing investment in walking, cycling and demand management measures.

Over the next 30 years, several critical transport projects are needed for Auckland to cope with population growth. An efficient multi-modal transport system is key to achieving a well-connected and resilient transport system that will provide a greater choice for all parts of Auckland.

There are approximately $25 billion worth of assets in the transport system. These assets and services must be optimised to get the best value from existing investment. This includes maintenance programmes, traffic optimisation, and safety programmes.

Getting the best out of our existing transport assets will also involve managing demand. Much of Auckland’s transport network is only at capacity during peak times, so spreading demand could ease congestion and reduce the need for expensive additional capacity. Measures include encouraging flexible work hours, possible time-related pricing mechanisms, school travel plans, workplace incentives for public transport, making walking and cycling more attractive, smarter parking policies, and more opportunities to work from home. These can manage demand without dampening economic activity.

Key transport initiatives under way include: completing the state highway network, upgrading the public transport system, the Western Ring Route section at Waterview, and improving public transport service efficiency through initiatives such as integrated ticketing and electrifying the existing rail system. These projects are scheduled to be completed by 2016.

However, completion of these ‘catch up’ projects still leaves Auckland well short of making the step change required to provide a modern, efficient, world-class transport system, which allows people to travel easily and goods to be transported efficiently. This is why the Auckland Plan places the highest priority on three new projects:

1. City Rail Link
2. AMETI and East-West Link
3. Additional Waitematā Harbour Crossing.
MAP 13.2 AUCKLAND’S PRIORITY TRANSPORT PROJECTS (2012 - 2042)

Existing Network
- Rapid Transit Network (RTN)
- Ferry
- Rail network
- Strategic road network
- Regional arterial roads/ Quality Transit Network (QTN)

Network Improvements
- Rapid transit
- Quality transit
- Strategic road
- Strategic road
- Regional arterial road
- Sea port
- International airport

Priority Transport Projects
1. City Rail Link
2. Auckland Manukau Eastern Transport Initiative (AMETI) and East-West Link
3. Additional Waitemata Harbour Crossing
4. Public transport infrastructure and services improvements
5. Improvements to the regional arterial road network and selected state highway improvements
6. Route protection of major projects
7. City centre transport improvements
8. Cycle and walk improvements (Refer Map 13.4 for the regional cycle network)
9. Rail freight third track
These are important contributors to city shaping and development. Unlocking the transformational effect of these projects requires them to be funded and built within a reasonable time frame and as an integrated package. They are viewed as a package because together they will strengthen Auckland’s capacity to build a robust, high-value economy and make the city more attractive to live in, work in and visit.

Further strategically important transport projects and initiatives are required as the next order of priority:

1. Public transport infrastructure and service improvements (see detailed list in Box 13.6)
2. Improvements to the regional arterial road network and selected State Highway improvements (see detailed list in Box 13.6)
3. Route protection of major projects (including the top 3 projects above, rail and State Highway connections to airport, rail to North Shore, and Avondale to Southdown rail)
4. City Centre transport improvements
5. Cycle and walk improvements (Regional Cycle Network is shown on Map 13.3)
6. Rail freight third track.

Together these projects form a multi-modal package which supports the planned growth and economic development in Auckland for the period to 2040. Although the projects take different forms, all are designed to move people, goods and services around, into and out of the region efficiently, without compromising the liveability of Auckland, or reducing its environmental quality. They are shown on Map 13.2.

This suite of transport projects is crucial for Auckland’s future and represents significant investment, which will require additional funding tools. Achieving the desired result requires all parties to collaborate closely, and consider alternate funding sources (see Priority 4).

The timing of these projects is currently constrained by funding availability. The planning of major projects requires rigorous analysis of all costs and benefits. Projects will only proceed if they demonstrate value for money and contribute to the outcomes sought for Auckland and/or New Zealand. This process will also help to prioritise the timing of projects.

Projects such as AMETI and the East-West Link, and the Western Ring Road realise their benefits when the complete project is in place. The timing of projects and their staging should generally be based on when the project is required and can best be delivered, rather than staging and part-funding a project over a prolonged period.

By identifying the top priority project package and setting completion dates of 2021 for the CRL and AMETI/East-West Link, and 2031 for an additional Waitematā Harbour Crossing, steps can be taken to ensure that funding is available to implement each project when required. Alternative funding mechanisms are discussed below.

Central government and Auckland Transport documents, such as the Government Policy Statement on Land Transport Funding and the Regional Land Transport Programme, set out the criteria for prioritisation. They must match available funding to projects.

Auckland’s transport priorities over the next three decades are outlined in Box 13.6. These projects will be further scoped and matched against available funding streams.
CHAPTER 13
AUCKLAND'S TRANSPORT

MAP 13.3 AUCKLAND'S REGIONAL CYCLE NETWORK

- Existing cycle network
- Proposed cycle network
- Metropolitan centre
- Town centre
- City fringe centre
- Local centre
- Satellite town
- Schools
- Public Transport Centres
  - Bus, ferry & train stations
  - Ferry
  - Railway
  - State highway
  - International airport

Last updated: 10 April 1:30pm
### BOX 13.6 MAJOR TRANSPORT PROJECTS

<table>
<thead>
<tr>
<th>First Decade: 2011 to 2020</th>
<th>Second Decade: 2021 to 2030</th>
<th>Third Decade: 2031 to 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Public transport service improvements, including bus services to the airport</td>
<td>▶ Construct rail to Auckland Airport</td>
<td>▶ Renew optimisation initiatives to take advantage of technology developments</td>
</tr>
<tr>
<td>▶ Integrated transport ticketing and fares</td>
<td>▶ Continue improvements to the arterial road network (with a focus on the movement of public transport and regional freight)</td>
<td>▶ Construct busway along SH16 between Lincoln interchange and Waterview interchange</td>
</tr>
<tr>
<td>▶ Rail network electrification and increased train frequencies to 10 minutes</td>
<td>▶ Complete construction of an additional harbour crossing (road and PT)</td>
<td>▶ Construct the Avondale-Southdown rail connection</td>
</tr>
<tr>
<td>▶ Western Ring Route, Newmarket Viaduct and Victoria Park Tunnel completion</td>
<td>▶ Construct improved rail and road access to the port</td>
<td>▶ Implement transport infrastructure and services in new greenfield areas to support their development.</td>
</tr>
<tr>
<td>▶ Removal of pinch points in the strategic road network to improve throughput (such as widening from Hill Road to Takinini on the Southern Motorway and others)</td>
<td>▶ Extend the Northern Busway from Constellation to Silverdale and from Onewa to the City Centre with bus lanes on the Auckland Harbour Bridge</td>
<td></td>
</tr>
<tr>
<td>▶ City Rail Link completion</td>
<td>▶ Triple-track the North Island Main Trunk rail line (the Port to Westfield to Papakura) for rail freight.</td>
<td></td>
</tr>
<tr>
<td>▶ City Centre transport improvements (as described in the Auckland City Centre MasterPlan)</td>
<td>▶ Construct the Warkworth-Wellsford motorway</td>
<td></td>
</tr>
<tr>
<td>▶ Completion of the Auckland Manukau Eastern Transport Initiative and the East-West Link between State Highway 20 Onehunga and State Highway 1</td>
<td>▶ Improve airport road access - SH20A and 20B</td>
<td></td>
</tr>
<tr>
<td>▶ Arterial road network improvements (with a focus on the movement of public transport and regional freight)</td>
<td>▶ Complete the regional cycle network</td>
<td></td>
</tr>
<tr>
<td>▶ Walking and cycling infrastructure improvements (includes completing 70% of the regional cycle network)</td>
<td>▶ Continue removal of pinch points in the strategic roading network to improve throughput</td>
<td></td>
</tr>
<tr>
<td>▶ Ferry network extension to Hobsonville and Beach Haven</td>
<td>▶ Continue City Centre transport improvements (as described in the Auckland City Centre MasterPlan)</td>
<td></td>
</tr>
<tr>
<td>▶ Route protection:</td>
<td>▶ Route protection:</td>
<td></td>
</tr>
<tr>
<td>▶ Dedicated rail corridor to the Auckland Airport</td>
<td>▶ Constellation-Westgate-Henderson rapid transit route</td>
<td></td>
</tr>
<tr>
<td>▶ Additional Waitāmatatā Harbour Crossing (road and public transport)</td>
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<tr>
<td>▶ Rail to the North Shore</td>
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<tr>
<td>▶ Avondale-Southdown rail corridor</td>
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<td></td>
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<tr>
<td></td>
<td>▶ Construct the Pūhoi-Wellsford Motorway, first Phase Pūhoi to Warkworth</td>
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<tr>
<td></td>
<td>▶ Complete electrification of rail to Pupekohe</td>
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</tbody>
</table>
These projects form a single system, integrated transport network for Auckland over the next 30 years. An indicative ratio of expenditure on the different transport activities over 30 years has been forecast as: roads 57%, public transport 40%, walking, cycling and travel demand management 3%.

DIRECTIVE 13.9
Jointly develop Auckland’s transport system, making the best use of existing infrastructure and new investments.

Auckland’s rural communities face very different transport issues to those in urban centres. Many communities are relatively remote, and residents must travel long distances. Most rural areas have no public transport service other than a school bus service, and for most, travelling by private car is the only viable option. Around 30% (1,000kms) of rural roads are unsafe at times, especially for visitors not used to driving on metal roads, and for people walking, cycling and horse riding. The Auckland Council is investigating a programme of sealing rural roads where traffic volumes are high and where safety is impeded, and decisions will be made taking into account safety, function, amenity and character (see Box 13.1).

Rural production is important to Auckland (see Chapter 9: Rural Auckland), and generates freight and commuter traffic. Rural roads also provide Aucklanders and visitors with access to a number of regional parks and other recreational opportunities, which increases the volume of traffic on those roads. These risks must be managed to ensure the safety and efficiency of Auckland’s rural roading network through appropriate levels of service.

Pūhoi and surrounds are an important tourist destination, but this may be at risk if the Pūhoi to Wellsford motorway does not provide access to/at Pūhoi. An investigation should consider a low-cost exit and entry for northbound traffic at Pūhoi, to support tourism and the economy in this area.

DIRECTIVE 13.10
Investigate and provide appropriate levels of service across the rural road transport network through:

1. regular resealing and maintenance of the existing rural roads,
2. sealing unformed roads where there is a reasonable level of traffic, subject to investigation and prioritisation,
3. providing feasible forms of public transport and park and ride facilities on urban fringes to allow access to the urban public transport network,
4. investigating bus services, including dual-purpose school buses,
5. improving cycleways and walkways near and within town centres and in the vicinity of schools.
Critical infrastructure projects, such as the City Rail Link and additional Waitematā Harbour Crossing, are essential investments to enable Auckland to grow and be economically successful, but they require funding sources in addition to those traditionally used.

For Aucklanders to reap the transformational benefits of these investments, they will also have to bear a significant part of the costs of these planned improvements to the transport system.

**DIRECTIVE 13.11**
Examine and implement new revenue tools and funding mechanisms as contained in Chapter 14.

Over the 30-year period of the Auckland Plan, new funding mechanisms will be required to help finance the approximately $10 to $15 billion funding shortfall for transport projects. The funding gap is most prominent in the first decade, with insufficient funds available to put in place projects such as the City Rail Link, AMETI and East-West Link. A range of funding mechanisms is being considered (refer to the March 2012 Discussion Document “Getting Auckland Moving – Alternative Funding for Transport”) including:

- general rates
- targeted rates
- development contributions
- tax increment financing
- regional fuel tax and road user charge/diesel levy
- tolling new roads
- road pricing on existing roads (i.e. some form of network charging or congestion charging)
- additional car parking charges
- visitor taxes
- airport departure tax.
Transport funding over the 30-year period must be agreed by the Auckland Council and central government, and must benefit users and those who contribute funding. It is likely that a mix of funding mechanisms will be required for a package of transport projects. Studies will be conducted jointly by the various planning and delivery agencies. A more flexible approach to financing will assist in accelerating transport improvements in Auckland. The transport direction set out in this Plan is informed by funding currently available, and potentially available from new funding mechanisms.

These funding mechanisms could result in additional costs for people who use the transport system, but the improvements they fund will ultimately lead to a better transport system for everyone.

These mechanisms will help to manage the level of congestion on the road network, and make journey times more reliable. However, there may be unintended impacts on communities that will have to be managed and mitigated.

Implementing the transport improvements outlined above will achieve an integrated single system in 2040 that meets the needs of Aucklanders and visitors, and improves Auckland’s economy, amenity, and environment. It will allow for future population growth and economic development, and help deliver the vision for Auckland.

### BOX 13.7 CHOICES FOR AUCKLANDERS

The following are transport-related matters that Aucklanders will need to consider over the 30-year implementation period of the Auckland Plan. Although this is speculative, it is intended to help understand the changes that are proposed. By 2040:

**Lifestyle** - there will be greater choice of lifestyle in terms of living in higher-density centres, suburbs, new greenfield areas or rural areas. Transport access to employment and social activities will vary for each location.

Travel mode – most people will have improved alternatives to driving a car, including walking, cycling, public transport, car pooling and telecommuting. Vehicles will be fuel-efficient and electric cars will be readily available. People will have to consider what mode of travel to use.

**Cost of travel** – the cost of car travel is likely to increase significantly as car parking costs and fuel costs rise (even though vehicles are likely to be more fuel-efficient) and tolls or road pricing may potentially be introduced. Rising transport costs also affect the cost of goods and services. People will choose how often they travel, how far they travel, and car affordability for their households.

**Trip patterns** – congestion will deter some trips by motor vehicle. People may choose to walk, cycle or use public transport to avoid congestion. More deliveries are likely to be made outside peak times. Some people may choose to conduct their activities locally and work from home where possible.

**Travel times** – travel times may increase as congestion grows. People may wish to pay for travel on some routes to avoid congestion. Others may choose to car pool, use public transport or defer a trip to a time when it is easier to move around.