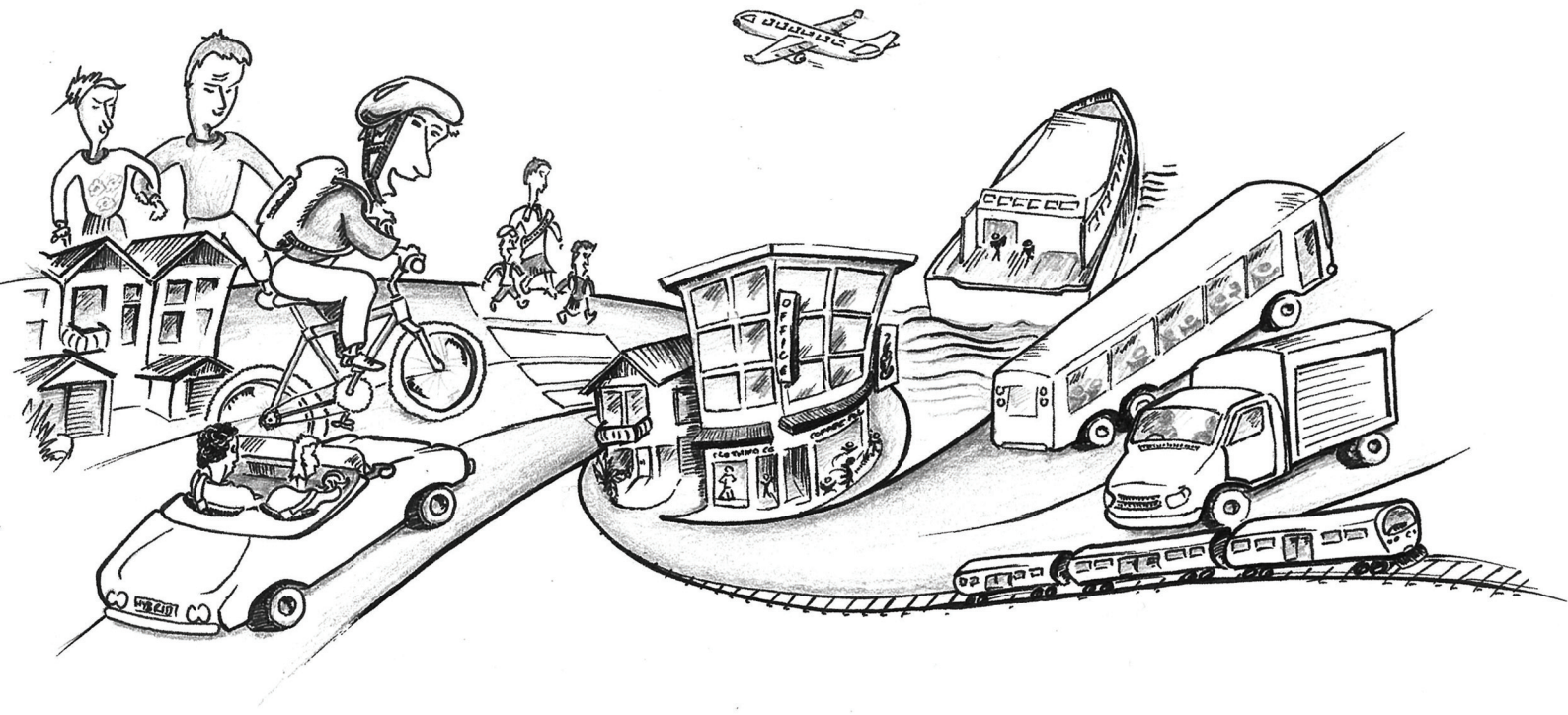




Waitakere City Council  
Te Taiāo o Waitakere

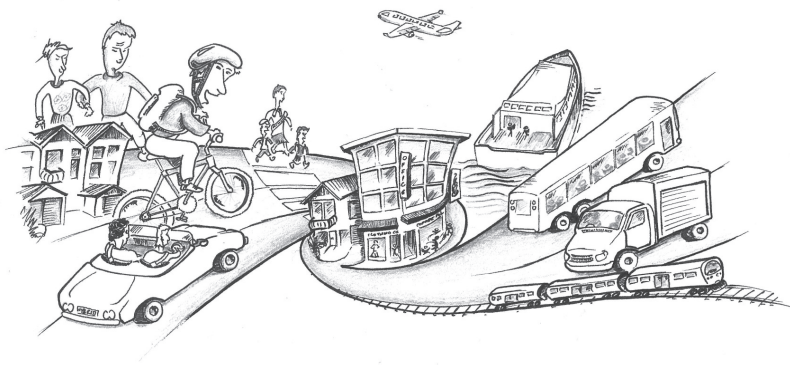


*Way to go*

# Waitakere City Transport Strategy 2006-2016





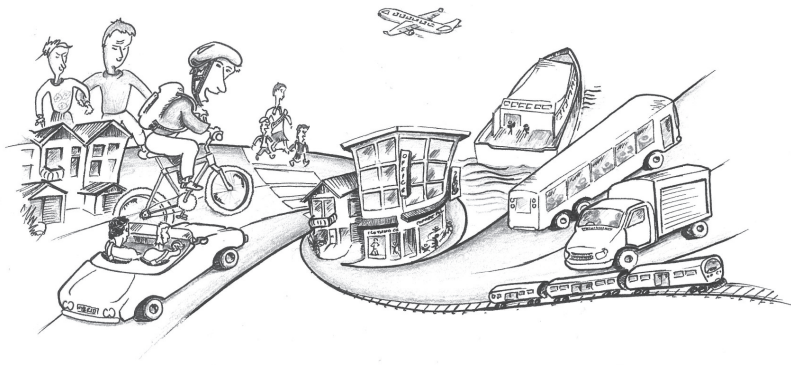


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## Waitakere: Way to go

The rising price of petrol is changing the way we live. Every household will query if there are better ways to get around, if they can be more mobile, but spend less time in traffic jams, and less money on travel.

Your City Council is facing the same queries, the same financial questions of affordability. We have resolved to



*Mayor Bob Harvey and Deputy Mayor Carolynne Stone, Henderson Interchange - Waitakere Central.*

change direction in our investment and management of transport. This strategy outlines those changes. It adds up to more choices for you.

Firstly, we're developing our town centres at New Lynn, Henderson and Westgate. These will be more than shopping centres; they will be 'down-town' places with jobs, high rise residential development, and economic activity. They will be attractive places to establish new businesses, new residences, and new places to work, shop and play.

Secondly, we will make these town centres easily accessible by foot, bike or passenger transport, so that you can leave the car at home. And the town centres will have frequent services to other destinations. Consider a rapid, comfortable, reliable train service to and from New Lynn or Henderson every ten minutes. Consider more than 10,000 jobs in Henderson, 10,000 in New Lynn, and exciting new developments at Westgate and Hobsonville Village. You won't have to leave the city to work!

New passenger services will take you to the city centre nodes and across the city and if you need to go further east there will be improvements to those routes as well. Within five years we will see a motorway connect Westgate to the North Shore; we will see the rail line double-tracked as far as Swanson with efficient, comfortable trains, much upgraded stations and safer park and ride facilities.

Road congestion will not be easily defeated, but we will invest in road improvements that will allow buses and high occupancy vehicles to get through – to sidestep the traffic queues.

We will look to give priority to goods vehicles too, to keep our centres as attractive, efficient and productive places to locate businesses and attract jobs.

## WAITAKERE: WAY TO GO

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We want to make it safer and easy for children to get to school by walking, cycling or passenger transport, so we support school travel plans. This is critical because 40% of peak hour trips are journeys to education. Carefully located new schools, the expansion of Unitec in Waitakere, and school travel plans will all assist families in making a choice other than using the car to get to school.

Our annual investment in transport will double over the next decade. It's not just more of the same. It's a new "way to go".

- students going to school more safely by walking school buses, cycling and passenger transport;
- living and working locally;
- using passenger transport or car pooling to get to work;
- vibrant town centres which are a focus for retail, business and activity;

- addressing congestion points and completing the State Highway network;
- upgrading footpaths and providing new cycle ways.

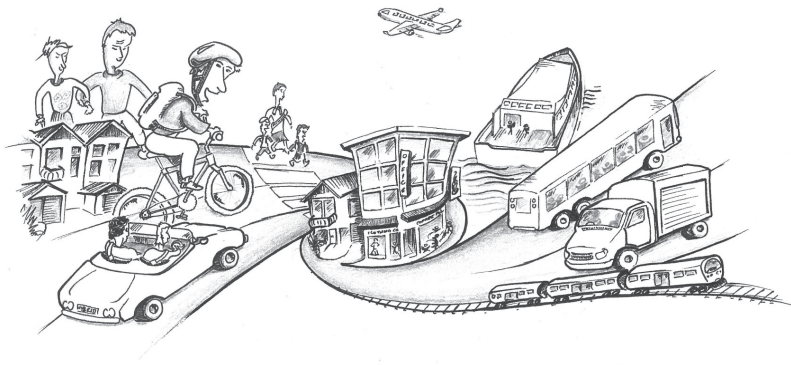
This provides more choice that will make getting about the city work for you. Please think about your travel choices and how together we can improve the productivity, liveability, and resilience of Waitakere City.



Bob Harvey  
MAYOR, WAITAKERE CITY



*Waitakere Central*



## Overview

This document sets out Waitakere City Council's strategic position and plans to develop a sustainable and integrated transport system for the city over the period 2006 to 2016.

The vision for transport in Waitakere is:

*'A sustainable multi-modal transport system that is integrated with land use and contributes to Waitakere as an eco city.'*

This vision supports a change from single-occupancy vehicle use to more sustainable modes of travel. That shift is necessary to enhance the quality of life in our city, to create dynamic town centres and liveable communities, and to protect the natural environment. To cope with expected growth, without a corresponding increase in vehicles on the road, Waitakere needs to make the transition to a more compact city which maximises the benefits of the rail line and its three main town centres.

### Aims

The Waitakere City Transport Strategy aims to develop a sustainable integrated transport system that:

- Contributes to Waitakere as an eco city;
- Provides attractive alternatives to the motor vehicle;
- Integrates land use and transport;
- Supports the development of the town centres and economic growth;
- Manages traffic and congestion.

### Strategic Direction

The strategy to achieve the city's transport vision and objectives is to reduce congestion in parts of the network and to encourage people to walk, cycle, use passenger transport and car pool. The flow of goods and people is vital to the economy and the functioning of the city. Sustainable solutions are required in order to achieve the city and lifestyle that people want. The strategy aims to provide benefits both in the short and long term.

This strategic direction is a balanced approach to investment in roads, passenger transport, walking and cycling, and travel demand management. The strategic direction is closely aligned with the Auckland Regional Land Transport Strategy 2005. Therefore, Waitakere's transport programme has a greater likelihood of receiving funding from Land Transport New Zealand.



Walking school bus, Woodlands Park Primary

## OVERVIEW

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The strategic direction requires the transport programme for Waitakere to focus on the following:

- Commitment to the essentials – safety, maintenance of existing transport assets, existing commitments, and operation of traffic systems.
- A balance of investment in roads, footpaths, passenger transport infrastructure, walking and cycling initiatives, and travel demand management measures.
- A commitment to integration between different modes of transport, with rail providing the backbone of passenger transport in Waitakere.
- Planning for integration of transport and land use. This requires growth to be in the right places, with good urban design and appropriate roads, footpaths, cycle ways, access to passenger transport and/or the state highway network.
- Ensuring that the implementation of transport projects is smart, cost effective and well planned so that they directly contribute to the type of city that people want to live and do business in.

## Transport Programme

A costed 10-year transport programme proposes how the Council will implement the strategy. The transport programme emphasises passenger transport and investment in the three main town centres and the northwest growth area.

Key features of the programme are:

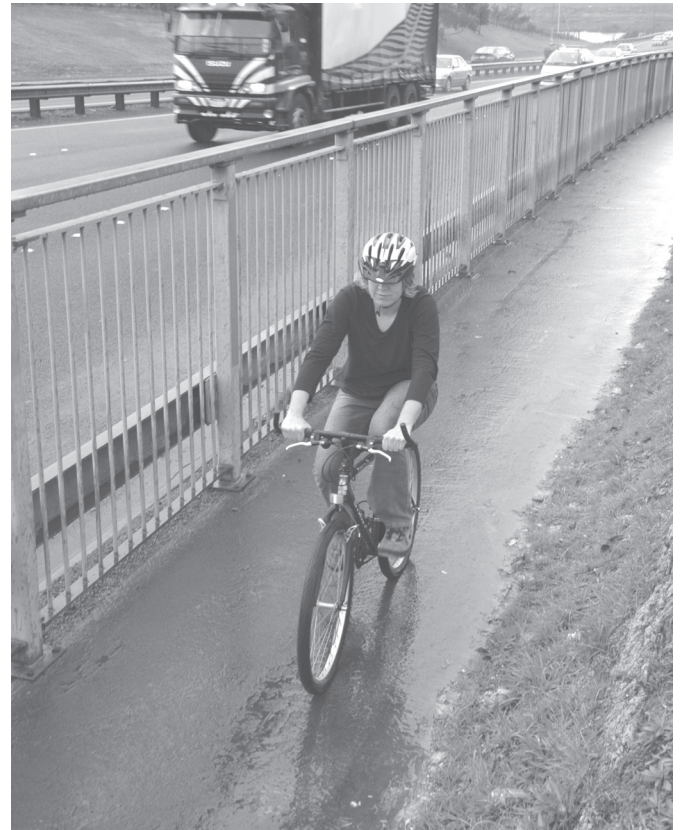
- Passenger transport improvements;
- Bus priority measures on state highways and key arterial roads;
- Cycle ways and footpath improvements;
- Travel demand measures.

## Conclusion

This strategy is an affordable and sustainable approach that aims to get the best out of the existing roading network and encourage greater use of sustainable alternatives – regular walking and cycling, passenger transport, fuel-efficient vehicles, ride sharing, shorter trips, fewer trips, travelling outside peak hours and working from home.

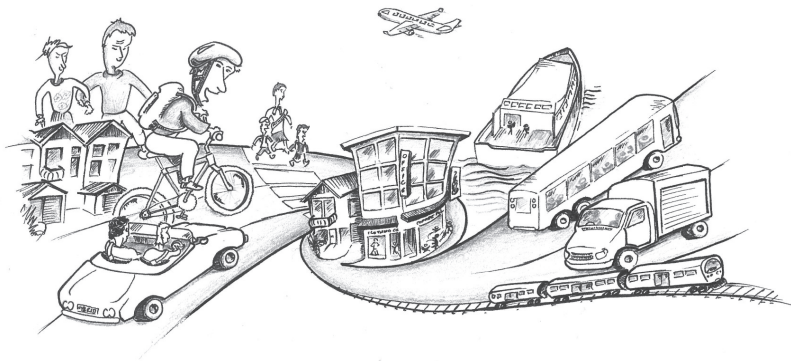


*Bus advance lane, Westgate*



*Cycleway, North Western Motorway*





## Section 1: Introduction - Purpose and Context

### Purpose of this document

This document sets out Waitakere City Council's strategic position and plans to develop a sustainable and integrated transport system for the city over the period 2006 to 2016.

This strategy provides direction and policy guidance to assist the Council and other transport organisations in decisions regarding transport projects.

The strategy will be reviewed every three years to align with the review of the Long Term Council Community Plan (LTCCP) and regional plans.

### Context

Waitakere is making the transition to a more sustainable urban form which maximises the benefits of the rail line and the three main town centres. A shift away from single-occupancy vehicle travel to more sustainable modes of travel is needed for a higher quality of life, better functioning town centres, liveable communities and to protect our

natural environment. This strategy is based on the Auckland Regional Land Transport Strategy 2005 and incorporates Waitakere City Council policies and objectives. This strategy includes a costed 10-year transport programme which proposes how the Council will deliver the strategy.

Waitakere's population is growing by about 1.7% each year and the volume of traffic is increasing by about 3% each year. This is not sustainable in terms of the economy, the natural environment and the effects on communities.

Our dependence on the motor vehicle has brought about significant health and environmental problems. The negative impacts of transport include noise, air pollution and greenhouse gases, contaminated water run-off and transport-related wastes. The Council's role is to reduce these negative impacts in a manner that reflects and delivers on the community outcomes for Waitakere. This is particularly significant in the context of increasing demand for energy and dwindling worldwide supplies of fossil fuels.

Waitakere has been characterised by low-density development with some concentration along the rail line. The city's urban strategy envisages intensified urban development particularly in and around the three town centres of New Lynn, Henderson and Westgate, and also along other major transport corridors such as Lincoln Road.

The Auckland Regional Growth Strategy, 1999, adopted by all councils in the region, requires such an approach to growth. The Regional Growth Strategy defined a metropolitan urban limit for the region to constrain the urban sprawl and set targets for concentration of growth in growth nodes (the three main town centres) over the next 50 years. The Local Government (Auckland) Amendment Act



Buses on Great North Road, Henderson

## SECTION 1: Introduction - Purpose And Context

2004 requires that regional and city resource management plans incorporate the growth concepts of the Regional Growth Strategy.

The basic premise of this strategy is that compact cities are more sustainable because they make more efficient use of land, transport and infrastructure. Living in a compact city enables communities to access employment, social and recreational opportunities with less travel. Compact cities also support the development and improvement of passenger transport systems which results in less reliance on private cars. This in turn contributes to reduced air emissions and less vehicle pollutants. Compact cities result in less pressure for sprawl and reduce the need for people to travel long distances.

The Auckland Regional Land Transport Strategy 2005 sets the direction and funding priorities for transport in the Auckland region. This requires a balance of funding for state highways, roads, passenger transport, travel demand management, walking and cycling.

In order to manage growth, significant improvements are needed in transport infrastructure, integration of transport with land use and travel demand management. We also need a significant shift to more sustainable modes of travel. Waitakere is in the process of catching up on investment in state highways, passenger transport and cycle ways. This will provide some ability to deal with existing demand and some future demand. Increased central government funding is available where there is a matched local contribution (except for state highways and rail lines, which are 100% funded by central government).

Key legislation and national and regional strategies provide a policy and strategic framework against which



*Residential development adjacent rail, New Lynn*



*Cyclist taking bike onto train, Ranui Rail Station*

Waitakere City Council can prepare its transport strategy programme.

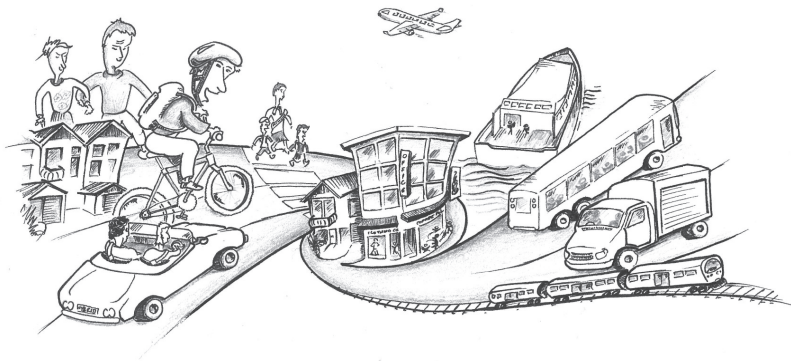
The Land Transport Management Act 2003 and the Local Government (Auckland) Amendment Act 2004 have significantly altered the planning, governance and funding of transport. New Zealand's vision for transport is an affordable, integrated, safe, responsive and sustainable transport system. The government's transport objectives guide Land Transport New Zealand's funding decisions in relation to transport projects.

New Zealand's five transport objectives are:

- Assist economic development;
- Assist safety and personal security;
- Improve access and mobility;
- Protect and promote public health;
- Ensure environmental sustainability.

The goal of the Auckland Regional Land Transport Strategy 2005 is a transport system which enhances the Auckland region as a great place to live, work and play. The objectives of the Auckland Regional Land Transport Strategy 2005 are the New Zealand transport objectives plus the objectives of 'Supporting the Auckland Regional Growth Strategy' and 'Achieving economic efficiency'.

The Auckland Regional Land Transport Strategy 2005 provides for a high investment in passenger transport, a medium investment in travel demand management (including walking and cycling) and significant investment in completing the state highway network and roading improvements. The Auckland Regional Transport Authority (ARTA) is required to prioritise the transport programme submitted by Waitakere City Council for funding and is guided by national and regional requirements.



## Section 2: Key Issues and Trends; Current Infrastructure and Services

### Setting the scene in Waitakere

Waitakere is a diverse city ranging from urbanised centres in the east to the sparsely populated and protected environment of the Waitakere Ranges and West Coast beaches. Waitakere may be characterised as young, fast-growing and ethnically diverse. It is the fifth largest city in New Zealand, similar to Wellington City in population.

### Key transport issues and trends

#### Growth

The population of Waitakere as at March 2006 was 186,444, forecast to grow to around 235,000 people by the year 2016 (high growth scenario). To meet this growth the transport system needs to provide for around 4,000 more residents in Waitakere annually. In order to cater for forecast population growth and to bolster local employment, provision for approximately 2,000 more employees in Waitakere will need to be made each year. The existing transport system is inadequate to meet current and future demands.

#### The cost of improvements to the transport system

The costs of improving the transport system in Waitakere are borne by users, developers, regional and central government and by ratepayers. Therefore, improvements have to be affordable and effective.

#### Location of employment

Waitakere accounts for approximately 15% of Auckland's total population, but the city only generates around 8% of the region's income and jobs. Approximately 56% of our workforce travels outside Waitakere to work. As a result, average trip lengths for Waitakere residents are very high. About 25% of local jobs are filled by people who commute into Waitakere from other parts of the region. The transport system needs to support local jobs as well as provide for access to jobs outside of the city.



*Hobsonville Road*

#### Dependence on the motor vehicle

Travel by motor vehicle is growing faster than the rate of increase in population growth. Low car-occupancy rates – an average of 1.2 persons per vehicle at peak times – exacerbates the problem of too much traffic on the roading network.

In 2001, 74% of Waitakere residents travelled to work in a motor vehicle. This was the second highest figure recorded for all the major New Zealand cities. In 2001, only 4% of Waitakere's workforce travelled to work by bus, 2% walked, 1% travelled by train, 1% by bicycle, 6% worked from home and around 11% did not work on census day (figure 3.2).

Car ownership per person in the Auckland region is increasing rather than decreasing as indicated in figure 3.1. Subject to the effects of increases in oil prices and the

**SECTION 2: Key Issues and Trends, Current Infrastructure and Services**

introduction of road pricing, it is projected that, by 2016, 11% of trips at peak times in the Auckland region will be by passenger transport, up from 7% in 2001.

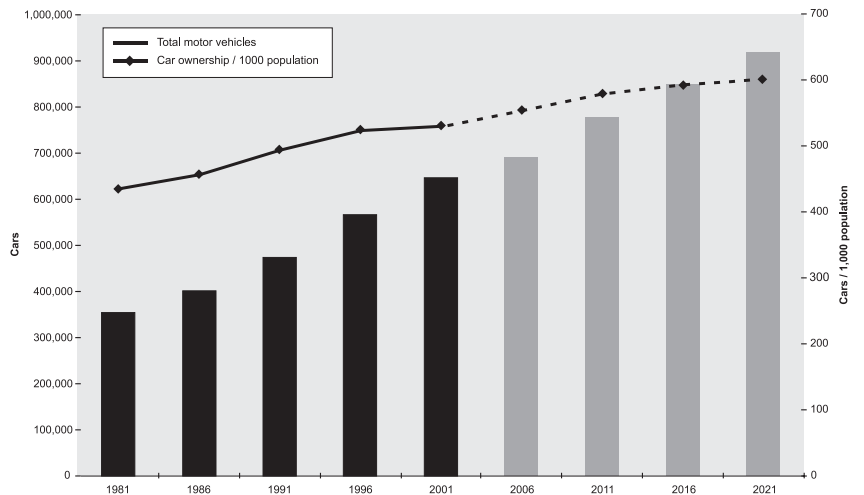


Figure 3.1: Car Ownership (1981 - 2021)  
Source: Auckland Regional Council (ART model), Statistics New Zealand.

**Traffic congestion**

The build-up of traffic, particularly on key arterials and on the motorway in the peak periods, results in travel delays, greater costs for business (estimated at one billion dollars a year for the Auckland region), negative impacts on the natural environment, and extra time away from family or the household. The most heavily trafficked arterial roads in Waitakere are sections of Te Atatu Road, Lincoln Road and Great North Road, which carry approximately 47,000, 45,000 and 32,000 vehicles per day respectively. The North Western Motorway (State Highway 16) between Te Atatu Road and Patiki Road now carries approximately 95,000 vehicles per day.

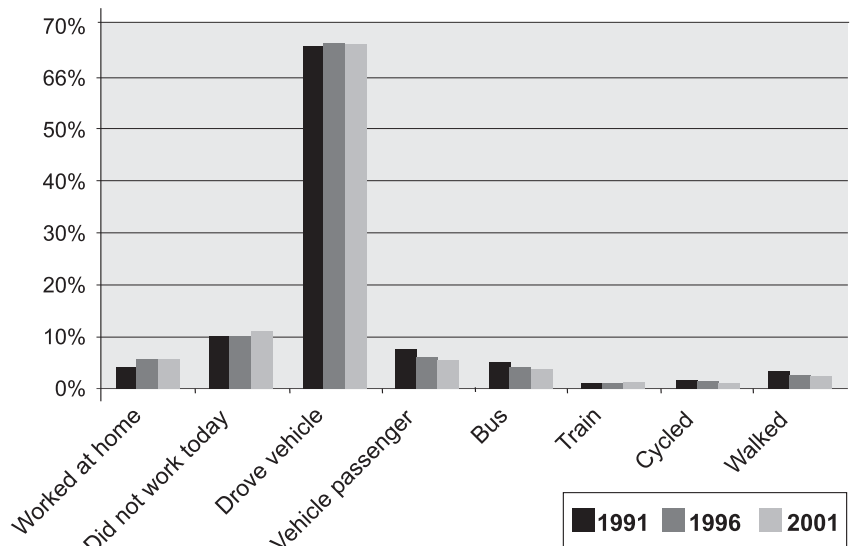


Figure 3.2: Means of travel to work, Waitakere Residents  
Source: Statistics New Zealand.

**Lack of walking and cycling for short trips**

Approximately 18% of all trips in the Auckland region are less than two kilometres during the morning peak: 64% of those are by car and many of these are to drop children off at school. Figures 3.3 and 3.4 indicate the length of trips and the mode taken for these trips in the morning peak.

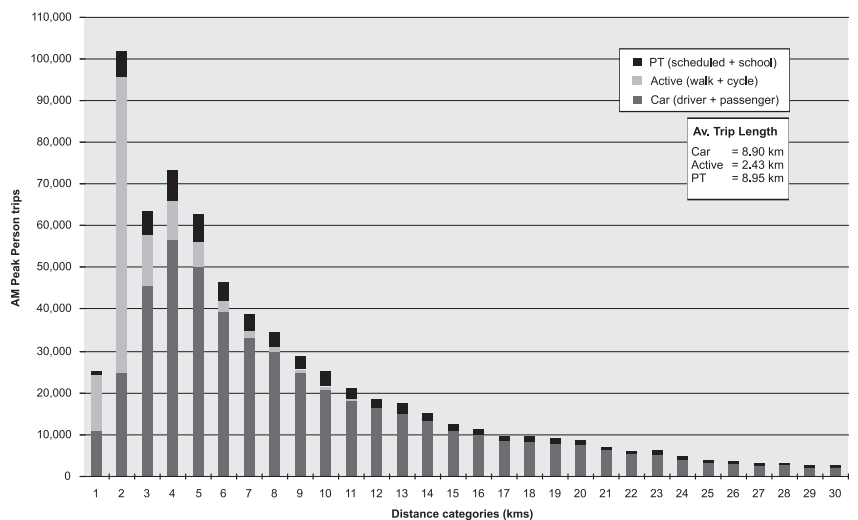


Figure 3.3: Trip lengths by mode (2001 morning peak period. 07:00 - 09:00)  
Source: Auckland Regional Council (ART model)

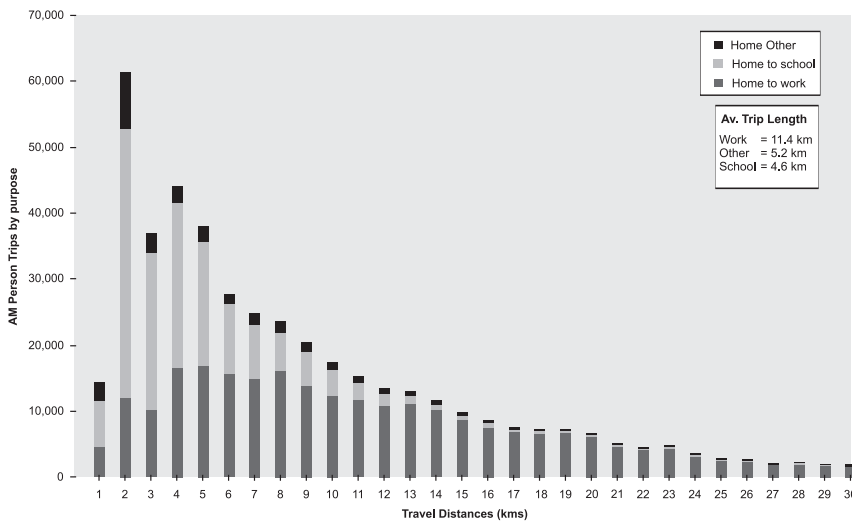


Figure 3.4: Trip lengths by purpose (2001 morning peak period. 07:00 - 09:00)  
 Source: Auckland Regional Council (ART model)

**Movement of goods and services**

It is vital that the transport system enables efficient movement of goods and services in a growing local economy. The transport system needs to allow for more local business activity in the future and better access to new motorways. Subject to the effects of increases in oil prices and the introduction of congestion charges, by 2016 it is projected that travel speeds between key business centres in the Auckland region will decrease by 5.6%.

**Access and social isolation**

Around 92% of Waitakere households have access to a car. However, around 25% of households do not have access to a car during the day; they may not own a car, or it is being used by a family member to commute. These households rely on taxis, walking, cycling and passenger transport to move about the city. Travel choice is limited in some parts of Waitakere, including the northwest and beyond the metropolitan area. The transport system is required to provide for a range of mobility needs.



Low emission buses, Henderson town centre

**Allocation of road space**

A key issue for Waitakere City Council is the allocation, use and priority of the road reserve. Competing demands for use of road space include vehicle traffic, passenger transport, pedestrians, cyclists and car parking. There are also impacts from the type of land use next to arterial roads and roads in town centres.

**Need for improved integration of land use and transport**

The historically low-density in Waitakere has resulted in long distances to travel and inefficient passenger transport. Inefficient bus services are often the result of an inadequate road network including a lack of linkages. High growth and development is required in Waitakere’s three main town centres. This will support passenger transport and restrict low-density sprawl.

**The health and environmental effects of pollution from motor vehicles**

Pollution from motor vehicles severely reduces the quality of our air and water. There are approximately 250 deaths each year in the Auckland region due to air pollution from motor vehicles. Subject to the effects of increases in oil prices and the introduction of road pricing, it is projected that CO<sub>2</sub> emissions in the Auckland region will increase by 21% by 2016 and that discharges to water from transport will increase by 20%.

**Increasing oil prices**

Fuel use for transport in the Auckland region is expected to increase by 26% by 2016. There are significant risks regarding security of supply and increases in oil prices over the next 10 years.

## SECTION 2: Key Issues and Trends, Current Infrastructure and Services

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### Safety

There has been an increase in the number of crashes on Waitakere roads since 2000.

### Innovation and opportunities

As an eco city, Waitakere City Council has been a leader in implementing and providing information on new technology. Current examples include solar-powered lighting and information on vehicle fuel efficiency. Future opportunities to support new technologies will arise over the period of this Transport Strategy and will be investigated and implemented as appropriate.

### Infrastructure and services at July 2006

Waitakere's transport infrastructure includes:

- The Western Rail Corridor – Tracks, signals, platforms and pedestrian bridges are managed by ONTRACK. Infrastructure on the platforms is managed by ARTA.
- State Highways and interchanges – managed by Transit New Zealand.
- The local roading network – managed by Waitakere City Council.
- The pedestrian and cycling network – managed by Waitakere City Council.
- Whenuapai airport – managed by the Ministry of Defence.
- Water access to two harbours.

Rail improvements have been the focus of Waitakere City Council's passenger transport advocacy over the past decade. The Western Rail Corridor links the main town centres of New Lynn, Glen Eden and Henderson (as well as Fruitvale, Sunnyvale, Sturges, Ranui, Swanson and Waitakere Village) with the Auckland central business district (CBD) and the remainder of the regional and national rail network.

Waitakere City Council has a role in relation to bus and rail interchanges and upgrading the precincts around the stations, including the provision of park and ride and drop-off facilities. The Council also has a key role in promoting and enabling increased population and employment densities around rail nodes.

The roading network is well developed, comprising motorways, urban arterials and other local roads. State Highway 18 Upper Harbour Corridor and the State Highway 16 Brigham Creek Extension are expected to be completed over the next five years.

The local road network is mostly complete, but:

- is straining to cope with demand at peak times;
- needs to be expanded for new growth areas;
- has many cul-de-sacs and unconnected communities;
- needs realignment in town centres.

The Council has completed studies of road corridors throughout the city which indicate decreases in performance of the road network in the future if the roading network remains unchanged. Most new local roads have been built and funded as part of new subdivisions.

Waitakere's bus services are mainly focused on trips to and from the Auckland CBD with limited ability to interchange with rail or ferry services or other bus services. Waitakere City Council's focus is on delivering bus related infrastructure (bus stops, signs, timetable holders, shelters, lighting) and working with ARTA and providers to improve bus services, service quality and frequency.

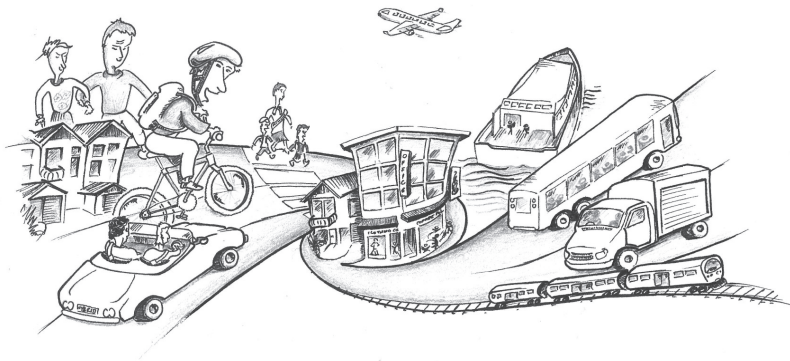
Waitakere's rail services operate every 37 minutes during the day and more frequently at peak times. The double tracking of the western rail line and new signalling should result in trains every 10 minutes at peak times.

People walking and cycling use the road and footpath network, walkways in parks and a limited length of dedicated walk and cycle ways. The Waitakere City Walking and Cycling Strategy was adopted in 2003.

The Ministry of Defence has transferred the Hobsonville Airbase to the Housing Corporation of New Zealand which is undertaking a sustainable development which includes sustainable transport solutions.

Whenuapai Airport is currently occupied by the Ministry of Defence and is expected to include commercial operations within the next ten years.

The Manukau and Waitemata harbours provide sea access for ferries. Ferry services operate at West Harbour on the Waitemata Harbour to and from the Auckland CBD.



## Section 3: Vision, Objectives, Desired Outcomes

### Eco City – Outcomes and Priorities

Waitakere City Council has a long-established over-arching vision of being an eco city – a city which celebrates its people, has a sustainable economic base, honours its environment and builds on culture and heritage.

### Waitakere’s Community Outcomes

Transport is an important contributor to a number of Community Outcomes as identified by the people of Waitakere. In 2005 the community of Waitakere identified the following transport outcomes to be achieved:

- Sustainable transport systems provide fast and effective movement of people, goods and services within, and in and out of, the city.
- The transport network is integrated, innovative, safe and environmentally responsible and supports excellent lifestyles and quality urban and village design.
- Passenger transport services are appealing, reduce car dependency and match local need.

The following transport priorities were also identified:

- Sustainable transport systems that prioritise meeting high needs and demand.
- Develop alternative options that reflect global trends.
- Develop walking and cycling opportunities.
- Ensure route planning involves public and community input and enables access to key places and services, e.g. health centres and hospitals, shops, civic and leisure centres, beaches, parks and schools.
- Improve the quality, accessibility and amount of passenger transport to best practice internationally (including added services, e.g. wireless access).
- Develop targeted travel planning initiatives, particularly for getting to school and work.

A number of other Community Outcomes also affect the function and nature of the transport system in Waitakere. These include a strong economy, strong communities and a sustainable environment.

### Vision for Transport

The Council’s vision for transport in Waitakere is:

*‘A sustainable multi-modal transport system that is integrated with land use and contributes to Waitakere as an eco city.’*

The concepts of this vision are:

**Sustainable** – The transport system must serve existing and future generations, taking into account the economic, social, environmental and cultural effects. Our transport system must be resilient enough to cope with the future and change.



Great North Road, Henderson

## SECTION 3: Vision, Objectives, Desired Outcomes

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**Multi-modal** – This means travel by motor vehicle, train, bus, ferry, bicycle and on foot. A good transport system is safe, affordable, efficient and provides easy interchange from one mode to another.

**Integrated with land use** – This means higher density at transport centres and activity which supports an efficient and effective transport system. Well-designed transport infrastructure is functional and fits with the local surrounds. For example, a parking area could be used as a park and ride facility by day and for residential parking at night.

**Eco city** – This means working together for better social, economic and environmental outcomes for our children, our grandchildren and ourselves. This requires a compact urban form which enables the town centres and transport system to operate effectively and protects the rural aspect and natural character of the foothills and Waitakere Ranges.

### The Objectives of the Waitakere City Transport Strategy

The objectives of the strategy are to develop a sustainable, integrated transport system that:

1. Enables Waitakere to achieve desired social, economic, environmental and cultural benefits for both current and future communities;
2. Facilitates and promotes more sustainable travel modes;
3. Supports implementation of the Auckland Regional Land Transport Strategy 2005 and the Auckland Regional Growth Strategy, 1999 in a collaborative manner;
4. Integrates land use and transport;
5. Facilitates and underpins development of town centres and supports employment growth.

### The desired outcomes of the Waitakere City Transport Strategy

The desired outcomes for transport in Waitakere are:

- a) People have safe, effective, integrated and sustainable travel choice options;
- b) Less traffic and more mobility through innovative travel demand management;
- c) Opportunity to live, work and play locally;
- d) Land use is integrated with transport and both are mutually supportive;
- e) Business travel and location needs are met in a sustainable way;
- f) People have choices that enable them to participate in society;
- g) The environment and human health are protected;
- h) Reduced non-renewable energy use for transport;
- i) People work in a collaborative and innovative manner to maximise these outcomes.

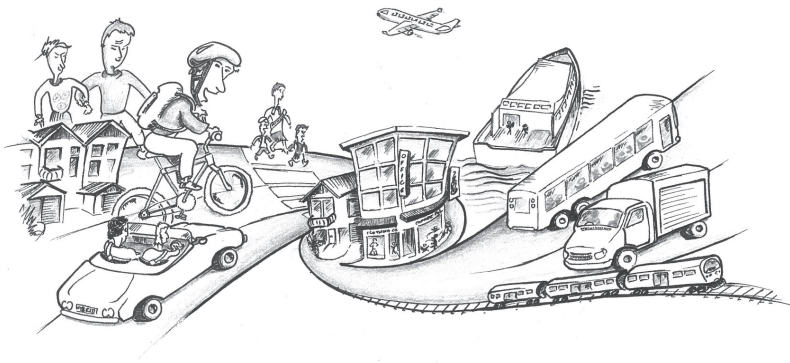
'Less traffic' means fewer vehicles on the road. This is a different approach than reducing congestion.

'More mobility' means providing access to travel and choice of travel. Travel must be affordable, safe and easy to use so that people with a range of abilities can get to where they need to go.



Great North Road, Henderson





## Section 4: Foundations of the Strategy, Strategic Direction

The foundations of this transport strategy are:

**Supply** - Investment in transport infrastructure. Significant investment in passenger transport, walk and cycle ways, state highways and selected roads is required to provide a multi-modal transport system for the movement of people, goods and services.

**Demand** - Travel demand management. A range of measures to reduce the need to travel long distances includes a compact urban form, appropriate land use, more local employment, promotion of attractive alternatives to the motor vehicle, a congestion charge in the Auckland region, school and workplace travel plans, and alternatives to travel such as communication through the Internet.

**Holistic approach** - Links with other strategies and community outcomes. Transport needs to contribute to outcomes for economic development, energy efficiency, the natural environment, stormwater management, health and social connectedness. A contribution to transport outcomes is also required from other activities such as housing, education, town centre development, economic development, land use planning in the District Plan, and social infrastructure.

### Strategic Direction – Way to go!

The strategy to achieve the city's transport vision and objectives is to reduce congestion in parts of the network and to encourage more people to walk, cycle, use passenger transport and car pool. The flow of goods and people is vital to the economy and the functioning of the city. Sustainable solutions are required in order to achieve the city and lifestyle that people want. The strategy aims to provide benefits both in the short and long term.

Traffic congestion will be addressed by targeted investment in transport infrastructure and a range of measures to manage the demand for travel:

- Increase road connections in town centres and disconnected neighbourhoods; improve the flow at selected intersections and at connections to the state highway network.
- Make significant improvements in passenger transport, walk and cycle ways and incorporate these elements, as appropriate, in road improvements.
- Encourage alternatives to single-occupant vehicle use.
- Implement a range of measures to manage the demand for travel, instead of building more roads or wider roads to meet projected demand.

New road connections would be done to generate new business, to improve connectivity in town centres and to improve the flow of goods and people. An upgrade of arterial roads is required to enable bus priority measures, to encourage ride-sharing with HOV lane, to improve cycle access with cycle lanes and to increase the traffic efficiency of the network.

Improvements in passenger transport and walk and cycle ways provide people with better travel choices and provide improved access for those who don't have a car. Sustainable ways to reduce car use include:

- Walking
- Cycling
- Train, bus or ferry
- Car pooling
- Shorter trips
- Fewer trips
- Travel outside peak hours.

## SECTION 4: Foundations of the Strategy, Strategic Direction

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A range of travel demand management measures is required to encourage a significant shift of people away from driving a car. This requires smart planning of the city form and land use, more local employment, vital town centres to attract employment and make passenger transport more efficient, restrictions on parking, relieving pressure to travel at peak times (for example, congestion charges, working from home, school and workplace travel plans, and sustainable alternatives to driving a car).

The city needs to take advantage of opportunities for cleaner fuels, renewable energy solutions and environmentally friendly technologies. This is important to reduce the harmful impacts of transport on people's health and the environment.

This strategic direction is a balanced approach to investment in roads, passenger transport, walking and cycling, and travel demand management. The strategic direction is closely aligned with the Auckland Regional Land Transport Strategy 2005. Therefore, Waitakere's transport programme has a greater likelihood of receiving funding from Land Transport New Zealand.

The strategic direction requires the transport programme for Waitakere to focus on the following:

- Commitment to the essentials – safety, maintenance of existing transport assets, existing commitments, and operation of traffic systems.
- A balance of investment in roads, footpaths, passenger transport infrastructure, walking and cycling initiatives, and travel demand management measures.
- A commitment to integration between different modes of transport, with rail providing the backbone of passenger transport in Waitakere.
- Planning for integration of transport and land use. This requires growth to be in the right places, with good urban design and appropriate roads, footpaths, cycle ways, access to passenger transport and the state highway network.
- Ensuring that the implementation of transport projects is smart, cost effective and well planned so that they directly contribute to the type of city that people want to live and do business in.

### Expected Outcomes

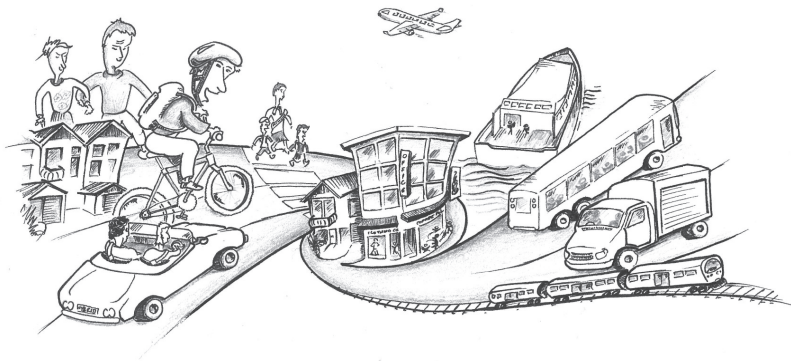
The following expected outcomes are based on the strategic direction and the budgeted programme:

- Most schools in Waitakere implementing travel plans – A 10% reduction in car trips to school is expected to be achieved.

- The Council (and other large organisations such as UNITEC and the hospital) would lead the way with workplace travel plans achieving a 12% reduction in single-occupancy car trips to and from work.
- More people walking and cycling – A 63% increase in the three main town centres is expected to be achieved.
- Train services are every ten minutes in the peak periods.
- Bus priority measures are in place on key arterial roads which result in faster and more reliable trips and greater bus patronage.
- A shift to passenger transport (approximately 50% increase in passenger transport trips to work at peak times).
- Congestion charging is introduced in the Auckland region by 2016, which is aimed at achieving a reduction in peak period trips by motor vehicle and providing a revenue source for passenger transport.
- ARTA will provide information on the availability of different modes of transport which will assist sustainable travel choices.
- At least 13% of Waitakere's population will be living in high-density centres and corridors.
- Road injury crashes per 10,000 people are expected to decline by 6%.
- Crashes, deaths and injuries involving pedestrians and cyclists decrease.
- A similar number of vehicle kilometres travelled per resident as in 2005 (4,352 kilometres per resident per annum in 2005).
- A slight increase in the number of vehicles on the roading network by 2016.
- A slight reduction in congestion on the arterials, assuming the shift to sustainable modes of travel.
- Increased efficiency of arterial roads.

These outcomes assume the introduction of congestion charging which is forecast to reduce congestion by 20-25% by 2016. If congestion charging is not introduced, then levels of traffic and congestion can be expected to be worse than as stated above.

The Waitakere City Council considers that it is important to have effective passenger transport alternatives in place in order to manage a shift in demand, anticipated to arise from increasing oil prices and congestion charging in the Auckland region.



## Section 5: Policies and Transport Programme

This section outlines the Council's transport policies and transport programme for Waitakere.

### Transport policies

There are a number of policies in the Auckland Regional Land Transport Strategy 2005 which apply to local authorities. These form an important part of transport policy in Waitakere and are outlined in Appendix 3.

Waitakere City Council policies also reflect its eco city approach and the local requirements of Waitakere, including:

- The Council's District Plan.
- The Council's proposed District Plan changes, including developments in the northwest of the city and New Lynn.
- Policies contained in strategic and implementation documents (refer to Appendix 4).
- Existing and planned transport corridors and modes of transport (outlined in section 6.)

Specific transport policies for Waitakere include:

#### Compact urban form

The Council supports intensive development around the main town centres, rail and ferry stations and along transport corridors. This will help to create vibrant centres, improve access to key services and support passenger transport. Community facilities (including schools, health centres, retail centres, libraries and council offices) and essential services should be located where there is safe and easy access by passenger transport, walking and cycling.

New development needs to be appropriate for the location and use. It is desirable that new development and transport

are integrated. Appropriate provision of transport modes and mitigation of adverse effects on the transport system need to be considered in order to achieve sustainable outcomes for the city.

#### Supporting economic development

The Council will encourage growth that provides local jobs, leisure and shopping facilities and concentrates housing and employment in areas with good passenger transport and walk and cycle routes. The efficiency of the existing road network will be improved and some new road connections will be provided to address congestion which directly and significantly affects economic development in Waitakere.

It is essential that growth in the local economy can be supported by the local transport network, with appropriate routes for trucks and goods vehicles. New developments that generate substantial freight movements should be located with access to the state highway network and away from town centres and residential areas. A civilian airport at Whenuapai, with appropriate transport connections, would provide significant local employment and achieves significant congestion relief.

#### Working with key stakeholders

The Council will continue to carry out effective consultation with key stakeholders including the local community and special interest groups. It will work collaboratively with key transport agencies including Transit New Zealand, Auckland Regional Transport Authority, ONTRACK, Auckland Regional Council, Land Transport New Zealand, transport providers and neighbouring Territorial Authorities.

#### Smart development

Smart development of the city means doing it right the first time. The Council will ensure that it works with utility

## SECTION 5: Policies and Transport Programme

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providers to coordinate works in the road corridor and ensure that disruption to users is minimised.

### **Reducing adverse environmental effects of transport**

The Council is developing a Greenhouse and Energy Action plan. This identifies that transport accounts for 44% of the city's greenhouse gas emissions. The Action Plan identifies a number of projects to reduce greenhouse gas emissions that the Council will undertake or advocate for, including higher standards for vehicle efficiency and environmental performance and the introduction of carbon neutral fuels.

Waitakere City Council will advocate for the introduction of noise emission and vibration standards in the Auckland region and support the Auckland Regional Council in its efforts to reduce vehicle emissions. The Council will ensure that all new roads in Waitakere are designed to mitigate water contamination from the roading network.

### **Develop quality infrastructure supporting passenger transport, walking, cycling and carpooling**

The Council will work with providers to ensure that station precincts are designed to meet the needs of users and have a high standard of safety, access and appropriate facilities such as lighting, toilets, bike lockers, signage, walkways, drop-offs and park and rides.

It will continue to plan and develop bus priority measures with a focus on key strategic corridors. The Council will upgrade infrastructure at bus stops including signs, timetable holders, shelters, lighting, and provide high-quality access. High Occupancy Vehicle (HOV) lanes will be proposed on selected arterial roads.

### **Support and promote alternatives to single occupancy car use**

The Council will continue to work with ARTA to increase the promotion and awareness of passenger transport services, walking and cycling. The Council will encourage mall operators and other major retail providers to assess

options for reducing car dependency such as a dedicated 'shopper bus' and parking restrictions. The Council will assist schools with the implementation of school travel plans which encourage sustainable travel to school and reduce traffic congestion at peak times

### **The Council as a leader**

The Council will contribute to the city's transport objectives through its own practices. Examples include location of its offices in Henderson next to a passenger transport interchange and implementing a workplace travel plan to encourage sustainable travel by employees and visitors. The Council will share its learnings with other organisations.

### **Parking**

A range of measures will be required to respond to demand for parking, particularly in the main town centres. These include restricted time parking, improved passenger transport, park and ride facilities, paid parking in the Council's off-street car parks and in car park buildings. The Council is committed to reducing the effects of traffic and there needs to be a limit on provision of parking to achieve this. Road users need to bear the costs of travel, including parking. The Council has direct control over parking on the roads and Council-owned parking areas. The following strategies are to be developed over the next 10 years:

- **Limit supply** – The Council is proposing changes to the District Plan to help manage parking to better achieve the Council's strategic goals: for example, the Council proposed no minimum requirements for on-site parking for residential developments at New Lynn.
- **Manage on-street parking** – Some changes in on-street parking may be required through regulatory measures, to enable bus priority lanes to be introduced and also to ensure adequate turnover of parking in busy town centres. Consideration will be given to on-street paid parking, but this is not part of the budgeted programme 2006–2016.
- **Off-street parking** – The Council intends to extend charging for off-street parking in Council-owned parking areas in town centres in order to upgrade the security, create a market for paid parking and to influence travel choices.
- **Park and ride** – Park and ride areas are required near to selected rail, bus and ferry stations. Park and ride facilities provide a connection to the passenger transport system, which is particularly important for those in rural areas. Park and ride areas should be developed with a high standard of safety and security.

### **Transport funding, congestion charges and tolls**

The Council's policy is to ensure that development contributions and financial contributions are obtained and used to fund the growth requirements of the transport



*Glen Eden Rail Station and park and ride*

system. This is to ensure that development costs are funded in a manner that is fair and equitable to current and future residents, while supporting the Council's eco city approach.

Congestion charging options in the Auckland region can be an effective tool in reducing congestion and raising revenue.

The Council recognises that there are a number of issues relating to congestion charges and tolls. The Council is yet to adopt a policy position regarding congestion charges but is encouraging government to consider legislation which enables congestion charges. The Council would seek to ensure that congestion charges and tolling:

- Are equitable across Auckland and New Zealand.
- Are equitable across all social groups and not discriminating against those with least choice.
- Provide any surplus revenue to fund passenger transport and travel demand management as well as physical infrastructure.
- Manage travel behaviour (to reduce congestion) as well as provide revenue.
- Are able to favour or discriminate in favour of genuine goods and business traffic.
- Do not overload local roads (or if they do, use revenue to fund improvements to local roads).
- Reduce overall road traffic.
- Are offset by a reduction in petrol tax or road user charges over time.
- Support Waitakere's economic and land use strategies.

A high-quality passenger transport network is a prerequisite for the introduction of congestion charges.

The Council will continue to advocate for legislation which taxes vehicle pollution into the air or stormwater system according to vehicle type – a 'polluter pays' system. Road users need to be aware of, and pay for, the true cost of their transport decisions.

### **Safety and accessibility**

Well-designed, inclusive and accessible communities and transport systems not only benefit vulnerable users, including the elderly, children, disabled people, people with English as a second language and those with least choice - they achieve better solutions for everyone. Accessibility issues need to be integrated into the approach and working practices of transport policy makers, planners and infrastructure and service providers. This approach is reflected in the work Waitakere City Council has undertaken investigating safety and access by design. This has three components which influence access for local residents -

Barrier Free, Universal Design; Crime Prevention through Environmental Design; and Injury Prevention through Environmental Design.

Safety and accessibility needs to be considered in the planning of all transport options and for the whole of the journey. The accessible journey covers all the steps needed for a person to get from their home to their destination and return, including reading information to plan the journey, and all the different transport modes, interchanges and streetscapes. If one link is inadequate, the whole journey may be impossible. For example, a bus that is accessible to wheel chairs and push chairs, needs to be supported by quality footpaths and road crossing systems. Passenger transport stops and access ways should be well lit and free from 'tagging' and vandalism. This will assist with an improved perception of personal safety.

### **Responsibility for roading**

The Local Government (Auckland) Amendment Act 2004 allows territorial authorities to delegate roading functions to the Auckland Regional Transport Authority any time after June 2007. The Waitakere City Council's current policy is that it does not wish to delegate its roading functions.

### **Transport Programme 2006–2016**

The Council's budgeted transport programme for the 10-year period 2006 – 2016 is attached in Appendix 1. The ten year programme is reviewed every three years and the annual programme each year. This identifies the key infrastructure costs and timing in the Council's transport programme. New programmes introduced into the Transport Programme 2006 – 2016 include:

- Bus priority measures on selected arterial roads;
- Development of 30% of the cycle way network across the city by 2016;
- A travel demand management programme which includes travel plans for schools, workplaces and promotes sustainable travel choices, particularly at peak times;
- A park and ride programme in relation to rail, bus and ferry stations and terminals;
- Integrated transport at new growth areas in the northwest.

The cost of the 10-year transport capital expenditure programme (excluding renewals) is \$368 million to be funded out of rates, user charges, development contributions, and regional and central government funding. The net cost of the 10-year transport capital expenditure programme (excluding renewals) after central and regional government funding is \$207 million.

## SECTION 5: Policies and Transport Programme

The increase in the cost of the capital expenditure programme between the draft and final strategies was due to the inclusion of all transport related unsubsidised transport projects and also an adjustment for inflation.

In developing the Council's Transport Programme 2006–2016, the focus has been on:

- Identifying projects and coordinating the timing of those projects.
- Setting the size of the programme to an affordable level and a programme which fits with the Council's strategic direction for transport.
- Prioritising projects based on the following order:
  1. Maintenance and renewals
  2. Safety
  3. Travel demand management – land use, integrated transport projects, working from home, local trips, travel plans, car pooling, passenger transport, preparation for congestion charging, traffic management, promotion and communication of sustainable travel choices.
  4. Walking and cycling
  5. Passenger transport
  6. Roads – new roads in subdivisions and growth areas, connectivity, some arterial improvement.

Projects have also been included where there is external funding in addition to Land Transport New Zealand subsidies (i.e. development contributions, user pays).

### Significant Projects

The following are large-expenditure items that significantly affect the total transport spend:

**Whau Crossing bridge** – A detailed investigation of the benefits and feasibility of constructing a crossing of the Whau River between Rosebank Peninsula and Te Atatu South/Glendene is proposed to be done jointly with Transit New Zealand and the Auckland City Council. It is believed that the crossing would help to improve flows on the North Western Motorway, Great North Road and Ash/Rata Street, and help relieve the Te Atatu motorway interchange providing better access to business areas in the city, notably Glen Eden and Henderson. The investigation will also need to consider alternative sources of funding such as tolls and private-sector partnerships. Only the cost of the investigation has been included in the 10-year budgeted programme.

**New Lynn Transit Orientated Design** – The double tracking of the Western Rail line at New Lynn is fundamental to improve transport and to revitalise the New Lynn town

centre. Placing the rail corridor below street level will allow the town centre to grow and integrate a range of uses across the corridor at ground level. The project includes redevelopment of bus facilities, additional road and pedestrian connections and some urban redevelopment of properties near the rail corridor. This will improve the level of north-south access and also allow pedestrians, buses and cyclists to get from one side to the other more safely.

**Cycle and walk way along rail line** - This walk and cycle way would provide safer, direct access to train stations and town centres along the rail line. It would also provide important links to schools, communities and workplaces. Only a portion of the cost of the walk and cycle way has been included in the 10-year budgeted programme.

### Principles for prioritising transport in Waitakere

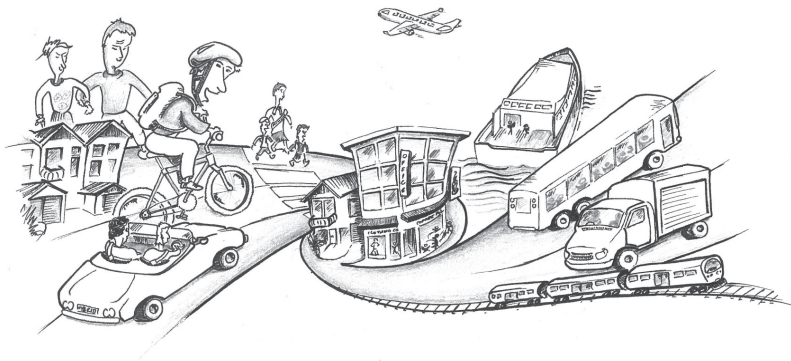
Assessment criteria is being developed in relation to new transport projects to reflect the contribution to the objectives of this transport strategy. Criteria for prioritisation of a transport project or programme should involve an assessment of economic, environmental, social and cultural impacts including, for example:

- How does the project contribute to employment or economic development within Waitakere?
- How does the project contribute to sustainable travel? For example, does it contribute to a shift away from single-occupant vehicle travel and long trips?
- How does the project contribute to safety?
- How does the project contribute to social capital and address social needs?

Prioritisation criteria set by funding agencies will affect the timing of projects in the 10-year programme.



*Footpath improvements, Glen Eden*



## Section 6: Role of Transport Modes and Transport Corridors

### Roads and State Highways

Making the most of our existing roading network is the main priority for the Council's roading investment. The Council will advocate for, plan, and construct new roads only when they are essential in order to better integrate the transport network.

Completion of the State Highway 18 Upper Harbour motorway and the State Highway 16 extension are vital to economic development and for local jobs at Westgate and Hobsonville. The completion of State Highway 18 Upper Harbour motorway is expected to significantly alleviate congestion on Hobsonville Road and will provide better access between Westgate and Albany. Surrounding areas will enjoy a reduced travelling distance to access employment and facilities, with the added benefit of reducing traffic volumes elsewhere on the network.

The Council plans to investigate construction of another crossing of the Whau River between Rosebank Peninsula



Lincoln Road off-ramp

and Te Atatu South/Glendene. A second crossing would help to improve flows on the North Western Motorway, Great North Road and Ash/ Rata Street, and would help to alleviate congestion the Te Atatu motorway interchange, providing better access to business areas in Waitakere, notably Glen Eden and Henderson.

The Council will consider road widening on strategic local roads to improve the flow of buses and high-occupancy vehicles or to add a cycle lane. Generally, road widening that is mainly for improving private vehicular traffic will not be undertaken. Exceptions to this may be in the context of safety, town centre development, connectivity, and when there is a considerable improvement to the entire route, i.e. more than localised benefits are achieved.

The Council will examine the impact of parking, deliveries, property access and conflicting movements at intersections. Solutions that improve general operation and provision for buses within the road carriageway and reserve will generally be sought.

### Freight Movement Strategy and Business Location Strategy

The Council will develop and implement a Business Location Strategy and a Freight Movement Strategy. Some of the general principles of these strategies will include:

- Goods-based businesses are encouraged to locate in areas with good access to the state highway network (for access to the port, airport, etc.);
- People-based businesses are encouraged to locate along the rail line and at locations with good passenger transport services;
- Preferred routes for freight will be developed in conjunction with freight operators and local businesses,

## SECTION 6: Role of Transport Modes and Transport Corridors

taking into account impacts on residential neighbourhoods, congested areas and efficiency requirements;

- Freight movement is encouraged outside peak hours;
- Local freight on rail is not planned in Waitakere over the next 10 years.

### Passenger Transport

The city's strategy for passenger transport is to further develop, and increase the patronage of, all modes of passenger transport. Recently, the Council's focus has been the development of the rail network. This focus will continue to ensure that we complete the planned infrastructure and services upgrade of the Western Rail Corridor. The Council is also committed to optimising bus and ferry services with improvements to infrastructure, priority measures, service quality and real-time information. There needs to be better integration of passenger transport services and modes. People need to be encouraged to use passenger transport not only in the peak times when there is pressure on the roading network, but also during the day as part of everyday travel. This is important for quality of life and the financial viability of passenger transport services.

### Rail

The Council will continue to advocate strongly for upgrade to services and infrastructure on the Western Rail Corridor.



Ranui Rail Station

It is vital that the Auckland region achieves the goal of an excellent rail passenger service and overcomes funding difficulties to achieve this.

The completion of double tracking of the Western Rail Corridor remains a high priority. This is fundamental to increasing frequency, and increased service results in increased patronage.

New trains will be needed in the future. However, a decision about whether the Auckland region continues with diesel or switches to electric trains must be made first. The Council will continue to advocate for electrification of the rail corridor. The benefits of electrification include reducing long-term impacts on the environment, supporting intensification along the rail corridor and around stations, and stimulating passenger growth.

The major stations and passenger interchanges are Henderson and New Lynn. Upgrading the stations from New Lynn to Waitakere and the precincts surrounding our rail stations is a priority. People want access to be easy, attractive, comfortable and safe.

The Council plans for the New Lynn station include redeveloping the bus station, lowering the rail line through New Lynn and removing the roundabout intersection across the rail line. The Council believes this will provide the best prospect for the future vitality and sustainability of New Lynn as a major town centre.

### Buses

Waitakere City Council's focus is on developing bus-related infrastructure (bus stops, signs, timetable holders, shelter, lighting, etc) and working with ARTA to improve services, service quality and frequency. Waitakere City Council will also work with Transit NZ regarding bus or high-occupancy vehicle lanes along the state highways.

Buses are an integral part of the passenger transport system. Bus priority measures give special treatment to buses so that their trips are faster and more reliable.

Bus priority measures include:

- Bus and high-occupancy vehicle (HOV) lanes during peak periods of the day.
- Bus advance signals (e.g. traffic lights, ramp signals).
- Bus advance lanes.
- Clearways.
- Traffic improvements that directly benefit buses such as free left-hand turns.



Consultation on proposed bus priority measures on specific routes will be required. Proposed locations of bus priority measures are along State Highways 16 and 18, along key arterial roads (Te Atatu, Lincoln, Great North and Hobsonville Roads) and around interchanges at New Lynn, Henderson and Westgate.

The benefits of bus priority measures include:

- reliable bus trips at peak times;
- fewer delays and quicker trips for buses at peak times;
- more services and increased patronage;
- fewer single-occupant vehicle trips at peak times;
- a shift to passenger transport, walking and cycling;
- more car pooling on HOV lanes.

**Bus Services**

ARTA is responsible for contracting services and periodically reviews bus services. Waitakere City Council will work with ARTA to ensure that any review of bus services best takes account of the needs of the city and its residents. The Council has identified some key changes required to bus services:

**Long-haul and local trips:** Bus services need to service travel within Waitakere (local services) as well as trips outside the city (express services).

**Support town centre development:** Bus services need to improve access to, through and from the key town centres, growth and employment centres. Interchanges are proposed to be established at New Lynn, Henderson, Westgate and Hobsonville Village.

**Bus and rail integration:** People need to be able to easily and safely connect between buses and trains, especially at

New Lynn and Henderson. This can be achieved by bus feeder services, adjusting bus schedules to integrate with rail, and by optimising the use of the upgraded interchanges to cater for all possible connections between bus and rail.

**Bus priority measures:** Where bus priority measures are introduced, increased frequency of services is required to increase patronage and take advantage of faster and more reliable trips.

**New services:** New bus services should be introduced in conjunction with, rather than after, new residential and commercial development. As the northern growth areas develop, new services should be introduced to encourage passenger transport use. The Western Heights, Central Park Drive, Massey, Westgate and West Harbour areas among others, need improved services.

**Regional and national issues:** The Council supports regional and national moves to reduce emissions from buses and use cleaner fuels. Other issues will be supported such as regional priorities for buses, review of fares, integrated ticketing, real-time information systems, low floors and cycle racks on buses.

**Ferry**

The Council wishes to maximise the potential of ferries by improving the precinct areas surrounding terminals, including signage, shelter, lighting, walking access and park and ride facilities. The Council will work with ARTA and operators to further develop services at West Harbour and establish new services at Hobsonville and Te Atatu.



*Lincoln Road bus advance lane*



*West Harbour ferry service, Westpark Marina*

## SECTION 6: Role of Transport Modes and Transport Corridors

### Walking and Cycling

The Waitakere City Walking and Cycling Strategy was adopted in 2003. The purpose of this document is to promote the healthy benefits of walking and cycling and reduce the negative impacts of motor vehicles by:

1. Increasing the proportion of short trips made by walking or cycling to major destinations (town centres, schools, bus and rail stations).
2. Increasing the number of walking and cycling trips made for leisure.
3. Supporting commuting by walking or cycling trips.

This requires the establishment of a network of routes for walking and cycling which connect to major destinations. The footpath network provides an important walking network. A safer cycle network also needs to be established, with dedicated cycle ways, cycle lanes and signage.

In order to encourage more walking, town centres need to be safe and well designed so that there is high amenity for people to sit and move about. Similarly for cycling, it is important that conducive cycling conditions are established throughout Waitakere through good design of roads, management of traffic and provision for cyclists.

In order to further support the passenger transport network it is important to improve pedestrian access to bus stops, train stations and ferry berths. Improvement in local footpaths to local employment, schools, shops and parks will also assist in encouraging short trips on foot.

While exact details and timing of some routes have changed since 2003, the Walking and Cycling strategy's objectives remain valid.

### Travel Demand Management

Travel Demand Management (TDM) seeks to reduce people's need for travel and to influence their choice of travel mode. TDM provides attractive transport alternatives, information and appropriate city form and land use. It is expected that people will minimise long and frequent trips in single-occupant vehicles.

The Council's strategy for TDM is to encourage walking and cycling, car pooling, working from home, travelling outside peak periods and use of passenger transport. This requires smart planning of the city form and land use, transport infrastructure and communicating and promoting more sustainable travel choices.

TDM measures include:

- A focus on appropriate business location and complementary land use.

- Reduce the need for travel and the distance travelled through land use intensification at town centres, transport nodes and along the rail corridor.
- Support the application for extension of the Metropolitan Urban Limit in the northwest to provide local jobs and to establish sustainable transport solutions at Westgate, Hobsonville and Hobsonville Village.
- Continue to advocate vigorously for Whenuapai Airport to operate with commercial services (i.e. maximise employment, minimise residential).
- Plan with developers for local services and facilities that meet needs of local catchment.
- Advocate for quality community facilities in Waitakere.
- Implement a Business Location and Freight strategy.
- Promote and facilitate Internet and broadband services.
- Travel plans for schools, tertiary organisations, workplaces and communities.
- Encourage work from home and flexible work hours.
- Implement the policies of the Waitakere City Walking and Cycling Strategy 2003.
- Advocate for introduction of congestion charges and pricing controls (parking and road pricing).
- Seek to improve and promote passenger transport as an alternative to the motor vehicle.
- Encourage formal and informal car pooling arrangements managed by participants or private sector.



*Shared path, Henderson Creek*

- Ensure footpaths are maintained and renewed to quality standards which encourage use by people with a range of abilities and for a variety of uses.
- Communicate travel demand management plans to the public.

### Energy Efficiency and Environmentally Friendly Technologies

Waitakere eco city has the opportunity to play an important role in the support, use and introduction of energy efficient, clean fuel and environmentally friendly technologies. This can be at a number of levels including advocacy, information provision and, where appropriate, trial and introduction of technologies. Many opportunities are small, low cost and require an innovative approach. Current examples include:-

- Promote Waitakere for pilot projects that demonstrate eco commitment (e.g. solar-powered lights, fuel-efficient vehicles and alternative fuels).
- Advocate regionally and nationally for emission controls, catalytic converters, fuel standards.

The Council is currently developing a Waitakere Greenhouse and Energy Action Plan which will further detail projects relating to transport related greenhouse gas reduction. The Council will investigate and implement as appropriate, future opportunities to support new technologies and solutions.



Modern train, Perth

### Transport Corridors

**Rail Corridor** – There will be very high train use within Waitakere and connecting with Auckland; but it is not expected that rail will be grade separated (except at New Lynn) by 2016. The Council expects completion of the double tracking of the rail line, with electrified new trains operating every 10 minutes at peak periods. High-density housing and businesses around stations provides a destination and source for trips by passenger transport, walking and cycling. Frequent bus services connecting to train stations are expected. Increases in residential, retail, commercial and office buildings at New Lynn and Henderson are expected to result in high rail usage as these town centres become established as key destination and employment centres.

Increased train services may result in increased traffic queues at peak times at level crossings.

### State Highway Corridors

**State Highway 16** – State Highway 16 will continue to carry high volumes of traffic including more buses. These buses (including express services) will increasingly use bus shoulder lanes at peak times. There will be a new interchange and connection to State Highway 18 by 2012, and an extension past Westgate is expected by approximately 2013. The Council anticipates ongoing congestion at arterial connections and at on-ramps in the morning peak, and off-ramps in the afternoon peak. Waitakere urgently requires an upgrade of Lincoln Road and Te Atatu Road interchanges. Ramp signalling at on-ramps should enable priority to buses and high-occupancy vehicles. A cycle way alongside State Highway 16 is an important part of the regional cycle network.

**State Highway 18** – State Highway 18 will improve essential economic linkages with North Shore and Rodney as well as with economic centres in Waitakere. When State Highway 18 is completed (expected by 2012), high volumes of traffic will be diverted from Hobsonville Road to State Highway 18. There will be a walk and cycle way from Buckley Ave to the Upper Harbour Bridge and from 2016, more buses (including express services) using bus shoulder lanes. State Highway 18 provides access to Westgate and to Whenuapai Airport.

### Arterial Road Corridors

Like the arteries of the human body, arterial roads are the lifeblood of the city, enabling people to move about, business to operate successfully, deliveries to be made and for the city to prosper. Arterial roads have to cater for a wide variety of needs such as supporting residential

## SECTION 6: Role of Transport Modes and Transport Corridors

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and business intensification; providing access to homes, jobs and shops; and enabling people and goods to move efficiently across the city and region as well as within the area. It is the Council's role to strike the best possible balance between all of these competing needs, recognising that many parties including pedestrians, cyclists, bus passengers, delivery vehicle and truck drivers, private motorists, and adjoining businesses and homes have a stake in achieving this balance. Overly favouring one need, such as speed for through traffic, can upset the delicate balance in the corridor and prejudice the interests of others whose stake in the corridor is equally as important.

Therefore, the Council will consider all these needs in respect of each road corridor to strike the best possible balance between the multiple competing needs. The Council will consider Te Atatu Road first, taking into account input from community and stakeholders. Decisions regarding this corridor will help guide the Council in relation to its planning for other road corridors.

**Access to State Highway 20** – Significant traffic is expected to be generated along Clark Street to Wolverton and Tiverton Roads from the completion of the Mt Roskill extension to the Maioro Street interchange in 2009 until completion of State Highway 20 Waterview connection. Rata Street will continue to experience high volumes of traffic and provide access to State Highway 20 and Auckland City. Planning will need to be coordinated with Auckland City Council.

**Te Atatu Road** – Te Atatu Road will continue to experience high volumes of traffic at peak times. Options for a bus and high-occupancy vehicle lane northbound between Edmonton Road and the Northwestern motorway will be investigated in 2006/07. This investigation will also include the ramp signals that Transit NZ proposes to ration access, provide bus priority and improve pedestrian safety.

**Great North Road** – Great North Road will continue to experience high volumes of traffic at peak times. It is also an identified growth corridor which runs through Henderson and New Lynn town centres. Options for bus advance lanes and signal pre-emption will be proposed to improve bus operation and encourage use of passenger transport.

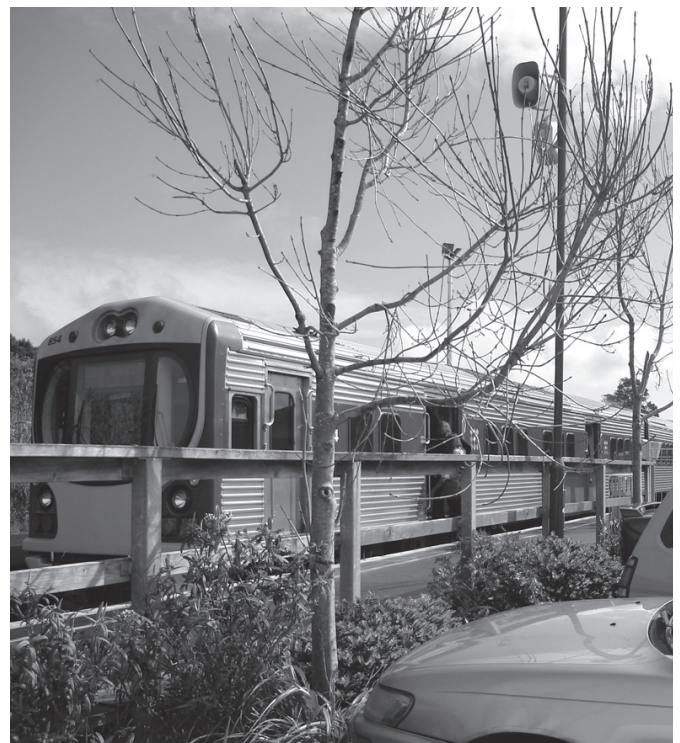
**Lincoln Road** – Lincoln Road will continue to experience high volumes of traffic at peak times. Lincoln Road serves a multitude of needs including motorway access; through traffic; local traffic and access to adjoining business and residences. It is identified as a growth corridor for the city and part of a quality transit route. At present, there is significant conflict between the local access and through-

traffic functions of the route which need to be worked on in order for it to work more effectively for all users. Options for bus lanes; high-occupancy vehicle lanes; bus priority measures; as well as for improved access management and overall corridor management will be investigated.

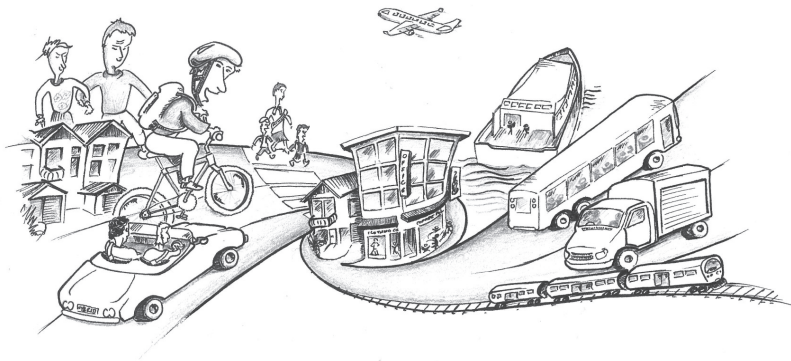
**Hobsonville Road** – The Council will seek transfer of control of Hobsonville Road from Transit NZ. Very high volumes of traffic need to be reduced after State Highway 18 is operational. Options for bus priority measures will be investigated, as will an on-road cycle lane. Planning for neighbourhood centres along Hobsonville Road will provide density to support increased bus services. Slower speeds will be required to address safety issues and to allow controlled access to either side of Hobsonville Road.

**Proposed Whenuapai airport** – Road access to the Whenuapai airport needs to be protected to enable high volumes of traffic to connect with the proposed Whenuapai regional airport.

**Proposed Whau Bridge crossing** – A joint study with Auckland City Council and Transit NZ is required into the feasibility of a connection to Rosebank Peninsula from Waitakere. This may provide an alternative connector and relieve pressure on Rata Street, Te Atatu Road and New Lynn. Options for bus and cycle routes will be considered. Funding options including tolls will be explored.



*Swanson Rail Station and park and ride*



## Section 7: Monitoring and Review

### Monitoring

The Council and other organisations carry out monitoring in relation to transport outputs and outcomes. In order to assess the effectiveness of this strategy, it is important to monitor progress against the outcomes set out in sections 3 and 4. This will assist in future reviews of the strategy.

The following is a list of indicators to be monitored:

- Incidence of crashes and transport related injury or death.
- Percentage of population with access to the passenger transport system.
- Number of vehicle kilometres travelled within Waitakere.
- Proportion of the work force that works locally.



Henderson Rail Station

- Proportion of growth that is located in high-density centres and corridors.
- Access by residents to employment, town centres and community facilities.
- Car ownership.
- Percentage of population using passenger transport, walking and cycling or travelling as a passenger in a vehicle.
- Percentage of population working from home.
- Travel times and congestion by different modes of transport and on arterial roads.
- Average speed for trip to Auckland CBD, port and airport in the morning peak period.
- Integration of transport modes, especially at town centres.
- Effectiveness of travel demand management programmes.
- Residents' perceptions of safety, accessibility and affordability of passenger transport.
- Health statistics related to active living.
- Use of non-renewable energy by transport.
- Air pollutants from transport.
- Discharges to water from transport.

Historical data and progress in relation to these indicators are available at the Council's website: [www.waitakere.govt.nz](http://www.waitakere.govt.nz)

### Review of the Waitakere City Transport Strategy

The Waitakere City Transport Strategy needs to be reviewed every three years to coincide with the next Auckland

## SECTION 7: Monitoring and Review

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Regional Land Transport Strategy and Waitakere's Long Term Council Community Plan.

By 2009, the following information is expected to be available:

At the regional level -

- Auckland Regional Transport Strategy 2008
- Auckland Regional Growth Strategy review
- Auckland Transport Plan
- Auckland region congestion pricing
- Toll arrangements in relation to the Western Ring Route
- Studies into effects of peak oil

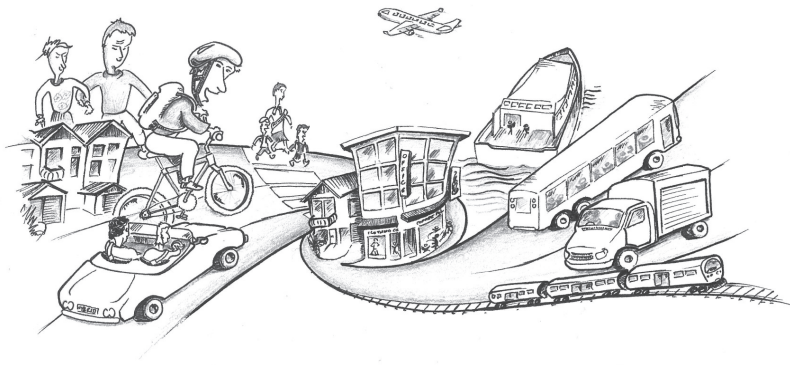
At the local level –

- Decision in relation to District Plan changes, particularly the extension of the metropolitan urban limit.
- Completion of the double tracking of the Western Rail line and station improvements.
- Road improvements and high-occupancy vehicle lanes at Te Atatu Road will have been planned and decisions made with community input.
- Effectiveness of the ramp signalling on the Northwestern motorway
- Policy development (for example, parking, freight)

This will inform the Council's decisions in relation to other road corridors and the next Waitakere City Transport Strategy.



*Walking School Bus, Woodlands Park School*



## Section 8: Conclusion

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Transport is a vital issue for people, the environment and the economy. Waitakere needs to focus its investment in passenger transport, walking and cycling infrastructure. The strategic approach is to manage demand for travel rather than continuing to build roads to cope with expected growth in Waitakere.

This strategy is an affordable and sustainable approach that aims to get the best out of the existing roading network and encourage greater use of sustainable alternatives – regular walking and cycling, passenger transport, fuel-efficient vehicles, car pooling, shorter trips, fewer trips, travelling outside peak hours and working from home.

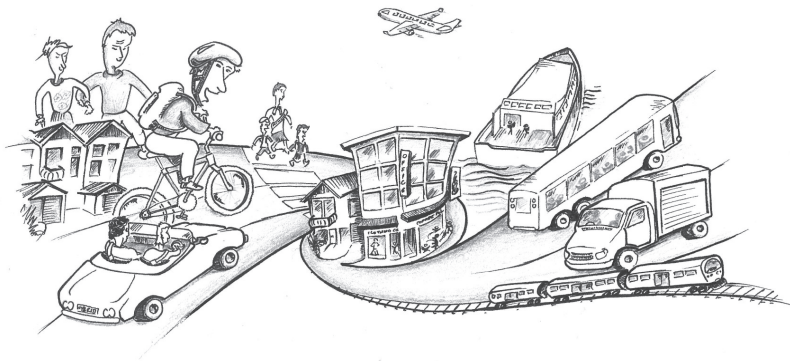
The key features of the Waitakere City Transport Strategy are:

- Commitment to the essentials – safety, maintenance of existing transport assets, existing commitments, and operation of traffic systems.

- A balance of investment in roads, footpaths, passenger transport infrastructure, walking and cycling initiatives, and travel demand management measures.
- A commitment to integration between different modes of transport, with rail providing the backbone of passenger transport in Waitakere.
- Planning for integration of transport and land use. This requires growth to be in the right places, with good urban design and appropriate roads, footpaths, cycle ways, access to passenger transport and the state highway network.
- Ensuring that the implementation of transport projects is smart, cost effective and well planned so that they directly contribute to the type of city that people want to live and do business in.







## Appendix 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
<b>RENEWALS</b>											
<b>Total Subsidised Renewals</b>	11,687,000	14,802,000	12,802,000	12,952,000	13,235,000	13,632,000	13,834,000	15,302,000	15,436,000	15,694,000	139,376,000
<b>NON-SUBSIDISED RENEWALS</b>	2,298,000	2,797,000	2,407,000	2,495,000	2,338,000	2,681,000	2,644,000	2,562,000	2,712,000	2,733,000	25,667,000
<b>TOTAL RENEWALS</b>	<b>13,985,000</b>	<b>17,599,000</b>	<b>15,209,000</b>	<b>15,447,000</b>	<b>15,573,000</b>	<b>16,313,000</b>	<b>16,478,000</b>	<b>17,864,000</b>	<b>18,148,000</b>	<b>18,427,000</b>	<b>165,043,000</b>
SUBSIDY ON RENEWALS	(5,126,000)	(6,492,000)	(5,615,000)	(5,681,000)	(5,805,000)	(5,979,000)	(6,068,000)	(6,711,000)	(6,770,000)	(6,883,000)	(61,130,000)
<b>NET RENEWALS</b>	<b>8,859,000</b>	<b>11,107,000</b>	<b>9,594,000</b>	<b>9,766,000</b>	<b>9,768,000</b>	<b>10,334,000</b>	<b>10,410,000</b>	<b>11,153,000</b>	<b>11,378,000</b>	<b>11,544,000</b>	<b>103,913,000</b>

### SUBSIDISED CAPITAL EXPENDITURE

#### Minor Safety

Professional Services: Minor Safety	35,000	36,000	37,000	38,000	38,000	39,000	40,000	40,000	41,000	41,000	385,000
Minor Safety Projects	1,000,000	872,000	893,000	913,000	931,000	949,000	965,000	979,000	992,000	1,005,000	9,499,000
Flush Median Development	0	0	0	0	0	0	0	0	0	0	0
Slow Streets	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
Safe Routes to Schools	15,000	15,000	16,000	16,000	16,000	17,000	17,000	17,000	18,000	18,000	165,000
Traffic Safety Works for Schools	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1,150,000</b>	<b>1,026,000</b>	<b>1,051,000</b>	<b>1,074,000</b>	<b>1,095,000</b>	<b>1,117,000</b>	<b>1,136,000</b>	<b>1,151,000</b>	<b>1,168,000</b>	<b>1,182,000</b>	<b>11,150,000</b>

#### Corridor Projects (Subsidised)

Lincoln Road Widening (Completion)	178,000	0	0	0	0	0	0	0	0	0	178,000
Lincoln Road Widening (Tasman / Sel Peacock)	780,000	0	0	0	0	0	0	0	0	0	780,000
Scats & CCTV - optimisation	100,000	103,000	315,000	322,000	329,000	335,000	341,000	346,000	350,000	355,000	2,896,000
Secondary Road Street Lighting	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
SP & RTPIS - Scats intersections & bus stops	851,000	0	0	0	0	0	0	0	0	0	851,000

#### Great North Road Corridor

Great North Road - Titirangi	0	0	0	106,000	105,000	1,457,000	0	0	0	0	1,668,000
Great North Road - West Coast	0	0	0	0	0	0	154,000	933,000	2,106,000	0	3,193,000
Great North Road - Archibald / Glenview	0	0	0	0	97,000	725,000	1,341,000	0	0	0	2,163,000
Great North Road - Glenview	0	0	0	0	0	0	0	127,000	1,103,000	1,732,000	2,962,000
Great North Road - View	0	0	0	0	0	17,000	232,000	0	0	0	249,000
Great North Road - View / James Laurie	0	0	0	0	0	36,000	486,000	0	0	0	522,000

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
Great North Road - Te Atatu	0	0	0	0	0	0	0	28,000	65,000	379,000	472,000
Great North Road - McLeod	0	0	0	0	0	3,000	42,000	0	0	0	45,000
Great North Road - Edmonton / Ratanui	590,000	0	0	0	0	0	0	0	0	0	590,000
Great North Road - Railside	353,000	0	0	0	0	0	0	0	0	0	353,000
Great North Road - Henderson Valley	25,000	0	0	0	0	0	0	0	0	0	25,000
<b>Lincoln Road Corridor</b>											
SH 16 Interchange	91,000	190,000	0	0	2,006,000	2,044,000	0	0	0	0	4,331,000
Triangle	303,000	630,000	840,000	859,000	1,643,000	1,674,000	0	0	0	0	5,949,000
Universal	2,000,000	2,652,000	0	0	0	0	0	0	0	0	4,652,000
Pomaria	0	0	0	29,000	59,000	142,000	144,000	617,000	625,000	0	1,616,000
Norval	0	0	0	85,000	58,000	59,000	593,000	602,000	0	0	1,397,000
Sel Peacock	0	0	0	81,000	196,000	199,000	566,000	575,000	0	0	1,617,000
Swanson	0	0	0	0	999,000	209,000	213,000	2,304,000	2,334,000	0	6,059,000
<b>Te Atatu Road Corridor</b>											
Te Atatu / Edmonton : Layout & signal	251,000	403,000	1,587,000	0	0	0	0	0	0	0	2,241,000
Te Atatu / Vera : Layout & signal	225,000	392,000	1,007,000	0	0	0	0	0	0	0	1,624,000
Te Atatu / Jaemont bridge	26,000	114,000	207,000	1,094,000	0	0	0	0	0	0	1,441,000
Te Atatu SH16 Ramps	71,000	323,000	597,000	3,051,000	0	0	0	0	0	0	4,042,000
Te Atatu / Gloria Ave : Improvement	0	0	0	0	0	0	16,000	216,000	0	0	232,000
Te Atatu / Gunner / Yeovil : New Roundabout	0	0	0	0	0	39,000	528,000	0	0	0	567,000
<b>Hobsonville Road Corridor</b>											
Buckley M/way Ramps	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000
NORSGA Hobsonville - Roads	0	0	210,000	0	0	0	0	0	0	0	210,000
<b>Titirangi Road Corridor</b>											
Titirangi / Margan : Layout & signal	0	0	0	0	0	0	0	147,000	292,000	2,005,000	2,444,000
Titirangi / Rail line widening	193,000	257,000	2,687,000	0	0	0	0	0	0	0	3,137,000
<b>Western Bypass</b>											
Ranui Station Road - Marinich extension.	0	0	0	113,000	53,000	716,000	0	0	0	0	882,000
Swanson / Marinich : New Roundabout	0	0	0	0	42,000	279,000	581,000	0	0	0	902,000
Glen Road - Waitemata extension & bridge	0	0	0	0	0	0	0	87,000	350,000	1,180,000	1,617,000
<b>Miscellaneous Corridor Projects.</b>											
Central Park Drive - School Road	0	0	0	0	0	0	0	16,000	217,000	0	233,000
Don Buck - Red Hills Roundabout	675,000	0	0	0	0	0	0	0	0	0	675,000
Margan Project - Rankin	0	0	0	0	0	0	0	19,000	22,000	254,000	295,000
Pleasant Road / Atkinson	0	0	0	0	0	0	0	6,000	76,000	0	82,000
Rata / Rimu Streets - New layout & signals	0	0	0	0	0	0	16,000	214,000	0	0	230,000
Rata / Bested Streets - New layout & signals	0	0	0	0	0	0	26,000	354,000	0	0	380,000
SH 16 Lincoln/Te Atatu Roads - contribution to Transit	0	0	105,000	107,000	0	0	0	0	0	0	212,000
Henderson Valley - Border / Forest Hill	0	0	0	0	0	63,000	198,000	866,000	0	0	1,127,000
Carry Forward	194,000										194,000
Swanson Road - Universal / Don Buck Roundabout	0	0	0	0	0	0	0	137,000	814,000	1,866,000	2,817,000
Swanson Road - Lamoch Roundabout	0	0	0	0	0	0	41,000	39,000	564,000	0	644,000
Swanson Road - Sturges New layout	0	0	0	0	0	44,000	170,000	607,000	0	0	821,000
Te Pai / Waipareira : Layout & signal	0	0	0	0	0	0	0	0	16,000	220,000	236,000
Triangle / Makora	0	0	0	0	0	0	0	20,000	271,000	0	291,000

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
Central Park Drive - extension to Te Atatu Rd	18,000	137,000	366,000	0	0	0	0	0	0	0	521,000
Central Park Edmonton - Layout	0	153,000	788,000	2,127,000	0	0	0	0	0	0	3,068,000
Westgate Drive / Route Improvement	42,000	573,000	0	0	0	0	0	0	0	0	615,000
Westgate - Bridge south of shopping complex	0	0	0	0	0	0	318,000	922,000	2,171,000	2,199,000	5,610,000
<b>Titirangi Town Centre</b>											
Titirangi Town Centre : Clearway & speed humps	0	0	0	27,000	27,000	0	0	0	0	0	54,000
Titirangi TC : South Titirangi Rd Intersec. Layout & signal	0	0	0	38,000	509,000	0	0	0	0	0	547,000
<b>Henderson Town Centre</b>											
Henderson Town Centre - Edmonton/Alderman	2,820,000	0	0	0	0	0	0	0	0	0	2,820,000
Henderson Town Centre - Trading Place	1,860,000	0	0	0	0	0	0	0	0	0	1,860,000
Henderson Town Centre - Alderman at Falls	83,000	1,126,000	0	0	0	0	0	0	0	0	1,209,000
Henderson Town Centre - Sel Peacock/Alderman	151,000	1,302,000	0	0	0	0	0	0	0	0	1,453,000
Henderson TC - Way Finding	353,000	149,000	162,000	0	0	0	0	0	0	0	664,000
Henderson Town Centre - Alderman/Ratanui	5,000	72,000	0	0	0	0	0	0	0	0	77,000
Henderson Town Centre - Hickory - Tunnel	0	0	0	0	307,000	4,152,000	0	0	0	0	4,459,000
Henderson Town Centre - Hickory/Dora or Cranwell link	0	0	0	0	630,000	1,155,000	4,339,000	4,404,000	0	0	10,528,000
Henderson Town Centre - View / Vitasovitch	0	0	0	0	0	0	201,000	38,000	1,371,000	1,389,000	2,999,000
Henderson Town Centre - extension to McLeod	0	0	55,000	805,000	764,000	0	0	0	0	0	1,624,000
Henderson Town Centre - Railway Station	500,000	0	0	0	0	0	0	0	0	0	500,000
<b>New Lynn Town Centre</b>											
Memorial extension to Clark	48,000	51,000	666,000	0	0	0	0	0	0	0	765,000
Portage Road Property Access	1,000,000	1,539,000	1,576,000	0	0	0	0	0	0	0	4,115,000
Hetana extension to Crown Lynn	70,000	1,026,000	977,000	0	0	0	0	0	0	0	2,073,000
Clark extension to Gt North	18,000	77,000	248,000	0	0	0	0	0	0	0	343,000
Clark Extension - Bridge over railway	221,000	0	1,539,000	1,573,000	0	0	0	0	0	0	3,333,000
Clark / Rankin	27,000	103,000	373,000	0	0	0	0	0	0	0	503,000
Totara / Rankin	4,000	0	59,000	0	0	0	0	0	0	0	63,000
Clark - Widen Crown Lynn to Rankin	105,000	0	1,466,000	0	0	0	0	0	0	0	1,571,000
Gt North Road / Totara	0	0	0	0	0	0	0	0	0	118,000	118,000
Gt North - Memorial to Veronica - calming	0	0	0	0	77,000	0	0	1,071,000	0	0	1,148,000
Crown Lynn - extension to Rankin	0	0	0	0	0	0	32,000	115,000	434,000	0	581,000
Portage/Wolverton/Clark/Astley - enlarge	0	0	0	0	0	0	0	0	0	141,000	141,000
Railway Station - lighting, safety etc	88,000	90,000	1,221,000	1,248,000	0	0	0	0	0	0	2,647,000
Railway Station - contribution to underground	0	15,390,000	15,759,000	10,737,000	0	0	0	0	0	0	41,886,000
Bus Interchange	518,000	531,000	244,000	250,000	0	0	0	0	0	0	1,543,000
<b>Norsga Westgate Town Centre</b>											
Westgate Town Centre - Road Network	50,000	0	0	0	0	0	0	0	0	0	50,000
Westgate Town Centre - Hobsonville Road Develop	100,000	346,000	358,000	1,298,000	1,324,000	0	0	0	0	0	3,426,000

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
Westgate Town Centre - Fernhill Extension	0	0	355,000	0	370,000	1,297,000	1,319,000	0	0	0	3,341,000
Westgate Town Centre - Northside Drive	0	0	355,000	0	370,000	1,297,000	1,319,000	0	0	0	3,341,000
Westgate Town Centre - Bus Interchange	0	0	281,000	0	293,000	259,000	264,000	0	0	0	1,097,000
Westgate Town Centre - 200 Space Park and Ride	0	0	580,000	0	605,000	778,000	792,000	0	0	0	2,755,000
<b>Norsga Hobsonville Town Centre</b>											
Roading Network	100,000	0	0	0	0	0	0	0	0	0	100,000
Bus Interchange - land, signs, shelters	0	0	281,000	0	0	299,000	264,000	268,000	0	0	1,112,000
200 Space Park and Ride	0	0	0	0	0	0	0	596,000	271,000	275,000	1,142,000
<b>Travel Demand Management</b>											
Road Pricing Study	10,000	10,000	11,000	11,000	11,000	11,000	11,000	12,000	12,000	12,000	111,000
Charged Car Park Trials	150,000	0	0	0	164,000	0	0	0	0	0	314,000
Community Travel Plans	0	0	0	0	164,000	0	170,000	0	0	0	334,000
Business Travel Plans	100,000	0	0	0	0	0	0	0	0	0	100,000
School Travel Plans	800,000	821,000	840,000	859,000	876,000	893,000	908,000	922,000	934,000	946,000	8,799,000
<b>Bus Priority Works</b>											
Henderson Station	450,000	0	0	0	0	0	0	0	0	0	450,000
Great North (Lincoln-Portage)	0	531,000	544,000	3,149,000	3,212,000	0	0	0	0	0	7,436,000
New Lynn Station Entry/Exit	0	0	132,000	135,000	782,000	797,000	0	0	0	0	1,846,000
Clark Street	0	0	99,000	101,000	586,000	598,000	0	0	0	0	1,384,000
Westgate	0	0	0	0	123,000	126,000	724,000	734,000	0	0	1,707,000
Hobsonville Road (Fernlea-Buckley)	0	0	0	0	0	0	258,000	262,000	1,503,000	1,522,000	3,545,000
Edmonton	0	0	0	0	0	0	133,000	135,000	774,000	784,000	1,826,000
Royal Road	0	0	0	0	0	0	92,000	93,000	536,000	543,000	1,264,000
<b>Ferries</b>											
West Harbour Ferry	0	0	0	0	0	0	0	0	0	591,000	591,000
Hobsonville Ferry	0	0	0	0	1,095,000	0	0	0	0	0	1,095,000
<b>Double Tracking</b>											
Double Tracking - Henderson / Fruitvale : Bridge	150,000	257,000	0	0	0	0	0	0	0	0	407,000
<b>Railway Station Improvements</b>											
Access, lighting etc - Waitakere	0	0	0	0	0	670,000	0	0	0	0	670,000
Access, lighting etc - Swanson	100,000	513,000	0	0	0	0	0	0	0	0	613,000
Access, lighting etc - Sturges Road	100,000	513,000	0	0	0	0	0	0	0	0	613,000
Access, lighting etc - Ranui	0	0	630,000	0	0	0	0	0	0	0	630,000
Access, lighting etc - Glen Eden	0	0	0	515,000	0	0	0	0	0	0	515,000
Access, lighting etc - Sunnyvale	0	0	0	526,000	0	0	0	0	0	0	526,000
<b>Miscellaneous Passenger Transport</b>											
Brigham Creek Bus Interchange	0	0	0	0	0	0	0	0	0	591,000	591,000
Bus Shelter Construction	125,000	128,000	131,000	134,000	137,000	140,000	142,000	144,000	146,000	148,000	1,375,000
Bus Stop Improvements	25,000	26,000	26,000	27,000	27,000	28,000	28,000	29,000	29,000	30,000	275,000
<b>Walk Strategy Works (Subsidised)</b>											
Pedestrian Islands	50,000	51,000	53,000	54,000	55,000	56,000	57,000	58,000	58,000	59,000	551,000
Pedestrian Signals	340,000	349,000	357,000	365,000	372,000	379,000	386,000	392,000	397,000	402,000	3,739,000
Lighting Improvement	120,000	108,000	21,000	21,000	22,000	22,000	23,000	23,000	23,000	24,000	407,000
<b>Cycle Strategy Works (Subsidised)</b>											
Cycleway North West Extension	158,000	0	0	0	0	0	0	0	0	0	158,000
Cycleway Bus Bike Lanes	0	9,000	409,000	111,000	449,000	664,000	588,000	305,000	501,000	0	3,036,000
Cycleway Committed Projects	3,140,000	0	0	0	0	0	0	0	0	0	3,140,000
Cycleway On Road Cycle Lanes	276,000	1,251,000	1,072,000	932,000	687,000	690,000	641,000	657,000	257,000	0	6,463,000
Cycleway Off-Road Routes	510,000	145,000	455,000	1,093,000	1,163,000	893,000	568,000	115,000	0	0	4,942,000

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
<b>Passenger Transport Works (Subsidised)</b>											
Signal Pre-emption for Buses	1,013,000	0	0	0	0	0	0	0	0	0	1,013,000
New Lynn Transit Exchange	300,000	0	0	0	0	0	0	0	0	0	300,000
Regional Integrated Traffic Management	276,000	0	0	0	0	0	0	0	0	0	276,000
ALS Study	0	0	158,000	0	0	167,000	0	0	175,000	0	500,000
ALS Safety Physical Works	600,000	616,000	630,000	644,000	657,000	670,000	681,000	691,000	700,000	709,000	6,598,000
<b>Total</b>	<b>24,980,000</b>	<b>33,160,000</b>	<b>40,937,000</b>	<b>32,734,000</b>	<b>21,555,000</b>	<b>24,194,000</b>	<b>20,060,000</b>	<b>20,361,000</b>	<b>19,614,000</b>	<b>18,592,000</b>	<b>256,187,000</b>
<b>Henderson Network (Subsidised)</b>											
Alderman Drive Bridge	100,000	0	0	0	0	0	0	0	0	0	100,000
Edmonton / Alderman Roundabout	170,000	0	0	0	0	0	0	0	0	0	170,000
Henderson Transit Exchange	923,000	0	0	0	0	0	0	0	0	0	923,000
<b>Total</b>	<b>1,193,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,193,000</b>
<b>Integrated Network Investigations (Subsidised)</b>											
Corridors	416,000	154,000	158,000	161,000	164,000	167,000	170,000	173,000	175,000	177,000	1,915,000
Bus Corridor Strategy Studies	270,000	0	0	0	0	0	0	0	0	0	270,000
Whau River	0	0	0	0	429,000	438,000	0	0	0	0	867,000
Carry Forward	545,000										545,000
<b>Total</b>	<b>1,231,000</b>	<b>154,000</b>	<b>158,000</b>	<b>161,000</b>	<b>593,000</b>	<b>605,000</b>	<b>170,000</b>	<b>173,000</b>	<b>175,000</b>	<b>177,000</b>	<b>3,597,000</b>
<b>Flood Damage</b>											
Flood Damage Miscellaneous	1,000,000	1,026,000	1,050,000	859,000	876,000	893,000	908,000	922,000	934,000	946,000	9,414,000
<b>Total</b>	<b>1,000,000</b>	<b>1,026,000</b>	<b>1,050,000</b>	<b>859,000</b>	<b>876,000</b>	<b>893,000</b>	<b>908,000</b>	<b>922,000</b>	<b>934,000</b>	<b>946,000</b>	<b>9,414,000</b>
<b>Contributions</b>											
Contribution to Subdividers	250,000	257,000	263,000	268,000	274,000	279,000	284,000	288,000	292,000	296,000	2,751,000
<b>Total</b>	<b>250,000</b>	<b>257,000</b>	<b>263,000</b>	<b>268,000</b>	<b>274,000</b>	<b>279,000</b>	<b>284,000</b>	<b>288,000</b>	<b>292,000</b>	<b>296,000</b>	<b>2,751,000</b>
<b>Facilities Upgrade</b>											
Rail Crossing	250,000	51,000	0	0	0	0	0	0	0	0	301,000
Utility Relocations - for safety	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
Road Drainage Extensions	350,000	359,000	368,000	376,000	383,000	391,000	397,000	403,000	408,000	414,000	3,849,000
<b>Total</b>	<b>700,000</b>	<b>513,000</b>	<b>473,000</b>	<b>483,000</b>	<b>493,000</b>	<b>503,000</b>	<b>511,000</b>	<b>518,000</b>	<b>525,000</b>	<b>532,000</b>	<b>5,251,000</b>
<b>Total Subsidised</b>											
<b>Capital Expenditure</b>	<b>30,504,000</b>	<b>36,136,000</b>	<b>43,932,000</b>	<b>35,579,000</b>	<b>24,886,000</b>	<b>27,591,000</b>	<b>23,069,000</b>	<b>23,413,000</b>	<b>22,708,000</b>	<b>21,725,000</b>	<b>289,543,000</b>
<b>UNSUBSIDISED CAPITAL EXPENDITURE</b>											
<b>Corridor Projects (Not subsidised)</b>											
Harbourview Park Te Atatu Road	220,000	0	0	0	0	0	0	0	0	0	220,000
Don Buck / Red Hills Road Intersection	100,000	0	0	0	0	0	0	0	0	0	100,000
Coronation Bridge	397,000	0	0	0	0	0	0	0	0	0	397,000
Artworks for Paremuka (Munroe) Bridge	380,000	0	0	0	0	0	0	0	0	0	380,000
State Highway 16/18 Artwork	0	103,000	265,000	272,000	0	0	0	0	0	0	640,000
<b>Total</b>	<b>1,097,000</b>	<b>103,000</b>	<b>265,000</b>	<b>272,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,737,000</b>
<b>Hobsonville Network (Not subsidised)</b>											
Hobsonville Detailed Design	188,000	0	0	0	0	0	0	0	0	0	188,000
<b>Total</b>	<b>188,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>188,000</b>
<b>Henderson Network (Not subsidised)</b>											
Streetscape : Great North Road - Henderson Valley to Edmonton	1,710,000	1,170,000	0	0	0	0	0	0	0	0	2,880,000
Corban Estate Access Road	0	5,145,000	0	0	0	0	0	0	0	0	5,145,000
Corbans Heritage Tram (detail development design)	0	0	26,000	0	0	0	0	0	0	0	26,000
Corbans Heritage Tram (Construction and Site Infrastructure)	0	0	0	1,083,000	1,108,000	0	0	0	0	0	2,191,000

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
Waitakere Central Car Park building (Detailed Development Design)	0	772,000	0	0	0	0	0	0	0	0	772,000
Waitakere Central Car Park building (Construction and Site Infrastructure)	0	0	15,852,000	0	0	0	0	0	0	0	15,852,000
Henderson Signs & Wayfinding Plan	100,000	0	0	0	0	0	0	0	0	0	100,000
Henderson Carparks, Charge Carparking Trial	62,000	0	0	0	0	0	0	0	0	0	62,000
Henderson Gateway Entrance	0	0	106,000	0	0	0	0	0	0	0	106,000
Henderson Median	334,000	0	0	0	0	0	0	0	0	0	334,000
<b>Total</b>	<b>2,206,000</b>	<b>7,087,000</b>	<b>15,984,000</b>	<b>1,083,000</b>	<b>1,108,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27,468,000</b>
<b>New Lynn Network (Not subsidised)</b>											
New Lynn Transport Design	100,000	0	0	0	0	0	0	0	0	0	100,000
New Lynn Transport Interchange land purchase and concept	2,750,000	1,029,000	0	0	0	0	0	0	0	0	3,779,000
McNaughton Way Extn (land purchase)	0	1,029,000	0	0	0	0	0	0	0	0	1,029,000
McNaughton Way Extn Urban Design and Concept Design)	0	0	528,000	0	0	0	0	0	0	0	528,000
New Lynn Way Finding Graphic Audit and Signage Implementation	0	72,000	21,000	16,000	0	0	0	0	0	0	109,000
<b>Total</b>	<b>2,850,000</b>	<b>2,130,000</b>	<b>549,000</b>	<b>16,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,545,000</b>
<b>Urban Villages Networks (Not subsidised)</b>											
Titirangi Village Off-road Parking	318,000	0	0	0	0	0	0	0	0	0	318,000
<b>Total</b>	<b>318,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>318,000</b>
<b>Contract Settlements (Not subsidised)</b>											
Marinich Drive Financial Contribution	2,000,000	0	0	0	0	0	0	0	0	0	2,000,000
<b>Total</b>	<b>2,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>
<b>Street Lighting</b>											
Fibre Optic Communications	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
Solar Lighting	30,000	31,000	32,000	32,000	33,000	33,000	34,000	35,000	35,000	35,000	330,000
Improved Illumination in Local Roads	505,000	518,000	531,000	542,000	553,000	564,000	573,000	582,000	589,000	597,000	5,554,000
Street Light Reliability Improvement	100,000	0	0	0	0	0	0	0	0	0	100,000
New Street Lights	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
Energy Efficient Lighting	50,000	51,000	221,000	225,000	230,000	234,000	0	0	0	0	1,011,000
<b>Total</b>	<b>885,000</b>	<b>806,000</b>	<b>994,000</b>	<b>1,013,000</b>	<b>1,036,000</b>	<b>1,055,000</b>	<b>835,000</b>	<b>847,000</b>	<b>858,000</b>	<b>868,000</b>	<b>9,197,000</b>
<b>Land Purchase &amp; Construction</b>											
Carry Forward	500,000										500,000
Road Reserves General	40,000	41,000	42,000	43,000	44,000	45,000	46,000	47,000	48,000	48,000	444,000
<b>Total</b>	<b>540,000</b>	<b>41,000</b>	<b>42,000</b>	<b>43,000</b>	<b>44,000</b>	<b>45,000</b>	<b>46,000</b>	<b>47,000</b>	<b>48,000</b>	<b>48,000</b>	<b>944,000</b>
<b>Forward Design</b>											
Forward Design for Benefit Cost Ratios	150,000	154,000	158,000	161,000	164,000	167,000	170,000	173,000	175,000	177,000	1,649,000
Forward Design of Capital Works	350,000	359,000	368,000	376,000	383,000	391,000	397,000	403,000	408,000	414,000	3,849,000
Carry Forward	200,000										200,000
Asset Management System Integration and Optimisation	100,000	103,000	105,000	107,000	110,000	112,000	114,000	115,000	117,000	118,000	1,101,000
<b>Total</b>	<b>800,000</b>	<b>616,000</b>	<b>631,000</b>	<b>644,000</b>	<b>657,000</b>	<b>670,000</b>	<b>681,000</b>	<b>691,000</b>	<b>700,000</b>	<b>709,000</b>	<b>6,799,000</b>
<b>Facility Upgrading (not subsidised)</b>											
Facilities for the Disabled	10,000	10,000	11,000	11,000	11,000	11,000	11,000	12,000	12,000	12,000	111,000
Footpath Construction	850,000	513,000	525,000	537,000	548,000	558,000	568,000	576,000	584,000	591,000	5,850,000
Seal Extensions (Non-Subsidised)	300,000	308,000	315,000	322,000	329,000	335,000	341,000	346,000	350,000	355,000	3,301,000
Lifelines	0	51,000	0	54,000	0	56,000	0	58,000	0	59,000	278,000
<b>Total</b>	<b>1,160,000</b>	<b>882,000</b>	<b>851,000</b>	<b>924,000</b>	<b>888,000</b>	<b>960,000</b>	<b>920,000</b>	<b>992,000</b>	<b>946,000</b>	<b>1,017,000</b>	<b>9,540,000</b>

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
<b>Carried Forward Passenger Transport works</b>											Ranui
Transport Amenity	172,000	0	0	0	0	0	0	0	0	0	172,000
Sturges Park and Ride	494,000	0	0	0	0	0	0	0	0	0	494,000
Railway Park and Ride	930,000	0	0	0	0	0	0	0	0	0	930,000
Bus Park and Ride	100,000	0	0	0	0	0	0	0	0	0	100,000
Railway Stations	40,000	164,000	0	0	0	0	0	0	0	0	204,000
Ferry facilities & Park and Ride	100,000	0	0	0	0	0	0	0	0	0	100,000
Henderson Park and Ride	58,000	0	0	0	0	0	0	0	0	0	58,000
Bus Signs Improvements	85,000	0	0	0	0	0	0	0	0	0	85,000
New Lynn Town Centre Transport Interchange and Road Development	3,344,000	0	0	0	0	0	0	0	0	0	3,344,000
Travel Demand Management Plans	200,000	0	0	0	0	0	0	0	0	0	200,000
Henderson Railside Avenue/Ratanui Street to Cromwell Park Pedestrian Amenity	327,000	0	0	0	0	0	0	0	0	0	327,000
Railway Stations Precinct Fruitvale, Glen Eden and Sunnyvale	286,000	1,172,000	0	0	0	0	0	0	0	0	1,458,000
School Travel Plans - Implementation	530,000	0	0	0	0	0	0	0	0	0	530,000
Business Travel Plans - Implementation	319,000	0	0	0	0	0	0	0	0	0	319,000
Waitakere Central Henderson Transport Interchange	100,000	0	0	0	0	0	0	0	0	0	100,000
Sunnyvale Railway Park and Ride	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000
Westgate Bus Park and Ride	100,000	0	0	0	0	0	0	0	0	0	100,000
Henderson - Great North Road Amenity Improvements Design	10,000	0	0	0	0	0	0	0	0	0	10,000
Glen Eden Station	63,000	0	0	0	0	0	0	0	0	0	63,000
<b>Total</b>	<b>8,258,000</b>	<b>1,336,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,594,000</b>
<b>Walkways, Streetscape &amp; Station Precinct</b>											
Owens Green - 800m Leisure Route	0	0	0	0	0	0	0	0	0	36,000	36,000
Manutewhau to Moire Park Leisure Route	0	0	0	0	0	0	0	0	0	18,000	18,000
Harbourview Reserve - Leisure Route 300m	0	0	0	0	0	23,000	449,000	0	0	0	472,000
Harbour View Development - Boardwalks & Landscaping	0	0	0	0	0	0	0	0	0	54,000	54,000
Green Bay Parking (Barrons Green)	126,000	0	0	0	0	0	0	0	0	0	126,000
Rewarewa Walkway - Upgrade Existing Pathway Section in New Lynn	60,000	0	0	0	0	0	0	0	0	0	60,000
Te Atatu Peninsula Walkway											
Chapman to Taipari Strand	20,000	39,000	605,000	761,000	0	0	0	0	0	0	1,425,000
Tui Glen Stage 2 -Parking pathways & landscaping	0	725,000	0	0	0	0	0	0	0	0	725,000
Claret Close - Bridge to Opanuku Walkway	117,000	0	0	0	0	0	0	0	0	0	117,000
New Lynn Town centre streetscape upgrade	100,000	0	0	0	0	0	0	0	0	0	100,000
Waitakere Railway and Town Centre Duoloo	232,000	0	0	0	0	0	0	0	0	0	232,000
Land purchase Waitakere Railway & precinct	200,000	0	0	0	0	0	0	0	0	0	200,000
Hobsonville Esplanade walkway	0	0	0	0	0	0	0	49,000	433,000	274,000	756,000
Hobsonville Esplanade walkway Developers land	0	0	0	0	0	0	0	938,000	0	0	938,000
<b>Total</b>	<b>855,000</b>	<b>764,000</b>	<b>605,000</b>	<b>761,000</b>	<b>0</b>	<b>23,000</b>	<b>449,000</b>	<b>987,000</b>	<b>433,000</b>	<b>382,000</b>	<b>5,259,000</b>
<b>Testing Station</b>											
Emission Testing Machine	15,000	0	0	0	0	0	0	0	0	0	15,000
<b>Total</b>	<b>15,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,000</b>

## APPENDIX 1: Budgeted Transport Programme 2006-2016

### CAPITAL EXPENDITURE *continued*

Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
<b>TOTAL NON-SUBSIDISED CAPITAL EXPENDITURE</b>	<b>21,172,000</b>	<b>13,765,000</b>	<b>19,921,000</b>	<b>4,756,000</b>	<b>3,733,000</b>	<b>2,753,000</b>	<b>2,931,000</b>	<b>3,564,000</b>	<b>2,985,000</b>	<b>3,024,000</b>	<b>78,604,000</b>
<b>SUBSIDY ON CAPITAL EXPENDITURE</b>											
Land Transport NZ Subsidy	(16,486,000)	(19,178,000)	(24,327,000)	(20,375,000)	(14,131,000)	(15,582,000)	(12,225,000)	(12,684,000)	(12,314,000)	(11,796,000)	(159,098,000)
Infrastructure Auckland Subsidy	(1,531,000)	(577,000)	0	0	0	0	0	0	0	0	(2,108,000)
<b>TOTAL SUBSIDY ON CAPITAL EXPENDITURE</b>	<b>(18,017,000)</b>	<b>(19,755,000)</b>	<b>(24,327,000)</b>	<b>(20,375,000)</b>	<b>(14,131,000)</b>	<b>(15,582,000)</b>	<b>(12,225,000)</b>	<b>(12,684,000)</b>	<b>(12,314,000)</b>	<b>(11,796,000)</b>	<b>(161,206,000)</b>
<b>TOTAL NET CAPITAL EXPENDITURE</b>	<b>33,659,000</b>	<b>30,146,000</b>	<b>39,526,000</b>	<b>19,960,000</b>	<b>14,488,000</b>	<b>14,762,000</b>	<b>13,775,000</b>	<b>14,293,000</b>	<b>13,379,000</b>	<b>12,953,000</b>	<b>206,941,000</b>
<b>TOTAL NET CAPITAL EXPENDITURE &amp; RENEWALS</b>	<b>42,518,000</b>	<b>41,253,000</b>	<b>49,120,000</b>	<b>29,726,000</b>	<b>24,256,000</b>	<b>25,096,000</b>	<b>24,185,000</b>	<b>25,446,000</b>	<b>24,757,000</b>	<b>24,497,000</b>	<b>310,854,000</b>
<b>TOTAL GROSS CAPITAL EXPENDITURE &amp; RENEWALS</b>	<b>65,661,000</b>	<b>67,500,000</b>	<b>79,062,000</b>	<b>55,782,000</b>	<b>44,192,000</b>	<b>46,657,000</b>	<b>42,478,000</b>	<b>44,841,000</b>	<b>43,841,000</b>	<b>43,176,000</b>	<b>533,190,000</b>

### OPERATING COSTS

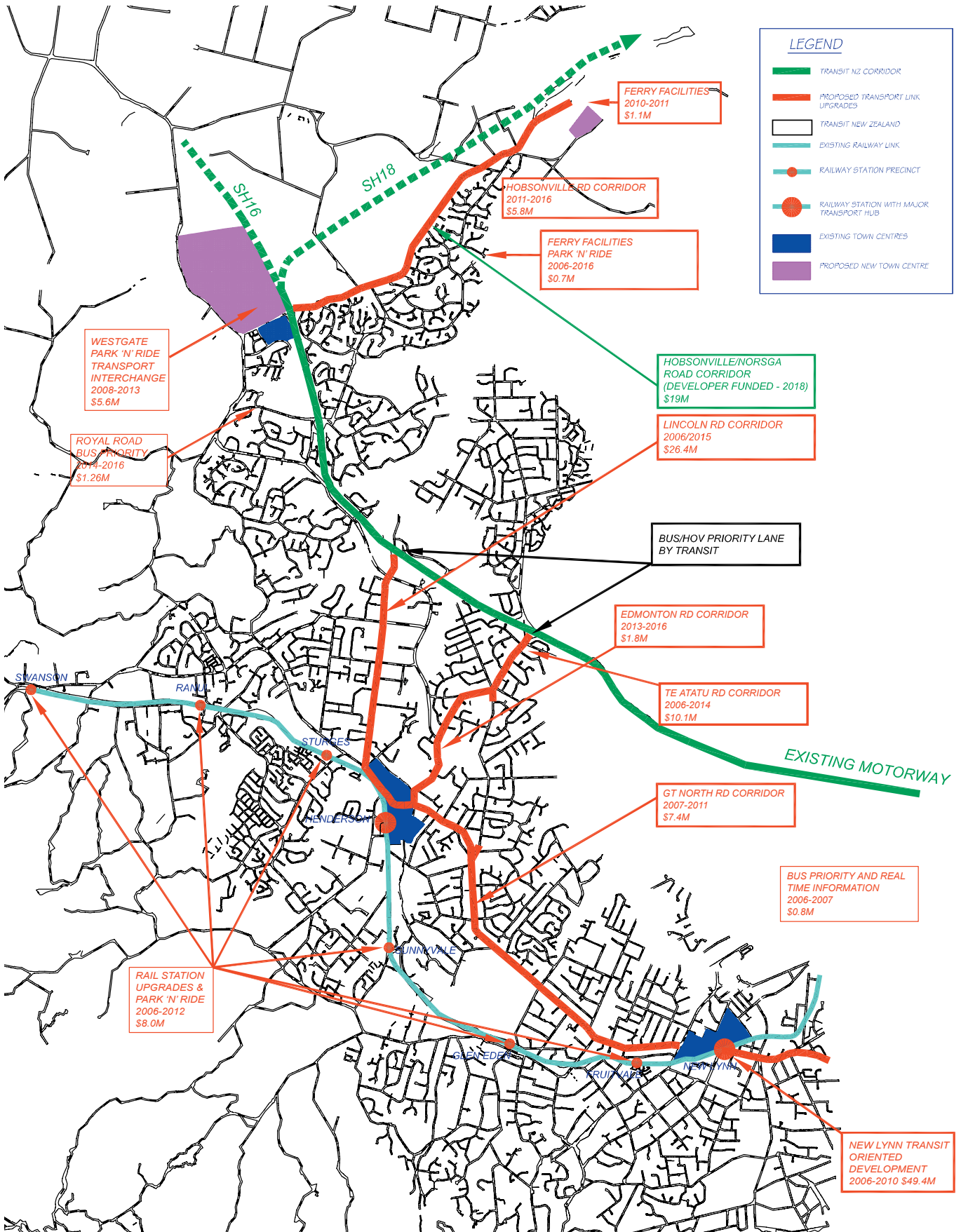
Details	2006/2007 LTCCP	2007/2008 LTCCP	2008/2009 LTCCP	2009/2010 LTCCP	2010/2011 LTCCP	2011/2012 LTCCP	2012/2013 LTCCP	2013/2014 LTCCP	2014/2015 LTCCP	2015/2016 LTCCP	10 Years LTCCP
<b>Direct Costs</b>	<b>28,291,000</b>	<b>30,852,000</b>	<b>35,313,000</b>	<b>39,583,000</b>	<b>42,873,000</b>	<b>45,808,000</b>	<b>48,755,000</b>	<b>51,305,000</b>	<b>53,676,000</b>	<b>56,278,000</b>	<b>432,734,000</b>
<b>Revenue</b>	<b>(6,970,000)</b>	<b>(7,528,000)</b>	<b>(7,900,000)</b>	<b>(9,848,000)</b>	<b>(10,222,000)</b>	<b>(10,632,000)</b>	<b>(11,174,000)</b>	<b>(11,504,000)</b>	<b>(11,906,000)</b>	<b>(12,443,000)</b>	<b>(100,127,000)</b>
<b>Net Operating Costs</b>	<b>21,321,000</b>	<b>23,324,000</b>	<b>27,413,000</b>	<b>29,735,000</b>	<b>32,651,000</b>	<b>35,176,000</b>	<b>37,581,000</b>	<b>39,801,000</b>	<b>41,770,000</b>	<b>43,835,000</b>	<b>332,607,000</b>

Note: Transport operating costs include depreciation, interest, maintenance (subsidised and unsubsidised), direct support costs, asset management, road safety, parking operations and enforcement, paths, streetscape and policy costs.

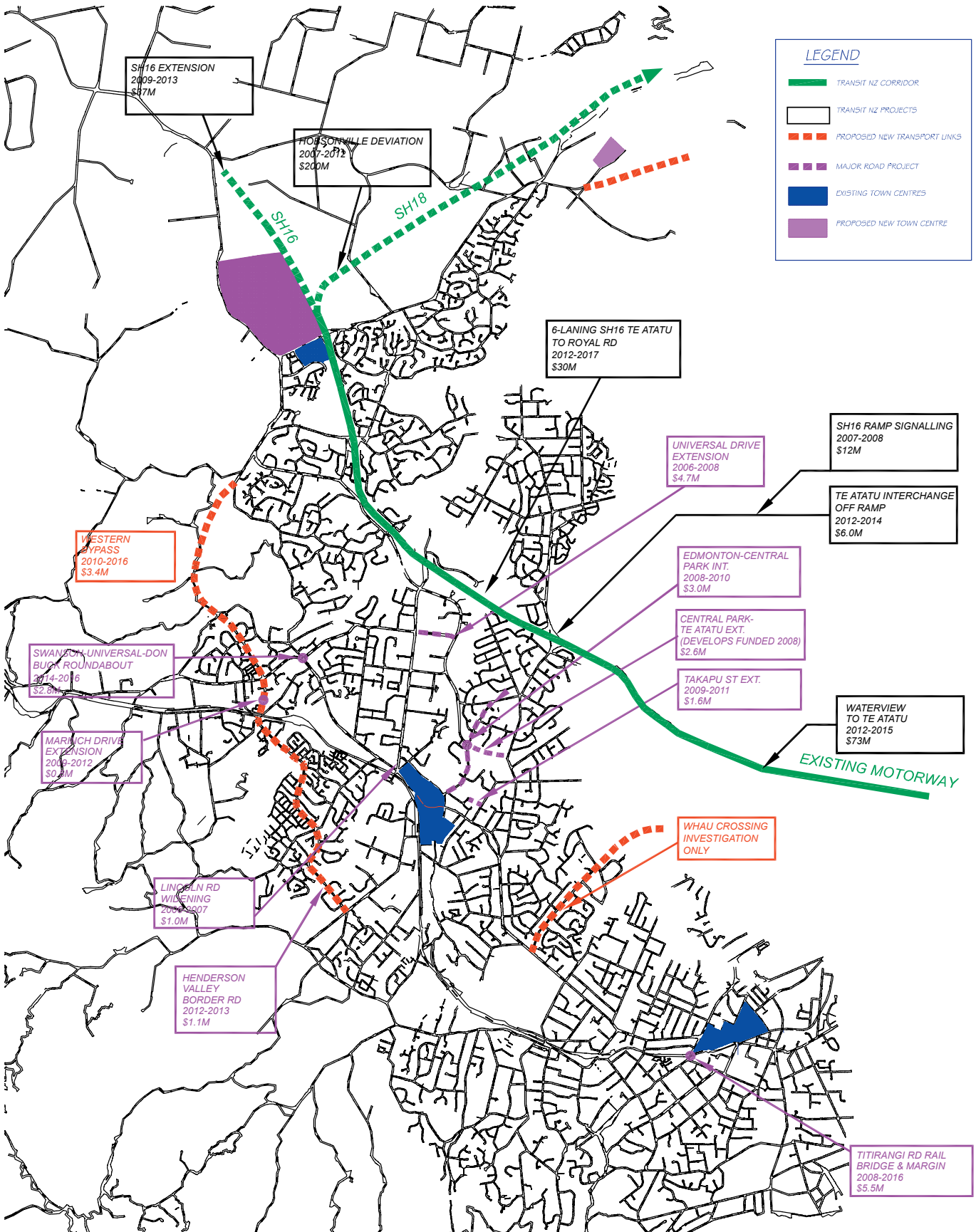
Budgeted Transport Programme 2006-2016 - as at June 2006.



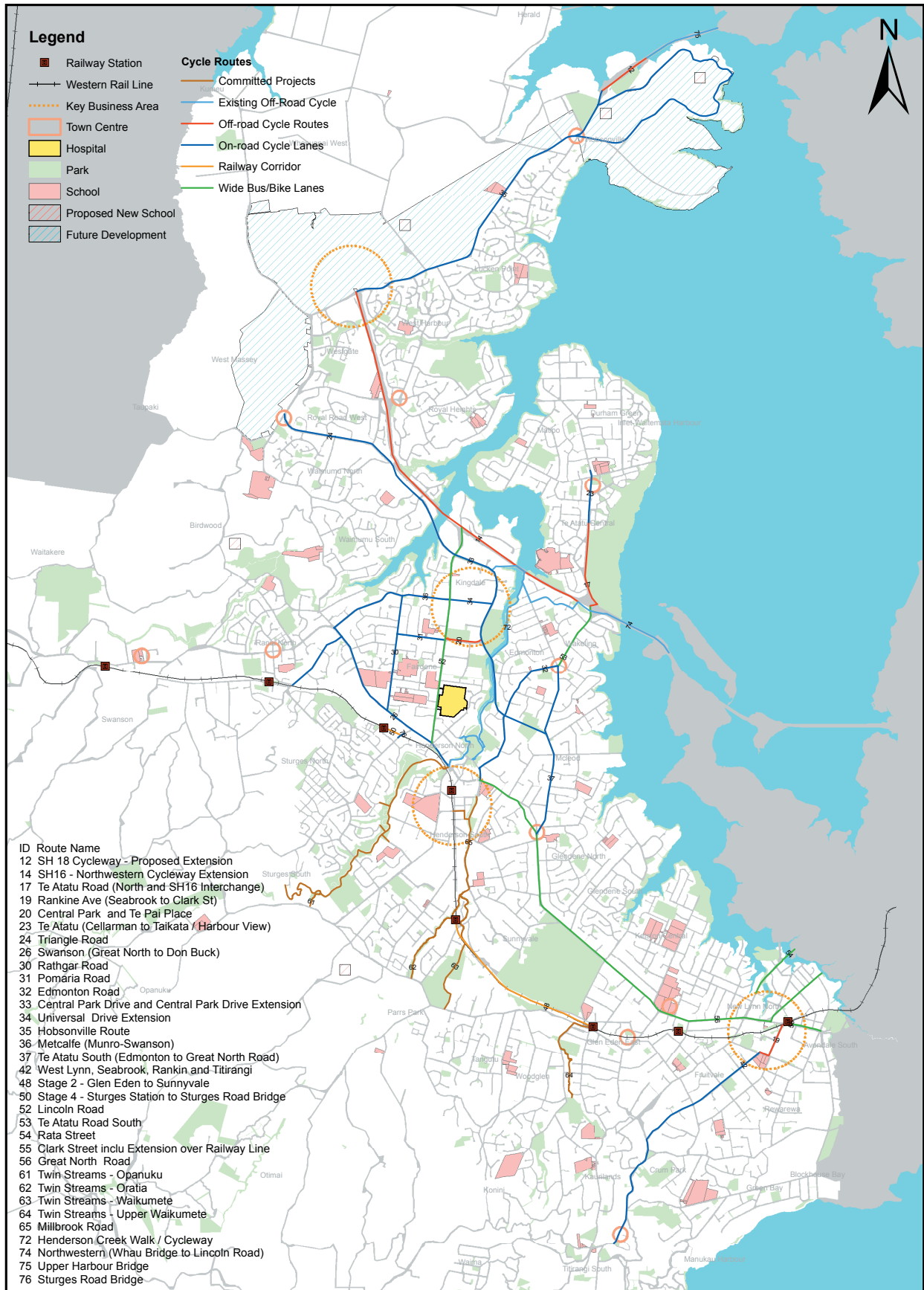
Map 1: Passenger Transport Projects Budgeted 2006-2016



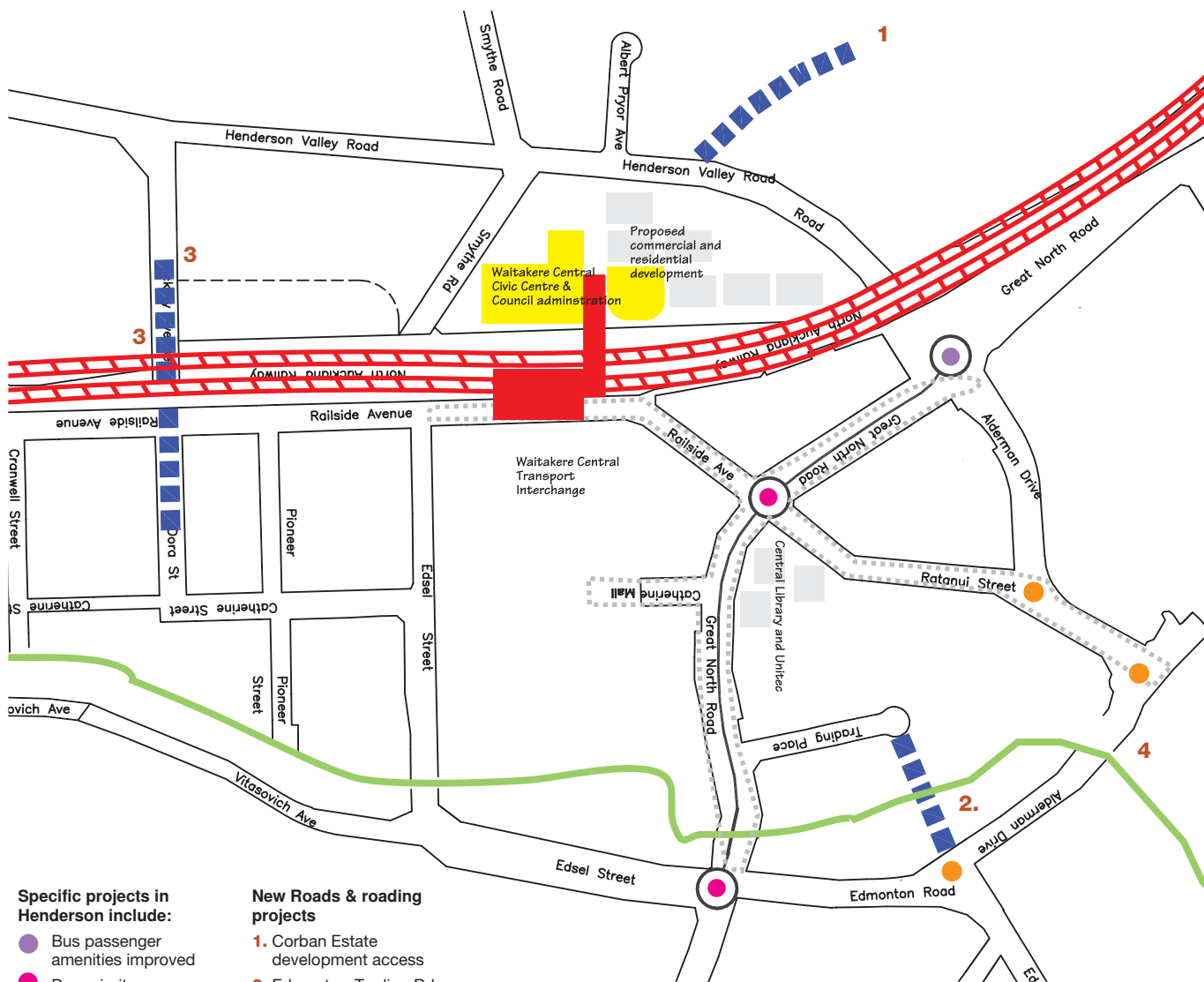
Map 2: Roothing Transport Projects Budgeted 2006-2016



Map 3: Cycleway Projects Budgeted 2006-2016



Map 4: Henderson Transport Projects Budgeted 2006-2016



**Specific projects in Henderson include:**

- Bus passenger amenities improved
- Bus priority measures
- ◆ Waitakere Central Transport Interchange
- - Streetscape upgrade
- Proposed road connections
- Cycleways
- ▬ Rail double tracking

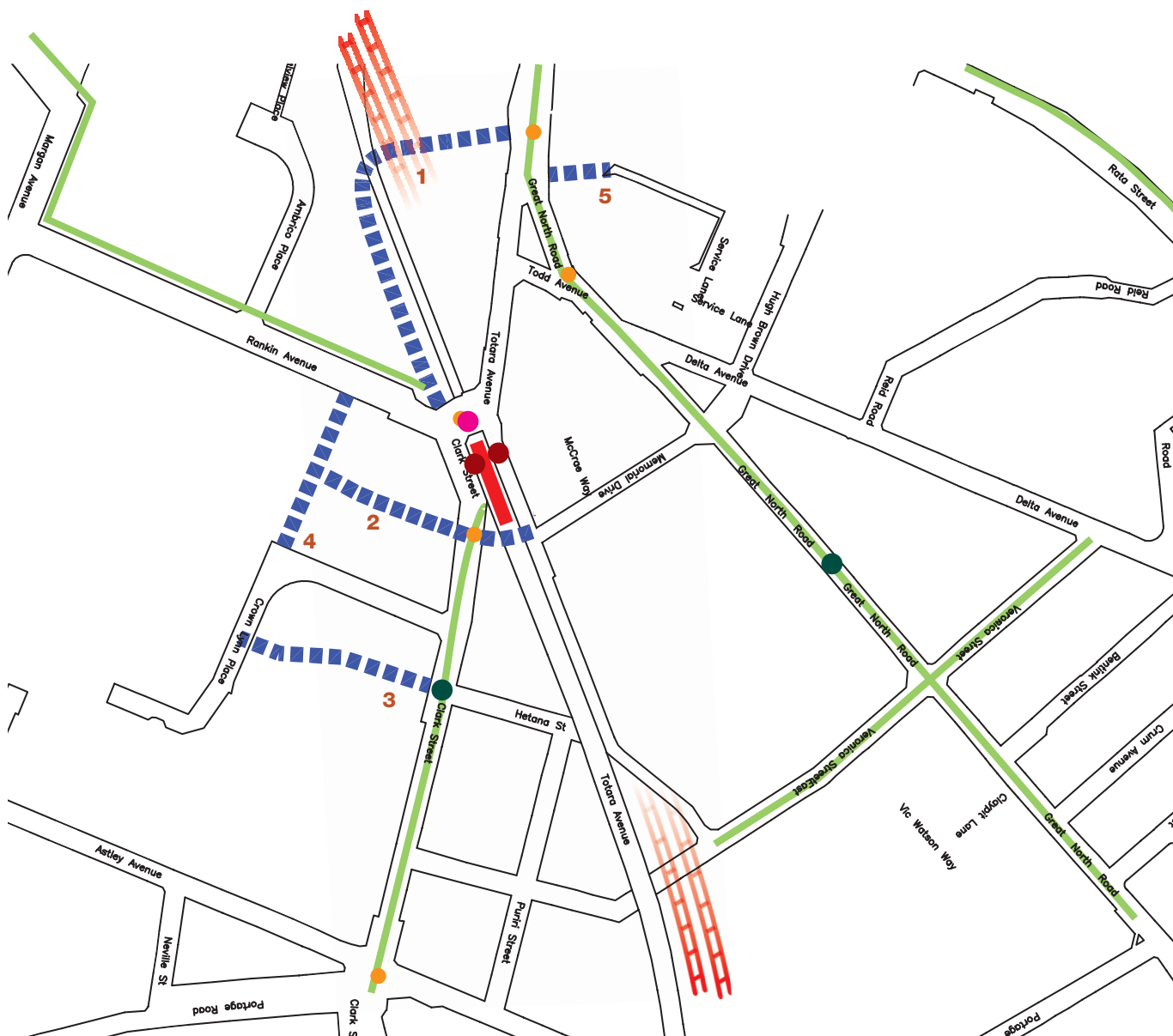
**New Roads & roading projects**

1. Corban Estate development access
2. Edmonton-Trading Rd extension & bridge
3. Hickory-Dora underpass
4. Alderman bridge widening

**New traffic interchanges at:**

- Sel Peacock-Alderman signalised interchange
- Corban-Henderson Valley signalised interchange
- Alderman-Ratanui interchange upgrade.
- Edmonton-Alderman signalised interchange

Map 5: New Lynn Transport Projects Budgeted 2006-2016



**Specific projects planned for New Lynn include:**

- Below street-level railway station
- New bus interchange
- Bus priority measures
- Great North Road and Clark Street Projects
- Proposed road connections
- Rail below surface
- Cycleways

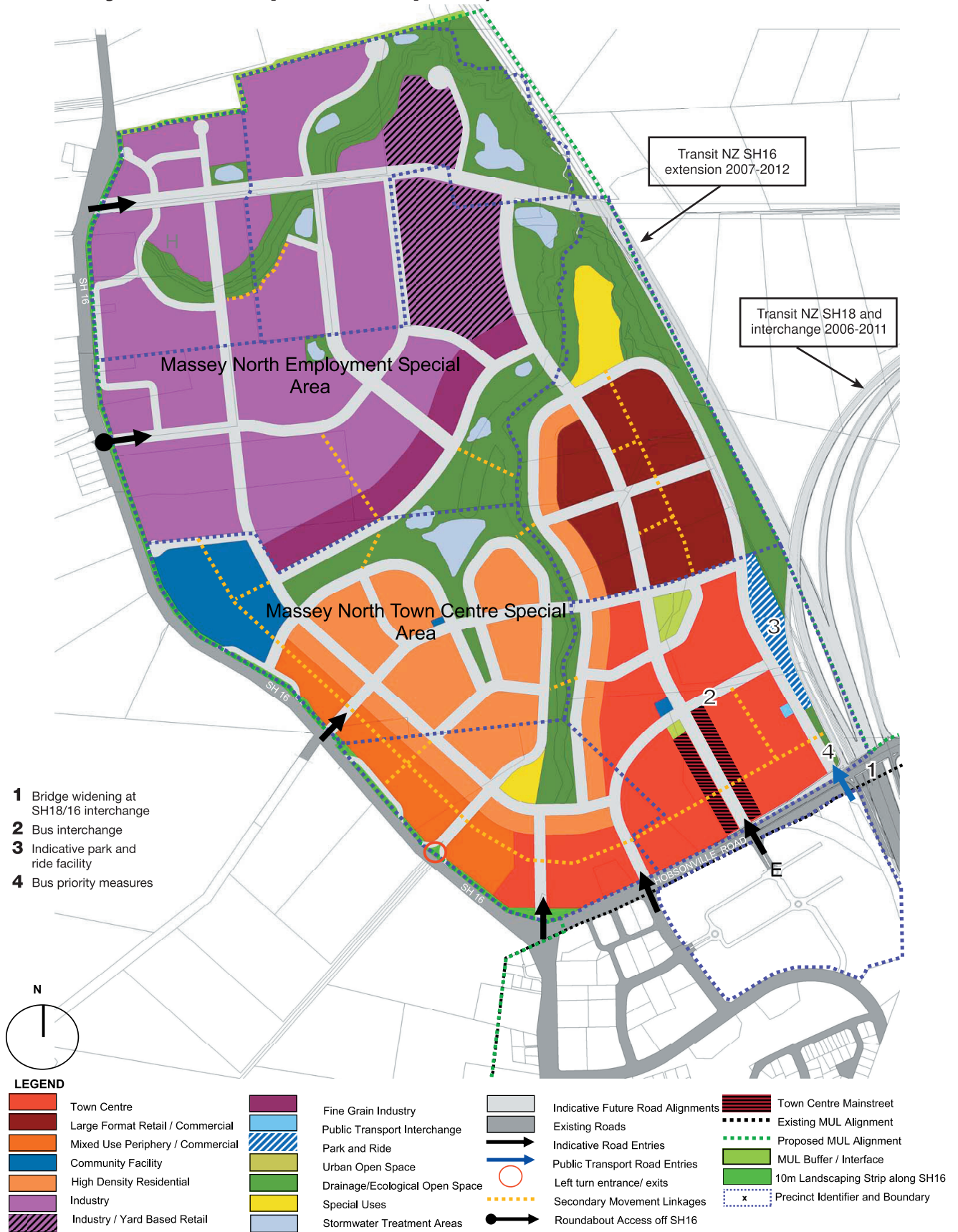
**Proposed new roads**

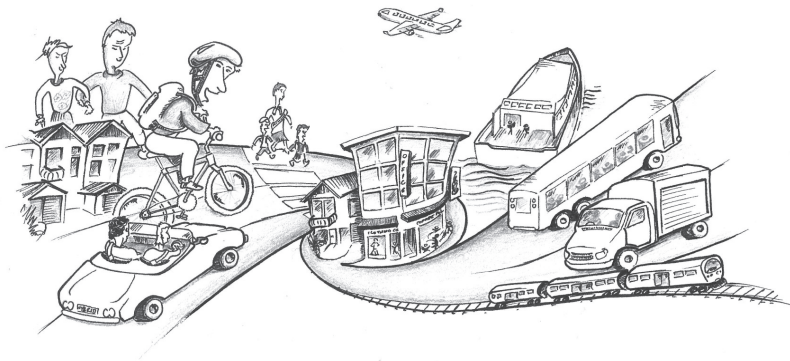
1. Clark Street extension
2. Memorial Drive extension
3. Hetana Street extension
4. Crown Lynn Place extension and closure
5. McNaughton Way extension

**New traffic interchanges at:**

- Clark St/ Great North Road
- Totara/Rankin/Clark St
- Totara/Great North Road
- Memorial/Clark St
- Portage/Wolverton/Clark

**Map 6: Westgate Transport Projects Budgeted 2006-2016  
(on Massey North Conceptual Development)**





## Appendix 2: Background to Strategic Options

The following three strategic options were developed and consulted on to enable an informed choice to be made about the level of investment in transport and the balance of that investment.

### **Strategic Option 1 – Minimal road investment: High demand management approach**

This option is a more accelerated approach to managing travel demand than that contemplated in the Auckland Regional Land Transport Strategy 2005. This option requires a significant shift out of the motor vehicle to use of passenger transport. This would be actively promoted to residents.

The aim is to reduce the number of cars on the road and the number of vehicle kilometres travelled per resident. Current levels of traffic congestion would be expected to continue in the long term. This option aims to reduce traffic on selected arterial roads where high-occupancy vehicle (HOV) lanes would take up an existing lane of traffic at peak times.

This option requires a low investment in roading and a substantial investment in passenger transport. Road investment would be limited to new connections which enable new businesses to establish rather than to make traffic flow better. High-cost projects would be excluded from the programme, for example: road widening to increase efficiency, most new road connections, New Lynn Transit Orientated Design project, Whau Crossing bridge and half the cycle network.

### **Strategic Option 2 – Selected road investment: Medium demand management approach**

This option provides less investment in the arterial roads than contemplated under the Auckland Regional Land

Transport Strategy 2005. The aim is to provide some road connections, but to use the existing road network to manage traffic, buses and high-occupancy vehicles.

This option requires a shift to passenger transport for traffic to flow on the road network at peak times. This option requires a low investment in roading and a substantial investment in passenger transport. Road investment would be focused on town centre connections and arterial improvements to enable HOV lanes. An existing lane on selected arterial roads would be used for buses and high-occupancy vehicles at peak times with limited improvements at intersections. This approach would not provide extra capacity on arterial roads.

This option includes the New Lynn Transit Orientated Design project. Some high-cost projects are excluded from the programme, for example: road widening and intersection treatment to increase efficiency, and half the cycle network.

### **Strategic Option 3 – Balanced road investment: Travel choice**

This option is the most closely aligned with the Auckland Regional Land Transport Strategy 2005. The aim is to reduce congestion in parts of the road network and to give people the choice to use passenger transport. Traffic congestion will be addressed by increasing road connections in town centres and disconnected neighbourhoods, addressing congestion at selected intersections and improving traffic flow on the arterial road network. This approach requires the provision of alternative modes of travel. This option aims to increase the traffic efficiency on arterial roads with options for bus and HOV lanes and some road widening.

This option includes the New Lynn Transit Orientated Design project. New road connections would be created

## APPENDIX 2: Background to Strategic Options

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to generate new businesses and to improve traffic flow in the network. Some road widening on arterial roads would be done to enable bus priority measures and increase the traffic efficiency on arterial roads.

This option is expected to provide increased efficiency and ease congestion at key parts of the roading network. The arterial roads would be better able to manage the traffic entering and exiting the state highway network. Measures such as congestion charges would be required for significant numbers of people to shift to more sustainable forms of transport.

This is a balanced programme with travel demand management and investment in all modes increasing the efficiency of the road network.

The key distinguishing factors between these strategic options were:

- The extent to which there is road widening and road connections in order to address congestion and efficiency issues.
- The 'choice' or 'push' to shift from a single-occupant vehicle to other modes of travel.
- The size of the programme in terms of the Council's financial investment.

Waitakere City Council adopted option 3 as its preferred option. A number of options were considered prior to the development of the three strategic options:

- a. Carry on as we are.
- b. The programme modelled for the Auckland Regional Land Transport Strategy 2005.
- c. A modification of the programme modelled for the Auckland Regional Land Transport Strategy 2005 to take into account Waitakere's particular issues, requirements and ability to pay:
  - i. City form and land use initiatives, such as the creation of a major town centre at Westgate, civilian airport at Whenuapai, and new schools in the north west, which provide significant transport benefits.
  - ii. Business location and transport of goods and services.
  - iii. Preparation for road pricing.
  - iv. Advocacy positions.
- d. Doing more or less than the programme proposed in the Auckland Regional Land Transport Strategy 2005.
- e. Greater emphasis on local economic development.
- f. Greater emphasis on a particular mode of transport (for example, roading - Increase the capacity of the roading network as a priority to address congestion).

### Carry on as we are

The 'steady as she goes' approach essentially means that the Council would carry on with the same focus and priority as in previous years.

Historically, the vast majority of Council expenditure has been on road maintenance and new connections, such as the Munroe Bridge.

Funding on passenger transport infrastructure has typically been low, although the Council has recently increased expenditure on bus and rail infrastructure. The Council has long advocated for development of the rail corridor and as a result expenditure associated with development of the rail station precincts is either underway or planned in conjunction with upgrading of the rail corridor.

Prior to 2006 there had been little or no expenditure on Travel Demand Management (TDM) schemes although plans had been laid to commence development of school and workplace travel plans. The Council adopted a walking and cycling strategy and proposes to begin implementation from 2006.

The Council does not believe it can continue the previous narrow and limited approach to transport investment. This approach would help keep rates similar to present levels but would not deliver the outcomes sought by the city and region.

### Focus on roads

An alternative school of thought says that the Council should simply widen and construct more roads for use by all traffic given that the vast majority of travel in Waitakere is by car or other private vehicle.

Various studies have been undertaken to assess what such as policy might mean for Waitakere. The aim of these studies has been to identify the scale of improvement works required just to maintain current operating speeds and journey times on the local road network and accommodate growth in population and employment.

The studies have identified that developing the road network in this way would require substantial capital and ongoing investment in the roading network which would be unaffordable to the ratepayers of Waitakere. In addition there would be significant environmental and social impacts and substantial land and property required to develop the road network in order to keep up with demand.

Such an approach would also result in increased stormwater and air pollution, severance, less interaction and tend to increase urban sprawl. This would conflict with the



Auckland Regional Growth Strategy 1999, and Waitakere City Council's District Plan policies which are aimed at encouraging intensification at the major town centres.

It would also encourage increased travel by car and would reduce demand for travel by alternative means such as passenger transport, walking and cycling and thereby reduce investment in these more sustainable travel modes. The outcome would be that some parts of the community would continue to have little or no choice other than to travel by car. There would also be less incentive for people to consider travel options, including the timing of trips or the need to travel at all.

To sum up, this approach would not be sustainable and would conflict with council and regional plans and strategies seeking to develop a more sustainable future. If the Council were to pursue this option, it would be difficult to obtain the funding assistance required given the conflict with the Auckland Regional Land Transport Strategy 2005.

Even with a substantial investment in the roading network, gains in travel times would be unlikely to be sustained as the city grows in population and local activity. More roading investment, beyond the plan period, would be required just to maintain present operating levels, the consequences of which would be very considerable.

### **Auckland Regional Land Transport Strategy 2005 (RLTS)**

In contrast, the RLTS is a balanced and sustainable strategy that aims to get the best out of the existing roading network, build new links where essential, and get more people using passenger transport and other non-car modes or choosing to travel at a different time or not at all.

The RLTS supports compact urban development with intensification around transport nodes and along transport corridors. It aims to build a platform for more balanced investment in transport across modes. It has a strong focus on passenger transport facilitates and the possible future introduction of road pricing in the Auckland region.

The following are the proposed investment allocations to each mode in the RLTS over the 10-year period 2006 to 2016:

- \$6.810 billion on new roads and state highway infrastructure, maintenance/renewals, traffic management and safety (62%);
- \$3.80 billion on passenger transport (34%);
- \$0.42 billion on Travel Demand Management, including travel plans, walking and cycling (4%).

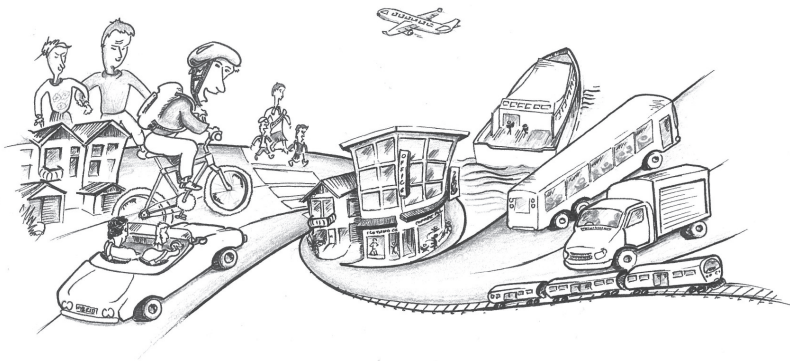
The following is a summary of expected outcomes of the RLTS by 2016 (subject to the effects of increases in oil prices and the introduction of road pricing):

- Traffic volumes are expected to increase by 22% over 2005 levels (45% increase in traffic volumes between key business centres).
- Interpeak travel speeds are expected to decrease by 5.6%.
- Average speeds for travel to the port in the morning peak are expected to decrease by 9%; and 8% to the airport.
- Excellent information on the availability of different modes of transport will assist sustainable travel choices.
- Half the trips into the central city in the morning peak will be by passenger transport.
- In the peak periods, passenger transport will represent 11% of trips (compared to 7% in 2001) and walking and cycling will represent 15% of trips (compared to 5% in 2001).
- Driver attitudes towards drink driving, speeding and general traffic enforcement are expected to improve over current levels.
- Regional road injury crashes per 10,000 people are expected to decline by 6%.
- Crashes, deaths and injuries involving pedestrians and cyclists are expected to decrease.
- Energy used to travel, as measured by fuel use, is expected to increase by 26%.
- CO<sub>2</sub> emissions are expected to increase by 21%.
- Discharges to water from the transport system are expected to increase by 20%.
- 13% of the urban population should be living within the regional growth nodes.
- The number of walking and cycling trips in town centres is expected to increase by 63%.
- Passenger services on the rail line will not be more than 10 minutes apart in the morning peak.

Whilst this will not solve traffic congestion over the 10-year period, and travel times are expected to continue to increase, the RLTS will mean that more people will have greater travel choice than at present.

Applications for funding will be prioritised to some extent according to a project's contribution to the RLTS.





## Appendix 3: Auckland Regional Transport Strategy 2005 - Policies

The following are policies in the Auckland Regional Land Transport Strategy 2005 that apply to Territorial Authorities in the Auckland region and are adopted as part of the Waitakere City Transport Strategy 2006 – 2016. The responsible agencies are included in brackets and the maps referred to are in the Auckland Regional Land Transport Strategy 2005.

### 1 Contribute to an integrated, safe, responsive, and sustainable transport system

1.1 Ensure that transport decisions take into account the objectives of the Land Transport Management Act and the Regional Land Transport Strategy.

1.1.1 Ensure that specific decisions on the development and funding of land transport activities in the region take into account the objectives of the Land Transport Management Act and this Regional Land Transport Strategy. (Transit, TAs, ARTA, Land Transport NZ, OnTrack)

1.1.2 Report to the RLTC on a periodic basis about proposed or completed activities. The reports will show how these activities take into account or consider the objectives of this strategy. (ARTA, Transit, TAs)

1.1.3 Submit annual reports to the RLTC on progress towards implementing the RLTS. These will be included in the RLTS Annual Report. (ARTA, Transit, TAs)

1.2 Encourage organisations with responsibility for transport and land use decisions to act in an integrated manner, and fully consider the wider impacts of their decisions.

1.2.2 Coordinate and integrate the actions of all

organisations responsible for transport and land use decisions to take into account the Regional Land Transport Strategy policies to achieve the maximum benefit and avoid unnecessary costs. (Transit, OnTrack, Land Transport NZ, TAs)

1.2.3 Ensure that transport and land use planning takes account of the needs of, and impacts on, all users and those with disabilities, especially commercial traffic, public transport, pedestrians and cyclists. (ARC, ARTA, TAs, Transit, OnTrack)

1.2.4 Ensure that the transport and land use implication of major trip generating activities are understood and that location decisions promote walking, cycling and public transport modes. (TAs, ARTA, ARC)

1.2.6 That land use / rail planning takes steps to avoid, remedy and mitigate reverse sensitivity effects of each on the other and work together to ensure integrated outcomes in transport and medium/high density corridors (TAs, OnTrack, ARTA)

1.2.7 That all agencies responsible for implementing the land transport system in Auckland are to act in a manner which is supportive of the NZTS, the effective integration of land use and transport, and the Regional Growth Strategy. (ARC, ARTA, TAs, OnTrack, Transit, Land Transport NZ)

1.2.8 Encourage all agencies responsible for the Auckland land transport system to provide and support adequate training, recruitment measures and policies to ensure that there

- is a sustainable and adequate supply of well-trained professionals within the transport and planning industry to assist with the further development of the Auckland land transport system. (ARC, ARTA, TAs, On-Track, Transit, Land Transport NZ)
- 1.3 Improve the safety and security of the transport system for all users.
    - 1.3.2 Include safety and security-related issues in the development of roading, public transport, ridesharing, motorcycling, cycling, walking and other transport projects and programmes. (Transit, TAs, ARTA)
    - 1.3.3 Ensure at-risk road users and communities get priority for regional safety initiatives including engineering and strategies to promote walking, cycling and public transport. (Transit, TAs, ARTA, Land Transport NZ)
    - 1.3.4 Include the security needs of walkers, cyclists and public transport users (including lighting and surveillance requirements) in the design and assessment of town centre developments, new subdivisions and major redevelopment proposals. (TAs)
    - 1.3.6 Where at grade rail crossings are provided they should be designed in a way that they maintain safety for both the rail and road network while adequately providing for pedestrians. (ARTA, TAs, OnTrack)
    - 1.3.8 Coordinate rail safety initiatives through support of any national rail safety plan and/or the consideration and development of a Regional Rail Safety Plan. (ARTA, TAs, On-Track, Land Transport NZ, Rail providers)
  - 1.4 Involve communities in decisions about transport that affect them.
    - 1.4.1 Identify who is affected by transport decisions, and provide early and full opportunities for them to contribute to the planning and decision-making process. (Transit, TAs, ARTA)
  - 1.5 Ensure that transport decisions take into account the diverse transport needs of all users.
    - 1.5.1 Consider the equity implications of transport decisions and the distribution of costs and benefits, paying particular attention to the impacts on and improving access for the transport disadvantaged. (Transit, TAs, ARTA)
    - 1.5.4 Remove barriers to ensure the transport system is accessible by all people including those with disabilities. Upgrading of the transport system to meet international universal design standards. (ARTA, TAs)
    - 1.5.5 Remove barriers to ensure the transport system is accessible by all people including those with sensory disabilities. Upgrading of the transport system to meet international universal design standards. (ARTA, TAs)
    - 1.5.6 That the evaluation of public transport contracts consider operator and driver training to support the use of the public transport system for people with disabilities. (ARTA, TAs)
    - 1.5.7 Ensure that planning and management of parking facilities in developments recognise the needs of the special requirements for people whose disabilities prevent them using private vehicles or public transport. This should include the provision of short-term pick-up / drop-off locations for wheelchair accessible transport providers. (TAs)
    - 1.5.8 Ensure that the needs of the transport disadvantaged are considered in the development of parking policies across the region and ensure that they are included within the consultation process. (ARC, TAs)
  - 1.6 Increase the flexibility and resilience of the transport system to meet changing circumstances and the needs of future generations.
    - 1.6.1 Undertake multi-modal corridor studies to establish the future transport and land use requirements in key transport corridors. (ARC, Transit, TAs, ARTA, OnTrack)
    - 1.6.2 Take steps to protect strategic roading, rail and public transport routes identified in Maps 7.1, 7.2, 7.3 and 7.4, taking into account the need to preserve flexibility to deal with changing travel demands over time. (Transit, TAs, OnTrack)
    - 1.6.3 Support the Auckland Lifelines project and develop emergency management initiatives aimed at ensuring the ongoing operation of the network in emergencies. (ARC, Transit, TAs, ARTA, Environment Waikato, Northland Regional Council)
    - 1.6.4 Coordinate and manage the actions of road controlling authorities and utilities to minimise the disruption caused by construction and maintenance activities within transport corridors. (Transit, TAs, ARTA)
  - 1.7 Develop the transport system in a way that minimises the use of non-renewable resources.

- 1.7.8 Support the use and development of less energy intensive transport options to reduce the need to use vehicles to move people and goods around the region. (ARC, ARTA, TAs)
  - 1.7.10 Investigate improvements in traffic flow management and road network characteristics to achieve greater energy efficiency across the network. (ARC, Transit, TAs)
  - 1.7.14 Take steps to minimise the amount of land consumed for transport purposes through the efficient use of all transport infrastructure including corridors, car parking and park and ride facilities, while having regard to the need for safe and environmentally friendly transport infrastructure design. (TAs, ARTA, Transit, OnTrack)
  - 1.8 Take all reasonable steps to avoid, remedy or mitigate adverse environmental effects and improve health outcomes of transport.
    - 1.8.3 Encourage the government to introduce New Zealand-wide standards for transport noise and vibration and support initiatives to achieve the standards. (ARPHS, Transit, TAs, in consultation with MOT)
    - 1.8.4 Identify and implement processes to improve water quality and reduce sediment contamination in freshwater and marine ecosystems caused by run-off from the transport network. (ARC, Transit, TAs)
    - 1.8.5 Ensure that transport projects avoid to the extent reasonable in the circumstances adverse effects on significant cultural, ecological, geological and heritage sites in the region, and where this is not possible, seek to remedy or mitigate the adverse effects. (ARTA, TAs, Transit)
    - 1.8.6 Ensure that transport projects incorporate improvements to enhance the visual amenity and quality of the regional network. (ARTA, TAs, Transit, OnTrack)
    - 1.8.7 Promote the recovery and disposal of transport related wastes and other contaminants, especially oil and effluent disposal from campervans, trains, ferries and stock trucks. (Transit, TAs, ARC)
    - 1.8.12 Ensure that transport projects consider, at an early stage of the scheme assessment, options to avoid and/or remedy adverse effects on human health and the natural and physical environments. (ARTA, TAs, Transit)
    - 1.8.13 Ensure that appropriate environmental mitigation techniques are implemented for transport projects where adverse effects cannot be avoided or remedied. (Transit, TAs, ARTA)
    - 1.8.14 Take steps to ensure that environmental mitigation associated with transport projects is coordinated with wider environmental improvements (e.g. stormwater catchment works) (ARC, ARTA, Transit, TAs)
    - 1.8.15 Work with the road network controlling authorities to identify and implement improvements within the existing network to reduce environmental effects. (ARC, ARTA, TAs and Transit)
    - 1.8.16 Ensure that monitoring programmes which track air, water, noise impacts, environmental health effects and natural and cultural heritage effects are developed for new transport projects at the time they are approved. (ARC, ARTA, TAs, Transit)
    - 1.8.17 Ensure that transport projects avoid or, in exceptional circumstances, limit the adverse effects on the region's volcanic cones. (ARC, Transit, ARTA, TAs)
- 2 Make best use of the existing transport system**
- 2.1 Ensure that the region's transport system is well maintained.
    - 2.1.1 Ensure that asset management plans are in place for the transport system. (Transit, TAs, ARTA, OnTrack)
    - 2.1.2 Develop an integrated approach to asset management and maintenance standards between different agencies. (Transit, TAs, ARTA, OnTrack)
    - 2.1.3 Ensure that land transport assets in the region are maintained to an acceptable standard, as determined in asset management plans. (Transit, TAs, ARTA, OnTrack)
  - 2.2 Implement a road hierarchy for the region.
    - 2.2.1 Adopt the strategic and regional arterial road networks for the region shown on Maps 7.1 and 7.2. (ARTA, Transit and TAs)
    - 2.2.2 Develop standards or guidelines for how the strategic and regional arterial networks should be managed. These standards or guidelines are likely to address matters such as geometric standards; provision for heavy vehicles, public transport, walking and cycling; property access; provision for parking

and integration with town centres. (ARTA, Transit and TAs, Environment Waikato, Northland Regional Council)

2.2.3 Develop, prepare and implement corridor management plans for developing the strategic and regional arterial networks and corridors taking into account the standards or guidelines developed in 2.2.2. (ARTA, Transit and TAs)

2.3 Implement network management techniques to optimise the performance of the transport network, taking into account the needs of all modes.

2.3.1 Develop traffic management systems that reflect and reinforce the roading hierarchy identified in maps 7.1 and 7.2, and implement management policies for each level of the hierarchy consistent with the following principles:

- On strategic roads the movement of people and goods should predominate and property access should be allowed only where the transport function is not compromised
- On regional arterial roads the movement of people and goods on the road should generally have priority over the access function of the road
- On both strategic and regional arterial corridors provision should be made for pedestrians and cyclists to move safely and conveniently
- Both strategic and regional arterial roads should facilitate the movement of heavy motor vehicles
- Both strategic and regional arterial roads should be designed to accommodate public transport and to provide priority for public transport vehicles where warranted by demand and traffic conditions
- The design and operation of regional arterial roads should support the amenity of communities they pass through
- Where regional arterial roads pass through high density centres and corridors<sup>2</sup>, the balance of travel and land use demands should be carefully considered to ensure that the road network supports the growth strategy in an integrated manner
- Consistent, coherent and high quality signage (both directional and street) should be implemented on strategic and regional arterial roads. (Transit, TAs, ARTA)

2.3.2 Finalise the current strategic and regional arterial road networks for the region shown on Map 7.1. (ARTA, ARC, Transit and TAs)

2.3.3 As appropriate, investigate and implement technologies for improving traffic management such as ramp metering, incident detection and traveller information, where these are feasible and where they can improve system capacity without compromising the efficiency of the local road network or the outcomes sought by the Regional Land Transport Strategy. (Transit, TAs, ARTA)

2.3.4 Develop and implement an integrated set of local traffic management techniques to complement the integrated traffic management system, and give effect to these principles. (TAs)

2.3.5 Ensure that network changes and management of all levels of the road hierarchy take into account the needs of all users including pedestrians, cyclists, public transport and freight. (Transit, TAs, ARTA)

2.3.6 Provide for the coordinated management of non-transport uses in road and rail corridors, including utilities and community activities and recreation, to minimise disruption while taking the road's wider community into consideration. (OnTrack, Transit, TAs)

2.3.7 Ensure that the needs of pedestrians and cyclists are considered in the design of traffic management systems in town centres and local community areas. (TAs)

2.3.8 Design traffic management systems on the road network (including strategic and regional arterials) to give priority to public transport and high occupancy vehicles, where appropriate. (Transit, TAs, ARTA)

2.3.9 Investigate the feasibility and cost effectiveness of traffic management systems to give priority to commercial traffic. (Transit, TAs)

2.3.10 Ensure that traffic management and priority systems are adequately enforced. (Transit, TAs, Police)

2.3.11 At grade rail crossings should be minimized. Where existing they should be designed in a way that maintains the efficiency of both the rail and road network while adequately providing for pedestrians. (ARTA, OnTrack, TAs)

2.4 Take steps to facilitate the movement of freight traffic within the region.

- 2.4.1 Support investment in the strategic road, rail and ferry transport network in a way that provides congestion relief for freight, particularly for connections to strategic links in Auckland's logistics chain such as the port and airport. (ARC, Transit, OnTrack, TAs)
- 2.4.2 Institute a data collection programme which provides good information on the movement of freight around the region. (ARC, Transit, OnTrack, TAs)
- 2.4.3 Identify a strategic freight network and prepare policies for the development, operation and/or enforcement of that network. (ARC, Transit, OnTrack, TAs, Environment Waikato, Northland Regional Council)
- 2.4.4 Prepare guidelines for the development of Local Area Freight Management Plans. (ARC, OnTrack, Transit, TAs)
- 2.4.5 Establish better communication with freight stakeholders. (ARC, TAs)
- 2.4.6 Encourage the effective and efficient intra and inter regional movement of freight by rail and by sea (ARC, TAs, Environment Waikato, Northland Regional Council)
- 2.4.7 Support and encourage the development and increased use of inland port terminals accessed by rail, as well as roads (ARC, TAs)

### **3 Manage travel demand**

- 3.1 Ensure that land use development and the transport system are mutually supportive and recognise the importance of design for non-vehicular travel.
  - 3.1.1 Give priority to transport investments and network improvements which give effect to the Auckland Regional Land Transport Strategy 2005 and Auckland Regional Council growth concept of the Regional Growth Strategy and the Regional Policy Statement as required by the Local Government (Auckland) Amendment Act 2004. (Transit, TAs, ARTA, OnTrack, Land Transport NZ)
  - 3.1.2 Wherever possible, programme transport investment to fit with the growth sequencing identified in the Regional Policy Statement. (Transit, TAs, OnTrack, ARTA)
  - 3.1.3 Support the Regional Growth Strategy and Regional Policy Statement emphasis on focusing intensification in locations with existing or potential transport characteristics that

support higher intensity and mixed land use activities. These include locations where:

- Good connections exist or can be established within the high density centres and corridors for all transport modes, including walking and cycling
- Strong public transport links exist or can be established with neighbouring high density centres and corridors, the CBD and key employment centres
- There is good 'permeability' (connections between high density centres and corridors and its surrounding area) or where good permeability can be established
- Good connections exist or can be established between high density centres and corridors and other parts of the region. (Regional Growth Forum, ARC, TAs)

- 3.1.4 Ensure that the provision of parking in areas of high parking demand does not outstrip the ability of the road network to service this demand. (TAs)
- 3.1.5 Manage traffic within intensification areas so that traffic loads are spread rather than concentrated. (TAs)
- 3.1.6 Design transport connections within high density centres and corridors to give priority to supporting pedestrians, cyclists and public transport and to enable improved urban amenity and land use integration, rather than to provide for the free flow of vehicle traffic. (ARTA, TAs, Transit NZ, OnTrack)
- 3.1.7 Ensure that good urban design is included in the planning and implementation of new transport projects or redevelopment of existing transport infrastructure. This should include consideration of noise / vibration, the built environment, public space and access for people with disabilities. (TAs)
- 3.1.8 In preparing district plans and in considering development and redevelopment proposals, consider the documents 'Public transport Supportive Land Use Guidelines' (June 1995); 'People, Places and Spaces: a design guide for urban New Zealand' (Ministry for the Environment March 2002); the New Zealand Urban Design Protocol (Ministry for the Environment 2004); the Urban Area Intensification and Structure Planning regional practice guides (both 2000); Crime Prevention Through Environmental Design;

- and relevant local authority urban design guides and provisions that ensure land use and transport systems are mutually supportive. (TAs)
- 3.1.9 Encourage, through district plans and long term plans, 'transit orientated developments' (TOD), which include a mixture of land uses which decreases the need for vehicle travel and increases community benefits, including removing barriers to working from home. (TAs)
- 3.1.10 Encourage the investigation of a regional land use development agency or agencies to support 'transit orientated development' (TOD) within identified centres and on rapid transit corridors. (ARC, TAs)
- 3.1.11 Support the use of regional and local developer contributions levied from (re)development for transport improvements which provide a direct benefit to that development. (ARC, TAs, ARTA)
- 3.1.12 Promote commercial and public awareness of the opportunities of private sector involvement in public facilities while developing or redeveloping key sites in transport corridors and growth nodes. (ARC, TAs, ARTA)
- 3.2 Provide attractive transport choices for individuals, communities and businesses.
- 3.2.1 Improve walking, cycling and public transport networks through the policies outlined in sections 4.2, 4.3 and 4.4. (Transit, TAs, ARTA)
- 3.2.2 Encourage households and businesses to take advantage of improvements to communications technology, by removing barriers to working from home and supporting teleworking initiatives. (TAs, ARTA)
- 3.3 Ensure that resources are made available to understand and influence travel choices being made in the region.
- 3.3.1 Develop and implement a travel planning programme which ensures that individuals are aware of and encouraged to use alternatives to private vehicles. (ARTA, with support from TAs)
- 3.3.2 Gain a better understanding of community needs and current transport choices. (ARTA, with support from TAs)
- 3.3.3 Work with schools to develop travel plans which identify existing travel choices and opportunities for reducing the level of vehicle travel for trips to and from school. (ARTA, with support from TAs)
- 3.3.4 Work with tertiary institutions, hospitals, public authorities, businesses and communities to develop travel plans which identify existing travel choices and opportunities for reducing the level of vehicle travel needed, including for trips to and from those destinations and provision for teleworking. (ARTA, with support from TAs)
- 3.3.5 Ensure that transport services and infrastructure development support travel planning initiatives. (ARTA, Transit, TAs)
- 3.3.6 Support technology improvements which reduce the need to travel. (TAs, with support from ARTA)
- 3.3.7 Support initiatives that encourage ridesharing, teleworking and flexible work hours. (ARTA, with support from TAs)
- 3.4 Ensure that the planning and management of parking resources in the region supports the region's land use and transport outcomes.
- 3.4.1 Achieve a balance between the provision of car parking and managing peak period traffic demands in areas of high parking demand such as the Auckland CBD and other regional centres. This should include consideration of parking ceilings in these areas. (ARC, ARTA and TAs)
- 3.4.2 Support the development of the region's public transport and active mode outcomes through appropriate parking policies and measures. This includes parking measures to influence the travel decisions of commuters through pricing and the planning and management of parking supply. (ARC, ARTA and TAs)
- 3.4.3 Support the region's travel demand management outcomes through appropriate parking policies and measures. This will include developing parking management measures, including parking restraint, to complement travel demand management initiatives and improvements to the public transport network. (ARC, ARTA and TAs)
- 3.4.4 Support the implementation of the Regional Growth Strategy land use outcomes through appropriate parking policies and measures. To facilitate this policy a better understanding of the dynamics of parking in areas of intensification and its consequential impacts is needed. (ARC, ARTA and TAs)



- 3.4.5 Effectively manage the short-term parking requirements around the region's activity / commercial centres. In areas of high activity the highest priority should be given to short-stay non-residential parking. The provision of long-stay parking should be planned and, if necessary, appropriately priced in areas of lower demand or activity. (ARC, ARTA and TAs)
- 3.4.6 Develop a Regional Parking Strategy to provide regional policy direction on all parking issues including a regional policy position for the provision of park and ride facilities. (ARC, ARTA, and TAs)
- 3.5 Evaluate options to establish an efficient road pricing system.
- 3.5.1 Work with the government to progress the Auckland road pricing evaluation study. (ARC, TAs, ARTA)
- 3.5.6 New roads may only be considered as possible toll roads in situations where:
- There is a suitable alternative route
  - Tolling would only have a minor adverse effect on the benefits of constructing the road (particularly safety benefits and relief of traffic pressures on communities)
  - The adoption of tolling does not prevent other transport or safety improvements in the network
  - There is traffic relief for bypassed communities.

In addition, consideration will be given to the social and economic impacts on bypassed communities. (Transit, TAs)

#### **4 Increase the capacity of the transport network**

- 4.1 Improve, upgrade and expand the region's public transport infrastructure and services.
- 4.1.6 Continue development of the Quality Transit Network in the region. (ARTA, TAs)
- 4.1.9 Ensure that public transport services are planned and provided for, to new and (re)developing areas. (ARTA, TAs)
- 4.1.10 Ensure that the design and construction of public transport infrastructure takes into account the requirements for safety and security of passengers. (ARTA, TAs)
- 4.1.11 Plan and protect the ability for additional Quality Transit Network connections throughout the region. (ARTA, TAs)

- 4.1.13 Undertake an investigation into development of the regional standardisation of transit and bus lanes. (ARTA, TAs)
- 4.1.17 Ensure that when changes are made to public transport services, individuals, communities and existing passengers are consulted with in a manner which is appropriate to the degree of change, and that the outcome of the consultation is communicated effectively to existing and potential passengers. (ARTA, TAs)
- 4.2 Upgrade and provide additional road infrastructure to improve network efficiency and effectiveness.
- 4.2.1 Finalise the future strategic and regional arterial road networks for the region shown on Map 7.2. (ARTA, ARC, Transit and TAs)
- 4.2.2 Undertake a programme to develop the strategic road network including completion of strategic connections identified in Maps 7.1 and 7.2, taking into account the preferred strategic option in the RLTS. (Transit, TAs)
- 4.2.3 Undertake a programme to develop the local road network, to give effect to the preferred strategic option in the RLTS. (ARTA, TAs)
- 4.2.5 Coordinate the planning and programming of state highway and local road improvements to ensure that the development of the region's road network reflects the preferred strategic option of the RLTS. (ARTA, TAs, Transit)
- 4.2.6 Continue work to investigate and protect the ability to construct roading infrastructure that may be required beyond the term of the RLTS. (Transit, ARTA, TAs)
- 4.2.7 Ensure that priorities for the development of roading infrastructure reflect the need to maintain and enhance access to key locations of economic activity, including strategic facilities such as the port and airport. (Transit, ARTA, TAs)
- 4.3 Upgrade and provide additional rail infrastructure to improve network efficiency and effectiveness.
- 4.3.1 Identify and protect the existing and future strategic rail network. (OnTrack, ARTA, TAs)
- 4.3.3 Continue work to investigate and protect the ability to construct rail infrastructure that may be required beyond the term of the RLTS. (OnTrack, ARTA, TAs)
- 4.4 Provide additional infrastructure to improve conditions for walking.

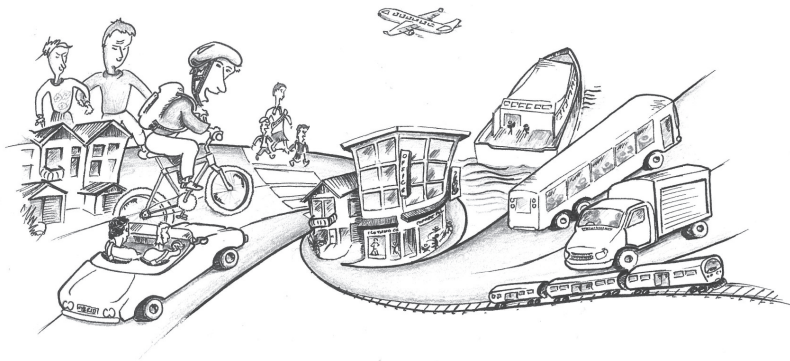
- 4.4.1 Incorporate national guidelines and standards for walking into transport planning, design and management activities. (Transit, OnTrack, TAs)
- 4.4.2 Implement improvements to safety and access for walkers, and support initiatives to increase the use of walking. (Transit, OnTrack, TAs)
- 4.4.3 Introduce traffic calming and enforcement measures where appropriate on local roads to improve the environment for walkers and local communities. (TAs)
- 4.4.4 Recognise that urban road corridors are public places and that amenity needs to be protected through appropriate urban design. (TAs)
- 4.4.5 Promote walking in the context of improved safety through a comprehensive assessment of safety and security impacts, and the implementation of appropriate infrastructure to both encourage walking and ensure the safety and security of users. (Transit, OnTrack, TAs)
- 4.4.6 Plan for the needs of walking and pedestrian amenity in the design and assessment of new subdivisions and major redevelopment proposals. (TAs)
- 4.4.7 Ensure that direct, attractive and safe walking routes are available to public transport stops. (TAs, OnTrack, ARTA)
- 4.4.8 Plan for and protect the ability to provide for additional pedestrian connections throughout the region, where required. (ARTA, Transit, OnTrack, TAs)
- 4.5 Provide additional infrastructure to improve conditions for cycling.
- 4.5.1 Incorporate national guidelines and standards for cycling into transport planning, design and management activities. (Transit, OnTrack, TAs)
- 4.5.2 Develop and implement a regional cycle network that is well connected across the region. (TAs, OnTrack, ARTA)
- 4.5.3 Implement improvements to safety and access for cyclists, and support initiatives to increase the use of cycling. (Transit, OnTrack, TAs)
- 4.5.4 Introduce traffic calming and enforcement measures where appropriate on local roads to improve the environment for cyclists. (TAs)
- 4.5.5 Consider the needs of cycling in the design and assessment of new subdivisions and major redevelopment proposals. (TAs)
- 4.5.6 Ensure that direct, attractive and safe cycling routes are available to major public transport stops and ferry terminals. (OnTrack, TAs, ARTA)
- 4.5.7 Plan for and protect the ability to provide for additional cycling connections throughout the region. (ARTA, OnTrack, Transit, and TAs)
- 4.5.8 Plan for cycling in ways that encompass the 'whole of journey' concept including:
- Infrastructure treatments
  - Safety at and across intersections
  - Secure bike facilities
  - Connection to activity centres. (ARTA, OnTrack, Transit, and TAs)
- 4.5.9 Ensure that needs of different cyclists – including recreational cyclists, fitness cyclists and children – are considered in the design of infrastructure. (TAs)
- 4.5.10 Plan and provide for safe and effective cycle facilities in local road corridor. (TAs, ARTA)
- 5 Allocate the available transport funding to ensure the Regional Land Transport Strategy's policies are achieved**
- 5.1 Allocate land transport funding to reflect the preferred strategic option of the RLTS.
- 5.1.1 Ensure that actions reflect the following general allocations of funding over the next 10 years:
- TRAVEL DEMAND MANAGEMENT 4%
- PUBLIC TRANSPORT 34%
- Infrastructure 18%
  - Services 16%
- ROADS 62%
- Infrastructure 30%
  - Safety measures 34%
  - Traffic management 42%
  - Maintenance & renewals 26%
- (Transit, ARTA, TAs, Land Transport NZ)
- 5.2 Promote changes to the land transport funding systems to enable implementation of the preferred strategic option.
- 5.2.1 Work with the Ministry of Transport, Land Transport NZ and other appropriate central

government agencies to ensure that funding arrangements, particularly related to local/regional shares, do not constrain the implementation of the preferred strategic option. (ARC, TAs, ARTA)

5.3 Take steps to mitigate the risks that have been identified with respect to implementation of the preferred strategic option.

5.3.2 Collaborate with the government and training institutions to address skill shortages in areas of increased demand. (ARC, Transit, ARTA, TAs)





## Appendix 4: Supporting and Technical Papers

### National

Environmentally Sustainable Transport – OECD  
 The Kyoto Protocol – UN  
 New Zealand Transport Strategy 2002 – Ministry of Transport  
 Transport Sector Strategic Directions December 2005 – MOT  
 State Highway Forecast 2005 – Transit NZ  
 Sustainable Action of New Zealand Programme for Action 2003  
 National Rail Strategy to 2015 – MOT  
 National Energy Efficiency and Conservation Strategy 2002  
 New Zealand Disabilities Strategy  
 Vehicle Fleet Emissions Control Strategy 1999 – MOT  
 Getting there on foot, by cycle – MOT  
 Road Safety to 2010  
 Growth and Innovation Strategy – Growing an Innovative NZ  
 New Zealand Health Strategy  
 Reducing Inequalities in Health  
 National Environmental Standards  
 The Accessible Journey – Report of the Inquiry into Accessible Public Land Transport – Human Rights Commission, 2005

### Regional

Auckland Regional Growth Strategy 1999 – ARC  
 Auckland Regional Land Transport Strategy 2005 – RLTC  
 Regional Passenger Transport Plan 2003 – ARC  
 Auckland Regional Road Safety Plan 2004 – ARC

Draft Regional Ferry Strategy – ARC  
 Draft Business Location Strategy 2005 – ARC  
 Regional Freight Strategy 2007 – ARC  
 Draft Auckland Transport Plan 2006 – ARTA  
 State of Public Health in the Auckland Region 2006 – Auckland District Health Board  
 Local Effects of the RLTS 2005 Technical Paper 2006 – ARC  
 Auckland Regional Air Land and Water Plan – ARC  
 Sustainable Transport Plan 2006 – ARTA

### Waitakere City

The draft Greenprint 1994  
 The draft Waitakere City Integrated Transport Strategy 1999  
 Transport principles adopted by Council in March 2002  
 The transport vision, goals and objectives contained in the Long Term Council Community Plan 2003 to 2013  
 Waitakere City Walking and Cycling Strategy 2003  
 Cycling Feasibility Study 2005  
 Strategic Road Corridor Studies  
 Transport Activity Plans 2005  
 Road Asset Management Plan  
 Waitakere City Road Safety Plan  
 Concept plans for the three main town centres and the growth of the northwest

**For more information about transport policies  
and projects relating to Waitakere**

Phone Waitakere City Council on 839 0400 or visit [www.waitakere.govt.nz](http://www.waitakere.govt.nz)

**Other transport agencies which fund or implement  
transport projects in Waitakere include:**

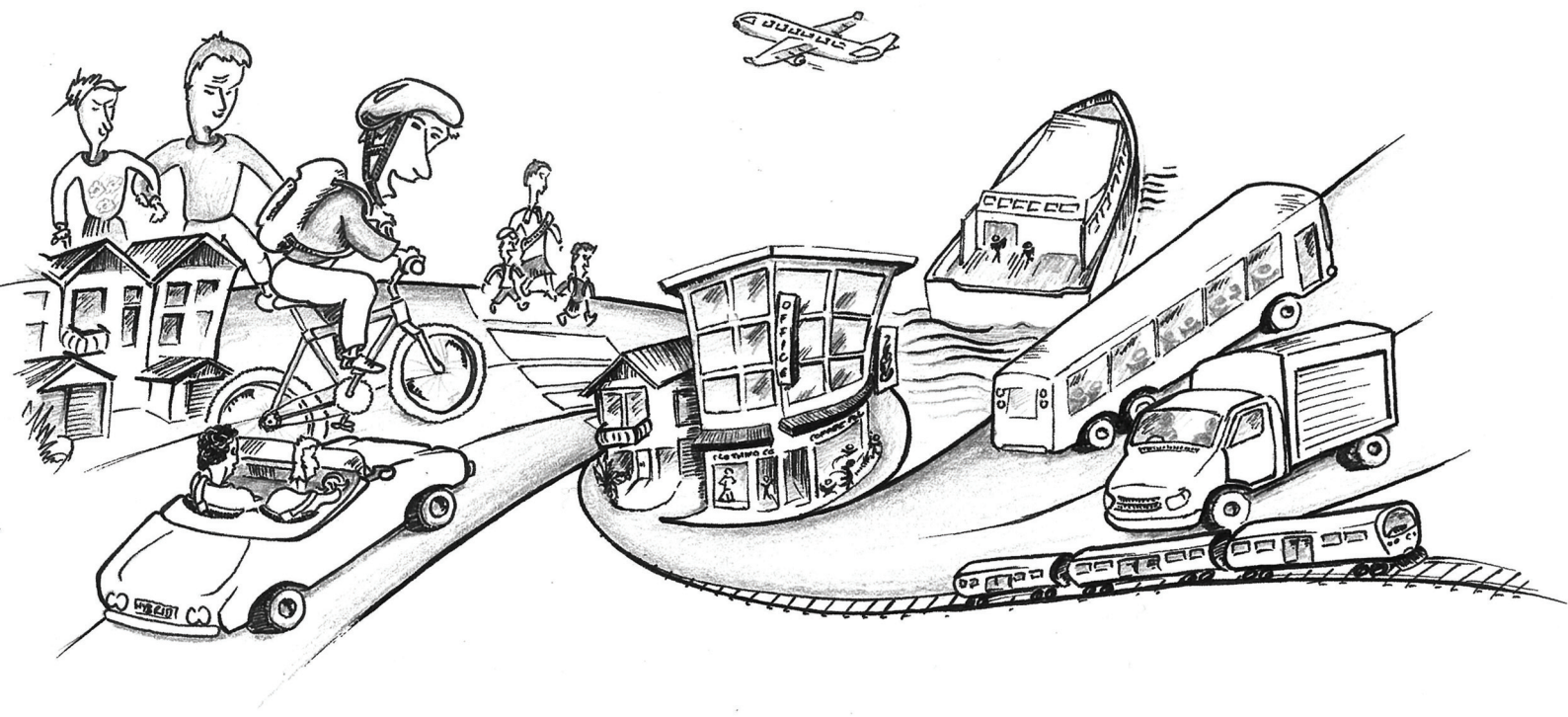
Transit New Zealand - [www.transit.govt.nz](http://www.transit.govt.nz)

Auckland Regional Transport Authority - [www.arta.co.nz](http://www.arta.co.nz)

ONTRACK - [www.ontrack.govt.nz](http://www.ontrack.govt.nz)

Auckland Regional Council - [www.arc.govt.nz](http://www.arc.govt.nz)

Land Transport New Zealand - [www.landtransport.govt.nz](http://www.landtransport.govt.nz)



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