

Chapter 7 Achieving the Objectives: RLTS Policies

7.1 INTRODUCTION

This chapter sets out the policies that have been developed to achieve the preferred strategic option identified in Chapter 6.

The policies are grouped into similar types of initiatives. Many contribute to multiple objectives. Their relationships with the strategy's objectives are detailed in table 7.1 and, in the context of the rest of the document, in Appendix C.

The policies are set out in a hierarchical framework and are arranged into five broad groups:

- **Contribute to an integrated, safe, responsive and sustainable transport system**
- **Make best use of the existing transport system**
- **Manage travel demand**
- **Increase the capacity of the transport network**
- **Allocate the available transport funding to ensure the policies of the Regional Land Transport Strategy are achieved.**

For each of these policy groups, a set of high-level policies has been developed (denoted by a two-digit numbering system); and each of these includes a set of more detailed actions (with a three-digit numbering system).

The organisations responsible for implementation are identified for each of the actions.

7.2 THE STRATEGY

Contribute to an integrated, safe, responsive and sustainable transport system.

A number of organisations contribute to the development of Auckland's transport system. Their

decisions impact on the effectiveness of the transport system in meeting the region's transport objectives.

The Regional Land Transport Strategy includes policies to help these organisations to contribute to the overall aim of an integrated, safe, responsive, and sustainable transport system. The policies are:

- Ensure that transport decisions take into account the objectives of the Land Transport Management Act and the Regional Land Transport Strategy
- Encourage organisations with responsibility for transport and land use decisions to act in an integrated way, and to fully consider the wider impacts of their decisions
- Improve the safety and security of the transport system for all users
- Involve communities in decisions about transport that affect them
- Ensure that transport decisions take into account the diverse transport needs of all users
- Increase the flexibility and resilience of the transport system so that it copes with changing circumstances and meets the needs of future generations
- Develop the transport system in a way that minimises the use of non-renewable resources
- Take all reasonable steps to avoid, remedy or mitigate the adverse environmental and health effects of transport.

Make best use of the existing transport system

Auckland's transport system represents a significant investment and its efficient and effective use is vital to the economic, social and environmental well being of the region. A key focus of this strategy is to ensure



that the existing transport network can operate at its best, both now and into the future. This includes policies to:

- Ensure that the transport system is well maintained
- Implement network management techniques to optimise the performance of the transport network, taking into account the needs of all modes
- Take steps to facilitate the movement of freight traffic.

Manage travel demand

The Regional Land Transport Strategy recognises that it is not possible to adopt a “predict and provide” approach to transport in Auckland. There are simply too many cars.

While additional transport services and infrastructure will be required, the region will also increasingly need measures that reduce the demand for travel, particularly by private vehicles. To this end, the strategy includes policies to:

- Ensure that land use development and transport support each other and recognise the importance of catering for non-vehicular travel
- Provide attractive transport choices for individuals, communities and businesses
- Ensure that resources are available to understand and influence people’s travel choices
- Ensure that the planning and management of parking resources supports the region’s land use and transport outcomes
- Evaluate options to establish an efficient road pricing system.

The policies above are linked to Chapter 8 on travel demand management.

Increase the capacity of the transport network

Even with steps to manage travel demand, growth of the region means that significant investments in infrastructure and services are required to maintain and improve the transport network’s effectiveness. Transport network improvements are also needed to support the Regional Growth Strategy and, in particular, to enable development based on centres. The Regional Land Transport Strategy therefore provides for strategic improvements to the region’s transport system to increase capacity, support the growth strategy, offer better transport choices and allow the system to operate safely and efficiently. To this end, the strategy includes policies to:

- Upgrade and expand the region’s public transport infrastructure
- Improve public transport service levels
- Upgrade and provide additional road infrastructure to improve network efficiency and effectiveness
- Upgrade and provide additional rail infrastructure to improve network efficiency and effectiveness
- Provide additional infrastructure to improve conditions for walking
- Provide additional infrastructure to improve conditions for cycling.

Allocate the available transport funding to ensure the achievement of RLTS policies

The evaluation of strategic options undertaken in the Regional Land Transport Strategy identifies a preferred mix of investment in roading, public transport, walking, cycling and travel demand management initiatives. The strategy includes policies to ensure that the funding available to land transport in the region is directed towards implementing the preferred option. These are:

- Allocate the available transport funding to achieve the preferred strategic option



- Promote changes to the land transport funding systems to enable the preferred strategic option to be achieved
- Take steps to mitigate identified risks to the implementation of the preferred strategic option.

7.3 CONTRIBUTION TO OBJECTIVES

Many of the policies outlined in this chapter will contribute to a number of the objectives outlined in Chapter 4. The primary relationships between the policies and objectives are summarised in the following table.

7.4 THE POLICIES

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

The Regional Land Transport Strategy includes the following policies to assist those organisations that will contribute to the overall aim of an integrated, safe, responsive and sustainable transport system.

Table 7.1 Relationship of policies with objectives

Policy	Economic development	Safety & security	Access & mobility	Public health	Environmental sustainability	Support growth strategy	Cost effective
1.1	✓	✓	✓	✓	✓	✓	✓
1.2		✓	✓		✓	✓	✓
1.3		✓				✓	
1.4			✓		✓		
1.5			✓				
1.6	✓		✓		✓	✓	
1.7					✓		
1.8				✓	✓		
2.1	✓		✓				✓
2.2	✓	✓	✓				✓
2.3	✓		✓			✓	
2.4	✓		✓				
3.1					✓	✓	
3.2	✓		✓	✓	✓		
3.3			✓	✓	✓		
3.4	✓		✓		✓	✓	
3.5	✓				✓		✓
4.1	✓		✓			✓	
4.2	✓		✓			✓	
4.3	✓		✓		✓	✓	
4.4		✓		✓	✓		
4.5		✓		✓	✓		
5.1							✓
5.2							✓
5.3							✓



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

The strategy is required to take into account the way it contributes to the objectives set out in the Land Transport Management Act (LTMA). These objectives are:

- Assisting economic development
- Assisting safety and personal security
- Improving access and mobility
- Protecting and promoting public health
- Ensuring environmental sustainability.

When preparing land transport programmes, approved organisations are also required to consider how each activity or activity class contributes to the Act's objectives.

As they were developed, the strategic options in this Regional Land Transport Strategy were assessed against the Act's objectives and the objectives of the Regional Growth Strategy, and their cost effectiveness. Where organisations are making decisions on specific activities and funding allocations to give effect to this strategy, the same objectives need to be considered.

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 into 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.

Recent changes to transport governance in the Auckland region have streamlined decision-making and implementation. However, there are still many organisations involved in transport in the region. There is a need to ensure that the actions of these organisations are coordinated so that they each contribute to the outcomes sought by this strategy.

Effective integration also requires the transport needs of all user groups to be considered, and the impacts of transport and land use decisions on those groups to be appreciated.

These policies are expected to involve an ongoing advocacy role for the Regional Land Transport Committee.

1.2.1 Coordinate and integrate the actions of all organisations responsible for transport and land use decisions to give effect to Regional Land Transport Strategy policies. **(ARTA, ARC)**

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**)
- 1.2.5** Develop and maintain a forum for discussion of inter-regional transport issues (**ARC, Environment Waikato, Northland Regional Council**)
- 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 (**TA's 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, OnTrack, Transit, Land Transport NZ**)
- 1.2.9** Develop and maintain a forum for discussion of inter-regional transport issues (**ARC, Environment Waikato, Northland Regional Council**)
- 1.2.10** That steps be taken to ensure that the next review of the RLTS is undertaken within a longer term strategic timeframe and integrated with the review of the Regional Growth Strategy. (**ARC**)

1.3 Improve the safety and security of the transport system for all users.

Road safety is a major issue for the Auckland region. On average one person dies every five days on the region's roads, and road crashes resulted in a social cost of \$800 million in 2003. Creating a safer and more reliable transport system will be more critical as our regional community grows.

The Regional Road Safety Plan 2004 to 2010 (Refer to Chapter 2 section 2.4 for more information on this plan) has adopted a long-term "Vision Zero" approach to road safety. It has a 2010 goal of no more than 670 deaths plus hospitalisations¹ in one year. While this is an ambitious vision, significant improvements can be made with a strong commitment by all those involved in road safety, including the wider community.

The Regional Road Safety Plan signals the continuing need for agencies and the community to work together to bring about change. Pedestrians and cyclists require improved infrastructure, continued education programmes and greater acceptance by motorists. Motorists require improved roads and programmes that reinforce safe driving habits such as observing give-way rules and driving to the conditions. The police require new tools to address serious offenders such as repeat drink-drivers and red light runners. The links between congestion levels and traffic speed also have safety implications that need to be addressed in an integrated way.

Major road safety improvements can be made through engineering. Road controlling authorities will be encouraged to have effective safety management systems in place and to make a significant investment in engineering for safety.

Currently the region does not have a regional rail safety plan. Although rail remains a relatively safe form of land transport, with increased frequencies in the region from the greater use of rail for both public transport and freight, may result in an increased number of rail related crashes. Rail related crashes

¹ Of more than one day.



fall into three different categories: level crossings (involving cars and trains), trespass and route crime (involving the public on tracks without authorization committing crimes); and operational crashes (such as collisions, derailments and rail passenger accidents).

Personal security needs to be addressed as part of this Regional Land Transport Strategy. Real and perceived threats to personal security can affect the willingness of individuals to use alternative modes such as walking, cycling or public transport. The strategy's increased emphasis on these modes needs to be accompanied by an increased emphasis on improvements to the security of the transport environment for their users.

1.3.1 Implement the key road safety priorities identified in the Regional Road Safety Plan 2004 to 2010, including:

- Visible safety management systems and increased safety engineering investment
- High levels of enforcement of drink driving, speed and intersection rules, and advocacy for tougher enforcement measures
- Increased community programmes, promotions and education to foster road safety awareness and improved behaviours. **(Roadsafe Auckland, ARTA)**

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)**

1.3.5 Coordinate road safety initiatives through ongoing monitoring and review of the Regional Road Safety Plan. **(Roadsafe Auckland, ARTA)**

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)**

1.3.7 Provide leadership and coordination for groups working cooperatively in the field of road and rail safety. **(ARTA, OnTrack, Land Transport NZ)**

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, OnTrack, Land Transport NZ, Rail providers)**

1.4 Involve communities in decisions about transport that affect them.

In the past, fragmented decision-making processes have meant that the needs of some parties have been overlooked. The Regional Land Transport Strategy aims to ensure that all transport-related decisions take the needs of all users and affected communities into consideration.

1.4.1 Identify who is affected by transport decisions, and provide early and full opportunities² for them to contribute to the planning and decision-making process. **(Transit, TAs, ARTA)**

² Refer to the consultation requirements and procedures under the LGA 2002



1.5 Ensure that transport decisions take into account the diverse transport needs of all users.

Transport imposes time and financial costs on households and businesses. The potential for changes to the way the transport system is developed, managed and priced can affect these costs. This is particularly the case for the transport disadvantaged who have fewer transport choices because of age, income or disability.

Transport decisions can impact on the transport disadvantaged disproportionately compared to other users – creating inequities. This is particularly the case for those on lower incomes who benefit from the promotion of active transport and public transport, while often subjected to the greatest adverse effects from the transport system.

The scale of changes envisaged in this Regional Land Transport Strategy makes it important to understand the impacts on these groups, and to ensure the benefits and costs are distributed equitably. The strategy also provides for the continuation of specific services and concessions for the transport disadvantaged.

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)**

1.5.2 Provide public transport fare concessions to appropriate target groups. **(ARTA)**

1.5.3 Ensure people whose permanent disabilities prevent them from using private or public transport have access to specialist transport services, such as total mobility. **(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.

Providing land transport connections requires the acquisition of continuous sections of right-of-way. Achieving this will be more effective if the right-of-way is protected well before the link is needed, often when land is first developed. This requires a long-term and multi-modal planning perspective.

Major roading, rail and public transport network improvements that could be undertaken and progressed until 2016 are shown on Maps 7.1, 7.2, 7.3 and 7.4 .

Forward planning also needs to consider the implications of any unexpected failure of any part of the transport network. Transport is an essential service that supports the economic activity and community values of the region. Failure of any of the region's



major transport links would have significant local and regional effects. Integrating transport planning with hazards management is fundamental to the continued operation of the network in an emergency.

Also, coordinated planning is required to minimise the disruptions by construction and maintenance within transport corridors. This will require road controlling authorities and utilities to work together.

- 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

The transport system is a major consumer of energy in New Zealand. Transport energy consumption in recent years has increased by more than the rate of population growth. There has been a particularly strong increase in per capita diesel consumption over the past decade.

As transport is a major contributor to greenhouse gas emissions, the continued increases in the per capita use of fossil fuels are not sustainable. They also work

against New Zealand's Kyoto Protocol obligations to reduce greenhouse gas emissions to 1990 levels by 2012.

The evaluation of strategic options shows that changes to the makeup of the transport network (e.g. increasing public transport) have relatively little impact on fuel consumption. These results point to the need for interventions that are focused on improving fuel efficiency and encouraging the use of more fuel-efficient vehicles. These interventions will generally require action by central government.

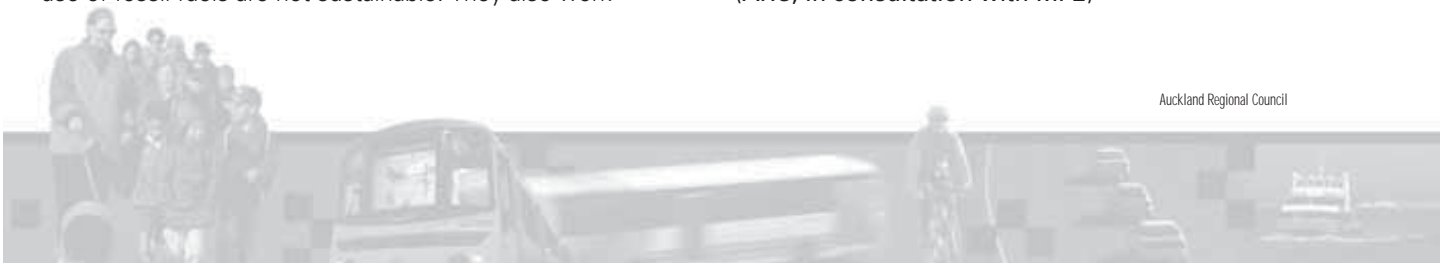
The National Energy Efficiency and Conservation Strategy aims to improve New Zealand's energy efficiency by 20 percent by 2012. It promotes a move towards a sustainable energy future for New Zealand through energy efficiency, energy conservation and renewable energy. (Refer to Appendix A for more information on the National Energy Efficiency and Conservation Strategy.)

Also needed is a long-term perspective on the reduction of fuel consumption by transport, by addressing the overall pattern of development in the region. The policies in section 3.1 relating to support for the Regional Growth Strategy are premised, in part, on a future urban form that has less demand for travel and transport fuels.

The construction of transport infrastructure relies heavily on the consumption of non renewable resources. The use and development of recycled and renewable resources of materials for transport should be encouraged.

The amount of land consumed for transport purposes is also significant, and impacts on the efficiency and amenity of the urban environment. Policies aimed at making more efficient use of existing transport infrastructure can help to minimise the consumption of land for transport purposes.

- 1.7.1** Work with central government to develop Kyoto Protocol targets for reducing greenhouse gas emissions from transport in the Auckland region (by 2012) and support initiatives to achieve the targets. **(ARC, in consultation with MFE)**



- 1.7.2 Support measures that reduce the need to travel by individuals, business, institutions and government. **(ARC, ARTA)** (Refer also to section 3.3 under TDM policies)
- 1.7.3 Work with central government to develop National Energy Efficiency and Conservation Strategy targets for energy efficiency improvements from transport in the Auckland region (by 2012) and support initiatives to achieve the target. **(ARC, in consultation with EECA)**
- 1.7.4 Encourage and facilitate the introduction of eco-efficient vehicles into the Auckland fleet. **(ARC, ARTA)**
- 1.7.5 Advocate for the development and implementation of national vehicle fuel efficiency standards and labelling. **(ARC, in consultation with MOT)**
- 1.7.6 Disseminate fuel efficiency information to encourage fleet managers and the public to select more energy efficient vehicles. **(ARC, EECA)**
- 1.7.7 Work with central government to progress the Auckland road pricing evaluation study to change behaviour and steer investment decisions towards energy efficiency. **(ARC, in consultation with MOT)**
- 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)**
- 1.7.9 Encourage individuals, business, institutions, and government to opt for less energy intensive transport, such as public transport, walking, cycling and rail freight. **(ARTA)**
- 1.7.10 Investigate improvements in traffic flow management and road network characteristics to achieve greater energy efficiency across the network. **(ARC, Transit, TAs).**
- 1.7.11 Encourage more energy efficient vehicle procurement and management practices in the region. **(ARC, ARTA)**
- 1.7.12 Work with central government to develop National Energy Efficiency and Conservation Strategy targets for increased use of renewable transport fuels for the Auckland region (by 2012) and support initiatives to achieve the targets. **(ARC, in consultation with EECA)**
- 1.7.13 Advocate for the development and implementation of national fuel standards for renewable fuels, such as bio-diesel. **(ARC, in consultation with EECA and MED)**
- 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)**
- 1.7.15 Support the use and development of recycled and renewable materials in the construction of the transport network. **(ARC)**
- 1.8 Take all reasonable steps to avoid, remedy or mitigate adverse environmental effects and improve health outcomes, of transport.

The region's environmental objectives and policies are outlined in the ARC's relevant plans. Key objectives and policies for managing air quality and water quality are outlined in the Auckland Regional Air, Land and Water Plan. The Regional Land Transport Strategy is one way the Air, Land and Water Plan's policies for reducing or managing air and water contaminants from the transport system will be implemented. Regional objectives and policies concerning water quality are further implemented through the Auckland Regional Plan: Sediment Control and Stormwater Action Plan. The region's coastal environment is managed through the Auckland Regional Plan: Coastal.

In addition, the government has recently developed National Environmental Standards for key air contaminants (many of which are principally emitted by transport activities). These will come into force on 1 September 2005. The National Environmental



Standards are mandatory technical environmental regulations which require regional councils to verify the state of their region's air quality, report any breaches, and develop strategic air quality management plans to bring levels into compliance. Since 1999 average levels of most of the key pollutants have decreased markedly but peak levels still exceed the National Environmental Standards' values. This means that further national or regional measures will be needed to reduce vehicle emissions. Relevant agencies will also need to ensure they comply with the National Environmental Standards when developing and implementing new transport projects.

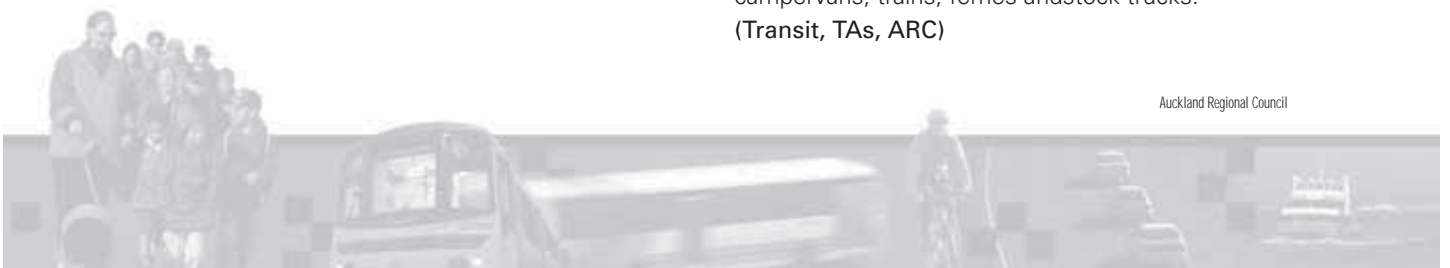
Achieving the Regional Land Transport Strategy's environmental objective will also depend on the processes and approaches adopted to consider and assess environmental concerns that may emerge from transport activities. An ideal approach would enable transport infrastructure providers to establish a consistent and transparent evaluation process with consent-giving agencies. Such an approach would better facilitate the implementation of regional transport projects.

There is also the potential for transport infrastructure to lead to improvements in the physical environment. For example, projects that relieve traffic congestion and improve traffic flow can improve the local air quality. Transport corridors can be designed to enhance public access and provide important view corridors. The planting of native species can enhance biodiversity, act as ecological corridors for wild life, and provide improved storm water management. Encouraging the use of public transport, walking and cycling can also lead to environmental and health benefits.

The broad direction for addressing environmental concerns and issues in the Regional Land Transport Strategy was established by the Regional Policy Statement. The strategy incorporates the broader environmental objectives of the policy statement, within the context of transport related issues and concerns, in the following policies and strategies.

It is important that in planning for future transport projects, the effects of development on the stormwater catchment areas are taken into account and incorporated into design and management options. This enables the co-ordination of transport planning with existing and future known land uses, and means that the most appropriate stormwater outcome can be achieved.

- 1.8.1 Identify and evaluate reduction strategies to ensure that emissions from new and existing transport sources comply with the National Environmental Standards and regional targets for air quality. **(ARC, ARTA)**
- 1.8.2 Accelerate environmental performance improvements that reduce air emissions from heavy-duty diesel vehicles in the region, such as the public bus and commercial trucking fleets. **(ARC, ARTA)**
- 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, 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)**



- 1.8.8** Work with the government and stakeholders to identify, evaluate, and communicate, measures that will limit the adverse environmental effects of transport and advocate that these measures are implemented. **(ARC)**
- 1.8.9** Encourage, enhance and increase the capacity for research to provide information and education on the environmental and human health impacts of transport, and promote environmentally friendly transport alternatives. **(ARC, ARPHS, ARTA, Tertiary Institutes)**
- 1.8.10** Work with the government to enhance the enforcement of environmental standards in relation to transport. **(ARC, MOT)**
- 1.8.11** Develop and implement consistent procedures for assessing the environmental and health impact and health risk assessment of transport policies and projects. **(ARC, MFE)**
- 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

Auckland's transport system represents a significant investment, and its efficient and effective use is vital to the economic, social and environmental well-being of the region. A key focus of this Regional Land Transport Strategy is to ensure that the existing network can operate at an optimal level, both now and into the future.

This includes ensuring that all transport infrastructure is maintained and managed to ensure its effectiveness into the future, and taking steps to improve the efficiency of the existing transport network for all modes.

Improving the safety of the existing transport system is also a key focus of this strategy. Policies to achieve this are included in section 1.3 of this chapter.

2.1 Ensure that the region's transport system is well maintained

The transport system in Auckland is a major regional asset and needs to be well maintained, so that it remains useful for future generations. The Local Government Act requires local councils to maintain their transport assets in accordance with asset management plans, and to make adequate provision for depreciation in their financial plans. Crown transport entities are also taking a longer-term approach to their planning, including the development of asset management plans.

While a key thrust of this strategy is towards completing new infrastructure, it is essential that adequate resources are allocated to ensure the system as a whole continues to operate efficiently.



This also includes maintaining the existing network of public transport services to an acceptable level and quality.

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)

2.1.4 Ensure that the quality and level of service of the public transport system is maintained and enhanced. (ARTA)

2.2 Implement a road hierarchy for the region

A road hierarchy that clearly identifies the function of key roads and the policies and upgrading programmes to ensure they operate appropriately is an important tool to ensure the best use is made of the current road system. From a regional perspective, it is important to identify:

- Strategic roads, which link the region to other regions or connect to strategic facilities such as the port and airport
- Regional arterial roads, which link districts or urban areas within the region and connect regionally significant facilities.

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

Opportunities exist to utilise the existing transport network in the region more effectively. Work undertaken for this Regional Land Transport Strategy suggests that the carrying capacity of the strategic and regional arterial roading network can be improved by applying traffic management techniques. Policies to achieve these improvements generally focus on increasing the capacity of the existing facilities to move people and goods.

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





Map 7.1: Present Day Strategic Route & Regional Arterial Road Network



Map 7.2: Future Strategic Route & Regional Arterial Road Network

- 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 corridors³, 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 p 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.

Freight is a key indicator of the wealth of a society. It represents all the materials produced, consumed, exported, discarded and recycled that support homes and businesses in the region. The efficient distribution of freight is therefore essential for the region's economy.

³ As defined within Auckland Regional Policy Statement – Proposed Change 6 – Giving effect to the Regional Growth Concept and Integrating Land use and Transport- Notified 31 March 2005.



The policies in this section of the Regional Land Transport Strategy are focused on achieving efficiency in the transport and storage of goods to support the regional and national economy.

The policies below summarise the key outcomes and priority actions of the Auckland Regional Freight Strategy, to which reference should be made for further detail.

- 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

Part 175(2)(o) of the Land Transport Act requires a Regional Land Transport Strategy to include a demand management strategy. While Chapter 8 is exclusively about travel demand management, travel demand management is integrated throughout this strategy. The policies in this section are a core part of the travel demand management strategy for the region and should be read in conjunction with Chapter 8. Significant elements of travel demand management are also in Chapters 5 (The Role of the Modes), 6 (Strategic Options), and Chapter 9 (Expected Results).

Travel demand management is intervention to modify travel decisions so that more desirable transport, social, economic and/or environmental objectives can be achieved, and the adverse impacts of travel can be reduced. It includes policy initiatives and actions that aim to reduce the level of demand for travel, particularly for private vehicles, and provide a greater range of travel choices. There is also potential to apply travel demand management techniques to the movement of freight by encouraging better logistical planning and the potential consolidation of freight onto rail. However freight is dealt with specifically in 2.4. Travel demand management excludes the provision of major infrastructure.

The value that individuals gain from the transport system is not from the travel itself, but from the economic, social and cultural opportunities that it permits. The challenge is to continue to provide access to these opportunities while minimising the amount of vehicle travel needed.

Travel demand management has become increasingly important as a result of the increasingly unacceptable impacts of growth in vehicle travel demand. There are very real limits to the ability of the region – financially, environmentally and socially - to provide the additional transport capacity that would be needed to cater for unconstrained demand.

There are four key components to an effective travel demand management strategy:



- Reducing the need to travel (which includes the distance travelled) through changes in the location, density and nature of land use activities, and by taking advantage of improvements in communications technology
- Making provision for more travel choices by providing a transport system that strives to meet the needs of all modes while enabling safe and convenient alternatives to vehicle travel
- Influencing travel choices, by providing suitable information and working with individuals, schools, tertiary institutions, businesses and communities to increase their awareness of the choices available
- Pricing to ensure that private vehicle users pay the true costs of their travel choice.

This Regional Land Transport Strategy includes policies in each of these areas. A key focus in the short-term is on developing travel plans as a way of influencing travel choices. These will be linked to improvements to services and infrastructure to support alternatives to vehicle use (further details are in Chapter 8 of this strategy). In the longer-term, land use changes under the Regional Growth Strategy and pricing initiatives are expected to play a stronger role in influencing 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

There is a direct relationship between the transport system and land use. Transport systems and land use should be planned in an integrated way so that they are mutually supportive.

The Regional Policy Statement and the Regional Growth Strategy are key documents that set out the form of urban development desired in the region. The growth strategy and the policy statement advocate limiting expansion into rural areas and concentrating

growth inside the existing metropolitan boundary. This Regional Land Transport Strategy aims to support the vision, objectives and policies for regional growth outlined in those documents.

In particular, growth is intended to focus on high-density centres and corridors with good transport access in a way that supports good urban design. In many cases investment in walking, cycling and public transport will be important to support the type of land use pattern stated in the Regional Policy Statement. This investment will also encourage the use of these modes for local trips.

The Local Government (Auckland) Amendment Act 2004 requires Auckland's local councils to introduce transport and land use changes to the Regional Policy Statement and district plans, to give effect to the growth concept of the Regional Growth Strategy (Refer to Chapter 2 section 2.1 for more information on the Local Government (Auckland) Amendment Act.)

The higher density centres and corridors envisaged by the Regional Growth Strategy will only be successful if development within them is aligned with a multi-modal transport system with particular emphasis on public transport, cycling and walking modes. In this regard developments within centres and along public transport corridors should be orientated towards these modes particularly to the rapid transit system. Transit Orientated Developments (TOD) support Regional Growth Strategy objectives.

It is important that the region introduce mechanisms that can assist in implementing TODs along with other appropriate land use changes required to give effect to the Regional Growth Strategy and good land use and transport integration. While at a broader level the TAs have this responsibility there is also a need for more focused development agency/ agencies, that would coordinate private public partnerships (PPPs) and which could generate additional funding (in the form of development levies) which further provides for land transport improvements both locally and regionally.

3.1.1 Give priority to transport investments and network improvements which give effect to the



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).**

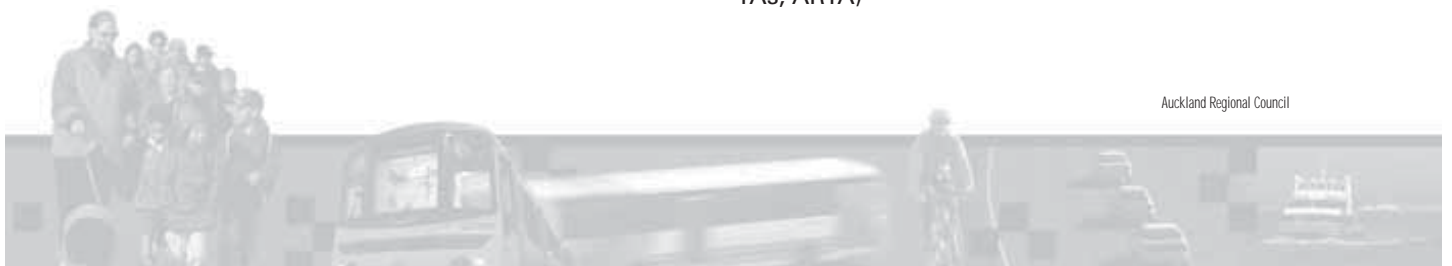
3.1.7 Ensure that good urban design is, included in the planning and implementation of new transport projects or redevelopment of existing transport infrastructure. This should include consideration of noise/ vibration, the built environment, public space and access for people with disabilities. **(TAs)**

3.1.8 In preparing district plans and in considering development and redevelopment proposals, consider the documents “Passenger 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

Realistic choices must be made available to enable people to make fewer vehicle trips. In many cases this will require improvements to the walking, cycling and public transport networks through the policies included in sections 4.2 to 4.4. Other initiatives are also needed, which do not involve physical networks.

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

Travel planning is the process of finding out why people make the travel choices they do, and what would persuade them to use their vehicles less. The assessment of strategic options undertaken for the Regional Land Transport Strategy shows an important role for travel plans in schools, tertiary institutions, businesses and communities. Experience overseas and in Auckland suggests that the impact of these measures on vehicle trips could be significant.

The initial focus will be on school travel plans, building on the successful walking school bus programme.

Another important element in influencing travel choices is the availability of good information about

the transport system. Residents and visitors can make well-informed choices only if they are aware of the choices available to them, and the benefits and costs of those choices.

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)**

3.3.8 Ensure that there is good access to quality information about transport choices, public transport services, walking and cycling. **(ARTA)**

3.3.9 Develop and implement education programmes to increase awareness of transport impacts and choices. **(ARC, ARTA)**



3.3.10 Develop and implement promotional activities to encourage safe and environmentally friendly transport. **(ARC, ARTA)**

3.3.11 Promote the use of real-time transport information systems and emerging information technologies. **(Transit, ARTA)**

3.4 Ensure that the planning and management of parking resources in the region supports the region's land use and transport outcomes

Parking facilities are key elements of the regional transport system. All motorised journeys begin from and end at parking places. Well-managed parking facilities are essential to achieve the region's transport outcomes. The way they are managed may reduce congestion, encourage the use of more sustainable modes of travel and improve safety and environmental sustainability, particularly in densely developed town centres and commercial areas that are the growth centres of the regional and national economy.

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 & 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 & 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 passenger transport network. **(ARC, ARTA & 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 & 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 & 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

Road pricing as a term means charging road users directly for their use of particular parts of the road network. Direct charges for use of the road may vary according to what road is used, when it is used and for what purpose. Previous studies conclude that road pricing has the potential to be a powerful demand management and funding tool in Auckland in the longer term. They also suggest that road pricing could result in a number of benefits, including reduced congestion and increased use of other modes of transport.

Current legislation permits tolls to be used on new roads, but only with the approval of the Minister of Transport and subject to a range of statutory conditions being met. Road pricing, as described in this strategy, would involve pricing for roads over and above what is provided for in the current legislation, and would therefore require legislative change. Before this can be achieved, road pricing must overcome four key challenges to its acceptance:



- Road pricing does not impact equally on all sectors of society and raises important equity and privacy issues
- To be effective, road pricing needs to be complemented by a reasonable alternative such as the availability of a high quality public transport system
- The type and location of any charging system raises significant technical and privacy issues which would need to be resolved
- Road pricing requires public acceptance.

International experience shows it would be unrealistic to expect immediate public acceptance of road pricing schemes. Research was undertaken by the ARC in 2001 to better understand public attitudes towards road pricing. The findings show that road pricing as a way of controlling congestion is not well understood by the public, or popular. Further research and discussion is required before road pricing could be adopted in Auckland.

The government has initiated a comprehensive study into the options for, and impacts of road pricing in Auckland. The completion of this work, expected in late 2005, is needed before any legislative amendments or implementation of road pricing. Also, the necessary policy changes need to be debated, and a decision made by the government about whether or not to proceed.

This Regional Land Transport Strategy recognises the longer-term potential of road pricing. It supports urgent completion of the evaluation studies underway so that early decisions can be made about whether or not to provide for pricing measures in the future. In the meantime, the strategy has been prepared on the basis of existing policy and legislation, which do not include road pricing.

The development of a significantly improved public transport system, as outlined in this strategy, is an important prerequisite to any move towards road pricing. This is because it enables people to make

travel choices in response to the introduction of charging for road use.

As noted above, the Land Transport Management Act permits tolling of new roads under specific circumstances. This Regional Land Transport Strategy sets out the conditions under which a toll road would generally be expected to proceed in the Auckland region under current legislation.

3.5.1 Work with the government to progress the Auckland road pricing evaluation study. **(ARC, TAs, ARTA)**

3.5.2 Support the early completion of the evaluation study and encourage the government to determine a policy position on road pricing as soon as possible. **(RLTC)**

3.5.3 Commit to an early review of the Regional Land Transport Strategy to evaluate and respond to the outcomes of the government's study and any resulting policy. **(RLTC)**

3.5.4 Inform the public of the potential effects (both positive and negative) of road pricing. **(RLTC)**

3.5.5 Determine the extent to which further improvements to transport alternatives, including public transport, are required as a prerequisite to any future move to road pricing. **(RLTC, 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 by-passed communities. (Transit, TAs,)

4: Increase the capacity of the transport network

The transport system in the region is under stress, particularly at peak periods, because the growth in travel demand has outstripped the system's capacity. Continued growth in population and economic activity means that the demand for travel will continue to increase, even with the demand management policies outlined above. The ability of the region's transport system to cope with future growth relies on significant improvements in roading, rail, public transport services and pedestrian and cyclist facilities.

Investment in the region's roading and public transport networks has not kept pace with demand. As a result, roads are increasingly congested, inefficiencies exist in the way traffic is managed, and public transport is relatively slow and unreliable. There has been limited investment in infrastructure to improve safety and access for pedestrians and cyclists, which has impacted on the attractiveness of these modes.

The policies in this section of the Regional Land Transport Strategy are focused on directing investment into the completion of key elements of the strategic roading network; facilitating investment in the rail network, the development of a major rapid transit system to form the core of a rejuvenated public transport network, supported by improved services throughout the region; and investments aimed at increasing trips by walking and cycling.

It will also be important to protect the region's ability to increase the capacity of the transport network in the future. To do this effectively and efficiently, it is necessary to plan for and protect future routes as early as possible. This is particularly important for future roading, rail and public transport networks but is also important for future cycling and pedestrian networks.

Some of these future network connections are known and protected and it is important that they remain protected. Others will need to be planned for and then protected. Protection can involve mechanisms such as land purchase and land use designations.

4.1 Improve, upgrade and expand the region's public transport infrastructure and services

The Regional Land Transport Strategy sets out the plans for significantly improved public transport. Public transport, in the form of the region's buses, trains and ferries generally provides a means of travel that is safer and more space and energy efficient than travel by car. Public transport's main limitation is that it is not good at serving dispersed trip patterns. Also, buses are increasingly delayed by traffic congestion.

Public transport has a number of distinct but related roles in large and growing urban areas such as Auckland. These are to increase the person carrying capacity of key corridors, especially those serving the CBD (transport efficiency); to provide an acceptable level of mobility for those who do not have access to a car or who choose to use public transport (community mobility); and to support strategic regional land use objectives.

To realise the potential of the region's public transport opportunities, improvements are needed to bus, rail and ferry services. The Regional Land Transport Strategy sets out the broad policy direction for these improvements. Detailed proposals for public transport will be developed in the Regional Passenger Transport Plan, to be prepared by Auckland Regional Transport Authority.

The Regional Passenger Transport Plan will include policies for the region-wide public transport network, including marketing/branding, information, fares and ticketing. It will also describe the way the region's public transport network will be developed as an interconnected and integrated network that enables timely and reliable movement around the region, and appropriate access to regional and local centres.



Improvements to the region's public transport system will involve the provision of four layers of public transport service and infrastructure: the rapid transit network, the quality transit network, the local connector network and targeted services. An example of how this could be undertaken is illustrated in Maps 7.3 and 7.4.

The **Rapid Transit Network** will involve the provision of a fast, high frequency service in its own right of way, unaffected by traffic congestion. This will be the backbone of the public transport system and will include the Northern Busway and the west, south and isthmus rail corridors. Some ferry services to and from the CBD – those that exhibit most of the qualities of rapid transit - will perform a similar role. The main role of the Rapid Transit Network will be to connect the region's major activity centres and major growth nodes and provide an important lever for development of higher density town centres as envisaged by the Regional Growth Strategy.

The **Quality Transit Network** will involve providing a network of high-frequency high-quality transit services. The majority of these will be bus services operating with bus priority measures between key centres and over major corridors. The Quality Transit Network will complement the Rapid Transit Network and will connect with it at key hub locations. In finalising the Quality Transit Network ARTA will give consideration to including rail services utilising existing rail tracks north of Swanson, south of Papakura and connecting to Onehunga and ferry services such as connections to Birkenhead, Bayswater and Half Moon Bay. The Quality Transit Network's main role will be to connect the region's activity centres and growth nodes and to facilitate, in conjunction with the Rapid Transit Network, relatively fast reliable access around the region.

The **Local Connector Network** will involve low to medium frequency local bus, ferry and train services that provide access to local centres and connect with the Rapid Transit and Quality Transit networks. Priority measures will be provided at key congestion points to promote reliable services. Where appropriate, services such as rail and bus could be provided to rural communities.

Targeted Services will provide mobility for groups for whom the regular public transport network is not adequate. This will include the Total Mobility service for people with disabilities and school bus services.

4.1.1 Develop and publish in the Regional Passenger Transport Plan, standards or guidelines for each level of public transport. These standards or guidelines are likely to address:

- Service area
- Service period
- Frequency
- Bus priorities
- Park and ride
- Passenger information
- Stop, station and terminal facilities
- Safety and security for users
- Ticketing
- Vehicle quality.

(ARTA)

4.1.2 Implement rapid transit in the existing rapid transit corridors shown in Map 7.4. (ARTA).

4.1.3 Investigate future rapid transit in the rapid transit corridors shown in Map 7.4 and, if the studies confirm that rapid transit is appropriate, protect the ability to implement rapid transit in these corridors. (ARTA)

4.1.4 Ensure that investment in the rapid transport system supports the Regional Growth Strategy growth centre objectives. (ARTA)



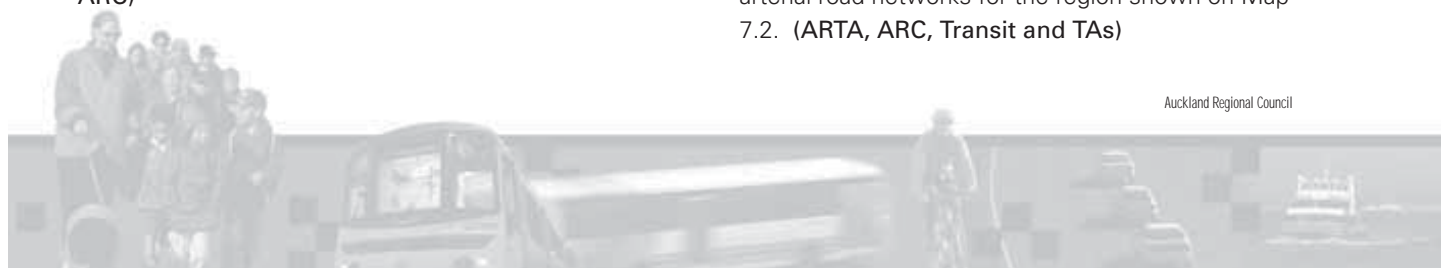


Map 7.3 Indicative Quality Transit Network



Map 7.4 Indicative Rapid Transit Network

- 4.1.5 Identify, and publish in the Regional Passenger Transport Plan, the Quality Transit Network for the region. An indicative map is showing in map 7.3. (ARTA)
- 4.1.6 Continue development of the Quality Transit Network in the region. (ARTA, TA's)
- 4.1.7 Make provision for dedicated transport services and concessions for people with disabilities, and other appropriate target groups. (ARTA)
- 4.1.8 Ensure that public transport fares (and charges for ancillary services such as park and ride) are set at a level that encourages increased patronage and supports the development initiatives outlined in this strategy, including concessions to appropriate target groups. (ARTA)
- 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)
- 4.1.12 Outline a detailed plan and timetable for the improvement of public transport infrastructure and services in a review of the Regional Passenger Transport Plan. (ARTA)
- 4.1.13 Undertake an investigation into development of the regional standardisation of transit and bus lanes. (ARTA, TA's)
- 4.1.14 Ensure that public transport services are as direct as possible. (ARTA)
- 4.1.15 Investigate fare levels including the consideration of running free bus services. (ARTA, ARC)
- 4.1.16 Investigate public transport procurement practices and issues. (ARTA, MOT, Land Transport NZ)
- 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, TA's)
- 4.1.18 Give consideration to the provision of public transport services linking rural and coastal settlements with urban areas. (ARTA)
- 4.2 Upgrade and provide additional road infrastructure to improve network efficiency and effectiveness
- Background studies for the Regional Land Transport Strategy identify a number of deficiencies in the region's strategic road network that, if not addressed, will result in a significant deterioration in travel conditions. A number of these deficiencies are the result of missing links in the strategic road network, where connections have been planned but not completed. The completion of these links is expected to make a significant contribution to economic and safety outcomes.
- The preferred strategic option provides for a total investment of approximately \$3,670 million in new roading infrastructure over the next 10 years. This is not sufficient to complete all of the strategic road works identified. The allocation of funds will need to be prioritised to the projects that contribute the most towards achieving the strategy's objectives. Particular attention should be given to the achievement of economic development objectives by developing the roading network in a way that maintains and enhances access to key centres of economic activity, with particular focus on strategic facilities such as the port and airport. This will require a coordinated approach between Transit, ARTA, TAs and Land Transport NZ.
- 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 this strategy. **(Transit, TAs)**
- 4.2.3** Undertake a programme to develop the local road network, to give effect to the preferred strategic option in this strategy. **(ARTA, TAs)**
- 4.2.4** Determine priorities for developing the roading network, considering the objectives of this strategy and the preferred strategic option. **(Transit, ARTA, Land Transport NZ)**
- 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. **(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 this 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

Rail provides an environmentally sustainable alternative to road based transport and its capacity can be increased without many of the capacity issues and other adverse effects associated with the development of new roads.

Until recently, investment in the region's rail network has been relatively poor. Significant investment is required to maintain and upgrade the existing network. There is also potential to develop new track to provide for new freight and passenger services.

- 4.3.1** Identify and protect the existing and future strategic rail network. **(OnTrack, ARTA, TAs)**

- 4.3.2** Determine priorities for developing the rail network. **(OnTrack, ARTA)**

- 4.3.3** Continue work to investigate and protect the ability to construct rail infrastructure that may be required beyond the term of this RLTS. **(OnTrack, ARTA, TAs)**

4.4 Provide additional infrastructure to improve conditions for walking

The benefits of walking as a mode of transport are widely recognised. Walking is environmentally friendly and sustainable, and presents a viable alternative to the use of private vehicles for short trips. Walking also offers the user health benefits by encouraging physical activity and is a popular recreational activity. As walking is a component in all public transport trips it is important that public transport improvements include direct, attractive and safe walking connections to stops and stations.

Despite the benefits, walking as a transport mode has declined in popularity. This is partly in response to growing traffic volumes that make the roads increasingly unpleasant, inconvenient and unsafe for pedestrians. Also, many town centre streets are designed primarily for general traffic, with limited regard for the provision of attractive footpath amenity and streetscapes.

Pedestrians use the same roads as motorists and increasingly find themselves in conflict with vehicles. To increase the share of journeys made by walking the needs of pedestrians should be explicitly considered when facilities are provided and road or rail space is allocated. The promotion of walking may help to make walking safer – the 'safety in numbers' effect. Needs of pedestrians also need to be considered in the management of the transport network as a whole. Much of the investment in better pedestrian facilities will take place at local level.



The policies below incorporate the key outcomes and priorities of the Auckland Regional Walking Strategy, to which reference should be made for further detail.

- 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, and TAs)**

4.5 Provide additional infrastructure to improve conditions for cycling

Cycling also has significant potential benefits as a mode of transport, especially for short to medium distance trips. Cycling also provides a useful mode for connecting with the public transport system. While the number of cyclists has increased in areas where safe and attractive cycle facilities have been provided, cycling has declined overall in Auckland.

Safety concerns, arising from the fact that cyclists are generally required to share road space with motor vehicles, are one reason for the decline in cycling. As with walking, more thought and investment are needed to support the integration of cyclists into the transport system. At the local level, this requires the needs of cyclists to be explicitly considered when facilities are provided, road and rail space allocated and improvements designed and implemented. The promotion of cycling may help to make cycling safer – the ‘safety in numbers’ effect. The needs of cyclists also need to be considered in the management of the transport network as a whole.

The policies below incorporated the key outcomes and priorities of the Auckland Regional Cycling Strategy, to which reference should be made for further detail.

- 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

The process for selection of the preferred strategic option was set out in Chapter 6. Implementation of the preferred strategic option will require the available funding to be allocated according to the general levels

identified as part of that process. Because funds are limited, activities will need to be prioritised, and this should be done in a way that reflects the objectives of this strategy.

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 ⁴	4%
• Traffic management ⁵	2%
• Maintenance & renewals	26%

(Transit, ARTA, TAs, Land Transport NZ)

5.1.2 Take account of the general allocations in Policy 5.1.1 in preparing the Land Transport Programme for State Highways. **(Transit)**

5.1.3 Give effect to the general allocations in Policy 5.1.1 in preparing the Land Transport Programme for public transport and local roads. **(ARTA)**

5.1.4 Take account of the general allocations in Policy 5.1.1 in preparing the National Land Transport Programme. **(Land Transport NZ)**

5.1.5 Determine the specific activities and their priorities for inclusion in Land Transport Programmes, to enable the expected outcomes in Chapter 9 to be achieved. **(Transit, ARTA)**

⁴ For safety measures which are **additional** to those currently provided for by TNZ and the regions' TA's

⁵ For traffic management measures that are **additional** to those currently provided for by TNZ and the Regions' TA's



5.2 Promote changes to the land transport funding systems to enable implementation of the preferred strategic option

The analysis of strategic options in Chapter 6 concluded that the level of funding likely to be available over the next decade might be less than optimal. The total funding available is not sufficient to fund all the desired improvements in public transport and demand management as well as complete the strategic roading network.

There are a potential number of other funding sources that should be further investigated and advocated for to ensure that there is sufficient funding available to develop the transport system. These include such things as development levies, and debt funding.

There is also a risk that the current funding arrangements, which require a significant “local share” of funds for public transport improvements, may be a barrier to the smooth implementation of the preferred option, which involves a significantly increased investment in public transport.

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)**

5.2.2 Advocate for additional funds to deliver the improved outcomes that could be achieved with additional investment in the land transport system. **(RLTC)**

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

Assessment of the risks associated with implementing the preferred strategic option shows the region needs to carefully manage the transition to higher levels of activity in public transport and travel demand management. This is particularly in relation to the availability of skills and resources, cost escalation, and the public acceptability of some of the changes proposed (e.g. increased provision for bus priority measures).

There is also a need to ensure that the potential for further development of the region’s transport system is retained, and that options are not foreclosed.

5.3.1 Carefully manage the programming of transport infrastructure and service improvements to ensure that any increase in the demand for new works does not outstrip the capacity of the construction industry and other suppliers, or lead to unacceptable cost increases. **(Transit, ARTA)**

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

5.3.3 Continue to investigate and protect the ability to construct transport infrastructure (both roading and public transport) that may be required beyond the term of this Regional Land Transport Strategy. **(Transit, ARTA)**

