Chapter 4 Land Transport Outcomes Sought

4.1 INTRODUCTION

The goal, vision and objectives of the Regional Land Transport Strategy are described in this chapter. Together they make up the outcomes that the strategy seeks.

The outcomes are broad based. They should be considered in terms of the operation, management and development of the transport system. They also need to be seen within the wider context of the Auckland Regional Growth Strategy 1999 and the Auckland Regional Policy Statement 1999 (incorporating Change 6).

The Land Transport Act requires the Regional Land Transport Strategy to contribute to the overall aim of achieving an integrated, safe, responsive, and sustainable land transport system. It also requires the strategy to take into account a number of outcomes sought by the Regional Growth Strategy.

The Regional Land Transport Strategy vision and objectives therefore take into account the outcomes of the growth strategy and the Land Transport Management Act along with the outcomes of a number of related national and regional strategies. The expected results of this strategy in achieving these desired outcomes is detailed in Chapter 9.

4.2 THE REGIONAL LAND TRANSPORT STRATEGY GOAL

A transport system which enhances the Auckland region as a great place to live, work, and play.

The goal, therefore, requires a proactive and integrated role for the transport system in the future development of the Auckland region.

4.3 THE REGIONAL LAND TRANSPORT STRATEGY VISION

Aucklanders are proud of their transport system, where:

- People and goods are able to move when necessary
- Transport supports vibrant town centres
- Streets are also community places
- Getting around by all modes is integrated, safe and effective
- People have choices which enable them to participate in society
- The environment and human health are protected and enhanced
- Transport resources are used efficiently.

4.4 THE REGIONAL LAND TRANSPORT STRATEGY OBJECTIVES

To achieve the goal and vision of this Regional Land Transport Strategy there are seven key objectives, which are not in order of priority. The first five are taken from the New Zealand Transport Strategy, while the final two provide a focus on Auckland and economic efficiency.

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

- Supporting the Auckland Regional Growth Strategy

- Achieving economic efficiency

The first five objectives incorporate the national transport objectives while the remaining two provide an Auckland focus and include a economic efficiency dimension.

Objective 1: Assisting Economic Development

An effective transport system will assist Auckland and New Zealand in achieving its economic potential by providing for the more efficient movement of people (residents and visitors), goods and services around the region. Businesses need to transport people and freight reliably between locations, often to meet 'just in time' requirements of their customers. The transport system will also help to attract and retain the skilled and talented people and innovative businesses that will assist in making Auckland an internationally competitive, inclusive and dynamic economy.

The Auckland region is the main commercial centre of New Zealand, and is home to one-third of its population. Auckland generates one-third of the nation's income, but is not performing as well as many of the cities it competes with internationally[1]. If the region is to continue to offer the lifestyle and quality of life its citizens enjoy, we must support and improve the future prosperity of the region.

The Auckland Regional Economic Development Strategy (AREDS) (Refer to Chapter 2 Section 2.4) recognises that the transport system plays a crucial role in supporting economic growth in Auckland. The efficient movement of goods, services and the workforce will enable the regional economy to develop.

An image of Auckland as a city and region with an up-to-date transport system, along with a high quality and liveable environment, will enable it to compete in the global market. Furthermore continued improvements to the transport system in Auckland are likely to encourage further tourism growth in Auckland. Tourists who can get around more easily are likely to remain in Auckland for a longer period of time.

Auckland's transport system does not work as well as it could for business. A number of key links, that would assist the movement of people, goods and services, are missing from the roading system. Also, a large number of vehicle trips, which compromise the movement of people, goods and services, could be made by other modes. In this regard the functional hierarchy of both the roading and public transport systems will provide for the more efficient movement of goods, services and people.

Improved accessibility to some key business centres around the region is of particular importance to economic development in Auckland. Effective road and rail links to the Port of Auckland and effective road and public transport links to the Auckland International Airport are of particular importance.

Auckland's economic development and prosperity will also be assisted if streets are seen as more than just thoroughfares simply by identifying and supporting the various roles they can play. Streets can be important for pedestrians, communities, cyclists, passenger transport or general traffic or a combination of these. With good urban design, streets can support adjacent activities and become lively public spaces and places for people.

More specific outcomes sought for this objective are:

- Effective, efficient and integrated transport links to key business, recreation and education locations in the region to allow all people in the region to participate fully in the community and economy.

- Effective and efficient transport links between the key business areas of the region for the movements of goods and services without unnecessary delays.

[1] Auckland Regional Business and Economy update – October 2005

- Effective links to key import and export points, including effective road and rail links with the Port of Auckland, and both road and public transport links with Auckland International Airport
- A transport system that will help to promote business and tourism
- Predictable travel times that enable effective travel planning
- A transport system resilient enough to deal with foreseen and unforeseen events that could affect it.

Objective 2: Assisting Safety and Personal Security

People need to be able to travel throughout the region with confidence. This means minimising crashes, injuries and fatalities. It also means protecting property and creating places where people feel safe walking, cycling and using public transport. Safety and personal security need to be considered at all stages of the design, construction, operation and maintenance of all parts of the transport system.

Road safety is a major issue for the Auckland region. On average one person dies and another 10 people are hospitalised[2] every five days from crashes on the region's roads. As the regional community grows, creating a safer and more reliable transport system will become more critical.

The National Road Safety to 2010 strategy aims to dramatically reduce road casualties and hospitalisations in New Zealand. The Auckland Regional Council and RoadSafe Auckland have adopted the Regional Road Safety Plan 2004 to 2010 (refer to Chapter 2 Section 2.4). This recognises that significant improvements can be made when there is a strong commitment by everyone involved in road safety, including the wider community. Engineering, enforcement and education all have key roles.

In addition to road safety improvements, the personal safety of rail users and the safety of communities close to rail corridors is an issue. This is especially so for children.

As the transport system becomes more multi-modal it is likely that more vulnerable transport users, notably pedestrians and cyclists, could be exposed to unsafe environments. It is important that these users of the transport network are recognised and that steps are taken to protect them.

It is also important that all transport users have a high degree of personal security, both real and perceived. The transport system should provide an environment in which personal security is assured whether the individual chooses to travel by private vehicle, public transport, walking or cycling.

More specific outcomes sought for this objective are:

- An established road safety culture, with transport rules obeyed, among all transport users
- Significantly reduced crash deaths and injuries
- A safe and secure environment for vulnerable users of the transport system
- Public transport that is safe to use at all times, on the vehicle or in the surrounds of the stop or terminal
- A land transport environment engineered to prevent injury
- A rail environment engineered to reduce the conflict between rail and other transport modes.

Objective 3: Improving Access and Mobility

Transport networks exist so that people can get around easily and safely to get to work, places of education, shopping destinations and all other destinations to meet their social, economic and cultural needs. Provision needs

[2] These are hospitalisations for more than 1 day.

to be made for a range of travel choices, including the car, and some choices need to be actively encouraged. Provision also needs to be made for improving network connectivity for all modes. Special attention needs to be given to those who find it difficult to travel independently, so that everyone is able to actively participate in society.

A large proportion of trips are for purposes other than work and business. They can be for education, health and social/recreation reasons. They can range from a five-minute walk to the local shops to trips to school, weekend shopping or an hour-long drive to a regional park. The individuals or groups undertaking the trips have different levels of ability to access different transport modes. For example, an individual with a disability may not be able to drive and may have difficulty undertaking any part of a journey that requires walking and public transport. As a result, the ability for individuals or groups to participate in activities can vary considerably.

The Regional Land Transport Strategy seeks to ensure that all individuals or groups in Auckland have a level of transport that enables them to participate in more activities.

The highest levels of accessibility and best travel choices will result from a high degree of integration between modes. This includes integration between public transport modes (bus, rail and ferry), integration between walking, cycling and public transport, and integration between cars and public transport.

More specific outcomes sought for this objective are:

- A high level of travel choice to all key destinations including employment areas, retail centres, tertiary institutions, major health facilities and other key community facilities
- A high level of integration between all transport modes within the transport system
- Aucklanders and visitors are able to access all significant destinations within the urban area by public transport
- Pedestrians and cyclists are able to access all local destinations easily and safely
- A transport system which provides people with disabilities the ability to participate more fully in society
- A transport system which provides affordable and reliable access and mobility.

Objective 4: Protecting and Promoting Public Health

Transport plays a vital role in building healthy communities. Reducing the levels of congestion, the amount of travel by motor vehicles and improving fuel quality can improve public health by reducing air pollution, water pollution and noise. Active transport choices including walking and cycling can also improve individuals' fitness and health.

The major transport effect on the health of Aucklanders is caused by emissions from motor vehicles. It is estimated that more than 250 people in the region aged 30 and over die every year from exposure to microscopic particles from vehicle emissions. This is a serious issue which requires ongoing action. To address it, an important outcome of the strategy is to ensure that the quality of fuel and emissions is improved.

Also, transport choices can indirectly affect the amount of physical activity that Aucklanders undertake. By being able to choose more active modes such as public transport, cycling and walking are likely to result in improvements in the physical activity of the population and offer health benefits.

Another key health consequence of transport is the effect of noise and vibration, which can be detrimental to the quality of life of some communities. Various elements of the transport system can have noise and vibration effects including road surface design, heavy truck movements on local roads, more frequent train movements, noisy vehicles, and new roads and motorway construction.

More specific key outcomes sought for this objective are:

- Fewer and cleaner vehicle emissions
- Transport choices which contribute to making healthier choices easier and which promote a more active population
- Reduced effects on communities from noise and vibration which originate from the transport system
- The cumulative travel made by the region delivers the greatest amount of health benefit.

Objective 5: Ensuring Environmental Sustainability

The transport system and motor vehicles in particular are a major source of adverse environmental effects in the region. The transport system can have adverse effects on ecosystems (including communities), water quality, air quality, cultural and natural heritage sites, noise and amenity. The pressures imposed by the transport system on the natural and physical environment (including the built environment) are likely to increase as the region grows. A well-designed transport system reduces reliance on non-renewable resources and fits into the natural and physical environment in ways which avoid, remedy or mitigate adverse effects on the environment.

The Auckland Regional Policy Statement provides the broad environmental outcomes to be achieved in the region. The Land Transport Management Act 2003 requires the Regional Land Transport Strategy to avoid, to the extent reasonable in the circumstances, adverse effects on the environment.

The transport system is one of the key contributors to adverse effects on the natural and built environment. Because a large urban area dominates the Auckland region, transport's effects on the built environment are significant. The transport system can have localised effects on people and communities including noise, reduced safety and community severance. These effects can be mitigated by design and through appropriate traffic management. However, the transport system can have positive impacts by bringing people and communities together and enabling them to provide for their social and cultural wellbeing by decreasing the distance or time it takes to travel around the region.

Auckland contains a large number of sites and areas of cultural and natural heritage. They include volcanic cones, estuaries, and areas of native bush and heritage buildings. Public open space and parks are also highly valued. The primary means of protecting these sites from adverse effects of transport, in particular construction, is by avoidance in the first instance, to the extent reasonable in the circumstances. Where this is not possible, adverse effects should be remedied or mitigated.

The National Energy Efficiency and Conservation Strategy 2001 (NEECS) aims to promote energy efficiency, energy conservation and renewable energy. It is estimated that the transport system accounts for 40 per cent of all consumer energy use in New Zealand annually. The Regional Land Transport Strategy can support the NEECS by reducing congestion, the number of vehicle trips made and providing for low energy transport options.

In addition to energy used, specific commitments and targets to reduce greenhouse gas emissions are set out in the Kyoto Protocol. If Auckland is to meet its share of the national targets there needs to be reduced congestion and viable alternative transport options. Also, the vehicle fleet itself will need to improve.

The construction of transport infrastructure relies heavily on the consumption of non renewable resources. Transport construction projects should seek to use recycled materials such as concrete from construction waste, and incorporate other non renewable sources of roading material where possible.

As the environment in Auckland also includes people and communities, it is important that the transport system enhances people's quality of life. The biggest adverse impact of the transport system on people and

communities could be their severance by transport infrastructure or increasing levels of traffic volumes on the roads which run through them.

The transport system is an integral part of the urban and rural parts of the region. As such it should be managed to minimise its amenity impacts on the built and natural environment. These impacts include both noise and visual impacts. In most cases they can be reduced. In some cases improvements to the transport system can remedy current amenity impacts.

More specific outcomes sought for this objective are:

- The protection of sites and areas of natural and cultural heritage value from the adverse effects of new transport infrastructure
- Reduced non-renewable energy use and consumption of non renewable resources in construction, by the transport system
- Reduced carbon dioxide emissions from the transport system
- Improved water quality from stormwater discharges originating from transport infrastructure
- Reduced community severance from the transport system
- Reduced amenity impacts from the transport system.

Objective 6: Supporting the Auckland Regional Growth Strategy

A sustainable transport system is integrated with the land use pattern it serves and is served by. While Auckland continues to expand at the edges it is also becoming denser. The Regional Growth Strategy aims to manage the majority of future growth into well-designed urban growth centres and corridors. The successful development of these centres and corridors will require transport investments that are well designed and that can assist to leverage urban development within those selected centres and corridors as identified in the Regional Policy Statement (incorporating Change 6).

The growth strategy envisages a population of up to two million people in the Auckland region by 2050. It aims to ensure the region can accommodate that growth in a way that enables it to be economically successful, enjoyable to live in, and which avoids or minimises any adverse effects on the environment. A key issue in the development of the growth strategy is recognition of the need to develop land use patterns that support reduced vehicle demand and increased use of passenger transport, walking and cycling. A long-term solution to the region's transport problems therefore requires a shift in land use patterns towards a more compact and sustainable urban form.

The growth strategy proposes that most future growth will be accommodated within the existing metropolitan area, with much of it focused around town centres and major passenger transport routes and stations. Some growth will be accommodated in future urban areas (known as greenfield areas) in the north, south and west of the region. Rural Auckland and coastal towns could also provide capacity for more people. Helensville, Kumeu, and Pukekohe are singled out for faster development because of their location on rail lines.

Development is avoided in the most highly valued and sensitive natural areas. Such areas include the Waitakere and Hunua Ranges and the Waiwera, Okura, Mangemangeroa/ Whitford and Puhoi areas.

The growth concept[3] as shown in Appendix B of the RLTS and given effect to in schedule 1 of the Regional Policy Statement (as amended by Proposed Plan Change Number 6), outlines the growth direction of the Regional Growth Strategy.

One of the key outcomes of the growth strategy will be more living choices for Aucklanders. People may choose to live in suburbs made up of individual homes on separate plots of land with space for gardens and

[3] The Growth concept is illustrated in appendix B.

outdoor activities, or they may choose to live in more intensive developments with access to a wider range of cultural and social activities.

An effective transport system that supports and responds to the proposed land use pattern is a key element of the growth strategy, and the Regional Land Transport Strategy is a key mechanism in developing that transport system.

An improved passenger transport system will provide opportunities for intensified growth in selected areas. Conversely, the realisation of future intensive development opportunities will support the passenger transport system. The provision of passenger transport infrastructure and services should ideally be safeguarded early as part of the planning stage

The shift towards a more compact urban form will occur incrementally over time. Meanwhile, continued suburban growth and the dispersal of workplaces will continue to fuel growth in vehicle traffic and the consequent demand for better roading for access to jobs, homes and community and recreation facilities. At the same time the passenger transport system will need to be developed based on the areas proposed for intensification, including new greenfield sites, and facilities for walking and cycling will need to be improved.

Transport improvements add to the attractiveness of the areas they service. While this is beneficial to those areas identified for future growth – such as growth centres and identified greenfield sites – the improvements may also create pressures for growth in areas where urban expansion is not desired. It is, therefore, important that the growth pressures associated with improvements to the transport system are understood and managed to avoid urban growth in areas not identified for future growth.

Changes to the transport system over the next 10 years are unlikely to generate land use benefits within the same timeframe. This is because the lead-times required for both transport investment and land use change are quite long. In addition, in some cases, there is likely to be a delay between the completion of transport investment and the realization of higher density transport related land use forms. The Regional Growth Strategy is a 50 year strategy. In this regard it is important to remember that the specific outcomes sought for this objective should be placed within a longer time period.

More specific outcomes sought for this objective are:

- A transport system which supports and assists in instigating growth within the higher density growth centres and corridors that are identified in the Regional Growth Strategy and sector agreements (this has been incorporated into Change 6 – Regional Policy Statement Plan – refer to Chapter 2 section 2.4)
- Walking and cycling opportunities which improve the cohesion of, and movement within, higher density centres that are identified in the growth strategy and sector agreements
- A rapid transit system which provides better linkages to and between those higher density centres that are identified in the growth strategy and region's sector agreements
- A transport system and land use policies which together manage urban growth pressures in areas where urban growth is not planned
- A high level of integration between land use and transport decision-making.

Objective 7: Achieving Economic Efficiency

Economic efficiency involves ensuring that the investment of the region's limited financial resources in the transport system is undertaken in ways that maximise both the tangible and intangible benefits it generates. (The benefits are described in the preceding five objectives.)

It is important that all choices relating to investment in the transport system are made in ways that maximise the benefits, whether they are economic,

safety, access, health, environmental or urban growth benefits. While the region has significantly more funds available for improving the transport system over the next 10 years than previously, there will not be enough funding available to achieve all of the improvements wanted. There will still need to be trade-offs.

The agencies responsible for implementing this Regional Land Transport Strategy may have alternatives available for meeting the strategy's objectives. Their individual choices cannot be made in isolation. To achieve the maximum overall benefit from their investments, those agencies – ARTA, Transit, New Zealand Railways Corporation and the territorial authorities – need to ensure that their individual decisions are consistent with this strategy and mutually supportive of each other.

While all investments in the transport system will produce a benefit, it will be important to understand what the marginal costs to benefit are. In some cases the first investment may produce a large benefit, but an additional investment may deliver only a fraction of the benefit of the first. It is important that the marginal costs per benefit gained are weighed up against potential gains that could be made elsewhere in the transport system for the same investment. If this is achieved then cumulatively the region will maximise the benefits gained within the funding constraints.

The benefits referred to in this objective are not solely the equivalent of a benefit cost ratio. Non-monetary benefits are also relevant.

More specific outcomes sought for this objective are:

- The cumulative transport investment decisions that the region makes will deliver the greatest cumulative amount of benefit

- All agencies responsible for transport investments will coordinate and synergise their efforts and decision making to deliver maximum benefit to the region while avoiding unnecessary costs.