

Auckland Regional Growth Strategy: 2050

A Vision for Managing Growth in the Auckland Region



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Cover Photo: CBD and Rangitoto taken from the Arataki Visitor Centre on Scenic Drive

Foreword

On behalf of the Auckland Regional Growth Forum I am pleased to introduce the Auckland Regional Growth Strategy: 2050.

This strategy has evolved from a three-year process which involved technical analysis and research, and political input and consultation with thousands of people and organisations. It has involved a wide cross-section of people including politicians; developers; business people; planners; architects; infrastructure operators; iwi; transport; stormwater and environmental experts; students; school children; community boards and interest groups, many of whom presented their views to the Growth Forum.

The Regional Growth Strategy sets out a vision for the future and provides certainty as to the outcomes Aucklanders want to achieve as the region grows and develops. The vision and desired outcomes provide certainty that future regional growth, in whatever form, will promote:

- safe, healthy communities
- diversity of employment and business opportunities
- housing choices
- high amenity of urban environments
- the protection and maintenance of the character of the region's natural environment
- sustainable use and protection of the region's resources (including infrastructure) and
- efficient access to activities and appropriate social infrastructure for all.

The strategy assists key stakeholders in understanding the likely scale and form of future growth and the consequent infrastructure priorities. It provides for more detailed planning to ensure the best ways to accommodate growth and implement the Regional Growth Strategy at a local level are determined.

The region's local authorities support the direction of the strategy. They are committed to aligning policy and funding in their areas to support and implement the strategy. Key areas will be:

- integrating rapid transit investment with transit-supportive, higher density mixed land uses along the western, southern and northern transit corridors;
- upgrading the stormwater and waste water infrastructure within the existing urban area to provide intensification opportunities; and
- providing or upgrading the social infrastructure to service new development areas.

The strategy will need to respond to changing circumstances. It will therefore be monitored annually and fully reviewed every five years.

This cooperative strategy is a first for the region. The Growth Forum is committed to developing strong partnerships and working together to optimise the opportunities growth can offer and help create a living environment that future Aucklanders can be proud of.

Thank you to all those who have been involved. I look forward to your continued support, interest, innovation and enthusiasm as we move from the planning phase to making things happen on the ground.



Philip Warren QSO, JP

Mul manen

Auckland Regional Growth Forum

What is the Regional Growth Forum?

The Regional Growth Forum consists of 10 elected representatives (mayors and councillors) from the Auckland Regional Council, Rodney District Council, North Shore City Council, Waitakere City Council, Auckland City Council, Manukau City Council, Franklin District Council and Papakura District Council. The Regional Growth Forum is a standing committee of the Auckland Regional Council.

A recent amendment to the Local Government Act 1974 established the Regional Growth Forum and Infrastructure Auckland. The Growth Forum's role is to develop a Growth Strategy to accommodate growth in a manner that best meets the interests of the regional community. Infrastructure Auckland's role is to make grants to projects that help address the region's land and passenger transport, and stormwater problems. These grants cannot be inconsistent with the Growth Strategy or the regional transport and stormwater strategies.

The Regional Growth Forum has delegated powers to:

- Address growth issues in the Auckland region by ensuring co-ordination and liaison on a regional basis, to facilitate the production of a Regional Growth Strategy.
- 2. Give effect to a Regional Growth Strategy by developing and approving a regional plan under the Resource Management Act 1991 and by such other means as are considered appropriate.
- 3. Make recommendations to Auckland's local authorities and other key parties on appropriate growth strategies for the integrated and sustainable management of the Auckland region.

The Regional Growth Forum is funded by the Auckland Regional Council through the regional rate. The other participating councils also fund the time of their elected representatives and staff to support the Growth Forum.

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Executive summary

Introduction

The Regional Growth Forum has prepared a Regional Growth Strategy looking ahead to the year 2050. The need for such a strategy reflects the councils' desires to work more closely together to resolve urban growth issues.

The Regional Growth Strategy follows three years' planning involving technical work, political workshops and extensive consultation with public and private sector organisations in the region, as well as the general public. It builds on a draft strategy published in 1998 and takes account of submissions made to that document. (See Appendix 1 for the key stages in the development of the Regional Growth Strategy.)

Purpose and vision

The purpose of the Regional Growth Strategy is to ensure growth is accommodated in a way that meets the best interests of the inhabitants of the Auckland region. The strategy provides a vision for what Auckland could look like in 50 years' time with a population of two million.

This vision is to sustain:

- strong supportive communities
- a high-quality living environment
- a region that is easy to get around and
- protection of the coast and surrounding natural environment

The meaning of this vision is further explained in the full list of desired regional outcomes and principles for evaluating growth alternatives in Chapter 2.

The Growth Concept

The Regional Growth Forum has developed a Growth Concept which sets out a possible future scenario for the region. It is a snapshot of how the region could look in 2050 if growth is managed according to the vision, outcomes and principles.

One of the key features is growth will be managed by promoting quality, compact urban environments (intensification). Other features include:

- most growth within the existing metropolitan area with development outside current urban limits only where environmental, accessibility and community principles can be met
- most urban growth focused around town centres and major transport routes to create higher density communities, with a variety of housing, jobs, services, recreational and other activities (mixed use)
- much less emphasis on general infill throughout suburban areas

Outside the suburbs, specific new areas are earmarked for growth:

- future urban (greenfield) areas including Takanini, East Tamaki, Hingaia, Westgate/Redhills, Albany/Greenhithe, Long Bay and Orewa/Silverdale
- rural and coastal towns to roughly double in size through natural growth. Helensville, Kumeu and Pukekohe to get a greater share of development because of their location on rail lines

Development is avoided in the most highly valued and sensitive natural areas and catchments. These areas range from the Waitakeres and Hunuas to localities such as Puhoi, Waiwera, Mahurangi (greater area), Weiti, Okura, eastern Waiheke Island and Whitford surrounds.

Some expansion in new greenfield areas is necessary to provide sufficient land and locational choice for dwellings and businesses. If all proposed greenfield development proceeds, the Auckland region's metropolitan area will increase by about 10% or 5000 hectares over the 50-year timeframe.

By 2050, more than a quarter of the population (more than 500,000 people) could be living in higher density, multi-unit accommodation compared with less than an eighth or 125,000 people in 1996. However, even after 50 years, 70% of people could still live at lower densities in the suburbs and rural areas.

Mixed-use development (different activities, residential, business, retail etc, sharing premises and within the same area) is already common in places like Ponsonby, Newmarket, Newton, Takapuna and New Lynn. The Growth Concept provides for more mixed use and also seeks to ensure sufficient business land is available in specific employment zones (e.g. Penrose, Onehunga, Wiri, Wairau Park) for larger industrial and commercial development.

Major employment development is envisaged in these areas as well as in Albany, Silverdale, Westgate, East Tamaki, Sylvia Park, Mt Wellington and the central area. The strategy aims to ensure the region will continue to be an attractive place to live and invest. It provides a framework to reduce uncertainty, create partnerships and opportunities, and improve longer-term planning for business. Maintaining and improving access to jobs and between businesses will be vital.

Transport

An efficient transport system is vital to the prosperity of the Auckland region and to the well-being of Aucklanders. Transport and land use are closely interrelated. Transport systems can both service growth and development and also facilitate future development patterns.

The strategy sees a shift in land-use patterns towards a more compact urban form which focuses growth in more intensive mixed-use centres along the northern, western and southern passenger transit corridors, as well as near main arterial roads. More intensive development can support a greater range of local services and facilities, increase the opportunity for safe walking and cycling and help support passenger transport, by bringing people closer to the main routes. Careful design will be needed to ensure good urban amenity.

Lifestyle issues will be important in determining people's desire to live in intensive areas. The Growth Concept envisages many people will consider being close to activities, shops, cafes and possibly work, as well as not having the responsibility for a large garden, or daily commutes, as a desirable trade-off for living in a busier environment. Agreement has been reached through the Passenger Transport Action Plan on priority passenger transport improvements for the next 10 years that will service the more intensive areas and help support increased urban intensification.

Accessibility between different parts of the region will be improved by traffic demand measures (such as tele-working, ride-sharing, road pricing, parking constraints) and completing and upgrading transport networks, including the region's arterial roading network, to provide alternative routes. The Regional Land Transport Strategy, released at the same time as the Regional Growth Strategy, is a key mechanism in the implementation of the Growth Strategy.

Implementing the strategy

The Regional Growth Strategy emphasises an integrated approach to the long-term management of the Auckland region. The strategy brings together a wide range of important policy directions which encompass a partnership approach between Growth Forum members and close consultation and co-ordination with major stakeholders and communities.

The process for implementing the Growth Strategy is detailed in Chapter 4. It has five themes:

- partnerships and relationships
- the need for alignment of policy and funding
- a long-term vision and identified short-term actions
- wide and adaptable range of implementation mechanisms
- a process to keep the vision alive

There are a large range of mechanisms which will be used to implement the strategy. Existing resource management and other statutory mechanisms will be supplemented by other non-statutory measures and may include economic instruments; practice and design guides; accords and heads of agreement between partners and major stakeholders; joint ventures and demonstration projects.

The Growth Forum will set initial priorities for co-ordinating and funding regionally significant infrastructure over the next 10 to 20 years. This will be regularly updated and ongoing feedback will be sought from the Growth Forum's primary partners and key stakeholders.

While a mixture of rates and user charges will continue to meet most costs associated with growth, development levies and other funding mechanisms might feature more strongly in the future. Other funding providers such as Infrastructure Auckland (transport and stormwater); the government's road funding agency, Transfund New Zealand; service delivery companies such as Watercare; and private companies including Telecom, will also be important to the mix. The co-ordination of this investment is crucial.

The Growth Forum partners will advocate that other key stakeholders, including central government and the private sector, take the strategy into account when preparing policy and allocating investment.

The Regional Growth Strategy provides guidance and a framework for all planning in the region to ensure a consistent approach to managing the social, economic and environmental effects of future growth across the region. Other sector and local growth plans and strategies will be developed to give effect to this strategy at a more detailed level. Growth Forum member authorities are already committed to working together to implement the strategy and meet regional needs.



a partnership of



NORTH SHORE CITY



PAPAKURA



Rodney





INTRODUCTION

Growth and its impacts and opportunities have been the focus of a multitude of local bodies since the early 1900s. Region-wide planning was discussed in the 1920s but it wasn't until 1940 that a regional approach to co-ordinating local development was undertaken. The 1950s saw the publication of Auckland's first regional planning document which focused on the efficient provision of infrastructure. This was a period of major decision-making when Auckland committed itself to being a large city and the balance between public and private transport was tipped in favour of the car.¹

The Regional Growth Forum was established to examine the options and alternatives to accommodating future growth in the Auckland region and to manage its effects. This Regional Growth Strategy looks beyond the short-term growth pressures likely to be felt in the next 10 or 20 years to the middle of the 21st century. The Regional Growth Forum has assumed the Auckland region will continue to grow, and that any strategy needs to be flexible enough to accommodate substantial growth over time. In doing this it is assumed the Auckland region will continue to grow at a rate which could see two million people living in the region by 2050.

In preparing, reviewing and implementing this strategy, the Regional Growth Forum has been and will be guided by a range of technical reports that provide analysis and background information to the issues dealt with in this strategy.

Structure of the strategy

This document is set out in the following way:

Chapter 1 contains the purpose of the strategy and identifies the major issues relating to the growth of the Auckland region. It also provides a vision for the region to the year 2050 and asks how do we get there and who is involved?

Chapter 2 takes this regional vision and translates it into what Aucklanders want to achieve for the region, that is, their desired outcomes. Principles for evaluating growth alternatives are also provided to give guidance in achieving the vision.

Chapter 3 describes how the region could accommodate growth over the next 50 years in terms of the location and form of growth throughout the region. It presents a Growth Concept for a sustainable and dynamic region.

Chapter 4 identifies the implementation tools required for achieving the strategy, the roles of the players in implementing, measuring and adjusting the ongoing growth policy, and the monitoring and review process to be used.

Regional Growth Forum "A Place Sought by Many: A Brief History of Regional Planning for Auckland's Growth", May 1997.

Purpose

The Growth Forum is required to produce a Regional Growth Strategy under the Local Government Act 1974. That Act states that the purpose of the Growth Strategy is:

to ensure growth is accommodated in a way that meets the best interests of the inhabitants of the Auckland region.

The partnership between Auckland's local and regional authorities has resulted in the establishment of the Regional Growth Forum. The Regional Growth Forum and the production of the Regional Growth Strategy demonstrates that a co-operative regional approach to growth management will result in a better future for the Auckland region.

The development of the Regional Growth Strategy recognises the various responsibilities held by the councils under the Local Government Act 1974, Land Transport Act 1993, the Resource Management Act 1991 and others. Under these various statutes councils are responsible for:

- developing economic and social strategies
- facilitating the health and well-being of their residents
- · delivery of public utilities and community services
- ensuring fair allocation of costs and benefits
- managing the regional transport network
- safeguarding the environment by enabling the use of the region's air, soil, land and water resources in a sustainable manner

In carrying out their functions under these statutes, councils are operating in a democratic environment which must be responsive to people's values. Therefore, this strategy identifies the values of the people who live in the Auckland region and the way they want to live in the future. It establishes principles to manage growth to retain these values and future regional opportunities.

The strategy provides guidance and a framework for all the district and city councils to ensure a consistent approach to managing the social, economic and environmental effects of future growth across the region. Other sub-regional and local growth strategies will be developed to give effect to this strategy at a more detailed and local level.



One key to the success of this strategy is a continued commitment to the vision, consistency of management and clear achievement of the regional outcomes outlined in Chapter 2.

Vision for the Auckland region

By 2050 the Auckland region could be home to two million people. The Regional Growth Strategy provides a vision and framework to manage that growth. The strategy is a dynamic document that will be refined and developed with continued input from the regional community throughout its lifetime.

One of the core elements of the strategy is sustainability. Sustainability involves the interdependence of economic values, social values and environmental values (Figure 1). Managing and minimising the conflicts between and within these values will be the challenge to achieving sustainability. The strategy aims to capture and enhance the synergies between these values to create a vision for a sustainable future for the Auckland region.





The vision for the future of Auckland was developed over a two-year period of consultation with regional stakeholders, Tangata Whenua, key organisations and the public. A variety of methods including interviews, workshops and questionnaires were used to gather information and opinions on the important values and qualities of the Auckland region and how it should look in the future. People were also asked how and in what form the region should grow and what factors were important when determining the direction of growth.

The key stages of the process used to develop the Growth Strategy are detailed in Appendix 1. Consultation showed the range of opportunities offered and buzz of urban life and its surrounding natural environment were the things people most liked about living in the Auckland region. An improved passenger transport system and a clean environment were regarded as important for the future as well as a safe, co-operative and caring community.

From this consultation, the vision of this strategy for Auckland for the year 2050 is as follows:

The diversity and well-being of people and communities living in the Auckland region will continue to prosper in a sustainable manner which:

- promotes strong, supportive communities
- ensures a high-quality living environment
- creates a region that is easy to get around and
- protects our coast and surrounding natural environment.

While the vision is crucial because it sets out what the Growth Forum would like to achieve, the Growth Forum acknowledges modifying and changing current directions and behaviour is a big challenge. Growth pressures are immense and the resultant issues are sometimes beyond the Growth Forum's influence. However, while recognising the vision represents an ideal goal, the Growth Forum is committed to moving along this path, with the regional community, to ensure the Auckland region is constantly improving as a place to live and work.

Key players and relationships

The partners

The implementation of this strategy will require the commitment and co-operation of all the district and city councils, the regional council, the co-operation of other significant agencies such as Watercare Services, Transit New Zealand, transport providers, Infrastructure Auckland, government agencies and the private sector. The co-ordination and relationships between and within these organisations will be critical to the



ongoing success of the Growth Strategy. All key players involved in the Growth Strategy, in particular the councils, appreciate their actions and decisions have a major impact on the direction and success of the strategy.

The role of each key player in the implementation of the strategy is discussed in Chapter 4.

A stronger appreciation of the region by the people of Auckland will ultimately determine the success of the vision. Success will mean that Auckland continues to be a dynamic and more sustainable region.



The Growth Forum

The Growth Forum is the co-ordinating body responsible for the production of the Growth Strategy and for its monitoring and review. The Growth Forum is based on a co-operative partnership between the Auckland Regional Council and the region's city and district councils. The Growth Forum is the mechanism by which integration, with an appropriate level of consistency, takes place between the region's local authorities. In this regard it is important that the Growth Forum continues to function as the integrating body of the strategy. It is also responsible for developing and facilitating ongoing relationships with the key players in the region.

The general public

This strategy is about how Aucklanders in the future will live, work and play with twice as many people around. Without the commitment of Aucklanders to this strategy, it will not succeed. The Regional Growth Forum will continue to seek public input, feedback, involvement and commitment to achieving a dynamic and sustainable region.

Tangata Whenua

The region's iwi have provided the Growth Forum with an understanding of traditional and contemporary Maori interests and values. Continued dialogue at the Growth Forum level and at the level of individual city and district councils will help ensure the implementation of the strategy takes into account Tangata Whenua approaches to resource management and focuses on maintaining and enhancing the mauri of ancestral taonga.

The private sector

The private development and business sector is ultimately responsible for most detailed development and investment decisions in the Auckland region. The private sector may include landowners who will make land-use decisions, utility companies which will make infrastructure investment decisions, finance companies, large and small businesses and their employees. A major focus of the strategy is to provide certainty through a strategic regional framework within which the market can operate efficiently and with flexibility.

The Regional Council

The Auckland Regional Council is responsible for ensuring integration occurs between different regional strategies, including the Regional Growth Strategy and the Regional Land Transport Strategy. The Regional Council will also enhance or amend its regional policy statement, regional plans, strategic plan, long-term financial strategy, asset management plans and annual plans to implement the vision contained in this strategy.

The Regional Council will be responsible for technical advice to the Growth Forum at a regional level, in addition to providing the Growth Forum with advice in relation to its functions under the Resource Management Act for integrated management of natural and physical resources.

Territorial authorities

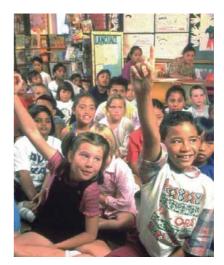
The effectiveness of the strategy depends primarily on the continued commitment of the region's seven city and district councils (Auckland, Manukau, North Shore and Waitakere City Councils and Franklin, Papakura and Rodney District Councils).

It is up to these seven authorities to enhance or amend their district plans, strategic plans, long-term financial strategies, asset management plans and annual plans to implement the vision contained in this strategy. This will be done at various levels of detail, from sub-regional through to a local level. Mechanisms to achieve this are further discussed in Chapter 4.

Central government

While this strategy is co-ordinated at the regional level, it is crucial that central government agencies are committed to the vision and process of implementation. This must involve a close and effective working partnership between central and local government. An integrated approach by central government in dealing with its Auckland-based policy advice and service provision responsibilities is critical. Agencies responsible for service delivery in the area of social infrastructure and services are particularly important to implementing the strategy. Central government agencies with a role in implementing the Growth Strategy could include the ministries of transport, health and education, the Ministry for the Environment, the Department of Conservation, Housing New Zealand and Work and Income New Zealand.





Funding agencies

Funding agencies (such as Transfund and Infrastructure Auckland) have a critical role and responsibility in co-ordinating their funding with the direction set out in this strategy. Investment in regionally significant infrastructure can significantly influence the direction and form of growth. Agencies responsible for funding this infrastructure need to give careful consideration to how to achieve the best possible outcomes for the region.

Infrastructure Auckland

Infrastructure Auckland's role in implementing the strategy is to make grants for projects that help address the region's land and passenger transport and stormwater problems. Grants can be made to those projects or parts of projects that generate benefits to the community generally, in addition to benefits that accrue to any identifiable persons or groups. Grants for projects cannot be inconsistent with the Growth Strategy.

Infrastructure operators

Whether in public or private ownership, infrastructure operators need to plan ahead for future servicing. The strategy gives these organisations clearer direction as to where they should be looking to invest capital to provide essential utility and social services for Auckland's future generations. This will provide greater efficiency and certainty for infrastructure providers.



Key relationships with other strategic documents

There are a number of important documents that can reinforce the Regional Growth Strategy. They are important tools for its implementation at a strategic and local level. They include:

- Regional Land Transport Strategy (including the Passenger Transport Action Plan)
- Regional Stormwater Strategy
- Regional Policy Statement, district and regional plans
- Annual plans
- Strategic plans and long-term financial strategies
- Asset management plans



Growth Forum process . . . how to get to 2050?

The key strength of the strategy is the political commitment to the vision, outcomes and principles contained in Chapters 1 and 2. Creating and maintaining this political commitment will involve an ongoing process of consultation, discussion, debate and political decision making.

The dual needs of **certainty** at a broad and long-term regional level, and **flexibility** at a detailed local level, emphasise the importance of a robust and dynamic process to implement the strategy. The process for implementing the Growth Strategy is detailed in Chapter 4. It has five themes:

- partnerships and relationships
- the need for alignment of policy and funding
- long-term vision and identified short-term actions
- wide and adaptable range of implementation mechanisms
- a process to keep the vision alive

The process through which a high level of certainty is established is through the political commitment of the Growth Forum (through a co-operative agreement) to the vision, outcomes and principles contained



in the Growth Strategy and to the implementation process and methods.

The Growth Forum also recognises the strategy must provide for flexibility to accommodate future changes in business, residential, transport or recreational trends or other changes in society, the economy or the environment that may affect the form of growth. Flexibility is achieved through the many pathways to implementation and the process of monitoring and review.

Implementation of the strategy will largely be facilitated through more detailed planning at sector and local levels. The intention is that the relevant parties (e.g. territorial authorities, infrastructure providers, developers) will come to an agreement on the form and location of growth in their sectors on infrastructure priorities and funding sources. They will establish how the vision, outcomes and principles of the Regional Growth Strategy will be met in that area. Such agreements may be reached through a variety of processes (described in Chapter 4) and will manifest themselves in different forms (e.g. sector and local area plans and strategies, agreements, contracts etc).

While the agreements will be facilitated and developed at a sub-regional level, they will be endorsed by the Regional Growth Forum to ensure overall consistency with the vision, priority outcomes and principles. The Growth Forum will also ensure each sector accommodates regional growth projected in the Growth Strategy and it will maintain an overview of regional infrastructure priorities. Sector and local area planning will therefore provide for both a level of detail that cannot be included in the Growth Strategy due to its regional overview perspective. It will also provide the flexibility to determine the most appropriate way to accommodate regional growth at the local level.



The Auckland region

Auckland is unique as a region in New Zealand. It is dominated by New Zealand's largest urban area and contains the biggest economic centre of the country.

Urban Auckland is a major metropolitan city. It is vibrant, multi-cultural and has a prosperous industrial and business centre attracting investment and attention from all corners of the globe.

The rural part of the Auckland region contains significant landscape, amenity and rural character values, and provides an important setting for the region as one of the most valued places in New Zealand to live.

Auckland region's growth

Auckland's population has grown at a faster rate than the rest of the country for most of this century. In fact, Auckland has never experienced a population decrease.

The population for the Auckland region in 1999 was more than a million people (1,173,400)². Between 1991 and 1996, Auckland was New Zealand's fastest growing region with 12.9% growth in population. That is equal to an additional 125,000 people or 35,900 households³. Over that period, 50% of the region's growth was due to overseas migrants settling here – but over the past 20 years migration has accounted for only 35%, with natural increase⁴ being the major component of growth.

Projections suggest that by 2050, the region could be home to between 1.6 and 2.2 million people, depending on the growth rate over this period. This is an average increase of around 20,000 people per annum and could lead to a doubling of the population in 50-60 years.

- The Auckland region is home to 30% of the nation's population yet this region only represents 2% of New Zealand's land area.
- The region's mainland area covers 4,518 square kilometres, with the metropolitan area covering 530 square kilometres.
- 32% of New Zealand's workforce is in the Auckland region.
- Up to 70% of new migrants settle in Auckland.
- 65% of population growth over the last two decades was natural increase.
- 13% of the population are Maori, 12% Pacific Islands' people and 9% Asian.
- 70% of the region is coastal and marine water.



Even if Auckland's population were to cease to grow altogether, there would still be a need to enable additional opportunities for development to meet the needs of the changing population structure. In 1996, 19% of the Auckland region's population was aged between 45 and 64. This age group is expected to increase to 26% by the year 2016⁵. There have also been changes to family structures over the last generation including a relatively high and increasing proportion of one-parent families. In 1976, 9% of families had one parent and by 1996 this figure had risen to 18%. The proportion of couples without children has also increased. Such changes affect the demand for types of housing, social services, community facilities, residential location preferences, the amount and type of recreation and the size of the labour force.

² Auckland Regional Council regional population estimates as at 30 June 1999

³ 1996 Census of Population and Dwellings: Usually Resident Population

⁴ The difference between births over deaths is the natural increase in population

In 1996, there were 356,000⁶ dwellings in the region, ranging from large rural estates to homes in the suburbs, to apartments in the central city⁷. The region has capacity⁸, under current district plan policies, to accommodate a further 155,500 new dwellings. This additional capacity includes vacant land within the metropolitan area (70,000), infill-type dwellings (36,000) and redevelopment potential (24,500), and capacity within rural and coastal towns and areas (25,000). This total capacity of 511,500 dwellings is estimated to be sufficient for 10-20 years' growth.

Dwelling Number	
70,000	Vacant metropolitan land within current urban limits
36,000	Metropolitan infill
24,500	Potential redevelopment
25,000	Rural towns, rural residential
Subtotal: 155,500	Total additional household capacity
366,000	Existing households (1996)
Total: 521,500	Total capacity (equivalent to approx. 1.5 million people)

Table 1	Auckland	region: t	otal	household	capacity	/ under	current	policy,	1996

Source: Regional Growth Forum "Capacity for Growth", March 1998

Around 700,000 dwellings will be required to house a potential population of two million people. This points to a need to accommodate a further 200,000 dwellings, in addition to the existing housing stock and capacity under current policy described above. Moreover, economic, social and technological changes mean people are living different lifestyles from 50 years ago. The existing housing stock in the region may not meet future demands for more variety and choice up to 2050.



It is expected the region will continue to grow at a fast pace with most of this growth generated by natural increase of the existing population. Although there are advantages arising from the region's increased size and prominence, there are costs to the environment, people and communities.

Growth benefits

There are a number of benefits that arise from growth in the Auckland region. There has been a growing market for goods, increasing investment, a larger labour force and skills base. There is greater diversity in resources and employment, as well as agglomeration opportunities for business. A larger population allows a variety of facilities, entertainment and events to develop. There is also a



⁶ 1996 Census of Population and Dwellings

- ⁷ The 1999 estimate is 381,900 dwellings
- ⁸ Regional Growth Forum "Capacity for Growth", March 1998



greater diversity of people, cultures and lifestyles, allowing a more vibrant and cosmopolitan society to develop. Auckland's growth has contributed enormously to its profile nationally and internationally. Moreover, growth and prosperity can provide opportunities to address environmental and infrastructural issues facing the region through an increase in the rating base. However, the Growth Forum recognises the benefits and impacts of growth need to be carefully considered.

Growth pressures

The growth of the Auckland region places considerable pressure on physical and social infrastructure, the economy and the environment. These pressures necessitate a regional approach to managing growth and its impacts.

Physical and social infrastructure

The impact of growth on Auckland's physical infrastructure has been prominent in recent years. For example:

- ongoing transport difficulties and the problem of traffic congestion
- pressures on schools and open space
- overloading the electricity supply systems in 1998
- upgrading sewerage systems which require major investment
- overloading the stormwater infrastructure and recognition of the detrimental effects of urban stormwater quality and
- water shortage problems experienced in 1994

Much of the region's infrastructure (water supply, wastewater treatment, stormwater systems, refuse disposal, transport, power, gas and telecommunication networks) is already reaching design capacity and needs upgrading to meet higher environmental standards as well as increasing demand. Any future growth will demand major expenditure on infrastructure.

Equally important are the social services, networks and facilities that support people and communities, which can also come under pressure with a growing population. The ability to achieve strong and sustainable communities depends on:

- access to affordable accommodation for businesses, homes and community facilities
- avoiding the forced isolation of communities
- obtaining sufficient population to provide services efficiently
- accessibility, particularly transport links and costs



- funding for social services to meet the needs of the region's fast-growing population
- access to education and health facilities

Growth is having an impact on physical and social infrastructure provision. This affects the ability of people to provide for their own well-being. In considering the alternatives and choices for accommodating future growth, an important issue for the Regional Growth Forum is how to achieve strong sustainable communities, as well as the physical infrastructure needs of the region.

Economy

The Auckland region dominates New Zealand's economy, accounting for around one third of the nation's economic output. Underpinning this position is its population and status as the country's major manufacturing, distribution, service and financial centre.

It is important for New Zealand that the Auckland economy can continue to grow, to have an increasingly important role in the economies of the Asia-Pacific region and the global economy.

Changes in the industrial structure of the regional economy can create pressures on the region's infrastructure and environment. The facilities that businesses require vary between industries. This can lead to an imbalance of infrastructure provision across the region, as a result of the relative growth of particular industries, as well as the movements of these industries within the region. In addition, the way businesses conduct their activities also impacts on the infrastructure required in particular areas.

The dynamics of the regional economy are constantly changing. The specific structural and spatial changes are difficult to predict. Changes seen in recent years include rapid growth in the business services and community/social service sectors, the growth of suburban business centres, the move towards more mobile and 'footloose' employment, and greater reliance on technology. Further changes can be expected in all sectors of the economy.



Traffic congestion is becoming a major concern for business, adding costs and creating inefficiencies. The business community generally believes Auckland's growth has a positive effect for it through the creation of more customers and increased sales. However, increasing traffic congestion has increased costs by, for example, increasing sales staff travel and delivery times.⁹

The overall quality of the region - its environment, liveability and vibrancy - are becoming important factors in attracting more business as technology reduces the "tyranny of distance" and some businesses do not need a permanent base.

⁹ Regional Growth Forum "Business Opinion Survey", March 1998

Environment¹⁰

Urban development can have an adverse effect on the environment during the development phase as well as from activities that occur on the land after development.

Despite extensive use of remediation techniques, land clearance for access, roading and house sites can result in the destruction or fragmentation of natural heritage resources such as indigenous flora and fauna, ecosystems, habitats, geological features, productive soils and the natural character of various aspects of the environment such as bush-clad hills and the coastal environment.

Large amounts of sediment are generated as a result of earthworks and land clearance, impacting on streams and marine ecosystems and habitats, and reducing the visual and aesthetic appeal of these waterbodies. Flooding can be exacerbated by urban development, increasing the amount of impervious surfaces, decreasing infiltration capacities and affecting stream channel widths.

Contaminants generated as a result of normal urban land use and the infrastructure that supports it (motor vehicle

use, pesticides, industrial land uses etc.) can lead to air pollution and contaminated sites, or leach from the land into groundwater, streams, wetlands, estuaries and harbours. Motor vehicles are the largest contributor to air pollution in the region and are a significant source of stormwater contaminants. The transport system is also responsible for localised noise pollution and major impacts on landscape and amenity values.

Cultural heritage areas are central to our identity and help define our place in history. Cultural heritage areas such as waahi tapu, buildings, objects and artifacts are vulnerable to the effects of





- 136,000 vehicles per day cross the harbour bridge; end to end they would stretch 500km
- Auckland's transport system produces about 1.9 million tonnes of CO₂ annually

development - either directly or indirectly through development occurring in the vicinity.

An increase in people living by the coast will impact on the coastal environment and may be in conflict with objectives to improve water quality and retain the recreational use of the harbours.

The process of development needs to be carefully managed to ensure the adverse effects of urban development and urban land uses are avoided, mitigated or remedied to the greatest possible extent to ensure the benefits of growth can be optimised.

In the Auckland region:

- fewer than 30% of indigenous terrestrial habitats remain
- 56 animal and 105 plant species are threatened

¹⁰ Regional Growth Forum "Natural and Physical Resource Constraints: Stage I Database", July 1997



DESIRED OUTCOMES, PRIORITIES and PRINCIPLES

To achieve and implement a successful Growth Strategy, the regional vision (page 7) needs to be translated into what we want to achieve for the region (desired regional outcomes). These outcomes represent an agreed set of values to be recognised and protected in order to achieve the vision.

Desired regional outcomes

The desired outcomes provide certainty as they will mean future regional growth, whether in new urban areas such as greenfields, satellite centres or expanded rural towns, or through redevelopment or intensification of the existing urban areas, should promote:

- safe, healthy communities
- diversity of employment and business opportunities
- housing choice
- high amenity of urban environments
- the protection and the maintenance of the character of the region's natural environment
- sustainable use and protection of the region's natural and physical resources (including infrastructure) and
- efficient access to activities and appropriate social infrastructure for all

Desired regional outcomes were derived from:

- Regional Growth Forum workshops on regional values, vision and desired outcomes
- major issues and values identified in surveys and consultation processes



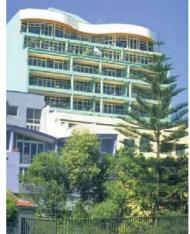


Table 2: Full statement of desired regional outcomes to be achieved in a Regional Growth Strategy

Outcome	Outcome definition
Water quality	water quality in streams and coastal marine area is maintained where it good and improved where it is now degraded
Access and transport efficiency	more transport choices and high levels of access for all sections of the community, a closer relationship between home and work, activities, shopping open space etc., managing traffic congestion and a better passenge transport system
Coastal environment	natural character of coastal environment including landscapes, ecosystem native bush and water quality preserved and enhanced and access to clean an beautiful beaches maintained
Air quality	air quality is maintained where it is good and improved in areas where is now degraded
Sustainable use of resources	more efficiency in use of natural and physical resources, including urba land, rural land, infrastructure and energy resources
Employment choice	more employment choices everywhere, better match of employment to population in different parts of region
Business opportunity	improved opportunities for businesses (business growth, developmer opportunities, affordable and suitable land and infrastructure)
Urban amenity	higher quality urban amenity particularly business, residential, shoppin and public space areas (more trees, better streetscape, better urba design etc.)
Safe, healthy communities	safer, healthier communities with high-quality readily accessible communi- facilities and services publicly and privately provided (e.g. libraries, sportin facilities, schools, stadia, theatres, cafes, gyms etc.)
Housing choice/ affordability	improved housing choice and affordability throughout the regio
Cultural heritage	protection and enhancement of cultural heritage
Habitat	expansion and protection of high-quality indigenous habitat
Open space	a greater range and diversity of protected open space
Rural amenity	better non-urban and rural amenity including landscape protection, an more trees and vegetation
Physical and social infrastructure	physical and social infrastructure provided, maintained, enhanced an optimised - existing infrastructure maintained and utilised where it has sufficien capacity for growth, and upgraded where it has not
Cultural identity	cultural identity, including maintaining cultural diversity

Prioritising outcomes

While the desired outcomes listed in Table 2 provide a robust and comprehensive list, it is recognised that in many situations they may be in conflict or not support each other. Resolving these conflicts involves prioritising outcomes through establishing a regional framework of priorities.

The Growth Forum has prioritised the desired outcomes through a range of consultation and political workshop exercises. While Table 3 illustrates these priorities, it should be noted that all the desired regional outcomes are important. Moreover, it is recognised that the priority given to the outcomes may be different in different parts of the region and at different times, depending on further analysis at the local or sector level.

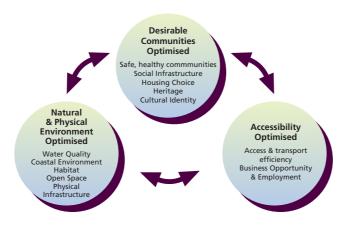
CRITICAL OUTCOMES	VERY IMPORTANT OUTCOMES	IMPORTANT
Access and transport efficiency	Business opportunity	Cultural identity
Water quality	Urban amenity	Rural amenity
Coastal environment	Safe, healthy communities	Cultural heritage
Air quality	Housing choice/affordability	• Habitat
Sustainable use of resources (land/infrastructure/energy)	Employment choice	
Open Space		
Social and physical infrastructure		

Table 3: Prioritising	the desired outcomes
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Three key themes relating to the major issues and growth pressures facing the Auckland region emerge from these prioritised desired outcomes. They are:

- Desirable communities and diversity and choice optimised
- Accessibility optimised
- Natural and physical environment optimised

Figure 2: Interrelationships between key themes and natural and physical environment



Managing growth to optimise these themes is a complex, but not unachievable, task. Success will lead the Auckland region towards sustainability. This strategy provides a framework for this to occur but it will involve a significant level of commitment from all key players.

Recognising the relationships between these three key themes is critical to the successful implementation of the strategy. All of the desired outcomes, the vision and the following principles are underpinned by one or more of the key themes and there is a strong interrelationship between them. There are many growth alternatives that could allow these outcomes to be optimised. Chapter 3 provides one concept of how the region could develop.

Principles for evaluating growth alternatives

The principles outlined translate the vision, and desired regional outcomes and priorities, into statements that will enable the Growth Forum to evaluate growth alternatives, and guide the location, physical form and character of growth.

These principles underlie the concept of managing the effects and consequences of regional growth on the natural, social and physical environment and provide a framework against which the strategy can be refined and other growth alternatives can be assessed, through sector and local area based agreements.

Some of these principles, while important to work toward, cannot become absolute rules if the strategy is to be realistic and continue to accommodate growth in the region over a 50-year period. Where there is conflict in applying the principles, priority is given first to critical outcomes, then very important and finally important outcomes in Table 3. In addition, there will be further detail in applying these outcomes to local level implementation. The key principles for evaluating regional growth alternatives are given in Table 4 with the associated desired regional outcome areas.

The principles are categorised:

- over the whole region
- to new urban (greenfield) areas (in addition to those over the whole region)
- to intensification areas (in addition to those over the whole region)



Table 4: Principles for evaluating regional growth alternatives

Relevant desired outcome area	A. Principles to be applied over the whole region
 Safe, healthy communities Social infrastructure Housing choice/affordability Employment choice 	Enable people and communities to meet their basic needs of shelter, safety, health, education, cultural expression, income, recreation and leisure, to facilitate the health and safety of present and future communities.
Cultural identityHeritageRural and urban amenity	Take into account the values of identified cultural heritage sites and areas, and their setting/context during (re)development.
Cultural identitySafe, healthy communities	Foster cultural expression by cultivating a sense of place, recognising arts and culture as key elements of place, enhancing cultural well-being and recognising the cultural diversity of local and regional communities.
Water qualityRural and urban amenity	Maintain or improve water quality in all catchments.
 Protect habitat Rural and urban amenity	Maintain and enhance high-quality indigenous habitats, especially those in proximity to Significant Natural Areas and Values ¹¹ , during (re)development.
Coastal environment	Recognise and maintain the qualities of identified highly valued coastal environments (the sea, islands, marine reserves, shoreline, harbours and estuaries) during (re)development.
 Housing choice Employment choice	Enable a regional growth pattern which can provide a range of employment choice and housing choice by type, affordability and location.
Safe, healthy communitiesCultural identity	Encourage a regional land use and transport pattern which:Enables people focused communities, and protects and fosters existing and future community values and integrity.
 Access and transport efficiency Business opportunity Sustainable use of the resources Air quality Employment choice 	 Recognises different types and functions of transport corridors and their relationship with adjoining land uses such as the location of freight forwarding/distribution near motorways and/or rapid transit interchanges; or the location of housing and community facilities near passenger transport.
Business opportunityEfficient use of resources	 Is flexible and accommodates change (e.g. new technology, road reform/pricing, new work practices, new industries etc.,) while providing sufficient certainty for planning purposes.
Business opportunityEmployment choiceSustainable use of resourcesAccess	• Enables a range and quality of business locations to accommodate employment growth (e.g. industrial areas near motorway/rapid transit interchanges; a variety of mixed use, sub-regional or town centres for offices and services outside the CBD).

" Significant Natural Heritage Areas and Values are described in Appendix B of the Regional Policy Statement, July 1999

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Table 4: Principles for evaluating regional growth alternatives (continued)

Relevant desired outcome area	A. Principles to be applied over the whole region
AccessBusiness opportunityEmployment choice	• Enables a good local, cross-region, inter-region and international transport network, including passenger transport for ease of movement for goods and services, business traffic and commuter traffic.
 Access Urban amenity Air quality Social infrastructure provision Employment choice 	• Reduces the need to travel by car by encouraging more employment/business/retail/community facilities close to residential areas and the opportunity to walk or cycle. This pattern needs to foster a critical mass in terms of population to support a range of small local enterprises.
 Social infrastructure provision Safe, healthy communities Employment choice 	Enable a regional land use pattern where local areas have sufficient critical mass in terms of population to support a range of quality and accessible community facilities and services, including health facilities and education and training to support employment choice.
Safe, healthy communitiesUrban amenity	Enable all urban areas to be capable of responding to community values, including improved community safety, amenity and urban design measures.
Business opportunityUrban amenity	Provide adequate and high-quality infrastructure to support business, residential and other opportunities in a timely manner.
Sustainable use of resources	Take into account the values of productive soils when managing growth in rural areas.
Sustainable use of resourcesSocial infrastructure	Sequencing of all new growth areas to be co-ordinated with the provision or upgrading of drainage and other infrastructure (including social infrastructure).
Social infrastructureSafe, healthy communities	Ensure the costs and benefits of growth are distributed in a manner that does not unfairly impact upon any group or community's ability to provide for its social, economic and cultural well-being.
Relevant desired outcome area	B. Principles to be applied to new urban areas (in addition to above principles for the whole region)
Water quality	Avoid urbanisation of the most highly valued and sensitive areas in respect of water quality.
Coastal environmentsIndigenous habitats	Avoid urbanisation of the most sensitive and highly valued coastal environments such as estuaries, harbours and wetlands.
 Open space Rural and urban amenity	Avoid urbanisation in areas where existing protected open space or other significant highly valued open space areas will be adversely affected.
 Rural amenity Heritage	Avoid urbanisation of the most highly valued rural areas such as high-quality landscapes, bush areas or views.

Table 4: Principles for evaluating regional growth alternatives (continued)

Relevant desired outcome area	C. Principles to be applied to urban intensification areas both in the existing urban area and in new greenfields development (in addition to the principles for the whole region)
AccessUrban amenitySafe, healthy communities	All intensification areas to be served by an effective and efficient passenger transport system.
Employment choiceAccessCommunity	All intensification areas to be within walking distance of a commercial or employment centre.
HeritageUrban amenity	All intensification areas to be located in a manner that maintains identified residential character areas.
 Open space Safe, healthy communities Urban amenity	All intensification areas to be located and developed in a manner that provides adequate open space for the needs of local residents.
Social infrastructureSafe, healthy communitiesAccess & transport efficiency	All intensification areas to have access to appropriate and affordable education, health, community, recreation, social services and facilities.
Housing choiceEmployment choiceCommunity	All intensification areas to provide a range of dwelling types and densities including mixed use development activity where appropriate.

Applying the outcomes and principles

The Growth Concept, described in Chapter 3, was developed through applying the principles in this chapter to a range of growth alternatives. The Growth Concept is therefore one way of achieving the vision and desired outcomes developed on the basis of the information available. The principles, in conjunction with the implementation criteria and tools in Chapter 4, can be applied to come up with



variations to the Growth Concept that will still achieve the outcomes and therefore the vision. Such variations may develop through sector and local area planning. This underlies the concept that the Regional Growth Strategy provides certainty (commitment to vision, outcomes and priorities) and flexibility (through more detailed analysis at the local level and different pathways to implementation).

A GROWTH CONCEPT FOR A SUSTAINABLE AND DYNAMIC REGION

The Growth Strategy provides a pathway to sustainability, while the Growth Concept provides an illustration of the destination.

Applying the principles - a Growth Concept

The Growth Forum is committed to ensuring growth is managed in a manner that optimises the three key themes of desirable communities, accessibility and a natural and physical environment. In developing the strategy, the Growth Forum has gone through many consultation exercises with regional and local stakeholders. Much of this consultation revolved around the question of "How can another million people be accommodated?" The Growth Forum has developed a Growth Concept following a comprehensive workshop process with a range of technical inputs and consultation processes, to help answer this question. The purpose of Chapter 3 is to describe how the desired outcomes and principles may be applied through this Growth Concept (illustrated on the map, pages 34 and 35).

The Growth Concept is essentially a snapshot that illustrates how the Growth Forum believes the region could look in the year 2050 if growth is managed according to the vision, outcomes and principles contained in the strategy. The Growth Concept provides one possible future scenario for the Auckland region. The use of sector and local area agreements provides flexibility for a number of alternative scenarios to eventuate at a sector level. Therefore sector and local area agreements may result in changes to this Growth Concept as other options are assessed against the vision, priority outcomes and principles and agreed by the Growth Forum and its members at a sector level.



The key features of the Growth Concept are described in the remainder of this chapter. One key feature is that the effects of growth are managed by promoting compact urban environments. Other key features are that:

- Most future growth is within the existing metropolitan area, with development outside the current urban area only where environmental, accessibility and community principles can be met. This results in a wide range of living opportunities, both in rural and urban areas by enabling the accommodation of future growth in a variety of ways.
- Most urban growth is focused around centres of varying sizes (illustrated on page 27) and major passenger transport routes, such as town centres along the western, eastern and southern passenger transport corridors. The Growth Concept places much less emphasis on general suburban

Growth focused in a variety of centres

Central area



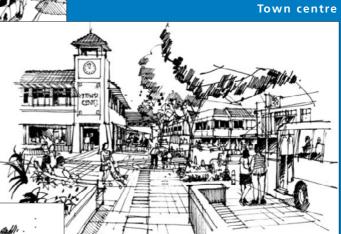
Sub-regional centre

3



Corridor





Neighbourhood centre

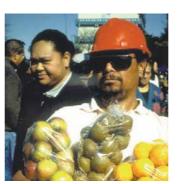


infill as a way of accommodating growth and focuses more on redevelopment and intensification in specific areas.

- Some growth would be accommodated in future urban areas (known as greenfield areas) in the north, south and west of the region. Greenfield areas include: Takanini, East Tamaki, Hingaia, Westgate/Redhills, Albany, Greenhithe, Long Bay and Orewa/Silverdale.
- Rural Auckland (including rural and coastal towns) will roughly double in size as a result of continued natural growth. This equates to an approximate population increase of 130,000 people. Helensville, Kumeu, and Pukekohe are singled out for a greater share of development because of their location on rail lines.
- Development of the most highly valued and sensitive natural areas is avoided. The unsuitability of such areas for future urban development is emphasised. Such areas range from the Waitakere and Hunua ranges which are significant park lands and water supply areas, to the Waiwera, Okura, eastern Waiheke Island, Whitford/Mangemangeroa and Puhoi areas which also have significant environmental values worthy of protection from urbanisation.

The Growth Concept is based on compact urban environments. This means where urban growth occurs, whether as part of the existing metropolitan urban area, a satellite town, or rural or coastal town, it should result in a compact urban form to avoid spreading the effects of urbanisation over a greater area. The Growth Concept puts greater emphasis on urban intensification than urban expansion. However, some expansion opportunities are required to provide sufficient residential and business land capacity and locational choice. The Growth Concept emphasises the opportunities for more **compact growth** and **integrated communities** as the best way of meeting the regional vision and desired regional outcomes. It is a concept that reflects diversity throughout the region, set within a regional framework.







The Growth Concept is illustrated on the map entitled "Growth Concept 2050", found on pages 34 and 35.

Capacity Issues

What does the Growth Concept mean for the region's cities and districts?

Developing the Growth Concept has involved an analysis of population projections and a comparison with the capacity to accommodate growth in various sectors.

Figure 3 compares the capacity for growth in each sector of the region, according to the Growth Concept, with sector population projections.

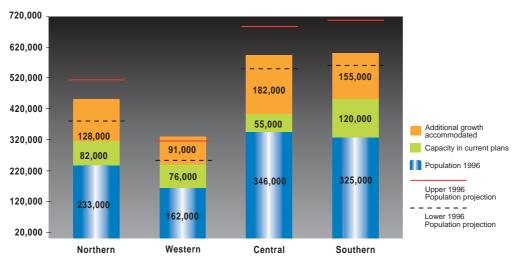


Figure 3: Growth accommodated by sector

See page 31 for map showing sector boundaries

This strategy reflects the differences and diversity throughout the region as well as the stage or age of development of different areas. It will be an ongoing challenge for the Growth Forum to ensure the costs and benefits of growth are equally shared throughout the region.

Table 5 provides a more detailed assessment of the capacity for accommodating growth by each sector. The figures indicate broad potential capacity only. More detailed analysis of each sector will be conducted as sector and local area agreements are developed. Further discussion of this process is included in Chapter 4.

Note: These population projections are demographic projections that assume a continuation of the status quo regarding such issues as land availability, residential zoning and demographic structure. Actual demand may therefore differ from these projections as a result of changes in any of these factors.

POPULATION (000's people)	1996 population	Existing metropolitan capacity*	Existing rural capacity **	Future population in future growth areas	Future population within existing urban areas***	Total capacity 1996-2050	Percentage increase
By sector North	222	FC	26	43	QE	442	00
West	233 162	56 61	26 15	43 37	85 54	443 329	90 103
Central	346	48	7	0	182	583	68
South	325	99	21	85	70	601	85
Auckland Region	1066	264	69	165	391	1956	85

What does the Growth Concept mean for each sector? Table 5:

* includes operative greenfield and infill (i.e. district plan provisions)

see notes below Table 6

*** through intensification of centres, corridors and limited infill

Table 6 provides an indication of the approximate regional share of growth allocated to each territorial authority. Again, these capacity estimates are flexible, and will be firmed up through sector and local area agreements. Significant investment and other land-use decisions made by key players may impact on the ability of territorial authorities to accommodate growth. The Growth Forum will monitor available capacity and impacts on capacity. Where necessary, reallocation of growth to another territorial authority or sector may occur where regional trade-offs are made that prevent territorial authority from accommodating its share of regional growth.

What does the Growth Concept mean for the region's cities and districts? Table 6:

	PULATION 10's people)	1996 population	Existing metropolitan capacity*	Existing rural capacity **	Future population in future growth areas	Future population within existing urban areas***	Total capacity 1996-2050	Percentage increase
By territorial authority								
North	h Shore City	172	38	1	27	54	292	69
Wait	akere City	156	61	17	18	51	303	94
Auck	kland City	346	48	7	0	182	583	68
Man	ukau City	254	87	8	47	36	432	70
Rodr	ney District	66	19	22	35	35	177	168
Frank	klin District	32	0	12	2	29	75	134
Рара	kura District	40	12	2	35	5	94	135
Auck	kland Region	1066	264	69	164	392	1956	85

* includes operative greenfield and infill (i.e. district plan provisions)

** includes towns, countryside living and general rural living

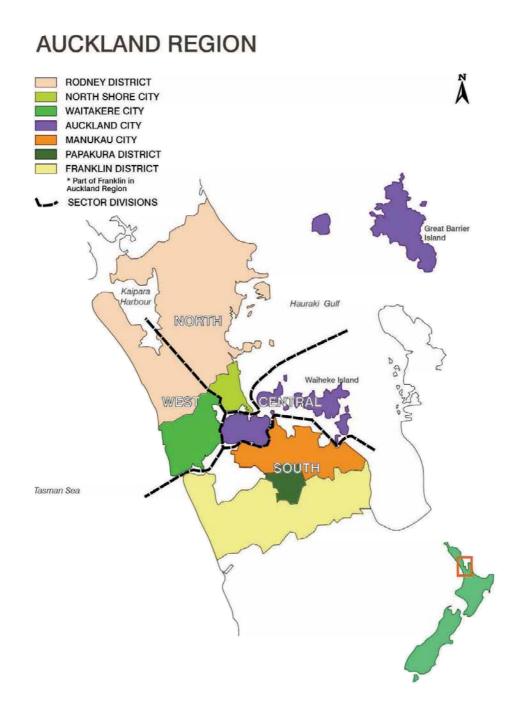
*** through intensification of centres, corridors and limited infill

Further notes to Tables 5 and 6

- 1. Figures indicate broad potential capacity only. A more detailed level of analysis will be required to identify the actual capacity of a given area. This applies to both greenfields and intensification areas. The environmental constraints as well as potential land use (e.g. employment demand) will need to be further investigated.
- 2. Total capacity 2050 includes the current (1996) population, plus existing capacity in plans, plus additional capacity (in greenfields, intensification and rural areas) indicated as future opportunities in this Growth Concept.
- 3. The total population of Franklin District is 47,000 (1996). The figure in the column "1996 population" is the part of Franklin that is in the Auckland region, the remainder being in the Waikato region.
- 4. These figures do not indicate 'new' or additional capacity in the rural parts of the region except the settlements of Wellsford, Warkworth, Helensville, Kumeu and Pukekohe as shown on the Growth Concept diagram. The demand for further rural capacity requires further study, particularly by district councils and this could result in additional rural capacity.

^{**} includes towns, countryside living and general rural living

see page 31 for map showing sector boundaries



Key features of the Growth Concept, by sector

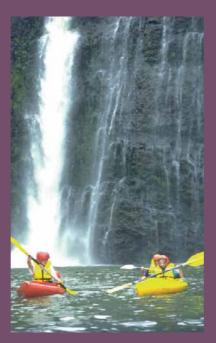
NORTH

All urban growth in the north would be within the current metropolitan limits and focused broadly in four areas - around Orewa, in the remaining North Shore greenfields (e.g. Albany), scattered throughout the North Shore urban area and in some rural towns (Warkworth and Wellsford). The north would eventually have three sub-regional centres, at Takapuna, Albany and Orewa. Growth of the Hibiscus Coast will be focused on the Orewa sub regional centre, with the SH1 realignment forming the urban/rural boundary. There could be some infill of the western Whangaparaoa Peninsula (in recognition of the potential to improve roading capacity in the area). Greenfield development is occurring in Albany and Greenhithe and structure planning is almost complete for Long Bay. The residential densities in these areas will vary according to the environmental constraints of the land and small neighbourhood centres will provide support services and local identity. These areas could accommodate more than 30,000 people collectively. Scattered through the North Shore urban area, intensification could be focused in a number of areas, such as the development of town centres at Browns Bay and Birkenhead, and more neighbourhoodtype centres in places like Hauraki Corner, Bayswater, Milford and Northcote. Should this additional capacity be taken up by the market, the north including the Hibiscus Coast (35,000), could be home to 440,000 people by 2050, compared to 233,000 in 1996. Low levels of growth compared to other parts of the region reflect infrastructure and environmental

issues, and current community concerns. The need for a third crossing of the Waitemata Harbour is unlikely until at least 2020 by improving north-south accessibility through the North Shore Bus Rapid Transit System, by introducing traffic demand management measures and improvements to the motorway system, as well as encouraging job growth on the North Shore.

WEST

In the west, intensification would be focused within two development corridors - the existing western rapid transit corridor and a proposed Henderson to Westgate corridor. The western sector would eventually have three sub-regional centres at New Lynn, Henderson and Westgate. There would be smaller town centres at Glen Eden, Sunnyvale, Ranui, Hobsonville and Te Atatu Peninsula. Some greenfield development is also focused on the



western rapid transit corridor, with opportunities for growth of Helensville and Kumeu. Further greenfield growth will occur at Redhills, in association with the sub-regional centre at Westgate. However, development of the Redhills/ Westgate area is dependent on the decision on whether SH 18 is realigned to the north of Hobsonville Road, and resolving issues relating to stormwater impacts on the harbour. The total additional capacity in the west is 91,500, 60% of this in the form of intensification in the existing urban areas (i.e. 54,000) and 40% in greenfields (i.e. 37,000). Should this capacity be taken up in this way, the 2050 population in the west would be around 330,000, twice the 1996 population of 162,000).





CENTRAL

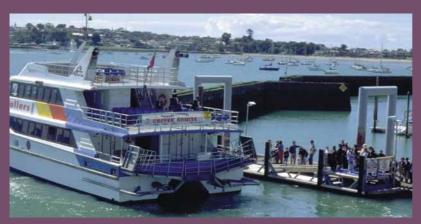
All growth in the central sector must be by way of intensification as there are no greenfield areas in the Auckland isthmus in which to grow. In the central sector, intensification would be focused in two areas - the first is the opportunities in the vicinity of the downtown area (the central area) and the second in varying sized centres along the major transport corridors, both road and rapid transit. Underlying the Growth Concept within the Isthmus, is the need to focus growth in centres to make best use of rapid transit opportunities (such as at Mt Albert, Avondale, Newmarket, Panmure and Glen Innes, on the western and eastern rapid transit corridors). In contrast, intensification along the full length of roading corridors (like Gt North Road, Manukau Road), where appropriate, signal the opportunity for passenger transport that can make multiple stops (such as buses or rapid transit). Intensification in the central sector would follow a largely radial pattern with all

intensification focused towards the central area. Strengthening of cross-town links will be important. The Growth Concept enables additional population growth of around 182,000 people in this sector. Should this and existing capacity in plans (55,000) be taken up, the isthmus could be home to 583,000 people by 2050 (a 68% increase on 1996). However, this development would be subject to the resolution of infrastructure issues, with significant cost implications.

SOUTH

In the south, growth would be focused on two broad corridors, the southern rapid transit corridor and motorway, and further east in a band along the current urban edge. Fourty-four percent of growth could be by intensification, i.e. in centres and corridors within the existing urban area There would also be some more intensive development as centres in greenfield areas. The south will eventually have two sub-regional centres at Manukau City and Papakura. There would also be many smaller town centres, such as at Pakuranga, East Tamaki, Botany Downs, Mangere, Wiri, Manurewa, Papatoetoe and in the greenfield areas. The greenfields areas of East Tamaki, Takanini and Hingaia could accommodate around 83,000 people (56% of growth in the south), along with further growth of Pukekohe, Waiuku and Tuakau (just across the regional boundary) as significant rural settlements. The south could be home to around 600,000 people by 2050, which is nearly double the 1996 population of 325,000.







Key features of the Growth Concept, by outcome

This section provides further explanation of the Growth Concept by relating it to the themes of desirable communities, accessibility and natural and physical resources, and the desired regional outcomes for these themes.

The Growth Concept has been described in terms of its key features and the different forms growth could take (i.e. how growth could be accommodated) and what this means around the region. The remaining parts of this chapter provide a description of what the Growth Concept means for each of the key themes and prioritised outcomes, what may be required for successful implementation, and it indicates the key linkages between issues. It is important to refer to Figure 2 (page 21) to recognise the interrelationships between each of the key themes. None of the outcomes can be seen in isolation from the others as the success of one outcome is dependent on a range of other factors.

Desirable communities

The community principles underlying the growth concept are about how we live, work and play in the region and ensuring liveable communities make up a liveable region.

Social infrastructure

A liveable community and region requires co-ordinated and effective social infrastructure - a system of social services, networks and facilities that support people and communities. Growth in the region means forward planning in terms of access to facilities like social support services, emergency services (police, fire, ambulance), affordable health care services, a range of employment opportunities, educational opportunities (schools, tertiary, adult/community), indoor and outdoor recreational facilities (parks, swimming pools, sports grounds).



Social well-being is strongly related to income and employment opportunities (discussed on page 41), which in turn are related largely to the state of the economy. Trends in economic prosperity, employment levels and central government social policy are important. A number of social services are funded and provided by central government, including education, income support, justice, emergency services, and the majority of health services and facilities. To provide effective social infrastructure, co-ordination is a key requirement.

The provision of new social infrastructure in developed areas can be inhibited by availability of sites and low levels of community acceptance for social infrastructure, such as justice and specialist medical facilities. Education and open space needs, in particular, have high land requirements that must be planned carefully in both intensification and greenfield areas. Opportunities for the sharing of space





(e.g. local reserves/school sports grounds), and better use of existing public open space and recreational facilities, will become increasingly important. The regional growth and regional land transport strategies seek to ensure transport systems provide efficient access for communities to such facilities.

Communities in the urban intensification areas, particularly in Auckland City, will have a much greater population density and cultural and ethnic

diversity than at present. They will need a greater number and wider range of social and community support services and facilities. These will need to be affordable and accessible to their communities and clients. The achievement of this will require co-ordinated early planning, assistance from public bodies to ensure their provision, enhanced passenger transport and ready access for all groups, including disabled people.

The Growth Concept seeks to enable affordable accommodation by ensuring sufficient residential capacity and encouraging housing diversity. This may also mean ensuring a critical population mass occurs in local areas to support a range of community services. Affordability issues will need to be addressed by community service provider organisations in those intensified areas where office and service accommodation may otherwise be at a premium.

Underlying many of the social issues facing Auckland as a result of growth, is the need to establish and maintain a strong and effective working partnership with central government to ensure that social outcomes, such as affordable housing, are supported through the range of social policy mechanisms available to central government.

Housing choice and affordability

The Growth Concept is intended to accommodate the regional housing demand arising from population growth projections. Around 700,000 dwellings will be required to house a potential population of two million people which points to the need for an additional 200,000 dwellings over and above the existing housing stock and capacity under current policy (Figure 3). In accommodating this growth, a range of lifestyle options, from countryside living to inner-city apartments will be provided for.

New opportunities for urban living will be provided in three ways: within the existing metropolitan urban area as centre or corridor intensification, in new greenfield areas, and in rural and coastal towns. Continuation of high levels of general infill throughout suburban areas is not supported by the Growth Concept.

The existing metropolitan area has the ability to accommodate approximately 70% of new growth in the region. This enables a number of environmental outcomes to be maximised such as the protection of sensitive water catchments, landscapes, bush and coastal areas outside the urban area from urbanisation. In addition, a more compact urban environment is more supportive of passenger transport, and offers greater choice in working and living environments, including mixed use areas.

Intensification of urban areas will promote the comprehensive development and re-development of areas around selected town centres of varying sizes and along transport corridors either on vacant land or redevelopment at higher densities. This may include low- and high-rise apartments, town houses, terraces, semi-detached, cluster housing and other multi-unit forms (see illustrations of housing types Page 39). Over the last five years there has been a significant increase in residential intensification and multi-unit dwellings as a proportion of overall residential development.

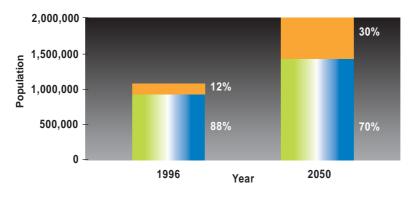
While the Growth Concept promotes intensification of the existing urban area, and in 50 years more than a quarter of the population could be living in multi-unit forms (compared with 125,000 in 1996), 70% of the region's population in 2050 could still live at lower densities in suburban and rural environments.







Figure 6: How could the population be living in 2050?



Multi-unit housing forms (eg. terraces, town houses, duplexes, flats, low- and high-rise apartments)

Single-unit housing (ie. traditional homes on small or full sites, in urban or rural areas)

The second way the Growth Concept accommodates urban growth is in the new greenfield areas that could accommodate up to 30% of regional growth. Like intensification, greenfield development must take place in a cost-effective, orderly and environmentally responsible manner. This will mean that future greenfield development will need to be designed:

- to encourage passenger transport, walking and cycling, as well as use of the private motor car
- to enable the provision of a range of house types (in both more intensive centres as well as suburban areas)
- to support the efficient use of land resources
- to enable the provision of a range of business, retail, recreational and employment opportunities
- I to mitigate environmental impacts such as impacts on water quality
- to ensure sufficient population to enable the provision of appropriate social and community services, such as schools and health facilities and
- to provide integration (with neighbouring areas and networks) and a sense of identity (such as the clustering of business and community facilities, e.g. a centre with a school, park, hall, shops etc)

The Growth Concept identifies opportunities for a wide range of housing choice in terms of housing form and location. It seeks to avoid capacity shortages and adverse impacts on the housing market in terms of affordability, whilst providing greater flexibility and opportunities for the market and greater housing choice for residents.



The strategy encourages a greater range of housing choice



Rural living opportunities



Detached houses

3



Terraces and townhouses





High-rise apartments anal Growth Strategy, Nov 1999 In addition to the growth opportunities in the urban area, the rural area offers a range of lifestyle opportunities. The Growth Concept enables the continued natural growth of rural towns, as well as identifying specific opportunities for increased levels of growth in rural towns with good accessibility such as Helensville, Kumeu and Pukekohe. One of the most significant issues faced in the rural area is managing the demand for rural lifestyle opportunities, while allowing the rural area to continue its role in agricultural production.

An important reason for having a greater range of housing types in a variety of areas is to enable people to continue to live in their chosen area throughout their lifetime and to ensure the housing stock meets their changing housing needs. Policies will need to be developed to facilitate a housing mix which meets the needs and income of a wide range of ethnic, age and socio-economic groups. Partnerships

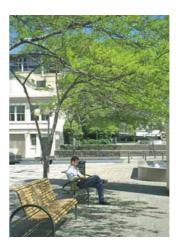
between councils, private developers, community housing groups and central government agencies need to be investigated and pursued, particularly in urban intensification areas. In some places higher density housing may provide cheaper options within closer proximity to the CBD or other major employment centres. Further work needs to be done to identify and implement mechanisms that can facilitate a range of affordable housing provision.



Amenity and design

A liveable community will be one of high-quality urban and rural amenity where good design helps to create a sense of place, identity and community within an area.

Urban amenity encompasses a range of natural and physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness. Such qualities include cultural and recreational attributes, open space, heritage, safety, accessibility, the environment (e.g. air and water) and infrastructure. It also includes character, views, privacy, sunlight, traffic, noise, streetscape, lifestyles, people mix, vibrancy, identity and "feel" of urban areas. Intensification will change the nature of the urban environment and can put pressure on these values and provide



opportunities to enhance them. Urban design is therefore important in creating a living environment with high amenity, character and access to public open space. For example, intensification can place pressure on existing public open space and it will be costly to provide new public open space. Consequently all existing and any new public open space will have increasing value to the community. Greater effort and investment will be focused on the quality of that space as well as the associated urban streetscape, trees and urban design.



Intensification can provide the opportunity to enhance urban amenity through (re)development and to provide better passenger transport, local services and facilities (including more mixed-use activity) in and near residential areas with increasing intensification. Upgraded passenger transport and pedestrian environments encourage more people to walk in an environment with increasing diversity, people interaction and overall "sense of place".

Public health, safety and well-being are closely linked with the economy (income and employment levels) as well as the quality of the urban environment. Poor urban environments (including housing) can contribute to crime, other anti-social behaviour and poor health. Good urban design can help minimise injuries, minimise environmental degradation, discourage crime, promote health and safety, enhance cultural well-being and foster a sense of

place. It is sometimes assumed that high-density living is synonymous with high crime levels and poor social conditions. However, crime and other anti-social behaviour is more closely associated with economic conditions (income, employment) than housing type or density. Increased integration of working, living, shopping and leisure activity in the urban area will also create activity over a longer period of the day and could enhance both urban vitality and safety.

The Growth Concept seeks to avoid further development in the vicinity of identified heritage areas and sites. Existing suburban amenity will be maintained and enhanced through less opportunity for infill development and greater attention to design where it occurs. This will include more careful transport design throughout the urban area to ensure good access and links between areas and overall improvement to the urban amenity.

In managing rural development and lifestyle opportunities, one concern will be to protect and enhance environmental values (e.g. through riparian planting) and rural amenity, including rural landscape and character. This must be seen within the context of the wider rural area and the requirements of rural production.

Business and employment opportunities

It is very difficult to assess what the needs of business will be in the future largely because of the dynamic nature of business, external influences on the economy, changes in industrial structures, and the numerous factors that influence individual locational decisions. This inability to foresee exactly what the needs of business will be indicates a requirement for flexibility and choice.



A number of trends are occurring within the economy that will influence business location such as globalisation, the decreasing average size of many businesses and the increasing size of others, rapid technological change with a consequent influence on businesses' site requirements and the need for flexibility. These trends may influence business location in the following ways:

- potential decline in the importance of older, more established areas
- development of new employment zones, aided by the provision of modern infrastructure, particularly communications infrastructure
- changes in mobility of business, resulting in many firms becoming either home-based or footloose and mobile
- greater self-employment is likely to continue
- mixed-use development opportunities are likely to exist, particularly among small manufacturers and consumer service businesses



larger businesses will require flat land for future expansion

Access for residents to a range of employment opportunities, and access for businesses to each other, their markets and their suppliers will be vital if the region is to continue to prosper. The Growth Concept provides for a series of centres and corridors with high-capacity transport linkages that will provide this level of accessibility and ensure businesses in the region can be run more efficiently.

The Growth Concept seeks to achieve a balance between the certainty that businesses require for their planning and the flexibility to accommodate the above trends and others that may develop.

The strategy aims to ensure the Auckland region will continue to be an attractive place in which to live and invest. The Growth Concept provides a framework to reduce uncertainty, and to improve longerterm planning in the business sector. Access to jobs and markets should be enhanced.

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The sub-regional, town and neighbourhood centres will not only be a focus of residential development but also for different levels of employment activity. This can include mixed-use development, which could be within a single building (e.g. apartments above shops or offices) or throughout an area. Mixed-use development is already common in places like Ponsonby, Newmarket, Newton, Takapuna and New Lynn where service, office, retail and hospitality activities are mixed with residential development.

The Growth Concept provides for a greater range of locational choice for business through the opportunities for mixed uses in more areas and by ensuring sufficient business land is available in specific employment zones (e.g. Penrose-Onehunga, Wiri or



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Regional Growth Strategy, Nov 1999

Wairau Park) for larger industrial and commercial development or activities not suitable near a living environment. In practice, major employment development is likely to occur in a range of areas including Albany, Silverdale, Westgate, East Tamaki, Penrose to Onehunga, Sylvia Park, Mt Wellington and the central area. The use of, and demand for, business land will change over time. This will need to be monitored as intensification and redevelopment of these and other areas will influence the employment capacity and density. Partnerships with the business community will be essential to achieving this.

Overall it is expected there will be a wide range of employment densities and destinations. The Regional Land Transport Strategy accessibility provisions must respond to increased mobility demands.

Accessibility

Transport

A doubling of population will have major impacts on the transport system and major transport improvements are needed. In turn, these will have significant environmental and community implications.

The Regional Growth Strategy seeks to achieve a number of outcomes in relation to accessibility and transport efficiency including more transport choice, high levels of access for all sections of the community, a closer relationship between homes and other activities (work, shopping, etc), managing traffic congestion and better passenger transport.

An effective transport system is a key component of the Growth Strategy and the Regional Land Transport Strategy is the key mechanism in developing that transport system⁹.

An efficient transport system is vital to the prosperity of the Auckland region and to the well-being of Aucklanders. It is integral to meeting many of the other desired outcomes, including safe and healthy communities, urban amenity, employment and business opportunity, and good air and water quality. A transport system is needed which is more sustainable and can cope with the demands of a much larger population.

Transport and land use are closely interrelated¹⁰. The location and nature of land use will be a key factor in determining



the region's transport needs. Transport systems can service growth and development and also facilitate future development patterns.

⁹ For more information, see 'Chapter 5: Supporting the Regional Growth Strategy' of the Regional Land Transport Strategy.

¹⁰ Regional Growth Forum, 'Transport and Land Use in the Auckland Region: Summary of Studies 1991-1998', January 1999

As the population grows in size, it becomes increasingly difficult to expand transportation systems to meet demand, particularly in the urban area. Continued road building, by itself, will not resolve all congestion, nor address the environmental problems such as water and air pollution which are associated with vehicle use. The Growth Strategy therefore envisages a shift in land-use patterns toward a more compact urban form which focuses growth in more intensive mixed-use centres along the northern, western and southern passenger transit corridors, as well as along main arterial roads. This pattern of growth will enable a greater proportion of trips to be made by passenger transport by bringing people closer to the main routes, and increase opportunities for passenger transport access to employment and other activities. It will also enable more people to walk and cycle to a greater range of local services and facilities.

The Growth Concept provides for different types of development in different areas. It recognises the transport requirements and priorities for employment and residential areas (rural, suburban and intensive urban) will differ.

- Car use is growing by around 4% pa.
- Congestion is perceived by the public to be one of the region's most significant problems.
- Vehicle use , especially under congested conditions, is a major source of pollution.
- Total cost of congestion to the region is estimated in the order of \$750 million pa including loss of production and costs of delay in moving goods.

The Growth Strategy addresses the transport needs of the regional community in a variety of ways, including establishing the need for a dedicated passenger transport network, mixed-use and more intensive development in selected areas, and the integration of land use and transport planning.

Regional transport needs

Good transport connections, road and passenger transport, will still be needed between the main parts of the region. Whilst the Growth Concept could lead to a reduction in the rate of growth of vehicle trips (through more intensive and mixed-use development), local and sub-regional communities are unlikely to become completely self sufficient. They will still need access to other parts of the region for business, recreational and cultural reasons and to make social and family connections. Therefore, in some corridors, pedestrian and passenger transport needs will need to take priority, while in others capacity for car and other vehicle movements will be paramount.



Accessibility between different parts of the region can be improved with traffic demand measures and completing and upgrading transport networks to provide alternative routes. This is particularly important to maintain north/south accessibility which is constrained by the need to cross the Waitemata Harbour and construct new approach roads through the built-up area. In the longer term, an additional harbour crossing may be necessary in order to maintain north/south accessibility.

New passenger transport corridors also need to be protected. Thus, the ability to construct a rapid transit network should be protected. (See Appendix 4 for Rapid Transit Network Map).

Servicing employment areas

The Growth Concept recognises the different access needs of different business activities. It enables industrial and commercial development in a range of locations in association with road and rail corridors. The lower density nature of some employment activities, such as light industrial and manufacturing, makes servicing by dedicated passenger transport difficult. But there may be opportunities to provide feeder and mini-bus type services to large employment areas near bus or train stations.

There is further scope in the longer term for employment land to be more intensively used - and this will be encouraged especially where passenger transport links can connect significant regional employment areas with residential areas on the passenger transport network. However, environmental constraints and the nature of some industries may prevent more intensive uses in some areas.

Future roading investment will be required to maintain accessibility on the region's arterial network, and to the ports and airport for commercial users. (See Appendix 5 for map of key roading projects).

The Growth Strategy seeks to provide high levels of access for all sectors of the community, by enabling a closer relationship between home and work and other activities, managing traffic congestion and providing transport alternatives.





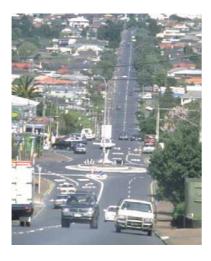
Transport needs of rural and coastal towns and suburban areas

The Growth Strategy seeks to maintain the character and amenity of suburban residential areas and rural and coastal towns while supporting the development of more intensive local employment and commercial centres so people have the opportunity to access local services. In these areas the roading network will need to be developed with a strong design emphasis on safety and connectivity, good facilities for walking and cycling and recognition of the needs of moving traffic and local communities. In addition, bus priority measures will be important in suburban areas.



In greenfield areas, the Growth Concept envisages a range of densities, as well as an identifiable centre and sufficient population to support a range of services. It is important that design at the outset ensures good access throughout the area including good connectivity and encourages passenger transport, walking and cycling and provides links to the regional transport network.

In low density and established areas, **flexible** passenger transport systems can provide a reasonable level of service. Conversely, more intensive areas (and greenfields) can benefit from high-quality **fixed** passenger transport systems.¹¹



Transport needs of intensive urban areas

Transport has an important role in supporting the liveability, economic health and environmental quality of the more intensive mixed-use centres and corridors proposed in the Growth Concept. More intensive development can support a greater range of local services and facilities, increase the opportunity for safe walking and cycling and help support passenger transport by bringing people closer to the main routes.¹¹

Concentrating people and businesses in intensification areas will also result in more traffic in those areas. As the population grows, there will be increasing competition for the use of road space, particularly in the mixed-use centres and corridors.

Careful design will be needed to maintain and improve the liveability of intensive areas and to manage the needs of pedestrians, cyclists, buses, cars and passenger transport systems.

Lifestyle issues will be important in determining people's desire to live in intensive areas and the degree to which they wish to use their cars less and to walk, cycle or use passenger transport instead.¹¹ The Growth Concept envisages many people will consider being close to activities, shops, cafes and possibly work, as well as not having responsibility for a large garden or long daily commutes, as a desirable trade-off for living in a busier environment.

¹¹ Hill Young Cooper Transport Implications of Intensive Urban Areas, February 1999



Passenger transport investment can act as a catalyst for achieving urban intensification and the related desired outcomes.¹² The Growth Forum and Regional Growth Strategy provide a vision and leadership for the region. There is a long-term commitment to manage regional growth and increasing congestion, and a process for more detailed planning at the sector level. There is recognition of the need to align policy and funding for regional infrastructure, including passenger transport¹³. These factors will help ensure passenger transport investment can act as a catalyst for achieving urban intensification. These factors and the role of transport in supporting the Growth Strategy are discussed in more detail in the Regional Land Transport Strategy (Chapter 5).

Significant improvements to passenger transport corridors are needed to support the mixed use, more intensive centres and corridors that the Growth Concept envisages. This could mean improvements to

rapid transit corridors, a central city connection, bus priorities on the major arterials and motorways, upgraded stations, more park and ride facilities, greater use of ferries and more frequent services. Agreement has been reached through the Passenger Transport Action Plan on priorities for the next 10 years and appropriate passenger transport improvements that will service the more intensive areas and help initiate urban intensification.



A key tool for the implementation of the Growth Strategy is the Auckland Regional Land Transport Strategy 1999, of which the key elements are:-

- passenger transport investment where there is heavy demand to a common destination and where separate rights of way or priority measures can be provided, such as the CBD currently or the growth centres and corridors proposed in the growth concept in the longer term;
- investigation of road pricing for reducing congestion levels on the busiest roads at peak periods;
- roading investment, particularly to improve connections between the non-central parts of the urban area to each other
- traffic demand management measures to influence the pattern of demand, such as flexible working hours, tele-working, peak spreading, trip restraint, cycling, walking, car pooling, parking controls, road pricing and land use controls more supportive of mixed-use intensive development.

Also important is the Passenger Transport Action Plan which identifies the passenger transport investments required to help achieve the region's transport and growth objectives.

¹³ Chapter 4 sets out how the Growth Strategy will be implemented, including methods to align policy and infrastructure investment.

PPK Environment and Infrastructure The Influence of Transport Investment on Urban Intensification, February 1999

3

Natural and physical resources

Environment

The Auckland region enjoys an environment of high quality compared with many other urban areas throughout the world. Future development will create further pressures on air quality, water quality, habitats and open space. The desired outcomes and principles in Chapter 2 highlight the importance of the region's natural environment.

The Growth Concept avoids development of the most highly valued and sensitive catchments and coastal environments, and highly valued rural areas, landscapes, bush, habitats and public open space, while protecting or enhancing environmental values in already urbanised areas.



An important input to the Growth Concept was an assessment of environmental values and the level of constraint to development they pose in each water catchment area, relative to each other¹⁴. Every area of the region has environmental values that will be affected by urban development. When only focusing on broad environmental qualities, the most desirable form of urban development is one that restricts the extent of environmental effects by concentrating the effects on already urbanised areas. In accommodating future growth, the Growth Concept is guided by three key considerations:

- leave catchments in as natural a state as possible (bush, pasture, urban), by urbanising partially urbanised catchments before non-urban catchments
- where development must occur in non-urban catchments, consider the lowest valued catchments first and avoid development in the most highly valued catchments and
- where development or redevelopment occurs in existing urban areas, the effects will be managed to protect or enhance environmental values.

While many of the impacts of greenfield development are well documented, impacts of intensification are not. When examining options for accommodating growth, there are two important elements: where and how? First, the location of growth is important as this will impact on a range of environmental values. The second element is how growth is accommodated, such that environmental values are protected and enhanced as a result of urban development or redevelopment. Managing the effects of growth to protect and enhance environmental values will therefore need to involve new methods and techniques (e.g. restoration or enhancement of degraded areas, or structure planning in intensification areas). More intensive development can exacerbate water pollution and have other effects on the environment through the concentration of people and activities. It is vital more intensive development is managed in a manner that minimises or mitigates such effects.

¹⁴ Growth Forum "Natural & Physical Resource Constraints: Stage 2 Evaluation Report", June 1999 See relative environmental constraints map in Appendix 3







Taking this approach, together with consideration of the other desired regional outcomes, the Growth Concept does not anticipate further development in the Waitakere and Hunua ranges. These areas are highly valued as important municipal water supply catchments, high-quality native forest, important terrestrial ecological resources and recreational reserves. They are protected regional parks or local reserves. The foothills in Waitakere City (a countryside living environment) are also a valuable foreground and buffer to the Waitakere Ranges.

Similarly, the Growth Concept seeks to avoid development in the catchments of the most highly valued and sensitive marine receiving environments, where urbanisation would result in considerable water quality and ecological degradation. These include Puhoi, Waiwera, Okura, Awaawaroa Bay (Waiheke), Mahurangi (greater area), Weiti, Turanga, Mangamangaroa, Waikopua, Wairoa and Taihiki catchments - all relatively undeveloped catchments of high quality. While Orewa is also in this category, it has been favoured for urban development because the marine receiving environment is already subject to the effects of urban development.

In managing growth in rural areas, consideration must also be given to the value of productive soils, which are an important natural resource.

The Growth Concept recognises the value of streams as an important urban amenity which is highly susceptible to degradation by stormwater runoff from impervious urban surfaces.

A rural belt has been maintained between the North Shore and Hibiscus Coast that protects rural values and access to the countryside. Greenfield development identified in the Growth Concept does not significantly reduce access to the rural and coastal area.

It is also recognised that in identifying greenfield areas, environmental outcomes cannot be maximised in all instances. Desirable communities and accessibility considerations result in some trade-offs. For instance, low relative catchment constraint areas such as Dairy Flat, Riverhead/Coatsville, Hobsonville and Brookby Valley have been avoided, not specifically for environmental reasons, but because of access, employment and other constraints, such as airfield approaches. On the other hand, development of Hingaia reflects the opportunities in the area for access and employment but the effects on the Manukau Harbour will need to be carefully managed.

Physical infrastructure

Meeting our environmental outcomes is not just about where growth occurs and how it occurs but the infrastructure to support that growth. Much of the region's infrastructure is reaching design capacity and needs upgrading to meet increasing demand and higher environmental standards, particularly in relation to water quality. The Growth Strategy assumes there will need to be new and improved infrastructure to accommodate growth to 2050. Over \$7 billion will need to be spent in the first 25 years of the strategy's lifetime for water supply, drainage and transport alone - a cost to the collective ratepayers (or consumers) of the region of at least \$140 million a year for capital expenditure and \$160 million a year for operation and maintenance (ASP II). This does not include the cost of developing private land for new subdivisions or construction, or other urban infrastructure such as open space, energy, communications or social services. It should be noted that not all costs for infrastructure are growth related. Some expenditure is necessary to meet higher environmental standards for current residents or to catch up with deferred work.



Table 6:	Some estimates of	regional	infrastructure costs

Infrastructure	Cost
Bulk water supply	\$160 million
Local water reticulation	\$270 million
Mangere Wastewater Treatment Plant upgrade	\$400 million
Retrofitting works for stormwater	\$2,500 million
Western, northern & southern satellite drainage plants	\$630 million
Integrated Regional Passenger Transport System	\$745-1520 million
Future third harbour crossing	\$ 950 million

Indicative capital cost estimates only. Sources: ARC, Regional Land Transport Strategy, June 1998; ARC, Auckland Strategic Planning Model: Growth Options 1991-2021 - Second Round Summary Report, July 1997



Comparison of costs of development alternatives (intensification and greenfield development) found costs are not significantly different in quantum over a period of 30+ years the issues were more who pays and when (ARC, ASP II Report, July 1997). Some growth alternatives require major investment now with benefits in the longer-term, others require longer term major investment, while yet others can be paid for as growth occurs.

The imperatives of certainty, competitiveness and focused public spending will necessitate co-ordination of planning for urban development, more effective decisions on urban infrastructure investments and innovative use of pricing and financing. In particular, the provision of regionally significant infrastructure prior to development will require more certainty and forward planning by the Growth Forum and infrastructure providers. These issues suggest there is a need to find a range of ways to pay for new and improved infrastructure, such as development levies. The costs (both private and public) of future growth are enormous and the region will have to pay - through a mixture of rates and user charges.

The strategy and Growth Concept will assist with the effective long-term planning of regionally significant infrastructure by providing a clear vision as to where growth will be accommodated. It will provide certainty as to applicable environmental standards and enable the scale, timing and staging of growth to be understood. This will allow infrastructure providers to make more confident, efficient, timely and co-ordinated investment decisions.









IMPLEMENTING THE STRATEGY

Implementation framework and themes

The Regional Growth Strategy emphasises an integrated approach to the long-term management of the Auckland region. The strategy brings together a wide range of important policy directions for the region, which encompasses a partnership approach between Growth Forum members and close consultation with their stakeholders and communities.

KEY THEMES

There are five key themes within the Regional Growth Strategy which set the direction for its implementation:

- An emphasis on *partnership and relationships* within the process of achieving the stated regional outcomes.
- Recognition of the need for *alignment* of policy and funding over time across Regional Growth Strategy partners and across geographical areas.
- Recognition that good growth management requires both a clear *long-term* (50 years) *vision* and identified *short-term* (1 to 10 to 20 year) *actions* to achieve the regional outcomes.
- An emphasis on a *wide* and *adaptable range of implementation measures* to achieve regional outcomes. This includes both statutory (LGA, RMA, LTA) and non-statutory measures to achieve an agreed balance of certainty for regional guidance and flexibility for local implementation.
- An emphasis on creating a *living strategy* to keep the regional vision alive over time.

The approach requires that a co-ordinating body such as the Growth Forum continues to exist to ensure the above themes and integrated decision making remain paramount.

The approach also requires that a range of mechanisms from both statutory and non-statutory sources be used to implement the strategy. The lead implementation documents will be the strategy itself; the Regional Policy Statement and the Auckland region territorial District Plans (RMA); the Regional Land Transport Strategy and associated documents (LTA); and Local Government Act strategic and funding policy documents.

Structure of Chapter

This chapter outlines how the region will implement the strategy and who the main players are in the implementation process. This is discussed within the framework of the five key themes:

- Partnership and relationships will outline the primary partners in the process, their relationships and roles, and their relationships with other policy and implementation stakeholders.
- Alignment will describe the primary policy documents to be aligned and introduces the concept of criteria to guide growth and regionally significant infrastructure.

- Vision and action will outline the process and structure to ensure commitment to the vision and immediate actions for its initial implementation.
- Adaptable mechanisms will describe the toolbox available to implement the strategy outcomes and establish regional criteria to guide the provision and release of development capacity and provision and funding of regionally significant infrastructure.
- A living strategy describes measures to keep the vision alive, including a monitor of ongoing regional trends, an annual performance review of achievement toward regional outcomes and a process of ensuring regular review of strategy outcomes and processes.

Partnership and relationships

Forum relationships

Effective implementation of the Growth Strategy requires a strong partnership between the primary Growth Forum parties. The Growth Forum is presently a standing committee of the ARC. Over time it is expected that this role will change through structures and processes associated with the Growth Strategy and that the primary parties to the Regional Growth Forum will have similar standing.

Regional Growth Forum: Primary partners





Successful implementation of the strategy also requires close consultation and co-operation with other parties and, in some cases, a more formalised relationship. The Growth Forum will thus need to invite others to the table (such as Transfund, Transit, Infrastructure Auckland, Watercare Services, Chamber of Commerce and other business and development interests, central government agencies, and other regions where appropriate) to achieve the strategy's desired outcomes. Strengthening the links and special relationship with iwi is also an important partnership in this regard. The Regional Growth Forum has adopted implementation mechanisms that incorporate processes and methods which emphasise the primary partnership and ongoing commitment to the strategy. This includes partners participating in an open and transparent way within the Growth Forum. At the same time they will actively demonstrate how they are implementing the strategy vision, outcomes and principles through involving other major regional development stakeholders in the process.

Some decisions will be made at Growth Forum level, such as reviewing the strategy outcomes and principles, as will setting priorities for regionally significant infrastructure and co-ordination of the provision of this infrastructure with growth. Other decisions are best made at the local area or combined local area (sector) level. Sometimes progressing the strategy at the local level will be best achieved through regional sector-based relationships and an understanding of the issues involved.



Forum relationship processes

- A Memorandum of Understanding (MoU) between the primary Growth Forum partners will be prepared and signed as soon as possible after adopting the strategy. This MoU will emphasise commitment to the vision, outcomes and principles of the strategy.
- Further MoUs with other major regional Stakeholders (see Table 7) may be progressively prepared and signed once the primary MoU is in place.
- Regional iwi will be further consulted on how they wish to be involved in implementing the strategy.
- The Growth Forum will set initial priorities for co-ordinating and funding regionally significant infrastructure in relation to the first 10 to 20 years of implementing the Growth Concept. This will be regularly updated.
- The Growth Forum will encourage sector-based planning to accommodate growth at the local level in accordance with the outcomes and principles of the strategy.
- The Growth Forum will encourage the following organisations and bodies to accept the strategy implementation responsibilities listed below. In addition, the Growth Forum will encourage these organisations to give ongoing feedback to the Growth Forum primary partners on how the Growth Strategy and associated plans and strategies influence the planning and operations of the associated partners.



Table 7:	Primary parties	(Regional Growth	Forum Partners)
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Party	Responsibility
Growth Forum	 Co-ordination of strategy and sector or local area-based work Monitor/review strategy Advocate for the strategy
ARC	 Participate in Growth Forum Service Growth Forum work Prepare, change and review Regional Policy Statement Prepare regional plans as appropriate Development of Regional Land Transport Strategy and associated documents Purchase passenger transport services
Territorial authorities	 Participate in Growth Forum Participate in sector-based implementation plans/local area strategies Prepare district plans, local area plans and sector-based plans in accordance with outcomes and principles of the strategy Fund local infrastructure in accordance with outcomes and principles of the strategy and associated local area and sector-based plans

 Table 8:
 Associated parties (Major Regional Stakeholders)

Party	Responsibility
Infrastructure Auckland	 Allocate funding which is not inconsistent with the Growth Strategy (for aspects of transport and stormwater improvements)
Other funding bodies (as Transfund)	Take into account Growth Strategy when deciding on investment priorities
Infrastructure providers (as Watercare)	Co-ordinate infrastructure provision with Growth Strategy and local area and sector-based strategies
Central government policy agencies as education or health)	 Take into account strategy when preparing policy Co-ordinate social infrastructure provision with Growth Strategy and local area or sector-based strategies
lwi	Take into account strategy whan preparing policy
Private sector (developers, business associations, land owners, transport	 Participate in development of the strategy and in local area or sector-based strategies Take interaction strategy when planning and investing in
operators)	Take into account strategy when planning and investing in development and business projects

• The Growth Forum will set up processes to monitor, review and, where necessary, change the vision, outcomes and principles of the strategy.

Examples of successful regional relationships include:

- a regional postion on road reform
- regional advocacy for retention of ARST assets
- a regional response to the 1994 bulk water crises

Alignment

One of the significant factors in implementing the strategy will be the alignment of regional growth policy and capacity with planning and expenditure on regional infrastructure. Some existing and planned infrastructure is already aligned to the Regional Growth Strategy direction. In other instances, new or upgraded infrastructure will need to be provided to enable successful implementation of the strategy.





Provision and funding of infrastructure

Areas with an immediate need for infrastructural improvement are transport (public transit and roading), sewage collection and treatment, stormwater management, water supply, electricity supply and public open space. A shortfall in investment over many years is clearly apparent with examples of rapidly increasing road congestion, the degradation of parts of the region's natural environment from



inadequate sewerage and stormwater systems, inadequate or unreliable supplies of water and power, and region-wide under-provision of schools. This shortfall was exemplified in the 1994 bulk water crisis and the 1998 central area electricity crisis.

Much physical infrastructure will be funded by service delivery companies such as Watercare, or by private companies such as Telecom, or through development charges to private developers. Other major physical and social infrastructure will require a large proportion

of public funding from central government agencies, local authorities and possibly Infrastructure Auckland (for aspects of transport and stormwater improvements). Public investment is especially likely for achieving substantial transport improvements, upgraded stormwater management and additional procurement of significant areas of public open space as well as significant social infrastructure provision such as education and health facilities.

Increasingly development impact or user charges are applied to locally based development infrastructure. Public agencies are also increasingly required to fully disclose the amount and funding sources required for public infrastructure investment. These trends will ensure more is known about the sources and equity basis of infrastructure funding in the future. Examples of current/proposed regionally significant infrastructure projects and possible funding sources

- North Shore Bus Rapid Transit (Transfund/TAs/IA)
- Northern motorway extension (Transfund)
- Western transit corridor upgrade (Transfund/IA)
- State Highway 18 (Transfund/TAs)
- State Highway 20 (Transfund/TAs)
- Project West Wastewater solution (Watercare/user pays)
- Waikato pipeline (Watercare/user pays)
- Project Manukau WTP upgrade (Watercare/user pays)
- Project Rosedale wastewater upgrade (North Shore/user pays)
- Key stormwater management projects (TAs, some IA)
- Bulk electricity upgrade (Transpower/user pays)
- Auckland central hospitals consolidation (Department of Health)

Aligning policy and investments

Whatever the source of funding, achieving the outcomes for the Growth Strategy will require commitment and co-operation to align public policy with physical and social infrastructure investment over time. This will include alignment of key sources of public funding (as rates, taxes) with policies for user charges systems and for measures to charge development impact or similar infrastructure pricing fees. In this context there may be a need for policy and investment adjustments between funding infrastructure for intensification and greenfields development to reflect the public benefit aspects of some developments.

Table 9: Aligning policy and investment of Growth Forum Primary Partners

All documents to have a consistent approach to Regional Growth Strategy issues

- Regional Growth Strategy
- Regional Policy Statement
- Regional plans
- Regional Open Space Strategy
- Regional Recreation Strategy
- Regional Land Transport Strategy
- Passenger Transport Action Plan
- Regional Stormwater Strategy
- Catchment management plans
- Territorial growth strategies (eg. ACC Liveable Communities)
- District plans
- Iwi management plans
- Structure/area/corridor plans

• Funding policy statements

Strategic plans

- Long term financial strategies
- Annual plans
- Asset management plans

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Guidance to infrastructure providers

Funding agencies such as Transfund or Infrastructure Auckland need clear guidance as to where and when major infrastructure investments will be required. The strategy establishes a set of regional critieria to guide the provision and release of regional development capacity and associated provision and funding of significant infrastructure (page 66). These criteria are concerned with the co-ordination and facilitation of Growth Strategy-related development and projects



and are not to be viewed as compromising local governance or corporate responsibilities.

Alignment mechanisms

Growth Strategy measures to enable regional policy and funding alignment over time include:

An agreement to region-wide policy and funding alignment (including Growth Strategy-related funding disclosures in annual plans) within the Regional Growth Forum Memorandum of Understanding (page 66).



- Regional criteria to guide the provision and release of regional development capacity and provision and funding of regionally significant infrastructure (page 66).
- An agreed list of current regionally significant infrastructure to be reviewed regularly by the Growth Forum (in Growth Forum MoU to be reviewed through the annual performance review and five-yearly strategy review - page 75).

In addition there is the opportunity for Regional Growth Forum partners to develop agreements to align local area and infrastructure servicing policy and funding measures over time. This is a critical stage of strategy implementation as much infrastructure is developed through local area plans and strategies.

For example, local infrastructure provision could be guided by:

- a combined TA agreement around the release of the combined parties greenfield or intensification capacity within the Regional Growth Strategy planning period
- a combined TA agreement with service provider agencies to ensure provision of co-ordinated infrastructure in priority development areas
- ➡ a combined TA agreement to disclose all local area growth related funding in annual plans

Examples of current projects with policy alignment

These involve multiple stakeholders with the opportunity to also align funding measures over time

- Western Corridor Study (ACC/WCC/ARC)
- Southern Corridor Study (MCC/PDC/FDC/ACC/ARC)
- Central Area (ACC) Passenger Transport Facilities (ACC/NSCC/WCC/MCC/ ARC)
- New Lynn Nodal Centre Study/Development (WCC/local business and community)
- Development East Tamaki Concept Plan (MCC/local community)
- Liveable Communities Strategy (ACC/local community)

Vision and action

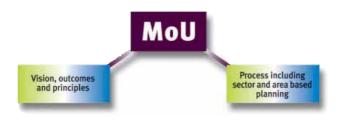
Once there is agreement to the Growth Strategy vision, outcomes and principles through the Growth Forum MoU, the next stage will be to encourage the development processes to manage the short-term details of growth within the long-term vision. This will involve identifying immediate actions to implement the first stage of the Growth Concept, while setting up processes to manage unresolved and new issues which could inhibit effective implementation.

Initial implementation methods to achieve this are outlined below.

Memorandum of Understanding (MoU)

The Memorandum of Understanding between the primary parties will include the following:

- A commitment to regional partnerships
- A commitment to the vision, outcomes and principles outlined in the strategy
- A commitment to the roles and responsibilities of the partners as outlined in the strategy
- A commitment to work as a region in setting criteria and priorities to co-ordinate growth including the provision of regionally significant infrastructure
- A commitment to a sector-based approach to prepare detailed growth management plans or local area strategies
- A commitment to align policy and funding instruments within the strategy and sector-based plans/local area strategies over time
- A commitment to regularly monitor and review the strategy



Regionally-based planning

The Growth Forum, now established under the Local Government Act 1974, will continue to exist to co-ordinate the overall form and direction of growth in the region with the provision of regionally significant infrastructure. The Growth Forum will also be responsible for processes to ensure regional priorities are met and for monitoring and reviewing the Growth Strategy, including consulting with major regional stakeholders. In addition, the Growth Forum will continue its role of a regional advocate on growth issues to central government.

The ARC will continue its regional planning function and ensure regional documents including the Regional Policy Statement, regional plans, Regional Land Transport Strategy and so on are consistent with the Vision, outcomes and principles of the Growth Strategy.





Sector-Based Planning

The strategy emphasises a sector-based planning approach to provide detail on how it will be implemented at a local level. A sector area planning response will ensure the strategy is more flexible in providing opportunities to accommodate a range of living and employment situations.

The MoU commits the primary partners to the strategy to develop plans in accordance with the vision, outcomes and principles of the strategy. The principles of the strategy require that sectors each take their share of growth, and ensure there are opportunities to accommodate a range of living and employment styles in each sector area. Sector-based planning can take a variety of forms. The strategy is not prescriptive on either the form or content of local planning, provided that local or sector-based strategies and plans are referred to the Growth Forum for endorsement within the strategy vision, outcomes and principles and the MoU. This is to ensure policy co-ordination across the region. Where there are debates amongst the parties on how growth may be accommodated, then the Growth Forum could play a mediating role.

Sector-based planning will not replace TA responsibilities for preparing and administering their district plans, long term financial plans, annual plans or other duties. Rather the approach recognises many regional issues are more effectively dealt with at a sector level.

Sector-based strategies and plans are expected to include:

- How much and where growth will be accommodated in a sector within the strategy planning period
- What type and form of growth will be accommodated
- What infrastructure needs to be provided to lead and sustain this growth, and how this infrastructure will be funded, taking into account the regional criteria and priorities for regionally significant infrastructure
- The sequencing and timing of growth and infrastructure within the strategy planning period
- The actions that need to be taken to accommodate the growth, such as:
 - Community consultation
 - Tangata Whenua consultation
 - Preparation of strategies and plans such as local structure/area/corridor plans or comprehensive catchment plans prior to the release of development capacity
 - Changes to regional policy statements, regional plans and other regional instruments
 - Changes to district plans, long term financial plans/strategies, annual plans or other local planning and funding documents
 - Securing funding for significant infrastructure required to implement the strategy/plan

What is a sector and sector-based planning process?

1	There are several possible ways to Geographic: Passenger transport related:	o create a regional sector, for example: North, West, Central, South Northern corridor, North western corridor, Southern corridor
1	A sector-based planning process of Informal: Semi-formal: Formal:	can take several forms, for example: task forces, joint working parties Memoranda of Understanding legal agreements
1	Sector-based plans can also take a Local area strategies: Corridor strategies:	a variety of forms, for example: for agreed geographic or issue areas such as rural strategies for agreed intensification and transport issue- related plans (these can also be a local area strategy)



Immediate sector-based work:

The Regional Growth Forum will facilitate the following sector-based work to progress the implementation of the strategy over the next three years:

Western passenger transport corridor: ACC, WCC and the ARC to complete planning for a rapid transit system, integrated with intensive land-use activities, along the western transit corridor within a 12-month timeframe. This project will be implemented through relevant district plans, LTF strategies, and the Regional PT Action Plan and will also include necessary local stormwater and wastewater upgrading.

Southern passenger transport corridor: ACC, MCC, PDC and FDC to complete planning for a rapid transit system, integrated with intensive land-use activities, in the southern sector within a two-year timeframe. This project will be implemented through relevant District Plans, LTFS the PT Action Plan and will also include necessary local wastewater and stormwater upgrading.

Northern Sector Workshops: NSCC, ACC, WCC, RDC and ARC to continue discussions on the implications of continuing growth pressures in North Shore, Rodney and Waitakere on local planning issues including the provision of housing, employment public open space and transport facilities within a three-year timeframe. This could result in changes to relevant district plans and LTF strategies.

North-western sector taskforce: ARC, WCC and RDC to progress long-term planning for future urban growth and rural protection in the northern part of Waitakere City and around Kumeu and Hobsonville within a two-year timeframe. This process will include resolving wastewater, stormwater and transportation issues.

Southern sector taskforce: PDC, MCC, FDC and ARC to complete planning for resolving joint growth-related planning issues including wastewater provision and possible adjustments to the southern Metropolitan Urban Limit. Resolution of the MLs issue to be initiated within a 12-month timeframe.

Rural taskforce: Forum partners undertake further work on the issues of greenbelts, countryside living and rural amenity.

Local-based initiatives

Regional and sector-based strategies and plans to implement the Growth Strategy are both supported by and actioned through a wide range of local initiatives.

Examples of recent and forthcoming local actions include:

- Auckland City: Liveable Communities 2050 Strategy (1999)
- Waitakere Urban Villages Strategy (1998)
- Manukau Development East Tamaki Concept Plan (1998)
- Rodney District Development Strategy (1999)
- Papakura District Central Area Structure Plan (forthcoming 1999/2000)
- Franklin District Strategic Growth Plan (forthcoming 1999)



Adaptable Mechanisms

Adaptable mechanisms means being able to select a variety of appropriate techniques to implement the strategy over its 50-year timeframe.

Range of measures

There are a large range of mechanisms from both statutory and non-statutory sources which can and will be used to implement the strategy. Some techniques are the responsibility of the Regional Council, others the responsibility of city and district councils.

The Growth Forum operates under a philosophy of consensus and co-operation. Mechanisms to implement the vision, outcomes and principles of the strategy need to reflect this and the five key themes identified for implementation - partnership and relationships; alignment; translating the vision to action; adaptable mechanisms; and a living document.

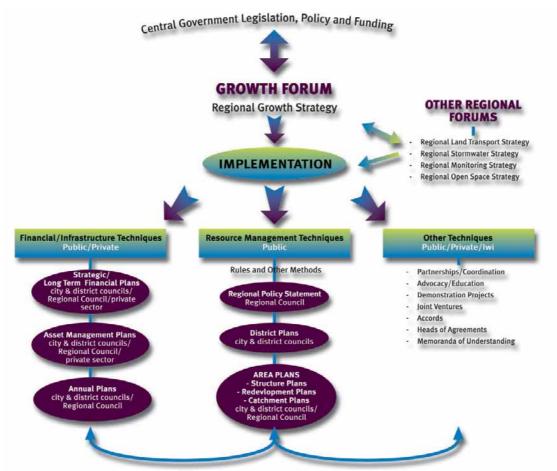
In the past, regional growth management strategies have relied on statutory mechanisms such as the regional policy statement (RMA) for their implementation. The continuing role of statutory mechanisms is also envisaged for Growth Strategy implementation. Changes to the Auckland Regional Policy Statement including managing extensions to the Metropolitan Urban Limit, and to district plans to reflect these changes, will be necessary. Other statutory mechanisms will include the Regional Land Transport

Strategy (Land Transport Act) alignment with the Growth Strategy on the regional land use - transport relationship and the Local Government Act documents (strategic plans, funding policy statements, long term financial strategies, asset management plans, annual plans) alignment with the Growth Strategy direction at both the regional and city and district levels.

The Growth Strategy, however, cannot rely on RMA and other statutory processes to achieve the vision and outcomes of the strategy. Successful implementation will also require a range of non-statutory measures. Over time these will include economic instruments such as road pricing, strategic use of public funds to leverage certain private investments (eg. increased intensification in transit corridors), emission or effluent charges, non-compliance fees, development impact fees and so on. They will include initiatives with the private development sector such as the Manukau Botany Downs development and the Waitakere West Harbour development. They will also include regional and local practice and design guides to assist designers and developers to implement Growth Strategy outcomes. Many of these initiatives may incorporate measures such as Memoranda of Understanding or accords to align policy, development and service provision with market and community preferences.

A number of Growth Strategy aligned projects that will incorporate a wide range of implementation mechanisms are already under way such as the Waitakere Urban Village Strategy, the Auckland Liveable Communities Strategy, the Manukau Development East Tamaki Concept Plan and the transportation-land use studies for the Western and Southern corridors. These projects also involve widespread public consultation and workshop measures.





Key implementation criteria

To achieve policy and funding alignment on the agreed Growth Strategy outcomes and principles outlined in Chapter 2, a set of implementation criteria has been adopted to guide the provision and release of development capacity across the region. These criteria will apply to the provision of both development land and associated funding of regional significant infrastructure. This mechanism will give guidance on the regional development direction within the strategy while enabling flexibility within the individual districts and sectors to use a wide range of implementation measures.



The following criteria (in addition to the desired regional outcomes and principles for evaluating growth in Chapter 2 of the strategy) will guide the co-ordination of regional growth with the provision and funding of regionally significant infrastructure:

- That adequate land supply and infrastructure capacity exist for the urban development market (including sub-markets) to operate within a 15 to 20 year planning period.
- That the release of new development capacity within greenfields and redevelopment areas (such as intensification centres and corridors) as determined through local area and sector-based planning processes will only occur once agreement has been reached with infrastructure providers on when and how to provide regionally significant infrastructure in these areas.
- That the funding and provision of regionally significant infrastructure should not promote growth patterns that are inconsistent with the vision, outcomes and principles of the Growth Strategy.
- That priorities for the funding of regionally significant infrastructure take into account the following specific Growth Strategy needs:
 - the integration of rapid transit investments with transit-supportive land use developments along the western, southern and northern transit corridors in the initial planning period and within other transit corridors in the longer term;
 - (ii) the upgrading of stormwater and wastewater infrastructure within existing urban areas to provide for intensification opportunities. This includes meeting existing shortfalls in infrastructure where necessary;
 - (iii) the provision or upgrading of social infrastructure to service proposed new development areas (both greenfields and intensification areas).
- That the city and district councils will ensure their LTF strategies, funding policy statements, annual plans, asset management plans and district plans recognise:
 - (i) that a consistent approach to the funding of capital expenditure is required to ensure a comparable and equitable assessment of development costs across the region;
 - (ii) that funding for infrastructural services for new development areas will generally be the responsibility of the developer. This may vary where existing residents and businesses benefit from the new infrastructure;

- (iii) that funding for infrastructural improvements to meet the increased demands of new development in redevelopment areas should take into account the need to share costs fairly between existing and future residents and businesses, and the costs associated with covering existing shortfalls in infrastructure investment.
- That private, physical and social infrastructure providers and funding agencies be encouraged to provide and fund regional infrastructure in a manner consistent with the vision, outcomes and principles of the Growth Strategy.

These criteria are critical for implementing the Growth Strategy, but are not sufficient to ensure implementation of all the strategy outcomes. Once key development areas and associated regionally significant infrastructure have been agreed, other processes need to occur to ensure development within the strategy outcomes, principles and priorities. These include: catchment, structure, corridor and other integrated issue area plans; district plan rezoning; the funding and provision of community facilities such as public open space, health and education facilities as well as amenity and design measures. All these mechanisms will contribute to effectively bring about the vision as outlined in the Growth Strategy.





Implementation mechanisms

Over time the range and appropriateness of mechanisms to implement the Growth Strategy will vary. Some of the implementation techniques which are now available or proposed to initially implement the strategy are outlined below and linked to the desired outcome sought. A column of additional future mechanisms, should significant policy and legislative changes occur, is also attached to each outcome area.

Table 10	Imp	lementati	ion mec	hanisms
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OUTCOME	EXISTING/ PROPOSED MECHANISMS	POSSIBLE FUTURE MECHANISMS
All outcomes	 Memoranda of Understanding between RGF partners (including negotiated priorities for regionally significant infrastructure every 5 years) Sector understandings (growth management) Regional Growth Strategy Regional funding mechanisms Regional Monitoring Strategy 	 Heads of agreement (RGF partners) Sector agreements (growth and infrastructure planning) MoU (other major stakeholders) Increased consultation and co-operation with stakeholders including central government, Tangata Whenua & infrastructure providers Growth Strategy Funding Disclosure
	Education and advocacy	Iwi management plans
Desirable communities Social infrastructure 	 District plans (zoning) Consultation and co-operation with central government (eg. health/education issues) Policy alignment with LTFS, AMP and APs Regional Recreation Strategy 	• Growth Strategy Funding Disclosure
• Housing choice and affordability	 District plans (zoning, incl. mixed use) Structure/area/ corridor plans 	 Direct Public Supply programme Public sector partnerships with private developers/community housing groups Increased developer involve- ment in strategic planning
• Amenity and design (includes heritage)	 Regional Plan Coastal District plans Structure/area/corridor plans Public workshops (as charrettes) Design guides Public investment in civic design 	 Increased guidance to private developers (e.g. Design Advisory Service) Increased community involve- ment in design programmes Increased public investment in civic design

Table 10: Implementation mechanisms

ουτςομε	EXISTING/ PROPOSED	POSSIBLE FUTURE
	MECHANISMS	MECHANISMS
Accessibility Transport 	RLTS Regional PT Action Plan	Growth Strategy Funding Disclosure in APs
- nansport	Transport Policy Alignment with LTFS, AMP, APs	Corridor plans to align PT and intensification
	Consultation and co-operation with central government	• PT supportive land use guidelines
	 Direct measures - TDM, busways and/or rail, pedestrian and bikeway improvements 	 Strategic use of public funds to leverage private investment to enhance PT systems
	 IA funding (selected transport projects) 	Protection of future PT corridors
		Congestion pricing
Business and employment opportunities	 District plans (zoning for employment/mixed use) Structure/area/corridor plans RLTS policies and projects 	 Increased business involvement in strategic planning (structure/ corridor/area plans and RLTS process)
Natural and physical resources		
 Natural environment (water and air quality, habitats, coastal environ- ment, public open space) 	 RPS (including MUL provisions) Regional Plan: Coastal Regional Land, Air, Water Plan (LAW) Catchment management plans District plans Structure/ area/ corridor plans RSW Strategy Regional Open Space Strategy Regional Recreation Strategy DOC estate management plans Policy alignment with LTFs, AMP, APs 	 Increased economic instruments petrol taxes non-compliance fees congestion tolling emission/effluent charges tradeable pollution rights Conservation zoning Environmental liability Growth Strategy Funding Disclosure in annual plans
Physical infrastructure		
(water supply, wastewater treatment, stormwater management, telecom- munications, waste man- agement etc)	 District plans (including financial contribution policy) Alignment of policy with LTFs, AMP, AP IA funding (selected stormwater projects) 	 Development impact fees & financial contributions Growth Strategy Funding Disclosure in APs Alignment of public policy with infrastructure provider AM plans

Initial implementation

The initial implementation of the Growth Strategy will rely on several key mechanisms many of which are already in place. These include:

Metropolitan limits

Metropolitan Urban Limits (MLs) are used in the RPS as a technique for minimising the adverse



effects of urban development on regionally-valued resources. They were designed primarily to distinguish the major urban areas of the region from non-urban areas for the following reasons:

- to protect identified most highly valued and sensitive environmental areas
- to limit the extent of adverse environmental effects with new urban development
- to promote an urban form which maximises the opportunities for access
- to protect significant regional infrastructure such as airports, defence land and sewage treatment plants.

The MLs have been extended in the Regional Growth Strategy and a change in the Auckland RPS will need to be made at some stage. The timing of this will be subject to Growth Forum agreements on the prioritisation of regionally significant infrastructure, and it is envisaged that the MLs' extension will occur progressively over time through the Growth Forum MoU process. Oversight of the MLs is the responsibility of the ARC which will also be responsible for monitoring their effectiveness.

The Regional Land Transport Strategy

Integration and co-ordination of the RLTS and associated documents with the Growth Strategy is crucial to the implementation of both strategies. This is because of the interactive relationship between land use and transport infrastructure where land use is a factor creating travel demand while the transport network is a factor generating land-use patterns.



The RLTS will need to continue to signal appropriate transport network improvements to service and facilitate the form and direction of development proposed in the Growth Strategy. This is especially important for the intensification measures identified where passenger transport improvements are indicated to both initiate intensification investment and service the increased densities. The Passenger Transport Action Plan is an important signal in this regard.

Infrastructure investment

Infrastructure planning and funding is a critical factor to implementing the strategy outcomes and priorities. Some future infrastructure is already planned and some will be funded directly from user charges. There are many others, however, which do not have adequate funding and which are essential for the implementation of this strategy.



Some large-scale projects such as an improved passenger transport system perhaps including rapid transit, new wastewater treatment plants, extensive stormwater management improvements, and any future additional harbour crossing or other major transport network additions are capital intensive. Funding for these projects could come from a variety of sources including rating, road user charges, Transfund and Infrastructure Auckland (for selected stormwater and transport projects).

It is the role of the Growth Forum through the Memorandum of Understanding agreement to prioritise the regionally significant infrastructure required to facilitate implementation of the Growth Strategy. Part of this process will be to facilitate improvements to the existing infrastructure system where the investment backlog in maintaining and upgrading these systems is constraining effective implementation of urban area centre and transit corridor intensification. This prioritisation process will be reviewed regularly.

Local government strategic and financial planning processes

The ARC, and city and district councils all produce strategic (including LTFS), asset management and annual plans which detail where and when funding will be used to improve and develop infrastructure and services throughout the region.

These strategies and plans are important mechanisms to ensure essential infrastructure and service improvements are funded in accordance with the Growth Strategy outcomes, priorities and principles and the current Growth Forum Memorandum of Understanding agreement on prioritisation of regionally significant infrastructure. Growth Strategy funding disclosure will be an important mechanism in aligning these processes. These processes are also important techniques for consulting with constituent citizens and ratepayers and public feedback can be incorporated into the strategy review process.

During the initial planning periods (10 to 20 years) it is anticipated that the Growth Forum primary partners will progress the use of economic instruments such as financial contributions or road pricing as mechanisms for managing regional infrastructure investments.





Integrated planning processes

Several existing processes utilise the integrated and co-ordinated planning approach mooted to implement the Growth Strategy.

Catchment management plans identify and describe characteristics of a water catchment in which resource management problems already exist or may occur as a result of proposed changes. It is the ARC's responsibility to co-ordinate these plans prior to, or in conjunction with, greenfield structure plans with the objective of mitigating any adverse effects. In the future it is intended this process will be extended to include co-ordinating the catchment plans with intensification corridor and centre plans.

In many city and district councils

structure plans are now developed prior to the urban development of a new greenfield area. Structure planning is the process by which a number of environmental and urban objectives are integrated to produce a plan which guides development so the form and intensity of development is appropriate to the character of the land. In the future this process will be extended to all major development areas including intensification corridors and centres (through *area, centre or corridor plans*) to ensure the strategy outcomes are met and the objectives of major stakeholders integrated. This is not only to ensure appropriate environmental mitigation takes place but also to design new and redeveloped areas in a manner which provides a range of housing types, encourages public transport, walking and cycling, and makes provision for sufficient public open space, education, health and other community facilities. It is expected that the first intensification centre/corridor plans will be aligned with the three major PT corridors outlined in the 1999 RLTS.

The city and district councils of the region are responsible for co-ordinating and developing these structure/area/centre/corridor plans. The ARC will produce regional practice and design guides to set the Growth Strategy context to these processes. Territorial authorities can also produce design guidelines within the district plan process to help implement strategy outcomes at the design and build stage for structure/centre/corridor plan areas and general development zones. Other non-statutory mechanisms can also be used to this end such as public charrette workshops, demonstration projects or design advisory services.

Consultation, advocacy and education

Constant and effective advocacy and consultation will be required to help implement this Growth Strategy which promotes a change in direction for the Auckland region over the next 50 years. The Growth Forum and its individual members and councils will especially need to promote the strategy to:

- central government and its policy-making agencies
- infrastructure providers
- regional iwi
- business interests
- building and development companies

Ultimately the Growth Strategy will only be realised if the general public, developers and major stakeholders support this future vision for the region. City and district councils will thus need to constantly advise their citizens of their own strategies and ensure direct public involvement in centre and corridor strategies, structure planning, charrette workshops and other growth management processes. This is especially important in areas which will undergo more change than others over a 50-year period. The Growth Forum also encourages the regional community to give feedback on how the strategy is influencing local areas and general regional amenity and accessibility.



A crucial part of the Regional Growth Strategy is the concept that the document is a living strategy that will change as circumstances change. These circumstances may occur as a result of ongoing central government policy reform such as from road reform proposals. It may also occur as a result of significant market shifts, or from comprehensive monitoring which indicates that the strategy outcomes are not being achieved over time.

Some change is hard to predict but the Growth Forum needs to be able to adapt to changing circumstances should they arise.

A process will be developed to monitor, at a regional level, all the strategy principles and outcomes as outlined in Chapter 2.

The Growth Forum Monitoring Strategy

The results of an effective monitoring programme will be used to assess whether or not the objectives of the strategy are being met and whether changes need to occur when the strategy is reviewed. Monitoring will be carried out at several levels, including by territorial authorities and other parties. The regional monitoring programme will focus on four main areas:

Regional growth

This will be mainly concerned with the physical growth of dwelling units and commercial developments in the region, but also with the location of future employment, the amount of mixed-use developments and the relationship between growth and the regional transport system. The primary source of data will







be building consents, the business directory and the five-yearly New Zealand census. Selected indicators will be monitored on an annual and five-yearly basis. They will indicate whether or not growth in households, jobs and investment is locating in the places identified in the Growth Concept, and whether adequate capacity exists to accommodate this growth.

Social

These indicators will show whether key social infrastructure is following growth and also the regional community response to the changes occurring as a result of the Growth Strategy. Key indicators will monitor:

- Housing affordability, quality and diversity
- Personal health and safety
- The provision of social infrastructure such as public open space, open space for recreation needs, community, educational and health facilities
- Urban amenity in changing residential, employment and mixed-use areas
- Community acceptance of the strategy

Transport

These indicators will monitor the primary outcome of accessibility and include:

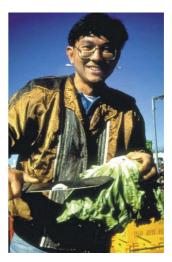
- Transport characteristics of intensified areas and length of journey to work
- The level of access to opportunities including work, home, business and leisure
- The level of transport choice for all sectors of the community
- The efficiency of the transport system in terms of vehicle usage and energy consumption

Environmental

These indicators will assess whether the key environmental outcomes and principles have been met and also measure whether the strategy has been successful or not in avoiding, mitigating and enhancing the natural environment of the Auckland region. They will include measures on:

- Ecosystem health and water quality in both urban and rural areas
- Open space requirements for environmental protection purposes
- Coastal protection, use and development
- Air quality





An annual monitoring and performance review

While it is proposed that there is a full review of the Regional Growth Strategy every five years, it is imperative that more regular discussions are held between the Regional Growth Forum and key stakeholders. A monitoring and performance review will take place annually among the Growth Forum partners preferably before the local authorities' annual plan review. New Zealand Census monitoring indicators can only be assessed every five years.

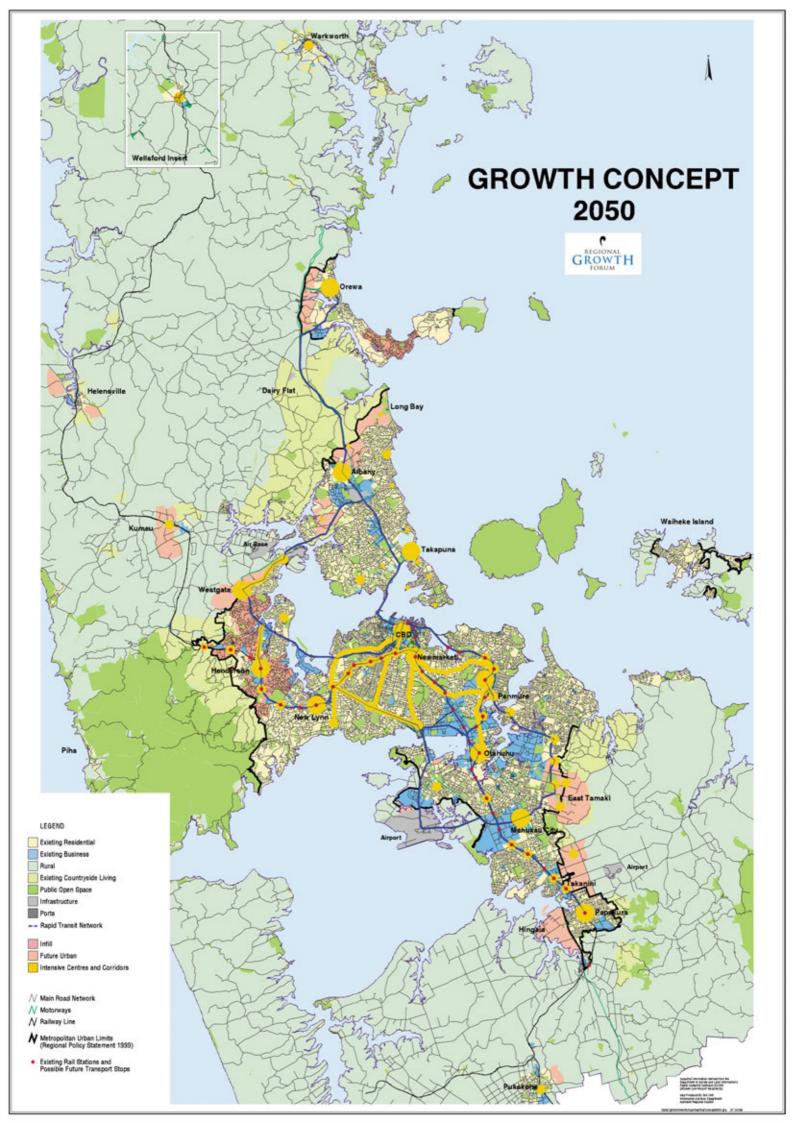
The annual monitoring and performance review Growth Forum meeting will:

- Evaluate the success of Growth Forum partnerships over the preceding year
- Evaluate the success of Regional Growth Strategy implementation over the preceding year
- Receive any available monitoring results
- Identify challenges for the coming year or next five-year review
- Commission any research and investigations for the coming year or next five-year review
- Discuss any changes that might need to be made to the MoU or other strategy processes

The five-yearly review

The Regional Growth Strategy is a living document. It is important that a full review of the strategy takes place regularly. While the annual monitoring and performance review is important to continually discuss issues, it will not be possible to assess whether the current strategy has been effective or not until at least five years. At this stage a full review of strategy outcomes, principles and criteria and the Growth Concept will occur.





Glossary

advocacy	Active support and recommendation of the RGS vision, desired outcomes and principles, including education, information provision and consultation.
amenity – urban and rural	Includes qualities that contribute to an area's pleasantness, aesthetic coherence, and cultural and recreational attributes - things like private and public open space, historic and cultural heritage, landscape, neighbourhood character, safety, views, noise levels, trees, gardens and bush. Different areas, both rural and urban, have their own identity and amenity values.
annual performance review	An annual evaluation of the success of the RGS partnerships and implementation over the preceding year taking account of any monitoring results available. An opportunity to commission any research and investigations and review the RGF and relevant processes.
annual plans	S223D of the LGA requires that every local authority produce an annual plan containing an outline of the long-term finan- cial strategy; the intended significant policies and objectives of the local authority; the nature and scope of the significant activities to be undertaken; performance targets and other measures; indicative costs and funding sources.
apartment housing	Multiple dwellings which are attached vertically or horizontally with shared access, parking, open space and other facilities. Low-rise usually up to 4/5 storeys. High-rise usually from 6 storeys up.
area plans/local area strategies	Implementation plans at the local level for geographic or issue areas which support and action the RGS through a wide range of local initiatives. Provide flexibility for translating the RGS vision into action and to ensure the RGS provides for community needs.
capacity in current plans	Urban capacity is a measure of the region's ability to accommodate urban growth (demand) and associated development over time. Residential capacity includes vacant land, infill capacity, redevelopment capacity and rural capacity. Similarly employ- ment capacity is a measure of the regionis ability to accommodate future business employment, i.e. in business zones and centres and specific employment zones.
catchment	An area of land which drains to a defined point.
catchment management plans	Identify and describe the important characteristics of a catchment in which resource management problems already exist or may occur as a result of urban development, redevelopment or other major changes in activity patterns. Normally initiated by the ARC and the responsibility of the ARC, TAs or major developers. May describe alternative futures and their consequences and identify and evaluate cost effectiveness of alternative means of addressing adverse effects on the environment. See RPS for more detail.
centres	Refers to nodes or areas of various size characterised by mixed-use and intensive land uses including retail, residential, busi- ness (sub-regional, town, neighbourhood centres). The centres normally give an area its identity, e.g. Kingsland, Takapuna, Newmarket.
certainty and flexibility	The RGS seeks to provide the dual needs of certainty and flexibility. Certainty relates to the commitment to the vision, out- comes and principles of the RGS by the primary partners, through the MoU. It also refers to certainty in relation to the process (ongoing role of RGF, annual performance monitoring, five-yearly review, etc) and to the range of mechanisms for imple- menting the RGS. It assists key stakeholders in understanding the likely scale and form of future growth and the consequent infrastructure priorities. Flexibility is provided through the provisions for more detailed planning at the sector and local levels to determine the best ways to accommodate growth and implement the RGS. Flexibility helps to ensure the RGS remains a living document and is responsive to community needs.
connectivity	Maximising connections with surrounding streets and activities and making the role/function of these connections clear to potential users.
consultation	Communication between persons/groups. May have a range of purposes including the collection or dissemination of infor- mation, or identification or resolution of issues. There must be a willingness to listen and change, adequate information and sufficient time.
criteria	Standards against which something can be judged or decided. In the RGS, refers to regional criteria to guide the provision and release of regional development capacity and associated provision and funding of significant infrastructure. The criteria are concerned with the co-ordination and facilitation of RGS-related development and projects only.
desired regional outcomes	In growing, there are outcomes the regional community wishes to achieve, such as protection of the coastal environment, improved air and water quality and better accessibility. The desired regional outcomes (chapter 2) were derived from Regional Growth Forum workshops, consultation and existing strategic plans.
development impact fees	Levied on new developments to help pay for the construction of off-site capital improvements based on the notion that devel- opment should be fully accountable for any adverse effects on the environment, economy or community. Used to fund a wide variety of services, such as parks, public buildings, roading and water supply, waste management, tree replacement etc.
district plans	The Resource Management Act 1991 requires city and district councils to produce district plans, to assist them to carry out their function under the Act. Such plans define the significant resource management issues and manage the effects of activities.
economic instruments	Aim to ensure the price of goods or services includes the cost that their production, consumption and ultimate disposal imposes on the environment. Include a range of price or quantity-related measures which alter the attractiveness of different options available to individuals, developers and other firms in the decision-making process, such as charges and taxes, subsidies, concessions, performance bonds, deposit refund systems and tradable permits.

emission/effluent charges	Charges based on the quantity and quality of pollutants discharged.
five yearly review (of RGS)	A full review of the Regional Growth Strategy by the Regional Growth Forum. Carried out on a five-yearly basis the out- comes, principles and criteria of the RGS will be revisited and changes are likely to occur to take account of information from the monitoring and performance reviews, research, technical analysis, consultation and so on over the five-year period.
funding disclosure	The full public provision of information on the amount and funding sources required for public infrastructure investment by public agencies. Refers to a commitment to disclose the funds allocated toward projects considered to be in whole or part, key projects for the implementation of the RGS. Annual plan disclosure would signal commitment to the RGS, reduce the opportunity for surprises, help identify inadequate information on future development costs and raise the public profile of the RGS during annual plan consultation.
funding policy statements	Every local authority shall, not less than once every 3 years, prepare and adopt a funding policy (S.12N LGA), prepared as part of an annual plan and adopted in accordance with the special consultative procedure.
greenfield	Rural (non-urban) land on the urban periphery which has been allocated for new/future urban uses, i.e. development of the green fields.
growth concept	An illustration of how growth in the region could be managed according to the vision, desired outcomes and principles contained in this strategy. It refers to one possible future scenario - a snapshot of the region at 2050. Further detailed planning at the sector and local level will mean variations to the Growth Concept will eventuate on the ground.
infill	The development of additional dwelling(s) on individual residential sites, such as through cross leasing. Usually means keep- ing the original house.
infrastructure (physical)	Includes ports, airports and airport approach services, bulk water supply and drainage reticulation and associated works, energy generation and transmission, transport and communications facilities and networks, solid waste disposal facilities, defence establishments. Regionally significant infrastructure also include regional institutions, reserves and parks. See also social infrastructure.
Infrastructure Auckland	Established in October 1998 (by the Local Government Amendment Act No 89 1998, following the dis-establishment of Auckland Regional Services Trust) with the principal function to make grants to transport and stormwater projects in the Auckland region. Manages a portfolio of assets valued at approximately \$870 million (June 1999), from which net annual income of approximately \$30 million is produced. The projects which are funded must not be inconsistent with the RGS, RLTS and RPS.
intensification	An increase in density (of dwellings, activity units, population, employment etc) over the current density of a given area. In this strategy it refers to residential site densities (less than 500m ³ /dwelling unit in selected areas (centres or corridors) as well as general incremental infill and redevelopment.
leverage	Actions to gain strategic advantage. In the RGS, refers to the use of infrastructure investment, such as for rapid transit, to initiate and support urban intensification.
long term financial plans	The Local Government Act 1974 requires territorial authorities to prepare a long-term financial strategy (section 122K) which includes estimated expenses and reasons for activities, proposed sources of funds, estimated cashflow projections, long-term borrowing, commitments and contingencies, etc. The long-term financial strategy is normally prepared and adopted concurrently with the annual plan and relates to a 10-year period.
memorandum of understanding	A flexible tool for achieving buy-in and commitment to the RGS from the primary parties and key regional stakeholders. Non-statutory and non binding but signals willingness to align relevant parts of own processes to the outcomes sought by the RGS. Typically replaced by more binding Heads of Agreement once partners are comfortable to enter into more formal agreements. The principle MoU will be signed by the primary partners, covering the first five years and include the out- comes sought, roles and responsibilities of partners, actions to be taken by parties, means by which success will be measured.
metropolitan (urban) limits (MLs)	In the current Regional Policy Statement, a Metropolitan Urban Limit delineates the outside edge of metropolitan Auckland. Urban growth boundaries (UGBs) like this are common in many overseas cities defined initially to limit urban sprawl and impacts on rural areas. This strategy proposes that the region continue to have Metropolitan Limits but that it be redrawn to include some new growth areas. The purposes of Metropolitan Limits are explained on page 70.
mixed-use development	The integration of compatible land uses in one locality, building or block and usually includes a mixture of activities, such as residential, business, recreational, retail or hospitality. For example, an apartment building with shops, cafes and offices on the lower floors, or a town centre with a range of such activities.
monitoring strategy	A strategy for the ongoing monitoring of progress toward the outcomes and implementation of the RGS, including annu- al monitoring and performance review. Factors such as changing lifestyles and preferences and housing quality and afford- ability, will be monitored alongside transport, growth and environmental factors, as well as community acceptance of the strategy. Another aim of the monitoring strategy is to ensure TAs and the ARC develop a common approach to collecting data.
open space (public and private)	Public open space includes all areas where there is free public access such as reserves, parks, walkways, beaches, play- grounds, urban squares, sportsfields and so on. This outdoor space is essentially shared by the public. Private open space is the outdoor space that is privately owned, such as private gardens. In intensification areas where there are fewer gardens and only small outdoor areas (courtyards and balconies), people will rely more heavily on the public open space for passive and active recreation. Some intensive developments may also have shared landscaped areas and outdoor facilities. In intensive urban areas, very large trees may only be found in areas of public open space and along streets.

passenger transport action plan (PTAP)	Identifies the projects and initiatives that need to be implemented in the next 10 years as a means of developing an inte- grated regional passenger transport system. Implementation of PTAP is seen as an integral means of achieving the region's transportation and growth objectives.
permeability	The degree of physical and visual accessibility in a local area (linked to connectivity).
primary partners (to RGS)	Auckland Regional Council and the Auckland region territorial authorities, as members of the Regional Growth Forum and signatories to the primary Memorandum of Understanding.
priority outcomes	A prioritisation exercise at Growth Forum workshops to rank the desired regional outcomes as critical, very important or important outcomes.
rapid transit corridors	These are the key passenger transport thoroughfares that have been identified by the Passenger Transport Action Plan for implementing high speed, high frequency and high quality passenger transport services as part of an integrated regional system. The development of rapid transit services in these corridors is seen as a key means for improving the region's trans- port system and supporting more intensive land-use development adjacent to the corridor.
rapid transit network	A dedicated passenger transport network, as defined in the Regional Land Transport Strategy 1999. Parts of the network already exist or land is designated for that purpose. Some parts require further investigation as to the most appropriate route and mode of passenger transport (e.g. bus, guided bus, light rail, heavy rail).
receiving environments (marine)	Aquatic areas, both marine (e.g. estuaries, harbours and open coast) and fresh water (streams, lakes and groundwater aquifers), which receive runoff from land catchments, and are therefore subject to impacts as a result of urbanisation on the land. Such impacts may include sedimentation, contamination, and hydraulic changes.
redevelopment	The replacement of existing dwellings or buildings with new, typically higher density dwellings, such as terraces, town houses or apartments. An example would be two houses side by side bought up, removed and replaced with a terrace block.
regional growth forum	A co-operative partnership of the ARC and Auckland region territorial authorities responsible for the production of the Regional Growth Strategy. It is a standing committee of the Auckland Regional Council, with delegated powers, and funded through the regional rate.
regional policy statement (RPS)	The Resource Management Act 1991 requires regional councils to prepare regional policy satements which provide an overview of the resource management issues of the region and policies and methods to achieve integrated management of the region's natural and physical resources.
relative catchment constraint	The rating (as high, medium-high, medium-low, or low) of the overall constraint of a catchment based on the severity and extent of constraining issues affecting the catchment, relative to other catchments in the Stage 2 study area. Refer to the Growth Forum report Natural and Physical Resource Constraints - Stage 2 Evaluation
retro-fitting	Environmental quality control devices and infrastructure fitted retrospectively.
road pricing	Road pricing consists of charging road users directly for their use of a particular piece of road. Charges for use of the road may vary according to what road is used and when. Road pricing can have two main functions - to change motorists behaviour and thus improve traffic conditions, and to raise funds. Road pricing can be implemented in a variety of forms ranging from network wide electronic pricing using satellite communications, to tolls collected at a limited number of points by conventional means. Levies on fuel and car parking can also be used as road-pricing techniques.
rural lifestyle opportunities	Refers to low-density residential development on rural land, including the concepts of rural-residential development, scat- tered rural residential lots, farmlets, residential bush lots, large-lot residential development and the like. Also referred to as countryside living.
satellite development	New communities developed outside the urban area as distinct new settlements.
sector (regional sector)	Sectors in the Auckland region have been defined as North, West, Central and South for the purposes of describing the implications of this strategy around the region. The sector boundaries are shown in Figure 4, Page 31. They are not official or administrative boundaries.
sector agreements/sector-based plans	Planning at the sector level to provide more detail on how the RGS will be implemented and to provide policy co-ordina- tion. May take a variety of forms. Sector plans will be endorsed by the RGF to ensure consistency with the vision, outcomes and principles of the RGS. See page 62 and 63 for more detail and examples.
social infrastructure	A system of social services, networks and facilities that support people and communities.
stakeholders	Persons or organisations that have a defined interest in the development and implementation of the Growth Strategy, over and above the general public. Major regional stakeholders include infrastructure providers, funding bodies (such as Infrastructure Auckland, Transfund), central government policy agencies (such as education and health), private sector (developers, business community, transport operators), Tangata Whenua - all important partners in the implementation of the strategy.
strategic plans	Produced by ARC and territorial authorities, as required under the Local Government Act 1974, to set out council priorities for action and expenditure over a 10-year period. Together with the Long Term Financial Plan, provides a framework for annual planning.
structure plans	A plan which guides urban development so the form and intensity of development is appropriate to the character of the land. Structure planning will consider the natural character of the land, the existence of features or values which warrant protection, the location and scale of infrastructure and identify the future pattern of significant land uses based on a consideration of alternatives. The responsibility of TAs. See RPS for more detail.

terrace or row housing	Three of more attached dwellings, side-by-side, on an individual site (normally without shared land or facilities).
tradable pollution rights	A transferable right to discharge a prescribed level of pollutants or use a certain amount of resource.
traffic demand management (TDM)	The term used to describe initiatives aimed at modifying travel behaviour in order to maximise efficiency in the use of transport systems. Examples of TDM measures include tele-working, ride-sharing, more flexible work and educational hours, road pricing, parking constraints, cycling, walking, passenger transpor, and land-use policies more supportive of intensive mixed-use development. Such measures can avoid more costly expansion of the transport system by relieving the need to construct roads or provide more passenger transport services.
urban area	The area within the Metropolitan Limits and areas included within the urban zones of rural and coastal settlements.
urban development	Development which is urban in character and is differentiated from rural development by its scale, density, visual character, and the dominance of built structures. It may also be characterised by a reliance on reticulated services (such as water supply and drainage), by its generation of traffic, and includes activities (such as manufacturing and retail) which are usually provided for in urban areas.
user charges	Payment for the use of environmental services such as emission or effluent charges, access fees or road tolls. Charging for the use of environmental services can provide incentives to reduce demand (for example, waste collection and treatment services), reflecting a truer cost of those services.
vision	A statement defining the qualities of the region in the future. An indication of regional values.

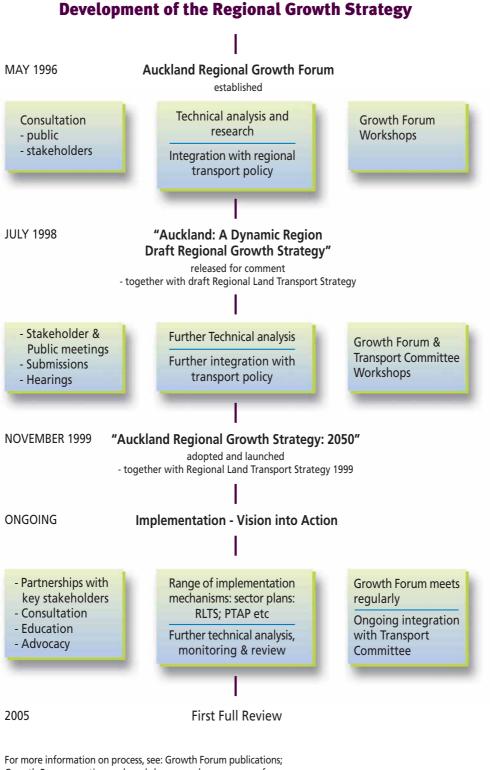
Definitions and abbreviations in Appendix D of the Regional Policy Statement may provide further clarification of some terms used in this strategy.

ABBREVIATIONS

used in the RGS and/or related documents Annual Plans AP Asset Management Plans AMP Auckland City Council ACC Auckland Regional Council ARC Auckland Regional Growth Strategy ARGS Auckland Regional Services Trust ARST Catchment Management Plans CMP Department of Conservation DOC District Plans DP Franklin District Council FDC Infrastructure Auckland IA

Land Transport Act LTA Local Government Act 1974 LGA Long Term Financial Plans/Strategies LTFS Manukau City Council MCC Memorandum of Understanding MoU Metropolitan Urban Limits MLs Ministry for the Environment MfE North Shore City Council NSCC Papakura District Council PDC Passenger transport PT Passenger Transport Action Plan PTAP

Regional Growth Forum RGF Regional Land Air and Water Plan LAW Plan Regional Land Transport Strategy RLTS Regional Open Space Strategy ROSS Regional Stormwater Strategy RSWS Resource Management Act 1991 RMA Rodney District Council RDC Territorial Authority ΤA Traffic Demand Management TDM Waitakere City Council WCC



Key Stages in the Development of the Regional Growth Strategy

For more information on process, see: Growth Forum publication Growth Forum meeting and workshop agendas; summary of submissions and report of Hearings Committee Appendix 2: Reports published by the Regional Growth Forum

A Place Sought By Many: A Brief History of Regional Planning for Auckland's Growth (May 1997)

Growth Management Techniques: A Tool Box of Techniques (June 1997)

Natural and Physical Resource Constraints: Stage 1 Database (July 1997)

Natural and Physical Resource Constraints: Stage 2 Evaluation (June 1998)

Employment Location in the Auckland Region (March 1998)

Capacity for Growth (March 1998)

Physical Infrastructure Providers Survey (March 1998)

Business Opinion Survey (March 1998)

Residential Intensification Developers Survey (April 1998)

Survey of Regional Environmental Organisations (April 1998)

Rural Values Report (April 1998)

No or Slow Growth: the Rationale, Policy Approaches, Techniques and Implications (April 1998)

Summary of Consultation Processes: The Views of Stakeholders and the Public (June 1998)

Intensification of Urban Areas (June 1998)

Social Infrastructure: Impacts of Urban Growth (June 1998)

Transport and Land Use in the Auckland Region: Summary of Studies 1991-1998 (January 1999)

Technical work carried out by and for the Regional Growth Forum following the publication of the draft Regional Growth Strategy:

The Influence of Transport Investment on Urban Intensification: Final Report (February 1999, prepared by PPK Environment & Infrastructure Pty Ltd)

Transport Implications of Intensive Urban Areas: Discussion Paper (February 1999, prepared by Hill Young Cooper)

Metropolitan Urban Limits in the Auckland Region: Impact on Land Prices (Oct. 1999)

Business Location in the Auckland Region (Oct. 1999)

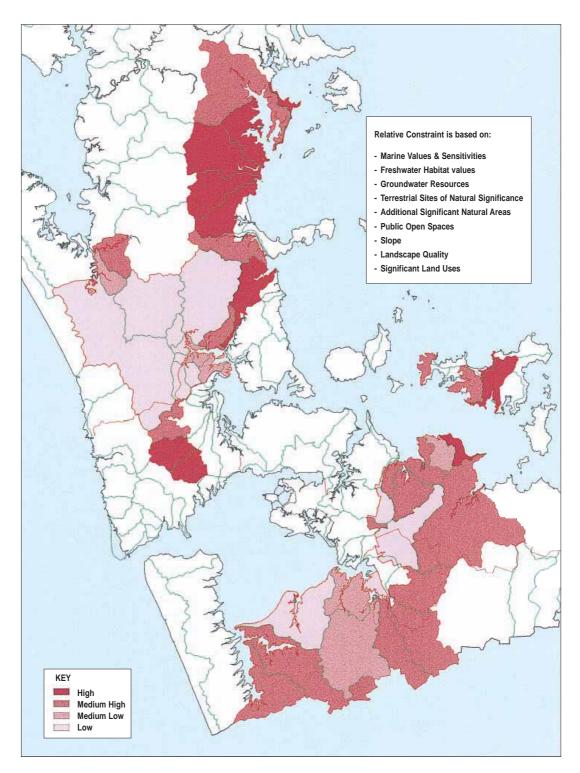
Affordable Housing in the Auckland Region: Issues, Mechanisms and Strategies (Oct. 1999, prepared by Business and Economic Research Limited)

Key Mechanisms for Implementation (Oct. 1999, prepared by KPMG)

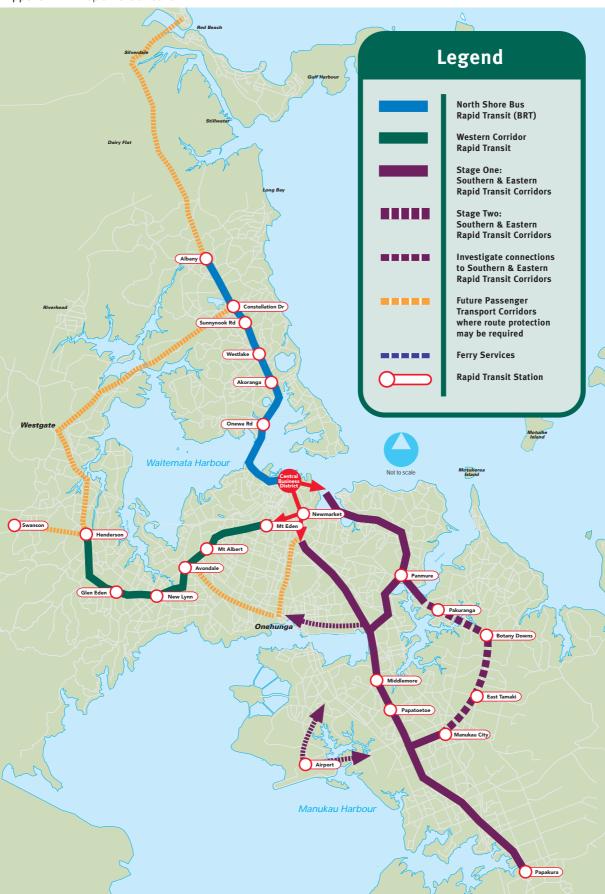
Draft Auckland Regional Growth Strategy: Commentary (Oct. 1999, prepared by McDermott Fairgray)

These reports are available at your local library and at the office of your local council. Or, for a copy telephone ENVIROLINE 0800 80 60 40.



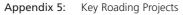


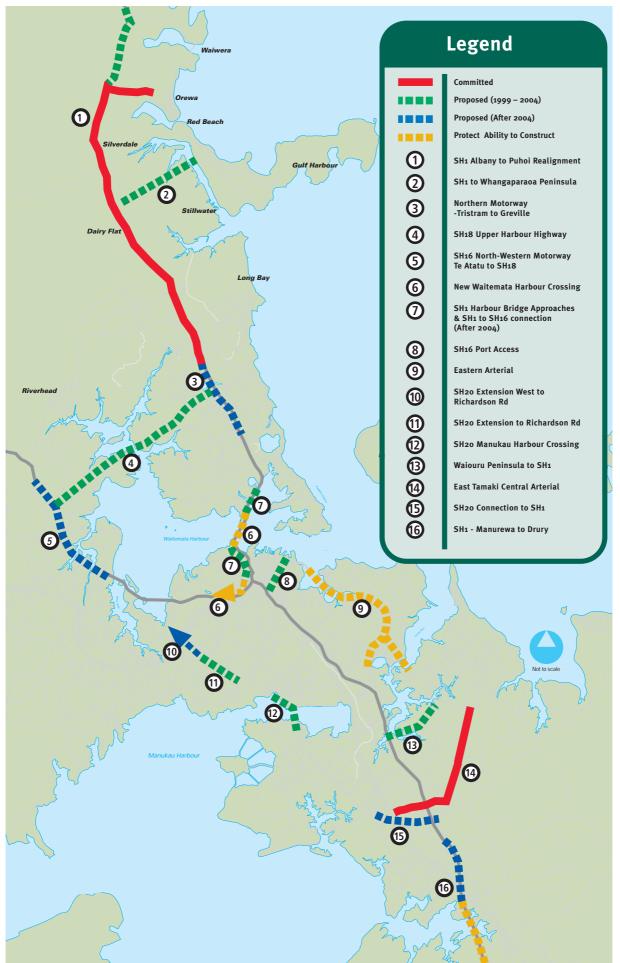
Source: Growth Forum "Natural and Physical Resources: Stage 2 Evaluation", June 1998.



Appendix 4: Rapid Transit Network

Source: Auckland Regional Land Transport Strategy, 1999.





Source: Auckland Regional Land Transport Strategy, 1999.

