

2.1 Introduction

The Auckland Region has a diverse natural and cultural environment. The intricate coastline, bush-clad hills, volcanic cones and craters, sheltered harbours and islands and waters of the Hauraki Gulf all contribute to its unique character. The equable climate, ample rainfall and rich soils sustain lush and diverse vegetation. In the past, while the Region's population was small, the effects of human habitation were masked by the natural setting. As the population has increased, however, pressures on the Region's resources have grown and degradation has occurred to some of the Region's natural resources. In recent years the regional community has shown a growing awareness of these problems and the need to rethink its actions in relation to the present and future qualities of the Region. There is now a need to consider whether today's actions will leave an environment for future generations which is, at least, as good as that which was inherited from the past. That is, there is a need to determine whether the Region's resources are being sustainably managed.

As well as natural resources, the Auckland Region also has significant physical resources. These resources include the metropolitan area and rural and coastal settlements and their extensive infrastructure, including its ports, airports, roading and utilities infrastructure. The physical resources also include the large industrial base, commercial facilities, the rural industry, including forestry and mineral extraction, and the extensive housing suburbs. These physical resources are of both regional and national significance and must be considered when determining the sustainable management of the region's overall resources.

As noted in Chapter 1, the RM Act requires the promotion of the sustainable management of natural and physical resources. The purpose of this RPS as prepared under the RMA and amended by changes prepared under the LGAAA is to manage growth and development in order to promote and integrate the sustainable management of those resources within the Auckland Region. The need for an integrated approach arises both from the diversity of the Region's natural and physical resources and from the need to co-ordinate the actions of the various agencies with responsibility for their management.

Subsequent chapters in the RPS provide for the management of specific resources in a manner which is sustainable and co-ordinated across the Region. The

function of this chapter is to integrate the management of the various components by:

- outlining the setting of the Auckland Region today;
- providing an overview of the major resource management pressures and issues confronting the Auckland Region;
- establishing strategic objectives and policies to give overall direction (strategic direction) to the management of the Region's resources;
- stating the broad outcomes which the provisions of the RPS are intended to achieve.

The strategic approach is of key importance to the integration of resource management and entails:

- taking the long-range view when considering the impact of development in shaping the future;
- taking a wide aerial view which considers the entire Region, not just a sectoral or district view;
- dealing with multiple issues including environmental needs, cost-effective infrastructure, community values;
- being proactive rather than reactive; that is, guiding, rather than merely responding to initiatives to use resources and development activities;
- dealing with matters comprehensively, which involves considering cumulative effects, rather than dealing with them in a piecemeal manner.

A regional approach by itself is not sufficient to deal comprehensively with all the issues facing the Auckland Region. Central government also has an important complementary role. It has the central role in determining appropriate immigration policy, ensuring the timely provision of critical services such as education and health, and supporting local government and the community in managing the pressures of development in such areas as the funding of regional transport.

2.2 The Setting – Auckland Today

The special qualities of the Auckland Region and its environment have attracted people to the Region over many generations. First, came the Maori who saw the benefits of its land and waters and settled on Tamaki Makaurau. Then came the European settlers from the British Isles and Australia. The modern city-region was built over the next 150 years. During this period new

settlers arrived from Europe, the Pacific Islands and Asia, changing the social character of Auckland into a multi-cultural region.

With over 1.3 million people, and 32% of the nation's population, the Auckland Region is the most populous in New Zealand. It is also the most cosmopolitan region, where currently Maori, Asian and Pacific Islander groups each comprise more than 150,000 people and in addition it is the largest centre of economic activity, and the focus of continuing growth.

With European settlement, the physical form of the Region changed markedly. Of particular significance were the physical developments around the ports and jetties that gave rise to fledging city and town centres, which serviced the ports and other infrastructure. Over time these became key parts of the industrial base for the region and the country. The motorway systems of the 1960s, further facilitated extensive low-density housing suburbs. The last two decades have seen significant changes to the region's economic base, as well as a renewed and increasing interest in urban (higher density, mixed use) living.

The Region's commercial and industrial base, and its ports, airport and rural industry are of both regional and national significance. The Region contains 31% of the nation's workforce and 38% of its business enterprises. The Region's ports handle 65% of the nation's imports by sea and 30% of its exports (by value), and handle about half of the total number of containers handled in all of New Zealand's ports. Eighty percent of all visitors to New Zealand enter the country via the Auckland International Airport. It is also significant that the airport accounts for over 45% by value of all imports into New Zealand.

Economic indicators such as retail trade, building activity, employment and population growth, and levels of business confidence show Auckland poised for continued economic growth.

The Auckland Region's rural economy reflects the presence of New Zealand's largest market. Although it has only 2% of the country's land area, the Region has 8% of the nation's land in horticulture. The rural parts of the Region also include other rural activities, for example, intensive animal keeping in buildings and some protected crops, that may not always be dependent upon the productive quality of the land, but which nevertheless contribute to the regional and national

economy. Commercial forestry is also an important rural land use activity with over 56,000 ha planted as at 2003.

The Region's continuing growth is of key strategic importance. The region's population has grown continuously throughout the last century, and in recent years most of the nation's growth has been occurring in the Auckland Region. Between 1996 and 2001, the region's population increased by over 90,000 permanent residents, 76% of the nation's increase. From 2001 up to 2004 the population increased a further 100,000, 55% of New Zealand's increase. By 2003, 32% of New Zealand's population lived within the Auckland region. This is expected to increase to 40% by 2050.

The majority of Auckland region's growth is natural increase. Between 1996 and 2001 55% came from this source, with the remainder composed of migration from overseas and other regions in New Zealand. Even without migration therefore, the population of the Auckland Region would continue to grow.

A reliable power supply is essential to the social and economic wellbeing of the Region. Currently, there is limited power generated in the Auckland Region, relative to demand. The Region is therefore dependent upon power supply from other regions.

Historically, the transport system and provision of bulk utility services (especially drainage) shaped metropolitan Auckland. The decisions made in the 1950s to develop a motorway system, and to provide drainage services to the greater part of urban Auckland from a treatment and disposal system situated at Mangere, greatly facilitated urban expansion. Sustained investment in the motorway system, and high levels of car ownership, encouraged suburban growth and has led to the low-density urban form which is present-day Auckland.

The low-density form of the Region's development provides a number of benefits to the public in terms of lifestyle, spaciousness and privacy. Many older communities of Auckland have special characteristics such as mature trees and vegetation, access to open space, and the quality and historical significance of the homes. It is clear there is a public desire to protect these qualities.

The individual home on a separate title, with the benefits that provided, became an important aspiration for many people and this was reinforced by government housing policy. These benefits, coupled with high rates of car ownership, ensured that the majority of people

had sufficient personal mobility to access employment, shopping, recreation, education and other services.

At the same time Auckland's low-density urban form has led to poor relationships between transport and land use and to inefficient travel patterns and use of energy. People have to travel further to get to the services they require and to get to and from work. Not only does this require more travel than a more compact urban form, but it has led to the need for more and higher capacity roads and greater reliance on private vehicles and less effective use of public transport. More travel means greater use of non-renewable fuel, more emissions to the environment from vehicles, a greater contribution of greenhouse gases to the atmosphere, community health impacts, noise, community severance through the development of large transport infrastructure projects and a greater impact on the quality of air and water in the Region.

Auckland's low-density urban areas have also been wasteful of land. They have taken valuable soils out of production. For example, Mangere and the Rosebank peninsula were once productive market-gardening areas in close proximity to the city. More recently, significant areas of productive land have been lost due to the uncoordinated expansion of urban and Countryside living development into rural areas of the Region. Furthermore, much urban land, especially industrial land, lies under-utilised within the urban areas. Urban development has also covered basalt lava flows and tuff, and scoria deposits which could have enhanced the heritage of the Region or been used as aggregate for construction materials. Urban expansion has adversely affected natural resources such as indigenous flora and fauna and the quality of streams and coastal waters. It has obliterated many places of cultural importance, particularly to Tangata Whenua, and has required the expensive extension of utility services, transport networks and community services to support low density settlement.

Since the 1990's Auckland has developed as much within the existing urban areas, as it has on its margins. A range of factors, including increased land values, a more vibrant CBD and a desire to relocate more centrally, has seen a rekindling of interest in urban living. The region now faces the challenge of providing a wider range of housing choices, in ways that better support easy access to the facilities that the region needs. This challenge must also be balanced with the provision of important utilities infrastructure to support urban

intensification and the protection of existing regionally significant infrastructure to ensure land use conflicts are minimised.

There has also been a shift in housing trends. These include falling home ownership rates, increasing housing costs, the reduction through sale of much of the state housing stock, and increased demand for both social and affordable housing. While the return to income-related rents for state housing tenants has assisted some households, the growth in waiting lists for state-owned housing provides ample evidence that many Auckland households face constraints on their ability to purchase adequate housing.

There is growing recognition that good quality, affordable housing is an essential component of strong communities. The health effects of poor housing are the most obvious. If people are forced into poor quality or overcrowded housing this is likely to have a negative impact on mental and physical health. However there is also growing evidence that there is a relationship between housing and a wide range of other social issues including learning deficiencies, crime, unemployment and family stability.

Changes have also taken place in the business sector as Auckland has grown. Perhaps the most obvious changes have taken place in the retail sector with the continued development of Commercial Centres, and continued pressure and demand for business and commercial, including larger format retail, development along Corridors and other out of centre locations. As the population in the existing built up areas intensifies, consideration will need to be given for appropriate ways to manage provision for growth and demand.

Auckland possesses some particularly defining features which provide a unique setting and are a valuable resource. These include:

- The diverse coastal environment which ranges from developed urban coastlines to sheltered estuaries, harbours and bays to rugged landforms. The coastal setting gives Auckland a distinctive character and the coast is valued for its role in the area's history, culture, landscape, ecology, amenity, recreation, tourism and economy.
- The islands of the Hauraki Gulf comprise significant natural and physical resources in terms of favourable location and climate, outstanding landscape features and unusual ecological balance.

- The Auckland scoria cones, explosion craters, tuff rings and lava fields are the most easily recognisable elements of the volcanic field on which urban Auckland is built. Not only is this volcanic field of national scientific importance, it also contributes to the distinctive character of Auckland. The volcanic cones are the most visible elements of the volcanic field and are outstanding natural features, cultural heritage icons and geographic markers in the Auckland landscape. The significance of Auckland's volcanic field comes not just from scientific, visual, historic, cultural and open space values of individual features, but from the complexity and diversity of these features within a relatively small area.
- The Waitakere Ranges Heritage Area (refer Appendix I for description of Waitakere Ranges Heritage Area and heritage features). The Waitakere Ranges including the foothills and coastal villages are a dominant and highly valued iconic landform of the Auckland region. The bush clad rainforest area of the landform is considered to be of international importance and significance. The foothills of the Waitakere Ranges have landscape value in their own right as a conglomerate of natural, rural and cultural landscapes. The foothills also play a significant role as a buffer and transition to the outstanding natural landscape and features of the upper ranges. The area is under unique pressure for subdivision, use and development due to its close proximity to Auckland, and is susceptible to cumulative adverse effects on its heritage features in the constituent urban, rural and forested parts, and on the area as a whole.
- The rolling green landscapes to the North and the South of urban Auckland, delineating urban from rural, and containing high quality soils and horticultural activities.

These defining natural resources make an important contribution to creating the region's unique character. These natural resources require careful management to sustain and protect them from inappropriate development.

The environment beyond Auckland's Metropolitan Urban Limits displays varying characteristics and supports diverse landuse. The rural and coastal settlements define a pattern of development explicitly linked by geographical association with urban Auckland, but also provide vibrant communities in their own right. Rural and coastal settlements vary in size and function,

but maintain local communities of interest and lifestyle choice.

The settlement pattern is also reflective of the natural and physical elements that further define the character of particular parts of the region. Parts of rural Auckland support large traditional pastoral and arable based activities, while others support more intensive arable based activities to create unique landscapes. Other activities have established in rural areas such as mineral extraction and aerodromes due to their requirement of a rural location.

2.3 The Auckland Regional Growth Strategy

The Auckland Regional Growth Forum is a partnership between Auckland's local and regional authorities allowing a co-operative regional approach to growth management. This Forum, a committee of the ARC, has delegated power to take responsibility for the production, implementation and review of a Regional Growth Strategy for the Auckland Region. The Forum has examined the options and alternatives to accommodating future growth in the Auckland Region and adopted the Regional Growth Strategy in November 1999.

The Local Government (Auckland) Amendment Act 2004 required all Councils in the Auckland region to make changes to their respective planning documents for the purposes of giving effect in an integrated manner to the growth concept contained in the Auckland Regional Growth Strategy.

The purpose of the Auckland 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 Auckland Regional Growth Strategy provides a vision for what Auckland could look like in the future with a population of 2 million.

This vision of the Auckland Regional Growth Strategy is that 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 the coast and its surrounding natural environment.

The Growth Concept

The “Growth Concept” is a snapshot of how the region could look at 2050 if growth is managed according to the vision, outcomes and principles.

For the purposes of giving effect to the “Growth Concept” the ‘Sector Agreements’ developed by all Councils have been used as a guide to identify future growth areas. Councils may also develop other appropriate strategies or approaches to give effect to the “Growth Concept”.

Key features of the “Growth Concept” are that:

- Growth will be managed by promoting quality, compact urban environments (intensification);
- Most growth is contained within the existing metropolitan area with development outside current urban areas only where environmental, accessibility and community principles can be met. This results in a wide range of living opportunities, both in rural and in urban areas by enabling the accommodation of future growth in a variety of ways.

Accessibility principles in this context are based on the degree to which opportunities for people, goods and service can conveniently travel within an area/region. Community principles are based on how people live, work and play in the region and creating a liveable region. For more information on environmental, accessibility & community principles refer to Regional Growth Strategy, November 1999, Table 4 Principles for Evaluating Regional Growth Alternatives;

- Most urban growth is focused around High Density Centres and Intensive Corridors (refer Schedule 1) to create higher density mixed use communities, with a variety of housing, jobs, services, recreational and other activities;
- There is much less emphasis on accommodating growth through general infill in suburban areas.

Specific new areas are earmarked for growth (refer Schedule 1) and other areas are identified in which development is to be avoided:

- Future urban (greenfield) areas including Takanini, Flat Bush, Hingaia, Westgate/Hobsonville Long Bay, and the balance of Albany/Greenhithe, and Orewa West /Silverdale;

- Selected rural towns notably Helensville, Kumeu and Pukekohe because of their location on rail lines;
- Development is avoided in the most highly valued and sensitive natural areas and catchments.

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 the population could still live at lower densities.

Mixed-use development (different activities including residential, business, retail etc, sharing premises within the same area), is already common in places like the CBD, Ponsonby, Newmarket, Newton, Takapuna and New Lynn. It is important that more intensive types of employment development are located with better access to the public transport network. The Growth Concept also seeks to ensure there is sufficient business capacity available in specific employment zones for larger industrial and commercial development.

Major employment (re)development is envisaged in a number of existing and new areas including Albany, East Tamaki, Sylvia Park, Mt Wellington, Massey North, Hobsonville and the central area. Maintaining and improving access to jobs and between businesses will be vital.

Transport

An efficient transport system is also 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 can lead planned development patterns.

The “Growth Concept” anticipates a shift in land use patterns towards a more compact urban form which focuses growth in High Density Centres and Intensive Corridors, such as the northern, western and southern passenger transit corridors and 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 public 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 High Density Centres and Intensive Corridors. The "Growth Concept" envisages that many people will consider being close to activities, shops, cafes and possible 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. Priority public transport improvements for the next ten years are vital to service these High Density Centres and Intensive Corridors.

Along with aligning land use more with the transport system accessibility between different parts of the region can be improved by further investing in the public transport system, developing new roading improvement and through initiatives which aim to reduce the demand for single occupancy vehicle trips. In this regard the Regional Land Transport Strategy, is a key mechanism for the implementation of the Growth Strategy.

2.4 Issues

An overview of the key strategic resource management issues in the Auckland Region shows that nearly all of them stem from the pressures and impacts of development on the Region's natural and physical resources. (Note: the appropriate sections in Part 2 of the RM Act are referenced at the end of each issue.)

2.4.1 The Region will need to accommodate continued population growth and economic development in the foreseeable future.

There are three key factors influencing Auckland's continued growth and development:

- **Population structure.** Its existing population structure means that the Region will continue to expand as a result of natural increase (excess of births over deaths).
- **Migration.** Migration rates are subject to substantial fluctuations which are difficult to predict. External immigration is largely affected by government policy, and has made a substantial contribution to Auckland's growth in recent years. In any particular year, up to 70% of migrants to New

Zealand settle in Auckland. Internal migration is influenced mainly by the state of the national economy. Planning for the Region's future will need to include consideration of future fluctuations in migration rates.

- **Economic activity.** The Auckland Region is the dominant commercial focus of New Zealand. Its large domestic market, infrastructure, port and airport, commercial expertise and diverse manufacturing and industrial base will ensure that this focus continues. With trends towards open global trade relations, Auckland is central to a successful export-led strategy. The domestic market contained within the northern part of the North Island (approximately 2.1 million residents by 2016) will also be a significant contributor to continued growth in the Region.

The Auckland Regional Council projects the Auckland Region to grow to 1.75 million by the year 2026, and to 2.1 million by 2046, representing approximately 40% of the nation's population. When the RPS was first notified in 1994 it was estimated that the population would reach 1.3 million by the year 2016. However, the population reached 1.25 million in 2003. The substantial difference between the actual population growth and the estimated population growth is a reflection of the difficulty in predicting future population dynamics. This is why the Growth Concept acknowledges there is a need for flexibility.

The housing market is influenced by changes in family and household composition as well as lifestyles, and economic factors. The following demographic changes affect the demand for housing in the Region:

- Net inflow of permanent and long-term migrants. Net migration figures show a large increase since 1991. Most overseas migrants entering the country settle in the Auckland Region, and they and their families have an immediate requirement for housing.
- Large numbers of people in the family formation age groups. This has been an important factor in the percentage growth of dwellings (11%) being higher than the percentage growth of population (8%) between 1996 and 2001.
- Changes in patterns of family formation and household composition. The average household size

is now below three persons. The number of single parent and one person households has increased rapidly in recent years. Household generation, increased longevity and other socio-economic factors also affect demand for housing.

- Ethnically diverse population. The population of the Region is becoming more ethnically diverse. Maori and Pacific Islands populations are much younger than the rest of the population and have a higher household formation rate. While the Asian household formation rate is lower than that of Maori and Pacific Islanders, their demand for housing has been driven by high net migration rates.
- Sub-regional differences. Each sub-region has distinct social and demographic characteristics and these affect the demand for particular housing.

These factors may increase pressure on the building and associated sectors and could result in a more varied supply of housing than has been provided in the past. There is little evidence to date that the housing industry is fully responding to these changes in housing demand.

In the past residential growth was accommodated in the suburban areas of Manukau, North Shore and Waitakere. More recently, areas such as Rodney and Franklin have experienced rapid population growth. However, the supply of relatively low-cost flat land for mass housing projects within the metropolitan limits is now almost used up. As a result, it can be anticipated that there will be greater interest in redeveloping the existing urban area as well as ongoing pressures to expand the metropolitan limits to accommodate more urban expansion. Accommodating future growth predominantly through continual expansion is unsustainable and contrary to the RGS.

The growing trend towards redevelopment of the existing urban areas includes infill housing of residential areas; the central city (CBD and city fringe) apartments; and a re-evaluation of commercial and industrial land with a view towards comprehensive residential and associated uses (e.g., Railways land in the city). Some criticism of the quality of infill and higher density housing has resulted, but this can and should be avoided by appropriate methods that ensure higher density residential areas are attractive places in which to live.

In the past, rural areas have undergone population growth faster in percentage terms than urban areas. There will

be continued pressure to expand the compact contained urban form into rural areas as the population increases. While there are already significant Countryside living opportunities within the Auckland region, the scale, take-up and specific location of such activities outside of the urban area has the potential to undermine a compact contained urban form and to divert growth into areas with unsuitable infrastructure and/or create significant adverse environmental effects in rural areas. One area where this is a particular concern is the Waitakere Ranges Heritage Area (refer Appendix I) where urban intensification pressures are compounded by the area's proximity to metropolitan Auckland and where there is little capacity to absorb further subdivision.

Whether greenfields development or urban intensification, the challenge for local authorities and developers will always be to continue to accommodate new development while protecting the social and natural values which make Auckland an interesting, efficient and diverse Region in which to live and carry out business activity.

Part 2 of the RM Act and links with other chapters

In order to enable people and communities to provide for their social, economic and cultural well-being and for their health and safety, the Region must accommodate future population growth and economic development (see section 5 of the RM Act). Accommodating growth also fulfills the requirement of section 5(2)(a) to meet the reasonably foreseeable needs of future generations. Policies relating to growth and development issues are specifically addressed within this chapter. However, all other chapters of the RPS deal with the effects of growth and development on the natural and physical resources.

2.4.2 Urban development in the Region threatens environmental qualities and thresholds.

The Auckland Region is reaching several critical thresholds in terms of the quality of the environment and the suitability of land for urban development. The long term cumulative effect of development continues to place pressures on natural and physical resources which, if not managed in an integrated manner, can eventually lead to the gradual diminishing of environmental quality.

In particular Auckland's historical pattern of urban expansion has resulted in significant impacts on the region's environment. However, new patterns of urban

development can be more sustainable than historical patterns and can protect, maintain and enhance the region's environment.

The semi-enclosed harbours with their poor natural flushing characteristics in parts of the harbours have become adversely affected by the pressures of development. Parts of the Waitemata and Manukau Harbours and Tamaki River are impacted as a result of urban-generated sediment and pollution. (see Map Series 6).

If not managed appropriately, development can result in a wide range of environmental pressures and adverse effects, broadly summarised as follows:

- Loss of valued natural resources through land clearance and associated development. Such resources include streams, terrestrial ecosystems and habitats, indigenous flora and fauna, landscapes, landforms, geological features, soils, and the natural character of the coastline. Natural resource values that remain after urban development, such as in parks and reserves, are often extensively fragmented, isolated or degraded reducing their potential to support long-term viable ecosystems. Moreover, amenity (including coastal access), landscape, and open space values may be compromised without appropriate consideration of urban form and design.
- Earthworks and land disturbance may result in erosion and the generation of sediment, which is transported by rainfall (stormwater runoff) into streams and coastal waters. Steep land is particularly prone to the generation of large amounts of sediment, and urban development in such areas may exacerbate slope instability and the potential for erosion. Sediment deposition in water bodies causes habitats to silt up reducing water clarity and light penetration leading to a corresponding reduction in productivity. Sediment deposition may also change stream channel shape, providing substrate for excessive aquatic plant growth, altering flows and potentially increasing the risks of flooding.
- Urban development, through the proliferation of impervious surfaces such as roads, roofs, concrete and hard surfaces, generates more intense stormwater runoff altering the hydrological characteristics of surface and groundwater flows. Inappropriate urban design and unmitigated stormwater runoff increases the risks of stream erosion and flooding. Furthermore, new roads and industry increase the amount of contaminants such as fuel derivatives, oil and heavy metals carried by stormwater into our streams, estuaries and harbours, reducing the quality and life supporting capacity of these sensitive receiving environments.
- Uncoordinated urban intensification places pressure on the capacity of existing infrastructure. For example, pressure on wastewater and stormwater networks increases the potential for wastewater overflows during heavy rainfall and subsequent contamination of waterways and beaches.
- Urban development, including intensification, can generate reverse sensitivity effects when located in close proximity to infrastructure.
- Changes to stream and groundwater levels and flows resulting from increased water demand, water abstraction and damming also influence stream habitat availability and have ongoing impacts on water quality and the health of freshwater ecosystems. Water resource management in the region faces the need to provide for increased demand and competing needs whilst maintaining levels and flows necessary to sustain the ecological, amenity and cultural values of water bodies. Growth may be constrained in locations where adequate forward planning of water supply provision is not made.
- Air emissions from new residential areas, industry and vehicles increase concentrations of toxic pollutants such as carbon monoxide, ozone, oxides of nitrogen and sulphur and fine particulates. These substances not only degrade visibility but more importantly exacerbate respiratory and heart disease resulting in increased hospital emissions and subsequent deaths. Intensification of existing urban areas has the potential to expose more people to high levels of air pollution if the emission sources are not managed appropriately and effectively. There is a need to ensure that air emissions are controlled at source (e.g. vehicles tuned and with catalysts, industrial process control equipment, domestic fires meeting NZ standards etc) to a practicable level. There is also a need to ensure appropriate separation between pollutant sources and sensitive activities through the use of Air Quality Management Areas and appropriate placement of transport routes.

- Urban expansion can generate reverse sensitivity effects when it occurs in or adjacent to productive rural areas. Any proposal for urban expansion needs to consider effects on productive soils and water and air quality.
- Increased infrastructure and development has continued to intensify the demand for limited aggregate supplies, some of which have limited availability due to a range of adverse effects associated with their extraction. Existing resources must be appropriately and efficiently managed, including the management of reverse sensitivity effects, if we are to avoid the high cost and adverse environmental effects associated with the transportation of material.
- Cultural resources, sites and values including waahi tapu areas, taonga, buildings, objects, artefacts, natural features of cultural and historical significance, historical associations, people and institutions may all be impaired or adversely impacted by the pressures of increased growth and development.
- Old industrial and horticultural land may be contaminated by historical chemical and pesticide use. Redevelopment of such land and reuse of soil for residential purposes needs to be managed appropriately to avoid environmental and public health risks from exposure to potentially harmful contaminants. The historical use of some persistent chemical compounds may have resulted in residues in the soil, which may pose a human health risk if the land is used for certain types of urban development. Redevelopment of such land needs to be appropriately managed.
- The expansion of urban activities onto rural land may, individually or cumulatively over time, reduce the visual distinction between rural and urban areas and the distinction between the types of activities that are characteristic within each of these areas. This lack of a clear visual distinction between rural and urban areas may then generate further pressure for urban expansion and/or urban sprawl.
- The intrusion of urban structures and activities into rural areas may also impact on both rural landscape character and amenity.
- Inappropriate development can cause significant degradation of high natural heritage, landscape and amenity values.

Part 2 of the RM Act and links with other chapters

This issue is concerned with the cumulative, actual and potential adverse effects of continued development on the regional environment. Providing for future generations, safeguarding the life-supporting capacity of resources and avoiding, remedying, or mitigating adverse effects are provided for in section 5(2), (a), (b) and (c) of the RM Act. Policies relating to urban development issues are specifically addressed in this chapter and the Water Quality, Water Conservation and Allocation, Coastal Environment, Air Quality, Natural Hazards, Heritage, Minerals, Waste, Hazardous Substances and Contaminated Sites chapters.

2.4.3 Ad hoc urban redevelopment and land use changes can lead to loss of urban amenities and environmental qualities.

Urban development patterns in the Auckland region are changing from predominantly a low density pattern of development outwards into one which also includes a substantial amount of higher density redevelopment within existing urban areas.

Urban redevelopment occurring outside of High Density Centres and Intensive Corridors in an ad hoc manner can result in the loss of urban amenities. For example, it can result in:

- Incompatible land uses on adjacent sites and between adjacent zones;
- Poor development layout;
- Inefficient use of the land resource;
- Densities and a mix of uses insufficient to support land use and passenger transport integration, and a viable passenger transport network;
- Residential and business densities not supported by increases in infrastructure and utilities, open space and community facilities provision (in some areas, some urban utility services, such as sewer and stormwater systems, electricity supply, telecommunication systems and the transportation network have reached limits to their capacity and require refurbishing, replacing or upgrading;
- Commercial development within new localities or by means of the expansion of existing High Density Centres may improve access to goods and services and better enable people and communities to meet their social and economic needs. However, regionally significant changes in the pattern of distribution of

commercial development can result in particular adverse effects, or require consideration of the relationships with other aspects of the “Growth Concept”, including the following:

- the relationship to higher density residential areas;
 - the efficiency of the use of existing physical resources, including public transport;
 - the extent and rate at which impacts on other centres (particularly High Density Centres) could reduce their amenity, and adversely impact on their social and economic functions;
 - whether adversely affected centres have outlived their function;
- Increased traffic congestion and underutilisation of public transport systems;
 - Damage to natural and cultural heritage;
 - Increases in stormwater run-off to Auckland’s sensitive receiving environments.

Comprehensive, well planned urban redevelopment has the potential to remedy past adverse effects on the natural environment, improve urban form and design outcomes, reduce conflicts between incompatible land uses, reduce transport demand in the longer term, and increase housing, transport and employment choices.

Where and how urban growth should be accommodated

Urban intensification in the Auckland region has been underway for many years. Initially, urban redevelopment involved infill housing. The scale of infill development has led to increased densities but has not provided equivalent increases in amenity and has placed pressure on existing infrastructure and communities. Furthermore, it does not provide sufficient support to the public transport system.

The Growth Strategy focuses most of the region’s future development within existing urban areas, particularly in High Density Centres and Intensive Corridors. It sets out a concept of selected and planned intensification, based on urban redevelopment. This provides opportunities for:

- enhancement of urban form and design,
- more effective use of the land and provision of open space,

- upgraded infrastructure and improved environmental standards, and
- improved transportation and community services.

Implementing the Growth Strategy will need to take into account changing trends in land use activities and their locational requirements, having regard to addressing the wider adverse effects of urban growth and the strategic integration of infrastructure with land use.

Sub region and town centres provide the critical mass necessary to support a number of urban activities. More intensive development can support a greater range of local services, facilities and employment increase the opportunity for safe walking and cycling. This also helps support passenger transport by bringing residents, employees and visitors closer to the main public transport routes.

There is a risk that intensification may occur in areas that cannot support increased densities. If provisions for land use intensification are not integrated with land transportation provisions, networks and systems, ad hoc urban redevelopment and intensification could result in high density residential developments being located distant from town centres, employment and passenger transport networks. Some areas within the MUL and the limits of rural and coastal settlements have significant natural heritage, landscape and amenity values. Significant intensification is not appropriate in such areas and should only be provided for where this will not compromise these values, and where environmental benefits are achieved, such as ecological restoration.

Equally, there is a risk that the long term potential of the region’s urban form could be compromised through lower density (re)developments in areas that are well located for more intensive (re)development or through ad hoc development of small sites limiting the region’s ability to achieve comprehensive quality development that integrates land use and infrastructure.

Intensification can be managed by local authorities so as to minimise the adverse effects on environmental, social and community, and amenity values, and on existing and new infrastructure. This management should take place through appropriate provisions within regional and district plans, and Long Term Council Community Plans. However, there will be a need to ensure a consistent and integrated outcome across all local authority boundaries within the Auckland Region.

Improving urban amenity

As residential densities increase, some aspects of amenity that are naturally provided by low density developments must be carefully considered and designed (e.g. access to outdoor space and buffering from the noise of adjacent activities). Some intensification has led to poorly located and poor quality developments often with limited privacy and amenities, which lack diversity in design and in unit size.

Attention needs to be paid to good urban form and design outcomes in order to maximise economic opportunity, social wellbeing, cultural diversity and environmental health.

Good urban form and building design is critical to ensuring that developments provide a high quality urban living experience, with sufficient amenities, a range of housing to accommodate a diverse population within mixed use, vibrant and coherent High Density Centres and Intensive Corridors.

Improving the quality of urban living includes considering such issues as safety, accessibility (including access to and via the passenger transport network), pedestrian circulation, connectivity, streetscape, and coordinated planning for provision of safe and high quality passenger transport shelters, stations and terminals, open space, schools and other community facilities.

Local Authorities responsible for public infrastructure in High Density Centres and Intensive Corridors can stimulate high quality private sector mixed use development by planning for multi-modal accessibility in adjoining street networks, and by ensuring public places and streetscapes are built to a high standard attractive to pedestrians and local residents.

Part 2 of the RM Act and links with other chapters

In order to enable people and communities to provide for their social, economic and cultural well-being and for their health and safety, the Region must accommodate future population growth and economic development (see section 5 of the RM Act). Accommodating growth also fulfils the requirement of section 5(2)(a) to meet the reasonably foreseeable needs of future generations.

Providing for growth and intensification primarily through urban redevelopment contributes to the efficient use and development of natural and physical resources

(section 7(b)), and – through the integration of land transport and land use provisions – the efficiency of the end use of energy (7(ba)) and the effects of climate change (7(i)).

Ensuring coherent urban redevelopment, with consideration of urban form and design issues, contributes to the maintenance and enhancement of amenity values (section 7(c)).

2.4.4 Rural resources enable people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety. However, the effects of some activities on the resources and the environment of rural areas, including cumulative effects, can be significantly adverse.

Rural resources include soils, water, minerals, flora and fauna, wetlands, ecosystems, open space, landform and heritage features, landscape character, amenity, and infrastructure. A range of activities take place in rural areas including;

- horticulture, farming, forestry and mineral extraction;
- services for rural people and their activities (e.g. schools, meeting places/places of worship and transport companies);
- rural residential and lifestyle occupation (countryside living);
- resource-based recreation;
- resource conservation (e.g. enhancement of bush remnants);
- Activities that, due to their inability to contain all their effects on-site, are optimally suited to locating in a rural setting (e.g. aerodromes and airports).

The activities mentioned contribute in significant ways to the opportunities for the region's people and communities to provide for their social, economic, and cultural needs and they affect rural resources in different ways. The effects on the environment that result from activities in rural areas are often separated from those activities by time and space and the cumulative effects must be considered. The consistent administration of policy statements and plans is of key importance for the management of cumulative effects, and in order to achieve the objectives of policy statements and plans.

In circumstances where an activity serves both rural and urban areas, a location in the rural area will need to be assessed on its merits. Consideration of character, intensity and scale can assist in that evaluation. The activities in the bullet point list above are examples of activities that are typically associated with rural areas. Other considerations include the degree and extent to which the activity depends on rural resources, requires a rural location or will serve residents in rural areas.

Rural land also has the potential to provide for urban settlement in the future, and it is important to ensure that this potential, which provides for the reasonably foreseeable needs of future generations, is not unnecessarily or prematurely compromised.

Problems that arise from the interaction of activities and resources include the following:

1. Some activities deplete the life supporting capacity, quality or diversity of rural resources (such as the effects of inappropriate agricultural practices on the quality of soil and water resources, clearance of bush, removal of vegetation from stream margins, and draining of wetlands).
2. Some activities (such as the commitment of rural land to urban development, rural intensification, or the inappropriate subdivision of rural land) reduce access to rural resources.
3. Section 5 of the RM Act requires that rural resources be managed to meet present needs while maintaining options for future generations to meet their social, economic and cultural needs.
4. Conflicts arise because people value the resources in rural areas in different, and often conflicting, ways. e.g. Some farming activities, such as intensive animal keeping or orcharding, may give rise to effects beyond property boundaries such as odours, noise, or spray-drift.
5. In rural parts of the region some activities have reduced rural landscape quality and visual amenity and hence rural character.
6. Amenity values and safety are reduced due to the cumulative effects of increasing vehicular traffic movements on regional roads.
7. The scale of some development and activities locating outside of the Metropolitan Urban Limits (and the limits of rural and coastal settlements), has

the potential to undermine a compact contained urban form and may increase travel demand in a manner that would adversely affect land transport systems that support the integration of land use and transport.

The scale and significance of issues in rural areas varies - not all are RM issues nor are they all of regional significance. Regional significance can arise through the scale of the issue, its area, extent, or because of actual or potential cumulative effects. These issues should be managed by the consistent administration of statutory resource management policies.

Part 2 of the RM Act and links with other chapters

Recognising the versatility of the Region's rural resources enables people and communities to provide for their social, economic and cultural wellbeing (section 5). It also ensures that opportunities are maintained for future generations to make resource use choices in order to meet their own needs (section 5 (2)(a)). In addition, the protection of the soils of the Region is provided for in section 5(2)(b) of the Act which requires the safeguarding of the life-supporting capacity of air, water, soils and ecosystems. The importance of the amenity values of the rural areas (section 7(c)) is also recognised in this issue. Section 7(g) requires that particular regard shall be given to the finite characteristics of natural and physical resources. Policies relating to rural issues are specifically addressed within this chapter and the Water Quality, Air Quality, Soil Conservation, Water Conservation and Allocation, Heritage, Pests and Minerals chapters.

2.4.5 Regionally significant physical resources, including infrastructure, are essential for the community's social and economic wellbeing. The location, development and redevelopment of infrastructure is of strategic importance in its effects on the form and growth of the region. However, the long term viability of regionally significant infrastructure and physical resources can be compromised by the adverse effects, including cumulative effects, of other activities. These regionally significant resources can equally give rise to adverse effects, including cumulative effects on the environment, and on communities. They can be adversely

affected by conflicts if sensitive uses are allowed to develop near them or if they are inappropriately located.

1. Regionally significant infrastructure

The Auckland Region has a large amount of nationally and regionally significant utility services as well as physical structures such as roads, rail, bridges, factories, commercial centres, offices and tourist facilities.

Infrastructural services and facilities, including utility networks and services, are necessary to enable people and communities (and future generations) to meet their economic and social wellbeing.

Regionally significant infrastructure includes the road, ferry and rail system ports, airports and airport flight paths, bulk water supply and drainage reticulation and associated works, solid waste disposal, energy transmission (electricity, gas and oil), electricity generation, transport networks (land and sea), telecommunications and radio communications networks and associated installations, and defence establishments. Universities and other tertiary institutions, large public hospitals and regional parks and reserves are also significant public infrastructure and services. Examples of regionally significant infrastructure are given in Appendix D.

The key issues involving regionally significant infrastructure are:

- Provision (or non-provision) of infrastructure is a major influence in the overall pattern and direction of regional development.
- The need for maintenance, expansion, replacement or upgrading of infrastructure or provision of new infrastructure in order to avoid adverse effects and/or to increase the capacity of infrastructure to accommodate growth.
- The need to avoid, remedy or mitigate the adverse effects generated by proposed changes to infrastructure and to consider alternative ways of avoiding or remedying them. Relocation of infrastructure or restrictions on the location of infrastructure or restrictions on the establishment of sensitive land uses in close proximity may be required to overcome the environmental problems faced. For existing infrastructure, alternatives are often limited to the consideration of matters

of system efficiency rather than the relocation of infrastructure. For new infrastructure, alternatives are sometimes limited by the consideration of location.

- An absence of co-ordination between infrastructure providers and other agencies responsible for urban growth and development may increase the likelihood of adverse effects.

In recent years, utility services have undergone structural change through a process of privatisation and corporatisation. These utility companies are required to focus on their own areas of responsibility, and any co-ordination of utility provision will be on the basis of inter-agency co-operation. There is a need for infrastructure providers to co-ordinate the provision of regionally significant infrastructure so as to properly provide for the economic and social wellbeing of the regional community. At the regional level, the ARC will promote such co-ordination, where appropriate, as a means of achieving integrated management of the natural and physical resources and the strategic direction of the RPS.

Regionally significant infrastructure has had an important influence on the form and direction of the Region's development. New and upgraded infrastructure, particularly roads, public transport facilities and sewerage systems, can also play a major role in reinforcing the desired regional form which is aimed at increasing efficiency and the enhancement and protection of amenity values and significant heritage. In some instances the effects of and/or on regionally significant infrastructure may give rise to the need to evaluate the options for redeveloping, relocating, or restricting regionally significant infrastructure or neighbouring sensitive activities

2. Utility Servicing Thresholds

Auckland is facing a number of development thresholds as the demands on several major utility services and part of the transport network approach design capacities. Options for meeting demands on capacity may be constrained by the location, intensity and nature of both the facility and the proposed urban growth and intensification.

The population served by the Mangere Wastewater Treatment Plant is approaching design capacity. The extent and magnitude of urban development in West

Auckland is nearing capacity of the trunk sewer serving that area.

In addition, the effects of contaminated overflows from the old combined stormwater and sewerage system during rainfall have become less acceptable as public concern about environmental quality has risen. Such overflows have the potential to affect public health and limit public use of effected beaches and waterways.

Much of the presently urbanised area requires significant expenditure to upgrade stormwater and wastewater networks to remedy or mitigate adverse environmental effects and/or accommodate an expanding population. Drainage issues need to be considered on a catchment and city-wide basis and the most appropriate solutions and priorities found to ensure future population growth can be accommodated whilst appropriately mitigating ongoing adverse environmental effects. The regions Councils are working together to develop a more co-ordinated and integrated approach to the management of stormwater contaminants, including reduction at source and targeted stormwater treatment, which considers effects on receiving environments and priorities on a catchment and city-wide basis. A number of future growth areas, particularly rural and coastal settlements, also require significant infrastructure upgrades to meet the growth capacity and to satisfy new environmental standards particularly for discharges.

Electricity networks and services are approaching capacity thresholds due to ongoing and extensive growth and associated demand for electricity supply. The National Grid in particular is reaching capacity. Without significant investment, secure electricity supply into the Auckland and Northland Regions becomes increasingly difficult. In response to this a programme of upgrades of existing infrastructure servicing the Auckland and Northland Regions has been initiated. This programme will be ongoing to continue to ensure a reliable and secure supply of electricity, to meet the projected growth demands in those regions. The failure to do so will severely restrict the regions' economic and social growth and development.

Because of the developmental and environmental consequences which can arise when utility services are provided or extended, it will be essential to ensure that such works are planned and programmed within a strategic framework. Such services should, where practicable, be designed to support a direction of urban

development which gives effect to the purposes of the RM Act.

Part 2 of the RM Act and links with other chapters

As with Issue 2.3.1, this issue is also linked to section 5 of the Act. Regionally significant infrastructure enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety. In meeting the needs of future generations and, in some cases, dealing with major environmental and public health issues, infrastructure is also linked closely to section 5(2)(a), (b) and (c). In addition, section 7 of the Act requires that particular regard shall be given to:

- The efficient use and development of natural and physical resources.
- The maintenance and enhancement of amenity values.
- The maintenance and enhancement of the quality of the environment.

All these provisions have particular relevance to the significant infrastructure of the Region. Policies relating to infrastructure issues are specifically addressed within this chapter and the Transport, Energy, Water Quality and Coastal Environment chapters.

2.4.6 It is important that Auckland's transportation system and its land use is well integrated. Without a high level of integration it will be difficult for the region to meet its social and economic needs and this will result in an inefficient use of resources and increase the adverse effects the transport system has on the environment.

Past development of Auckland's transport system has provided Aucklanders with a level of mobility and accessibility that is high by world standards and is based on the private use of motor vehicles. Investment from the 1960s onward in the development of the motorway system has encouraged outward expansion and decentralisation of the city.

Today, however, parts of the motorway system and arterial roading system are congested, especially at peak travel times. This reflects the inefficiency of Auckland's expansive low density form, and the diminishing effectiveness of the public transport system. Longer

travel times and greater numbers of vehicles exacerbate the adverse environmental effects of transport activities.

In addition, the public transport system has become primarily a commuter service, carrying a small proportion of workers and servicing mainly the central city, a destination which is no longer the Region's only significant employment focus.

The cause and effect relationship between land use and transport has been acknowledged for some time in Auckland. However, the lack of planned integration between the outcomes has contributed to a number of adverse effects to the environment.

The development of the motorway network has been a key contributor in the development of Auckland as a low density city since the 1960s. This low density of development, which includes single dwelling housing suburbs and single storied industrial areas, has had a number of adverse effects on the natural environment.

In turn this form of development has led to the need to invest even more in the roading network which has perpetuated the expansive growth of the city and the dependency on the motor vehicle for the vast majority of all trips being made in the region.

The adverse environmental effects of a road based transport system and of the low density urban form and lifestyle it supports are well known. These effects include;

- the loss of rural land which is valued for its agricultural, ecological and aesthetic qualities;
- increased emissions into the air of a variety of pollutants, including greenhouse gases;
- the lowering of water quality in waterways and harbours by polluted runoff from roads, including lead, zinc, copper, hydrocarbons and petrochemicals;
- relatively high use of energy and reliance on consumption of non-renewable resources both in fuel use and in land use;
- impacts on sustainable urban form and design, including town centres, and on urban and rural amenity values.

While there are some community benefits associated with this low density form of development, there are also a number of direct and indirect adverse effects on regional and local communities. These include:

- adverse health effects from air emissions from vehicles;
- reduced community health and fitness from a lack of safe active transport modes;
- a high level of road deaths and injuries;
- other community impacts such as community severance caused by the development and expansion of the urban roading network.

This pattern of low density urban development and dependence on private motor vehicles has also made it difficult to provide for more sustainable transport modes such as effective public transport and walking and cycling opportunities. This is because low density development cannot support an efficient public transport system and segregated land uses (e.g. living in one part of the region, working in another) promote longer trips and restrict opportunities for walking and cycling.

Since the early 1990s land use patterns in Auckland have begun to change with more growth being accommodated by way of urban intensification. However the majority of this intensification (through infill housing and medium density housing development in a number of business zones) has not always been coordinated with the maintenance and enhancement of existing passenger transport networks and the development of an integrated multimodal transport system. This form of intensification and land use provisions have perpetuated the pattern of more private vehicles trips and with it the associated adverse effects on the natural environment and the health and safety of communities.

In addition, this uncoordinated form of urban intensification is having an adverse impact on the efficiency and sustainability of the regions transport system. These impacts include:

- reverse sensitivity effects and costs placed on the roading network from urban development which has not addressed air quality and noise effects which arise from locating adjacent to busy roads;
- the reduced safety and efficiency of the roading network resulting from the cumulative addition of vehicles and driveways directly accessing the roading network;
- the inability to provide or coordinate improved accessibility for all transport modes;
- the loss of opportunities for mixed use high density development within and surrounding High Density

Centres and Intensive Corridors.

Transport and land use are both interrelated and interdependent. This is especially the case in the Auckland Region, where the transportation system passes through and serves a range of land uses and activities. Commercial and industrial business activities are changing their character within the Region, with less traditional manufacturing, and retail activity seeking locations outside commercial centres, and the rapid distribution of goods and services. Implementing the Growth Strategy will need to take into account changing trends in land use activities and their locational requirements, having regard to addressing the wider adverse effects of urban growth and the strategic integration of infrastructure with land use.

In particular, there is a need to ensure that future investments in regional transport maintain an efficient and effective transportation system, and support the more intensive land use pattern where High Density Centres and Intensive Corridors have been provided for.

A lack of integration between land use intensification and the transportation system (in particular the passenger transport network) will result in an under-utilisation of the land resource and greater development of low density neighbourhoods at the edge of the urban area. Passenger transport nodes should be reinforced and strengthened where these are:

- a) within walking distance of higher residential density areas, High Density Centres, Intensive Corridors; or
- b) in close proximity to mixed use and commercial activity nodes in High Density Centres and along Intensive Corridors.

Realising opportunities for intensification near passenger transport nodes will give effect to the Growth Strategy and the vision of a compact, contained urban form.

The Gulf Islands face particular transport issues including the need to relate access opportunities to the ability of the environment to cope with development and visitors and the need for special planning measures at key entry points (wharves and airports).

Part 2 of the RM Act and links with other chapters

The transportation system is essential for the social and economic wellbeing of the community. It is an important shaper of the Region's development, is a high user of energy, and also has an impact on the environment. The

road network is a highly significant component of Auckland's infrastructure (refer to Issue 2.3.2 for further details of this issue). Energy is included in the meaning of natural and physical resources and its efficient use is a matter requiring particular regard under section 7(b) of the Act. The environmental effects of transportation can be significant and avoiding, remedying, or mitigating those effects are provided for in section 5 of the Act. Policies relating to transport issues are specifically addressed in the Transport, Energy, Air Quality and Water Quality chapters.

2.4.7 Auckland's coastal environment is a fundamental part of its heritage and is sensitive to the adverse effects of inappropriate subdivision, use and development. It is also essential for the Region's social and economic wellbeing.

In this Region water quality is of major significance. Auckland's maritime setting is crucial to its identity and economy. The coastal marine area (CMA) represents 69% of the total area of the Auckland Region. The Region's coastline is lengthy and diverse, ranging from the rugged and wind-swept west coast to the protected harbours and beaches along the east coast and gulf islands.

The Hauraki Gulf and its islands are resources of regional and national significance for navigation and port purposes, fishing, recreation, tourism and settlement. The Hauraki Gulf Marine Park Act 2000 requires the Council maintains the interrelationship between the Hauraki Gulf, its islands and catchments to sustain the life supporting capacity of the environment. Sections 7 and 8 of the Act recognise the national significance of the Hauraki Gulf and sets out objectives for its management. An integrated management approach (including national, regional and local levels) is required to sustain these activities while avoiding the risk of environmental damage. The main harbours of the Kaipara, Waitemata and Manukau are semi-enclosed bodies of water which are susceptible to the adverse effects of stormwater runoff from land development and urban and rural activities. Stormwater runoff impacts water quality and has effects on ecology and the marine habitat. The Region's coastline includes a number of other significant harbours (Mahurangi, Whangateau, Bon Accord, Matiatia, Fitzroy and Tryphena), and many estuaries and rivers (such as the Matakana, Puhoi, Orewa, Weiti, Okura, and Wairoa). All of these are of ecological, recreational and visual

significance to the regional community. They are all sensitive to the ways in which land in their catchments is developed and used.

Harbours, such as the Mahurangi, sustain a variety of recreational uses as well as commercial shell fisheries. The catchment also contains large tracts of forest and some urbanisation. These potentially conflicting uses must be carefully managed to ensure this diversity of use is sustainable and the resource qualities are maintained.

The coast is a public asset which not only provides much of the character and identity of the Auckland Region but is important to the social, economic and cultural wellbeing of its residents. Maintaining or improving public access to the coast is a matter of national importance to be protected, promoted and, if required, negotiated with landowners.

Development on the coast for such purposes as the port, marinas, and some particular forms of commerce, may affect the natural character of the coastal environment and may not be appropriate in all coastal areas. It can also be a catalyst for urbanisation with additional effects on the marine environment. It is therefore important that its location and effects be planned and managed within the strategic framework for regional development. Development along the coast should also take into account potential hazards from coastal erosion and the unpredictability of the effects of global climate change.

There is increasing pressure for settlement in coastal areas, and there is a concern that some coastal settlements are losing coastal natural character, landscape and amenity values through such things as the proliferation of buildings and loss of native vegetation. Future settlement needs to be managed carefully in terms of its location, extent, scale and character so as to avoid such adverse impacts on the Region's coastal environment. This includes in the Waitakere Ranges Heritage Area (refer Appendix I) where there is little capacity to absorb further subdivision and the built environment should remain subservient to the natural landscape.

Most of urban Auckland drains into harbours, estuaries, or coastal waters which are valued and used in a wide variety of ways. The protection of these areas already imposes unavoidable costs, in terms of managing the environmental consequences and treatment of stormwater runoff. Continuing urban expansion would extend these effects and increase the costs of mitigating or remedying adverse effects on the Region's marine areas.

Growing awareness of the pollutive effects of urban stormwater was brought into focus by the Manukau Harbour Water Quality Management Plan, 1990. It showed stormwater runoff from urban areas to be the greatest contributor of toxic contaminants to that harbour. Urban stormwater is contaminated by a wide range of sources, including spills by industries, products of vehicle operation washed from roads, faeces of domestic pets, and sediments from land under development and from home gardens.

This requires a combination of approaches such as public education to reduce contamination at source and prioritising catchments for appropriate stormwater treatment.

Part 2 of the RM Act and links with other chapters

This particular issue is linked to the provisions of Part 2 of the Act, in particular, section 5 and Matters of National Importance, section 6(a) which provides for the preservation of the natural character of the coastal environment. Policies relating to coastal environment issues are specifically addressed in the Coastal Environment, Heritage, Water Quality, Natural Hazards and Matters of Significance to Iwi chapters.

2.4.8 Auckland's heritage is important because it gives Auckland its uniqueness and sense of identity, but some of this is under threat.

Auckland has a unique and distinctive natural and cultural heritage which is central to the identity of communities, groups and individuals in the Region. It is also important for the economic, social and cultural wellbeing of the Region. In addition, the intrinsic values of Auckland's ecosystems and natural areas and their biodiversity are important and in need of protection.

At a strategic level, the Waitemata, Manukau and Kaipara Harbours, Waitakere Ranges Heritage Area (refer Appendix I), Hauraki Gulf Islands, important bush-clad escarpments and volcanic features (cones and craters) are major features of natural heritage which contribute to Auckland's identity. Many of these features also hold associations with the past for the Tangata Whenua of the Region. In many places in the Region indigenous vegetation has been reduced to a level where the remaining remnants are no longer sustainable as viable ecosystems. Wetlands have been progressively drained so that the remaining wetlands are now of special value because of their rarity. It is also essential to control plant and animal pests which can damage important natural

heritage in urban and rural areas.

Historic and special character buildings, sites and places also play an important part in the retention of the Region's heritage. It is essential that these buildings be identified and given appropriate classification and protection in district plans and through the provisions of the Historic Places Act (HP Act).

Respect for the vital contribution heritage makes to the identity of Auckland and recognition of the importance of the life-supporting capacity of ecosystems and natural features are constraints which mould the form and direction of development in the Region. In certain cases there is a need for a greater level of protection from adverse effects than has been provided in the past. One method of achieving this is to ensure there is no significant increase in the intensity of development. Examples include the volcanic cones and Waitakere Ranges Heritage Area, (refer Appendix I).

Part 2 of the RM Act and links with other chapters

The protection of the Region's heritage (natural and cultural) is provided for in Part 2 of the Act. In particular: section 6(b) provides for the protection of outstanding natural features and landscapes; section 6(c) provides for the protection of significant indigenous vegetation and habitats; and section 6(e) provides for the relationship of Maori with their ancestral lands, water, sites, waahi tapu and other taonga, all as matters of national importance. In addition, particular regard shall be given to the recognition and protection of heritage values of sites, buildings, places, or areas (section 7(e)). Policies relating to heritage issues are specifically addressed in the Heritage, Matters of Significance to Iwi and Pests chapters.

2.4.9 Tangata Whenua are under increasing pressure to manage their ancestral taonga.

Management of the ancestral taonga by Tangata Whenua is being affected by:

- The effects of Auckland's regional growth and development on the relationship of Tangata Whenua with their ancestral taonga. Growth and development has also been associated with pollution of waterways, reduction in natural and cultural heritage, and reduced access to heritage and sites of significance to Tangata Whenua.
- Impediments to Tangata Whenua in their effective

involvement in sustainable management of their ancestral taonga. These impediments include misunderstandings, lack of awareness of rights and responsibilities, limited resources to participate, and difficulties in dealing with official structures and systems.

- Lack of recognition of the Treaty of Waitangi in the administration of resource management. With the RM Act, Tangata Whenua have expectations that new procedures will be in place to ensure that, as far as practicable, future Treaty grievances pertaining to the management of natural and physical resources will be avoided.

Part 2 of the RM Act and links with other chapters

This issue is linked to sections 6, 7 and 8 of the Act. Section 6 provides for the relationship of Maori with their taonga as a matter of national importance; section 7(a) states that particular regard shall be had to kaitiakitanga; and section 8 states that the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) shall be taken into account in exercising powers and functions under the Act. Policies relating to Tangata Whenua issues are specifically addressed in the Matters of Significance to Iwi Chapter and in most other chapters.

2.4.10 There is a diminishing supply of vacant, or underutilised, business land to provide for future economic development. The provision and location of business land is of strategic importance in its effects on the form and growth of the region.

Economic growth can support a higher standard of living. To provide for the economic well-being of people and communities, the Region seeks to encourage sustainable economic development, whilst protecting agreed social and natural values. A compact urban environment needs to efficiently utilise remaining business land whilst providing sufficient opportunities and flexibility for business growth.

Existing High Density Centres and in some cases Intensive Corridors represent an agglomeration of regionally significant physical resources. Such areas play an important role in providing for the economic and social well-being of the region and have an associated value and range of benefits to the community. Subject to integration of land-use and transportation, and maintaining the important role of Commercial Centres, Commercial Activities located along Intensive and other Corridors could contribute to the economic and social well-being of the community. This presents challenges for the identification of appropriate mechanisms to ensure that such High Density Centres and Intensive Corridors are sustainably managed for existing and future communities, whilst recognising appropriate opportunities for commercial growth in other locations.

Auckland is the key industrial and commercial centre for New Zealand. Important commercial centres are situated throughout the Region in areas such as the CBD, and other centres such as Newmarket, St Luke's Centre, Manukau, Henderson, New Lynn, Takapuna, Westgate, Albany, Orewa, Pakuranga, Papatoetoe, Glenfield, Howick, Browns Bay, and Manurewa. Other areas for light and heavy industry are also located throughout the region in areas such as Albany, the Wairau Valley, Penrose and Mt Wellington, East Tamaki, Manukau and Auckland Airport. A range of other business areas are also established in many other parts of the Region.

In a compact urban environment it is important that Commercial Centres, Corridors and industrial areas are able to grow, in accordance with social, economic, cultural and environmental outcomes. Commercial centres in particular can benefit economically from increased intensification and efficient use of available land. If development in these areas is well designed, and contains a mixture of activities, this will ensure that the centre becomes multi-functional. While residential development will be encouraged in such centres, residential development will need to be appropriately designed to ensure that the introduction of dwellings does not result in reverse sensitivity effects on commercial activities.

The relative importance of commercial centres changes over time due to competition and new developments. It is important that plans recognise the dynamics of change and also that the adverse effects of change on the environment including the form and direction of urban growth are adequately considered and monitored. The grouping of activities that have similar environmental

effects is supported where this enables economic growth and such grouping enables the avoidance, remedying or mitigation of any adverse environmental effects that might otherwise be caused. Whether such activities are grouped or not, it is important that their location and design serves to enable the effective management of adverse environmental effects. Commercial centres are important community focal points particularly where they provide opportunities for the public and private sectors to co-ordinate their services, including transport, for the benefit and accessibility of the community.

In the past, business growth has relied largely on expanding onto greenfield sites. Accommodating future growth through continual expansion without also considering the efficient utilisation of existing business land would be unsustainable and contrary to the RGS. However it is recognised, that, while there remains a shortage of business zoned land, particularly for land extensive industrial activities, expansion into Greenfield land will need to be provided for, including locations outside of the existing MUL where there is a proven sub-regional shortage of such land. In some locations, expansion onto Greenfield sites may also be the most appropriate means of providing for more localised employment opportunities in those areas where there is an employment/residential imbalance. The employment residential imbalance is a particular issue in the western sector of the region. Addressing this imbalance will assist in reducing the need to travel longer distances for employment; as one means of achieving better integration of land use and transport.

Similarly local planning for economic development has generally allowed a broad range of business activities to locate within broadly defined business zones. This has meant retail and service sector businesses competing for the same business land as manufacturers and other land extensive business sectors. In some town centres in the region there are remnant industries that cause significant adverse effects that impact on other commercial activities located nearby.

Commercial activities that are best suited to locate and develop in High Density Centres and Intensive Corridors should be enabled to do so within those areas. Outside of the localities of High Density Centres and Intensive Corridors, such activities should be discouraged from locating where they would compromise the achievement of a compact sustainable urban form and sustainable urban land use intensification.

There is in addition, a range of business activities, including a limited range of retail (particularly larger format retail) activities which due to form, scale or customer base are ill-suited to locating in High Density Centres and Intensive Corridors. These include activities that require extensive land, have noxious emissions, contribute to reverse sensitivity problems and create adverse effects on the environment. Such activities should be encouraged to locate in business areas that are zoned specifically for such activities so that adverse effects can be adequately avoided, remedied or mitigated. Although there is some regional capacity for future growth in these heavy business areas, it is recognised by the ARC that future business growth is likely to lead to a shortage of vacant business land in such business areas and new greenfield land may be required to provide for future growth.

Increasing populations will create an increased demand for commercial, particularly retail, activity. The availability of Retail Activities is particularly important to provide for the community's wellbeing by ensuring that consumers have ready access to a choice of goods and services. There is a wide spectrum of Retail Activities in terms of form, scale, function, transportation effects and customer base. Whilst the majority of Commercial Activities will continue to locate in Commercial Centres, a centre location may not always be suitable for all types of retail activities due to a number of factors including their function, as well as site requirements and size. It may therefore be appropriate in a number of circumstances, to locate such activities along Intensive Corridors and elsewhere in business zones, subject to ensuring any adverse environmental effects are appropriately managed.

Recognition of the important industrial and commercial base of the Region is essential in resource management and strategic planning. It is crucial for the economic and social wellbeing of the community. Local authorities should ensure that the introduction of mixed use zones (e.g., residential and commercial) or encroachment of housing on quarrying and industrial areas, especially those storing or using hazardous substances, do not impose high costs on or prejudice the future use of industrial sites due to incompatibility of uses.

Part 2 of the RM Act and links with other chapters

As with Issues 2.4.1, this issue is also linked to section 5 of the Act. Sustainable economic development and the provision of business land enables people and communities to provide for their social, economic and cultural well-being and for their health and safety. Also as already identified in Issue 2.4.1, the Region must accommodate future population growth and economic development (see section 5 of the RM Act). Accommodating growth also fulfils the requirement of section 5(2) (a) to meet the reasonably foreseeable needs of future generations. Specific objectives and policies related to sustainable economic development and the provision of business land are contained within Strategic objectives and the policies related to urban containment and structure.

2.5 From issues to Strategic Direction

The RM Act requires the RPS to provide an overview of the resource management issues relevant to the Region together with policies and methods necessary to enable the resources of the Region to be managed in a sustainable and integrated manner.

Essentially this requires, in addition to the protection of the natural environment, recognition of those other resources and activities which enable people to provide for their continuing economic, social and cultural wellbeing and their health and safety, and the identification of the issues which need to be addressed. Section 5 of the RM Act also requires consideration of three conditions over the management of the use, development and protection of the natural and physical resources of the Region.

The first stated requirement in the RMA is to sustain resources to meet the reasonably foreseeable needs of future generations. The Strategic Direction recognises the needs of future generations by:

- managing future growth and development to achieve sustainable outcomes;
- ensuring the Region has the capacity to accommodate growth and development;
- enabling the providers of significant regional resources to meet economic and social needs of the community while ensuring that adverse environmental effects are avoided remedied or mitigated;

- improving urban efficiency.

Guiding development in a way which avoids foreclosing future options ensures that future generations will be in a position to make appropriate resource use choices in order to meet their own needs.

The second requirement stated in the Act is to safeguard the life-supporting capacity of air, water, soil and ecosystems. The Strategic Direction is concerned with the protection of the life-supporting capacity of these resources in the Region. It also recognises that some of these resources have already been degraded and seeks their remediation.

The third requirement is that measures be taken relating to any adverse effects on the environment. Where an activity or the use or development of any resource results in, or is likely to result in, some adverse effects on the environment, the RM Act identifies three approaches to achieving a balance of competing values and interests involved. These are to 'avoid' adverse effects, to 'mitigate' the effects, or where the resources are already affected, to 'remedy' the adverse effects.

The strategic response is to avoid significant adverse effects, especially where the effects are not easily anticipated or, where cumulatively over time, they carry costs (social, economic or environmental). Failure to respond effectively can lead to significant irreversible impacts which cannot be remedied or mitigated. It is also recognised that not all adverse effects can be avoided as a result of development processes. In such circumstances the strategic response is to seek a direction that leads to the least adverse effect which is most capable of being managed over the long term.

The key factors to be considered in the integrated management of the Region's natural and physical resources are:

- Auckland is the largest growth centre in New Zealand, in terms of population increase, urban development and the physical take-up of land, and nearly all of the Region's resource management issues stem from the impacts of this development on natural and physical resources.
- The continuing growth of urban population results in an ongoing need for more housing, jobs, regional infrastructure, transport facilities, and other services, with cumulative effects on the land and water resources of the Region, and on its air quality.

- The effects of urban development and a large urban population extend widely over the rural parts of the Auckland Region. These effects create pressure for urban-generated countryside living, resource-based recreation, and growing markets for rural produce.
- New regional infrastructure and transportation and the extension of existing services can have a profound impact on the form and direction of the Region's development and consequential, as well as direct, potential impacts on the environment.
- Auckland's regionally significant resources, including infrastructure, and facilities and services for transport and energy are essential to the community's social and economic wellbeing. New infrastructure and the extension of existing services can have a profound impact on the form and direction of the Region's development.
- Auckland already has a number of serious environmental concerns which need attention. These include degradation of some waterways, air quality concerns in some urban areas and loss of natural and cultural heritage. Developmental pressures have the potential to exacerbate those problems.

In the development of a regional strategy, the form and direction of future growth provides a focus around which the integrated management of natural and physical resources can best be achieved. This is because, in determining an appropriate direction and form for Auckland's future development, all resource management objectives need to be considered. That is, land management, water quality, heritage, coastal, air quality, landscape, social, economic, energy, transportation and other infrastructure objectives all have to be recognised and taken into account in order to provide for the integrated management of all the Region's resources.

For the above reasons, it is concluded that the strategic direction for the Region should guide development in a direction and towards a form which will provide appropriately for the Region's growth while managing the resources of the Region in a sustainable and integrated manner, as required by section 59 of the RM Act.

An overview of the issues arising in the Region leads to the conclusion that to achieve the purposes of the RM Act it is necessary to:

- Auckland is the largest growth centre in New Zealand, in terms of population increase, urban development and the physical take-up of land, and nearly all of the Region's resource management issues stem from the impacts of this development on natural and physical resources.
- The continuing growth of urban population results in an ongoing need for more housing, jobs, regionally significant infrastructure, transport facilities, and other services, with cumulative effects on the land and water resources of the Region, and on its air quality.
- New development occurring in close proximity to regionally significant infrastructure can have an adverse effect on the function and operation of services necessary to support continuing population growth.
- The effects of urban development and a large urban population extend widely over the rural parts of the Auckland Region. These effects create pressure for urban-generated countryside living, resource-based recreation, and growing markets for rural produce.
- New regionally significant infrastructure and transportation and the extension of existing services can have a profound impact on the form and direction of the Region's development and consequential, as well as direct, potential impacts on the environment.
- Auckland's regionally significant resources, including infrastructure, and facilities and services for transport and energy are essential to the community's social and economic wellbeing. New infrastructure and the extension of existing services can have a profound impact on the form and direction of the Region's development.
- Auckland already has a number of serious environmental concerns which need attention. These include degradation of some waterways, air quality concerns in some urban areas and loss of natural and cultural heritage. Developmental pressures have the potential to exacerbate those problems.

In the development of a regional strategy, the form and direction of future growth provides a focus around which the integrated management of natural and physical resources can best be achieved. This is

because, in determining an appropriate direction and form for Auckland's future development, all resource management objectives need to be considered. That is, land management, water quality, heritage, coastal, air quality, landscape, social, economic, energy, transportation and other infrastructure objectives all have to be recognised and taken into account in order to provide for the integrated management of all the Region's resources.

2.6 The Strategic Direction

The strategic direction for the Region should guide development in a direction and towards a form which will provide appropriately for the Region's growth while managing the resources of the Region in a sustainable and integrated manner, as required by section 59 of the RM Act.

This is further reinforced by the requirement of the Local Government (Auckland) Amendment Act 2004 which requires that the growth concept in the Auckland Regional Growth Strategy be given effect to through this RPS and other planning documents in the region.

An overview of the issues arising in the Region leads to the conclusion that to achieve the purposes of the RM Act and Local Government (Auckland) Amendment Act 2004 it is necessary for the Strategic Direction to:

- contain expansion of Auckland's urban development while still providing for population and economic growth;
- require that High Density Centres and Intensive Corridors within the metropolitan urban limits are the focus for accommodating urban growth through intensification;
- provide restricted opportunities for greenfields development through limited movement of the metropolitan urban limits;
- recognise that rural towns and settlements are an important focus for accommodating rural growth in a contained compact form;
- direct urban, rural and coastal settlement development and countryside living to areas in a form which is efficient in terms of travel patterns and energy use, supports infrastructure investment and avoid, remedies, or mitigates adverse effects on the Region's natural and physical resources including existing infrastructure and, the Region's volcanic cones;

- guide the providers of urban infrastructure and transport facilities or services so that they plan and programme their facilities or services so as to support urban development being contained within urban limits and growth being accommodated through intensification at selected locations;
- remedy or mitigate degraded natural resources which are life-supporting (air, water, soils and ecosystems), and protect those significant natural and physical resources which provide for the foreseeable needs of future generations;
- guide Councils to plan for the regeneration of existing sub regional centres and town centres to maximise opportunities for public and private investment;
- protect the important natural and cultural heritage, landscape and amenity values of significant landscapes in the Region, such as the Waitakere Ranges and the volcanic cones, from the adverse effects of intensification;
- promote the protection, restoration and enhancement of the heritage features of the Waitakere Ranges Heritage Area (refer Appendix I) and recognise that the area has little capacity to absorb future subdivisions without creating adverse effects, including cumulative effects, on these heritage features.

The Strategic Direction comprises the following Strategic Objectives and Policies. It is based on Part 2 of the RM Act, the LGAAA, consideration of the overview issues in 2.4 of the RPS, the ARC's functions under the RM Act and the provision of policies and methods to achieve integrated management of the natural and physical resources of the whole Region. These objectives and policies are to be considered in conjunction with the objectives and policies in other chapters of the RPS.

2.6.1 Strategic Objectives

1. *To ensure that provision is made to accommodate the Region's growth in a manner which gives effect to the purposes and principles of the Resource Management Act 1991 and Section 40 of the Local Government (Auckland) Amendment Act 2004, and is consistent with these Strategic objectives and with the provisions of this RPS.*
2. *To maintain and enhance the overall quality of the environment of the Auckland Region, within and outside the urban area, including its unique maritime setting, volcanic features, significant landscapes, cultural and natural heritage values, and public open space.*
3. *To achieve a compact well designed more sustainable urban form served by an integrated multimodal (private vehicles, public transport, walking and cycling) transport system.*
4. *To develop and manage the region's transport system including road, rail, ferry, bus, cycling and pedestrian networks and services in a manner that supports urban development and land use intensification.*
5. *To achieve a built environment within the region's metropolitan area and rural and coastal settlements that has a sense of identity and character, has a range of densities and uses, maintains or enhances its amenity values, and is visually pleasant, functionally efficient, environmentally sustainable and economically vibrant.*
6. *To achieve a high level of mobility and accessibility within the Region that provides for an integrated, responsive, sustainable, safe, affordable and efficient movement of goods and people.*
7. *To protect regionally significant mineral resources from the adverse effects of inappropriate subdivision, use or development.*
8. *To protect the rural land resources from the adverse effects of inappropriate subdivision, use or development.*
9. *To protect amenity values, rural character, and landscape values of rural areas, including volcanic cones, from the adverse effects of inappropriate subdivision, use or development.*
10. *To preserve the natural character of the coastal environment, whilst ensuring that the use of the coastal environment by those industries and activities which serve the needs of the Region and which depend on a coastal location is appropriate and efficient.*
11. *To protect the intrinsic values of the Region's natural resource base, within and outside the urban area, and to make appropriate provision for the avoidance, remediation or mitigation of adverse effects on the Region's environment, including the*

identification of significant natural features and landscapes, and areas of significant indigenous vegetation and habitat, and protection of these from inappropriate subdivision use and development.

12. *To encourage the efficient use of natural and physical resources, including urban land, infrastructure, and energy resources.*
13. *To preserve and protect a diverse and representative range of the Region's heritage resources*
14. *To manage the Region's natural and physical resources in an integrated manner.*
15. *To involve the Tangata Whenua as kaitiaki of the Region's natural resources.*
16. *To improve the overall health, well being and quality of life of the people of the Region.*
17. *To enable the redevelopment, operation and maintenance of existing and provision of new regionally significant infrastructure.*
18. *To develop a network of High Density Centres and Intensive Corridors as the focus for the region's urban growth.*
19. *To enable sustainable economic development to occur through Business Activities in appropriate locations throughout the region.*
20. *To protect the Waitakere Ranges Heritage Area from inappropriate subdivision, use and development, and to promote the protection restoration and enhancement of the area's heritage features (refer Appendix I).*

Strategic Policies

There are six Strategic Policies:

- Urban Containment
- Urban Structure
- Urban Design
- Land Use and Transport Integration
- Infrastructure
- Rural Areas

2.6.2 Strategic Policies - Urban Containment

1. *Urban activities are to be contained within the metropolitan urban limits (MUL) shown on Map Series 1 and within the limits of rural and coastal settlements such that:*

- (i) *There is no provision for new, or expansion of existing, urban activities outside the metropolitan urban limits as defined and shown in the RPS, except as provided for in Policy 2.6.2.2;*
 - (ii) *There is no expansion of rural and coastal settlements outside the limits of their existing urban areas except as provided for in Policy 2.6.2.2;*
 - (iii) *There is no provision for new rural and coastal settlements except as provided for in Policies 2.6.2.4 and 2.6.2.5.*
2. *Extensions may be made to the metropolitan urban limits shown on Map Series 1 and to the limits of rural and coastal settlements from time to time, but only where:*
 - (i) *The strategic direction of containment and intensification is not compromised. In particular the extension does not compromise intensification within the areas identified for intensification in:*
 - (a) *Schedule 1 that are within the same geographical Sector (North/West, Central or South) where the extension is located; and*
 - (b) *the district plan(s) that relate to that geographical Sector;*
 - (ii) *The extension avoids areas of:*
 - (a) *significant ecological or heritage values;*
 - (b) *outstanding natural features and landscapes;*
 - (c) *regionally significant landscapes; or*
 - (d) *high natural character;**including areas or parts of areas identified in Appendix B that contain these values, and the area identified in Appendix I;*
 - (iii) *It can be demonstrated that infrastructure and services, including utility services, roading and public transportation facilities and services, and community and health services, such as schools, libraries, public open spaces can be provided appropriate to the scale of the extension;*

- (iv) *The extension:*
 - (a) *is contiguous with existing urban development; and*
 - (b) *can be efficiently connected to existing physical infrastructure or serviced by new infrastructure; and*
 - (c) *in the case of rural and coastal settlements, the extension will support and complement existing rural and coastal settlements;*
 - (v) *Areas where there is a risk of damage to land or property or of loss of life occurring as the result of the impact of natural hazards, such as flooding or land instability, are avoided;*
 - (vi) *The new boundary provides a clear differentiation between urban and rural areas in order to reduce pressure for future urban expansion, including through the use of:*
 - (a) *water catchment boundaries; and/or*
 - (b) *visual catchment boundaries; and/or*
 - (c) *major roads and transport routes; and/or*
 - (d) *land protected from development (through legally binding protection mechanisms or vesting as public reserve);*
 - (vii) *It achieves a defensible long term limit to the urban area;*
 - (viii) *Conflicts or incompatibilities between adjoining land uses are avoided or mitigated;*
 - (ix) *Areas of elite land are avoided;*
 - (x) *It is demonstrated that there is insufficient undeveloped and/or appropriately zoned land, available within the metropolitan urban limits, or the limits of rural or coastal settlements, within the particular geographical Sector (North/West, Central or South) in which the extension is located;*
 - (xi) *An integrated transport assessment is provided in accordance with the matters outlined in Appendix J; and*
 - (xii) *In the case of proposed extensions to the metropolitan urban limits, the following matters are to be taken into account:*
 - (a) *the need to redress any existing residential/employment imbalance;*
 - (b) *the need to provide for a range of housing types;*
 - (c) *for land extensive industrial activities, the typical requirements set out in the definition of land extensive industrial activities in Appendix D.*
3. *Countryside living is subject to constraints as to location, scale and extent and should not compromise urban consolidation policies (refer to Strategic Policies – Rural Areas and methods).*
 4. *New rural or coastal settlements may be provided for where the proposal:*
 - (i) *only utilises existing titles and/or consented lots from within the rural area within the particular geographical Sector (North/West, Central or South) in which the new rural or coastal settlement is located; and*
 - (ii) *meets the requirements in Policies 2.6.2.5(iii), (iv), (v), (vi) and (ix), and Method 2.6.3.10.*
 5. *New rural or coastal settlements that do not meet Policy 2.6.2.4(i) may be provided for where the proposal:*
 - (i) *does not compromise the strategic direction of urban containment and supports the integration of land use and transport;*
 - (ii) *does not compromise the planned growth of existing rural and coastal settlements and/or planned extensions of the MUL;*
 - (iii) *avoids the following:*
 - (a) *areas of:*
 - *significant ecological or heritage values;*
 - *outstanding natural features and landscapes;*
 - *regionally significant landscapes; or*
 - *high natural character*
- including areas or parts of areas identified in Appendix B that contain those values and the area identified in Appendix I;*
- (b) *areas where there is a risk of damage to land or property or of loss of life occurring as the result of the impact of natural hazards, such as flooding or land instability;*

- (c) *areas of elite land;*
- (iv) *achieves environmental restoration and/or enhancement relevant to the scale and/or location of the proposal;*
- (v) *avoids or mitigates reverse sensitivity effects between incompatible land uses;*
- (vi) *provides the following infrastructure and services, as relevant to the scale of the proposal:*
 - (a) *utility services;*
 - (b) *roading and transportation facilities and services; and*
 - (c) *community and health services, and public open spaces;*
- (vii) *provides a clear differentiation between urban and rural areas in order to reduce pressure for future urban expansion, including through the use of:*
 - (a) *water catchment boundaries; and/or*
 - (b) *visual catchment boundaries; and/or*
 - (c) *major roads and transports routes; and/or*
 - (d) *land protected from development (through legally binding protection mechanisms or vesting as public reserves);*
- (viii) *provides a mixture of activities including commercial, residential, and community activities and enables the provision of sufficient land to enable local employment opportunities, as relevant to the scale of the proposal;*
- (ix) *provides an integrated transport assessment in accordance with the matters outlined in Appendix J, in a manner relevant to the scale of the proposal; and*
- (x) *takes into account whether there is insufficient undeveloped and/or appropriately zoned land available within the particular geographical Sector (North/West, Central or South) in which the proposed rural or coastal settlement is located.*

2.6.3 Methods - Urban Containment

1. *District Plans shall provide for the urban containment of metropolitan Auckland within the metropolitan urban limits shown on Map Series 1 in the RPS. In particular they will include appropriate provisions to avoid urban activities locating outside the metropolitan urban limits and limits of rural and coastal settlements and to accommodate urban activities within these limits.*
2. *District plans shall identify areas suitable for urban intensification within the MUL that are able to accommodate reasonably foreseeable growth and include provisions to enable and encourage this to occur.*
3. *The ARC upon request from a territorial authority within the Region will consider changes to the RPS to extend the metropolitan urban limits in accordance with Policy 2.6.2.2. Information required in support of a request will include but not be limited to:*
 - (i) *an assessment of how the provisions of this RPS are addressed;*
 - (ii) *an integrated catchment management plan;*
 - (iii) *all relevant applications for discharge consents, including stormwater discharges;*
 - (iv) *a report demonstrating how any environmental, including human health, issues arising from the catchment management plan and application for discharge consent will be addressed;*
 - (v) *an assessment of how any air quality management issues and any potential health will be addressed;*
 - (vi) *a structure plan in accordance with the matters set out in Appendix A: Structure Planning;*
 - (vii) *District Plan policy guidance and rules to a level of detail sufficient to establish:*
 - (a) *the types and densities of activities provided;*
 - (b) *the extent of potential impermeable surfaces;*
 - (c) *how any environmental issues arising from the catchment management plan*

- and application for a discharge consent will be addressed;*
- (d) the sequencing and timing of the release of land for urban development;*
- (e) how urban design outcomes will be achieved;*
- (viii) an open space plan having regard to the Auckland Regional Open Space Strategy;*
- (ix) where appropriate, provide a report detailing the discussions and agreements of the proposed change from the territorial local authority partners to the relevant Regional Growth Strategy Sector Agreement.*
4. *The ARC will initiate changes to extend the metropolitan urban limits to incorporate areas identified in Schedule 1B, upon request from the appropriate Council and upon receipt of the information outlined in Method 3 above, and subject to the information addressing all relevant issues to a satisfactory standard.*
5. *Each TA shall set out within its District Plan issues, objectives, policies and methods for managing the extension of rural and coastal settlements and Countryside living. This shall:*
- (i) be an integrated consideration of the relevant issues;*
- (ii) be integrated with the urban, coastal and rural components of the District Plan;*
- (iii) include matters raised in Appendix A and in Policy 2.6.2.2 and Method 2.6.3.3 above.*
- (Refer also to 2.6.17 Strategic Policies – Rural Areas and 2.6.18 Methods)*
6. *The ARC and TAs will undertake ‘Capacity for Growth’ surveys every five years to determine the provision and take up of residential and business urban development and redevelopment opportunities (including vacant land) within the metropolitan urban limits and the limits of rural and coastal settlements.*

2.6.4 Reasons - Urban Containment

The Region’s sustained growth is accompanied by ongoing development and redevelopment with consequent effects on natural and physical resources.

Section 40 (1) of the Local Government (Auckland)

Amendment Act 2004 directs the Regional Policy Statement to give effect, in an integrated manner to the “Growth Concept” in the Auckland Regional Growth Strategy. The Growth Concept seeks that growth is managed by promoting quality, compact urban environments with the intensification of selected High Density Centres and Intensive Corridors. Growth for the most part (approximately 70%) will be contained within the existing metropolitan area with development outside current metropolitan urban limits only where environmental accessibility and community principles can be met. Land use and land transport provisions should be integrated to manage growth and provide for mobility in an efficient manner.

A Memorandum of Understanding (MoU) commits all territorial local authorities in the Auckland Region to the Regional Growth Strategy including its vision, outcomes and principles as well as a sector-based planning approach to provide detail on how the Strategy will be implemented at a local level.

Along with the Local Government (Auckland) Amendment Act 2004 and the Auckland Regional Policy Statement, Sector Agreements are a key tool for implementing the Regional Growth Strategy, and identify High Density Centres and Intensive Corridors, where urban intensification can occur. These agreements include the form, sequencing and location of growth opportunities, and the planned capacity for residential, recreational, business and commercial expansion.

The Metropolitan Urban Limits help to manage the impacts of development, providing sufficient opportunities for communities to grow and develop while protecting the Region’s natural resources and significant heritage resources from the adverse effects of development. Auckland’s historical pattern of urban expansion has resulted in significant impacts on the region’s environment. Continued uncontrolled expansion outside the Region’s limits to growth can have significant impacts on the Region’s natural environment and can result in the inefficient provision of infrastructure and transport networks. Growth should be managed in an integrated manner, ensuring the efficient provision of infrastructure and transport in a compact and contained urban form.

Policy 2.6.2 provides for the containment of urban activities within the metropolitan urban limits and the

limits to rural and coastal settlements. These limits have been defined to minimise adverse effects of particular urban activities on regionally significant resources, including:

- areas of high amenity value;
- natural heritage and cultural heritage features and areas;
- the productive soil resource of the region;
- vulnerable ecosystems;
- areas prone to where the quality of the environment is already degraded and requires improvement;
- areas where there is a risk of damage to land or property or of loss of life occurring as the result of the impact of natural hazards such as flooding or land instability;
- strategic infrastructural facilities such as airports/airfields;
- significant natural resources including aggregate resources; and
- integration with the transport network.

The definitions of urban activities and rural activities provide the elements to be considered when evaluating an activity sits on the continuum between urban and rural activities. Such elements will include character, intensity and scale.

The definition of the metropolitan urban limits also takes account of:

- the need to promote an urban form which maximises opportunities for the integration of land uses with transport networks;
- the amount of land available for peripheral expansion having regard to the strategic direction of urban containment and intensification;
- the need to promote the efficient use of existing urban infrastructure and where necessary to enable the provision of new infrastructure;
- the incompatibility of urban uses with activities such as airports, intensive horticulture or activities storing or processing hazardous substances.

The above factors are also consistent with the provisions of the New Zealand Coastal Policy Statement which addresses the use, development and protection of land in the coastal environment. In addition, the definition

of metropolitan urban limits takes account of the need to maintain a clear differentiation of character, especially visual character, between urban and rural areas. This should also be taken account of in defining the limits to rural and coastal settlements.

Policy 2.6.2.4 and Policy 2.6.2.5 provide for two different means of establishing new rural or coastal settlements. Under Policy 2.6.2.4 a proposal must only utilise existing titles and/or consented lots from within the geographical sector in which the new settlement is to be located, as well as meeting five of the criteria set out in Policy 2.6.2.5. If a proposal does not only utilise existing titles and/or consented lots from within the relevant geographical sector, Method 2.6.3.10 and all the criteria set out in Policy 2.6.3.10 and all the criteria set out in Policy 2.6.2.5 must be met.

The Strategic Policy provides a framework for limited extensions to the metropolitan urban limits and to the limits of new and existing rural and coastal settlements. The policy direction is based upon not compromising the strategic direction of containment and intensification, supporting the integration of landuse and transport, and avoiding adverse effects on the environment.

It is also important that any provision for expansion or intensification of rural towns and coastal settlements gives consideration to whether residential development could readily outstrip growth in employment opportunities, resulting in long and energy inefficient commuting trips into metropolitan Auckland.

It is expected that Catchment Management Plans and Structure Plans will be prepared for each growth area identified in Schedule 1 to enable major stakeholders to be involved in planning the physical form of developments in each area, including co-ordinating the programmes for infrastructure and service provision. The Regional Practice and Resource Guide to Structure Planning seeks to promote a consistent approach to structure planning by providing a reference for territorial authorities, providers of infrastructure and services, and other stakeholders in the development process.

It will also be necessary to monitor ongoing growth and development in the region and, within the broad framework of the Strategic Direction, to ensure that the detailed policies continue to make appropriate and effective provision for the Region's growth.

Historically, complex and liberal provisions in district plans for control of the subdivision of rural land have provided for people to live in rural areas. This largely urban generated use has had a range of adverse effects on the Region's environment (refer to Strategic Policies – Rural Development Control). Countryside living can assist in achieving positive environmental effects by remedying the existing environment (detailed further in the Rural Area Reasons 2.6.19). However, Countryside living can undermine the policies of urban containment and intensification, reduce the sustainability of urban settlement and effect the efficiency of the regional roading network.

2.6.5 Strategic Policies - Urban Structure

High Density Centres and Intensive Corridors

1. *Urban intensification is to be encouraged to occur in specified locations (being those areas identified in Schedule 1 and other High Density Centres and Intensive Corridors identified in district plans) to provide the primary focus for the Region's residential and commercial growth.*
2. *Pending the development of a classification framework for and identification of further High Density Centres and Intensive Corridors through changes to Schedule 1 of the ARPS, and the resulting change or review, urban intensification (including retail activities) may occur in locations other than those listed in Schedule 1, if it can be demonstrated that it will not compromise the achievement of Policies 2.6.5.3 – 2.6.5.10.*
3. *To develop a network of High Density Centres and Intensive Corridors which are linked by high quality public transport ranging from frequent local bus services supplemented by express buses to rapid transit (rail, ferry, or bus) on separate rights-of-way.*
4. *Development within High Density Centres and Intensive Corridors should primarily be of a character and form that supports or serves Compact Mixed Use Environments.*
5. *The structure and sequencing of urban development in the High Density Centres and Intensive Corridors should support and be coordinated with the development, implementation and operation of the transport and infrastructure networks serving or traversing the area.*
6. (i) *High Density Centres identified in Schedule 1 or in district plans, should be developed for a range of uses, (including high density residential activities). The widest range, and greatest intensity of uses, including a primary focus on enabling Commercial Activities, shall be within the Commercial Core.*
 (ii) *Intensive Corridors identified in Schedule 1 or in district plans, should provide for Compact Mixed Use Environments and other appropriately located employment areas, where this is compatible with the principal focus of the movement function of the corridor, and does not detract from maintaining public transport network efficiency and effectiveness.*
7. *Commercial Activities shall be encouraged in High Density Centres identified in Schedule 1 or in district plans to the extent that such activities serve the function, role and amenity of High Density Centres, and would not compromise the achievement of development pursuant to Policies 2.6.5.1, and 2.6.5.3 to 2.6.5.6.*
8. *To encourage the outward expansion of the Commercial Core of High Density Centres which are suitable for growth, subject to having regard to the following matters:*
 - (i) *the effects on the existing distribution of business activity and population, in order to facilitate an efficient and sustainable distribution of such centres;*
 - (ii) *the effects on High Density Centre function and their role;*
 - (iii) *the provision of a greater level of access by a community to a wide range of facilities, goods and services in a convenient and efficient manner;*
 - (iv) *the traffic effects associated with the expanded Commercial Core and the ability to maintain the safety and efficiency of the road network, in a way that promotes integrated transport through:*
 - (a) *providing a strong connection to a range of transport modes to an adjoining Compact Mixed Use Environment, including ease of accessibility for walking and cycling; and*

- (b) *enabling efficient connections to the existing public transport network to link with adjoining High Density Centres and Intensive Corridors.*
9. *Commercial Activities are, where appropriate, to be enabled in business and mixed use zones along Intensive Corridors (being those areas identified in Schedule 1 or as identified in district plans) having regard to the following matters:*
- (i) *any effects on High Density Centre function and their role;*
 - (ii) *social and economic enablement and accessibility;*
 - (iii) *the efficient use and provision of Infrastructure;*
 - (iv) *the impacts on transport efficiency, including but not limited to effective public transport through the region;*
 - (v) *the effects on the road network;*
 - (vi) *the impacts of the development on the efficient use of any scarce industrial land resource;*
 - (vii) *the effects on residential activity and planning for residential intensification along Intensive Corridors; and*
 - (viii) *reverse sensitivity effects.*
10. *To enable new High Density Centres to be developed in locations where they:*
- (i) *contribute to a distribution of High Density Centres with close proximity to living areas (specifically areas of moderate to high density housing);*
 - (ii) *provide a diverse function and role which complements the established network of High Density Centres and Intensive Corridors;*
 - (iii) *provide transport choices and improve travel behaviour, through fostering resilient, attractive and integrated transport options by:*
 - (a) *providing a strong connection to a range of transport modes to an adjoining Compact Mixed Use Environment, including ease of accessibility for walking and cycling; and*

- (b) *enabling efficient connections to the existing public transport network to link with adjoining High Density Centres and Intensive Corridors;*
- (iv) *avoid adverse effects at a regional level, both individually and cumulatively with other High Density Centres, on:*
- (a) *the distribution, function and amenity of High Density Centres; and*
 - (b) *existing and planned Infrastructure (including the classified road network and public transport systems networks).*

Other Existing Urban Areas

11. *Where appropriate, Commercial Activities are to be enabled in business and mixed use zones in locations other than High Density Centres and Intensive Corridors (in particular Neighbourhood Centres and those Corridors not listed in Schedule 1 or in district plans) having regard to:*
- (i) *the matters listed in Policy 9(i)-(viii);*
 - (ii) *the extent to which such activities would compromise the achievement of Policy 2.6.5.1; and*
 - (iii) *the extent to which the hierarchy of locations indicated in Policies 2.6.5.3 – 2.6.5.9 may be compromised.*
12. *Existing urban areas shall be managed so that significant natural heritage, landscape, amenity and character values are maintained and enhanced, including in the Waitakere Ranges Heritage Area (refer Appendix I) where there is limited capacity to absorb further subdivision.*
13. *Provision shall be made for sufficient business zoned land, in particular industrial land, in appropriate locations in the region, to accommodate anticipated growth.*
14. *To ensure sufficient business zoned land is identified and prioritised for Industrial Activities by zoning in appropriate locations in the region.*
15. *Within urban areas, opportunities for urban intensification may be enabled at Passenger Transport Nodes where these:*

- (i) would not compromise the development of a network of high density centres and intensive corridors as the primary focus for the region's residential and commercial growth;
- (ii) maintain or enhance significant natural character, heritage, and landscape values;
- (iii) provide for a mix of open space, community and neighbourhood business opportunities commensurate with the nature and extent of proposed urban intensification; and
- (iv) maintain the function of supporting infrastructure and the road network.

Industrial Areas

16. Land Extensive Industrial Activities should locate in appropriately zoned business areas, where such activities would:
- (i) avoid reverse sensitivity effects;
 - (ii) be appropriately located with good transport access to the arterial road network, port, airport and railways, and avoid direct access to sensitive local streets;
 - (iii) not detract from the safety and function of the arterial road network;
 - (iv) avoid adverse effects on the safe, efficient and sustainable operation of regionally significant Infrastructure.
17. Residential activities and other sensitive activities shall only be provided in industrial areas where they do not reduce capacity for Land Extensive Industrial Activities, and where there is no likelihood of reverse sensitivity issues arising.

Future Urban Areas

18. Prior to operative urban zoning Future Urban Areas (including those identified in Schedule 1B) should not be compromised by the location, nature, scale and extent of activities by subdivision of the land.
19. The rezoning of Future Urban Areas shall enable urban development and/or a subdivision pattern that maximises the efficient use of the land and provides higher density development adjacent to public transport Corridors, subject to consideration of environmental, economic and infrastructural capacity issues.

20. Future Urban Areas should not be developed for urban uses until it can be demonstrated that all necessary Infrastructure can be provided. Where appropriate, development can be staged.
21. When areas identified in Schedule 1B are rezoned for urban purposes, provision may be made in selected locations for levels of urban development appropriate for Town Centre development, where the area to be rezoned is identified to support Town Centre development. In such areas policies 2.6.5.1 – 2.6.5.6, 2.6.5.8 and 2.6.5.10 shall apply.
22. To ensure sufficient land is identified and provided, including through zoning, to meet existing and anticipated demand for Industrial Activities, including Land Extensive Industrial Activities, having regard to the following:
- (i) reverse sensitivity effects;
 - (ii) being appropriately located with good transport access to the arterial road network, port, airport and railways, and avoiding direct access to sensitive local streets;
 - (iii) not detracting from the safety and function of the arterial road network; and
 - (iv) avoiding adverse effects on the safe, efficient and sustainable operation of regionally significant Infrastructure.

Refer also to Strategic Policies - Land Use and Transport Integration (2.6.11) and Infrastructure (2.6.14), Chapter 4 - Transport and Chapter 6 - Heritage.

2.6.6 Methods - Urban Structure

1. Strategic Policies – Urban Structure shall be given effect through the provisions of any relevant regional plan, changes to the RPS, district plans, and the RLTS, and should be reflected in the LTCCP process and any relevant strategic planning process.
2. TAs shall include a programme for the sequencing and timing of the development of areas identified in Schedule 1 sufficient to accommodate growth based on a minimum 20 year time frame in District Plans. These programmes should include:
- (i) An indication of the anticipated increase in household densities and employment densities having regard to Appendix H;
 - (ii) The location and nature of higher density development;

These programmes shall be reviewed in consultation with ARC and ARTA to ensure that they are co-ordinated with and support planned transport improvements.

3. *District and Regional Plans shall include appropriate provisions including rules that enable the development, implementation and operation of the transport network.*
4. *TAs should align LTCCP processes, including infrastructure funding processes with the development of High Density Centres and Intensive Corridors identified in Schedule 1.*
5. *TAs shall include appropriate provisions in District Plans for tools such as minimum and maximum lot sizes, minimum required densities, and minimum heights to:

 - (i) *ensure that efficient use of land and the desired densities are achieved in the selected High Density Centres and Intensive Corridors, in Future Urban Areas and, where applicable, in Passenger Transport Nodes; and*
 - (ii) *increase support and use of public transport investments.**
6. *Desired densities and development controls to achieve appropriate levels of urban intensification shall be determined by the ARC and TAs by reference to Appendix H.*
7. *TAs shall include provisions in District Plans to manage development and activities in the areas identified in Schedule 1 so that the areas' ability to accommodate urbanisation and or intensification is not compromised.*
8. *ARC and TAs shall promote appropriate redevelopment and greenfield development through reference to Appendix A and Appendix H and:

 - (i) *Structure Planning: Regional Practice and Resource Guide 2005 (for the avoidance of doubt structure planning in an urban context should be used for areas of 5,000m² or greater);*
 - (ii) *NZ Urban Design Protocol;*
 - (iii) *Integrated Catchment Planning Guide;*
 - (iv) *Auckland Regional Open Space Strategy;*
 - (v) *The Regional Land Transport Strategy;*
 - (vi) *National Guidelines for Crime Prevention through Environmental Design in New Zealand.**
9. *The ARC and TAs will encourage central government and local government to design and locate sustainable public buildings and community facilities within the urban area and within or at the edge of High Density Centres and Intensive Corridors and close to public transport services where this is appropriate.*
10. *The ARC through the Auckland Regional Growth Forum will engage with the Ministry of Education to develop a strategic approach to providing schools in the Region in a manner consistent with the land use strategy set out in the Auckland Regional Growth Strategy and in the RPS.*
11. *The ARC will encourage Councils to implement relevant aspects of the "Auckland Regional Affordable Housing Strategy" and work with central government where appropriate to support the achievement of this.*
12. *The ARC will monitor the effects of the RPS and Auckland Regional Growth Strategy on housing affordability within the MUL's and where necessary advocate for greater provision of lower cost housing.*
13. *The ARC will work with Territorial Authorities, the Department of Conservation and other appropriate central government and community agencies to implement the "Auckland Regional Open Space Strategy".*
14. *Significant new areas proposed for urban development and existing urban areas proposed for significant redevelopment are to be provided through the structure planning process that, as a minimum, meets the requirements of Appendix A: Structure Planning.*
15. *The ARC will investigate mechanisms for encouraging intensification in High Density Centres and Intensive Corridors.*
16. *The ARC will work with potential partners to investigate mechanisms, review, and advocate for different models to facilitate urban redevelopment, including the aggregation of land.*
17. *The ARC will advocate to central government for access by local authorities to government seed funding for facilitating urban redevelopment that supports land use and transport integration.*

18. *The ARC will work with the Auckland Regional Growth Forum to identify the amount and location of greenfield land for the future growth of Land Extensive Industrial Activities.*
19. *The ARC will work with Territorial Authorities to develop criteria for the identification of greenfield land to cater for the future growth of Land Extensive Industrial Activities. These criteria will include: business need, social, cultural, economic and environmental factors.*
20. *District Plans shall include appropriate provisions to provide for a range of Commercial Activities to enable the community to provide for its wellbeing.*
21. *In relation to the Waitakere Ranges Heritage Area (refer Appendix I) the ARC and TAs will advocate for and support initiatives that promote objective 2.6.1.19 including support for weed and pest eradication, Waitakere Ranges Heritage Area covenants, visitor management, rural activities in the foothills, design guidelines, and provision of Local Area Plans.*
22. *Territorial Authorities shall investigate and may, where appropriate, provide for the intensification of residential activities within Passenger Transport Nodes where these:*
 - (i) *support a network of High Density Centres and Intensive Corridors and Passenger Transport Nodes which are linked by high quality public transport;*
 - (ii) *enhance public transport network efficiency and effectiveness;*
 - (iii) *enable neighbourhood and convenience based commercial and employment activity, commensurate with the extent of household development anticipated for that area within a 400m radius or 5 minute walk of the station or terminal on which the node is centred;*
 - (iv) *are supported by transport and infrastructure to serve such intensification;*
 - (v) *maintain the function of the supporting road network; and demonstrate consistency with the Policies in 2.6.5 and 2.6.5.1, such as by way of structure plan.*

Refer also to Chapter 4 - Transport and Chapter 6 - Heritage.

2.6.7 Reasons - Urban Structure

More intensive forms of development should not be provided on an ad hoc basis but should be centred around identified High Density Centres and Intensive Corridors. Such development should be comprehensively designed to provide a safe, clean and easily accessible environment that encourages a variety of activities and attracts business investment. Land, within a walkable distance of High Density Centres and Intensive Corridors, also offers development opportunities for a wider range of housing types and densities than have been attempted in some greenfields developments in Auckland. Achieving higher density development within and around identified growth areas and on undeveloped urban land will mean that the current reservoir of urban land will be able to accommodate the Region's growth for a longer period of time.

The Strategic Policy supports intensification of those areas identified in Schedule 1. This land is in areas where the existing amenities, social infrastructure, utility systems and the transport network have capacity to service higher density forms of residential and non-residential development. Intensification can enable the more efficient use of physical resources including infrastructure and also shift the emphasis of development of metropolitan Auckland toward an urban form which is more efficient in transport and energy terms, and which enables an integrated multimodal transport network including walking, cycling, motor vehicles and public transport services. Such development has the potential to play a greater part in meeting Auckland's future needs for housing, jobs and services, and also to bring about a more varied supply of housing types and densities, thus achieving a better match between housing supply and need.

The intensification within High Density Centres and Intensive Corridors of a range of activities including retail, commercial, community and health facilities is also an important factor in ensuring a compact and contained urban form. Commercial sectors that are likely to be suitable for High Density Centres and Intensive Corridors are: retail trade, accommodation, cafes and restaurants, communication services, finance and insurance, property and business services, government administration, health and community services, cultural and recreational services, personal and other services. The clustering of activities which enhance amenity

values and convenience should also be encouraged in identified High Density Centres and Intensive Corridors. Intensification should be contained within an easily walkable distance of transportation nodes, encouraging increased use and investment in the public transport system.

Whilst there is desire to provide for the establishment of a broad range of Business Activities throughout the Region, there is the potential for incompatible activities, such as some types of Commercial Activity, to restrict and displace the opportunities for Industrial Activities within industrial business areas. Some inappropriately located Commercial Activities can also have the potential to threaten the ongoing role and function of the Region's High Density Centres. However, not all Commercial Activities necessarily fall into such a category. Some Commercial Activities are ancillary to a predominantly industrial use, or are of a trade, construction, automotive or marine nature that may well be more appropriately accommodated in the industrial business areas of the Region. Likewise, small scale convenience based Commercial Activities such as administration offices, or food and beverage outlets may well meet localised needs for employees in the business industrial areas of the Region.

In respect of Commercial Activities, their establishment should be encouraged in High Density Centres and enabled in other locations where appropriate, where they would maintain or enhance the function and amenity of such Centres or such other locations.

Commercial Activities are to be enabled, where appropriate, to locate along Intensive Corridors and other areas where this is not inconsistent with:

- the ability to make efficient use of, and undertake long term planning and management of the transport system;
- maintaining the vitality and viability of High Density Centres; or
- the functioning of the road hierarchy.

There will be in addition, the need for the respective local authorities to identify and provide for opportunities for continued commercial growth in the Region to meet demand, subject to the criteria as specified in Policies 2.6.5.8 to 2.6.5.11, and 2.6.5.20. The variety of existing and evolving forms of Retail Activity in particular

makes it important that across the Region the range of Retail Activity is provided for, meaning that district plans will need to ensure the enablement of a range of Retail Activities in appropriate locations. Such managed flexibility recognises the varied forms and requirements of Commercial Activities (particularly larger format retail and trade based Retail Activities), in terms of their locational requirements, whilst ensuring that the environmental effects of Commercial Activities are appropriately managed.

Intensification needs to be carefully planned to avoid, remedy or mitigate adverse effects which can stem from loss of trees, bush and landscape values, overloading of utility systems (especially drainage and stormwater), traffic congestion, poorly integrated passenger transport and reduction of space around buildings. Where possible, necessary refurbishing or replacement of urban utility services should be planned and programmed to fit in with provision enabling intensification. With careful planning and programming, intensification may be co-ordinated with, and help to fund, necessary improvements to services so that natural resource values are protected and amenity values maintained or enhanced.

High Density Centres and Intensive Corridors should provide for a wide range of compatible and mutually supportive activities, enabling a mixed use urban environment where residents have opportunities to work, shop and participate in recreation within easy walking distance of their residence. In mixed use environments it is essential that residential development incorporates sufficient measures to protect the amenity of residents, including noise attenuation and access to sufficient daylight and sunlight.

It is also important that residential activities be segregated from incompatible activities (such as those handling hazardous or toxic substances). Allowing residential activities, or activities involving assemblies of people, in close proximity to industries which emit significant noise, air emissions, pollution or involve hazardous or dangerous processes may not only have adverse effects on the health or safety of residential communities, but may also adversely affect the economic and safe operation of such industries. Major areas of industrial and business activity which are important to the regional economy should not be compromised by the introduction of incompatible activities.

The Strategic Policy encourages the development of mixed use environments within High Density Centres and Intensive Corridors and outside those areas of industrial activity, to allow the development of higher density housing and more intensive forms of compatible non-residential activities.

Due to the diminishing supply of business land, it is important to provide sufficient areas for business that are discouraged from High Density Centres and Intensive Corridors. These businesses are important to the economic well-being of the region and provision needs to be made for their land and location requirements. Land Extensive Industrial Activities such as manufacturing, transport and storage, construction, and wholesale trade may be unable to locate and intensify in centres. The strategic policy direction recognises that such activities are better directed to heavy business zones. Dependent on the future growth of these business sectors, the region may, from time to time, have to identify and provide additional greenfield land to enable growth of these business sectors.

To maximise the efficient use of the land resource and to support an integrated multimodal transport network, high density forms of residential living are encouraged with the use of District Plan statutory methods such as minimum density controls to ensure that lower density development does not eventuate, compromising the ability of a centre to accommodate growth.

Planning for intensification must also take account of features or places of cultural or of historical significance to the Region or nation. These may be important to the identity of the Region or locality. Areas of significant natural heritage value should also be avoided.

Changes should be planned and managed so that activity patterns which provide appropriately for social, economic and cultural wellbeing and the health and safety of the community are reinforced, and opportunities to make better provision for those matters and to improve amenity values are realised. Increases in residential population in High Density Centres and Intensive Corridors and in future urban areas will require appropriate provision and enhancement of amenities, particularly the quality and accessibility of the commercial cores of town centres, community infrastructure and open spaces.

Structured intensification is only part of the regional growth management package and needs to be carefully co-ordinated with transport and other infrastructure

provision. Intensification needs to incorporate good urban design, consideration of crime prevention through environmental design principles, civic amenity and initial community consultation programmes. The “Structure Planning: Regional Practice and Resource Guide 2005” provides more information on the regional framework, broad local criteria and examples of practice which could improve the quantity and quality of intensification. The use and continued development of mixed use and higher density residential design guidelines will assist in the development of High Density Centres and Intensive Corridors of high quality.

2.6.8 Strategic Policies - Urban Design

1. *The design of Future Urban Areas and the management and promotion of change in existing urban areas is to occur so that:*

- (i) *There is a diversity of urban environments (including building types and densities) and living choices for individuals and communities;***
- (ii) *Buildings, public spaces and road corridors contribute to a vibrant, liveable and attractive environment with a sense of place;***
- (iii) *Buildings and places with heritage and cultural value are protected;***
- (iv) *Urban environments have a logical permeable and safe structure of connected routes for all modes of transport, including walking and cycling;***
- (v) *Public transport, roading, cycling and walking networks are integrated with each other and the land uses they serve;***
- (vi) *Roads (including new roads) and road improvements within higher density areas should be designed to provide a pleasant environment for cyclists, pedestrians and residents and minimise adverse effects on urban amenities;***
- (vii) *There is long term protection of public open space, and improvement in the quality, quantity and distribution of local open space;***
- (viii) *Iconic and outstanding Auckland landscapes are protected; and in existing urban areas other urban landscapes that contribute to local character and identity are managed to ensure critical values remain;***

- (ix) *Natural features and their relationship with built elements are recognised and protected, and, where appropriate, enhanced;*
- (x) *A positive contribution is made to the environmental health of urban streams, the harbours, beaches and their catchments, including through improved storm water and waste water management;*
- (xi) *Public access to and along stream, coastal and foreshore environments is protected and, where possible, enhanced;*
- (xii) *Conflicts between incompatible land uses are avoided, remedied or mitigated;*
- (xiii) *In areas of high density where new development is exposed, or could potentially be exposed, to high noise levels (internally and externally), and diminished air quality, higher building standards should be required;*
- (xiv) *Urban design acknowledges the importance of energy, water and materials efficiency and conservation to the sustainable management of natural and physical resources;*
- (xv) *The health and well being of communities is maintained, and where appropriate, enhanced.*

2.6.9 Methods - Urban Design

1. *Strategic Policies: Urban Design shall be given effect through the provisions of any relevant regional plan, changes to the RPS, district plans, and the RLTS, and should be reflected in the LTCCP process and any relevant strategic planning process.*
2. *TAs shall identify in District Plans explicit urban design outcomes to be achieved. This could be achieved through rules and/or guidelines on urban design. These guidelines should also consider, via consultation with ARTA, the design of the road space and road network, passenger transport services and infrastructure and the siting and design of buildings and appropriate land uses adjacent to transport Corridors.*
3. *Significant new areas proposed for urban development and existing urban areas proposed for significant redevelopment (such as areas identified in Schedule 1 or where the redevelopment requires a district plan change) are to be provided through the structure planning process that as a minimum meets the requirements of Appendix A Structure Planning.*
4. *The ARC will encourage and support all Councils to establish urban design panels.*
5. *The ARC, as a signatory of the New Zealand Urban Design Protocol, will develop a set of actions appropriate to the Auckland Region to implement this commitment, and will monitor and report annually on the actions.*
6. *The ARC will encourage central government and local government to locate public buildings and community facilities within the Urban Area, and within or close to High Density Centres and Intensive Corridors and close to public transport services.*
7. *The ARC and TAs will encourage improvements to urban structure, urban design and amenity through reference to relevant good practice guidelines such as:

 - (i) *Structure Planning: Regional Practice and Resource Guide 2005;*
 - (ii) *New Zealand Urban Design Protocol;*
 - (iii) *ARC Low Impact Design Manual;*
 - (iv) *People, Places and Spaces.**
8. *The ARC will implement relevant aspects of the “Auckland Regional Open Space Strategy” and encourage the Department of Conservation and other territorial authorities to do so.*
9. *TAs shall include in their District Plans rules and other methods to manage adverse effects of development (including adverse effects arising from development on adjoining sites) on heritage buildings, including its setting or curtilage. Rules and other methods should ensure development is in keeping with the characteristics and heritage values of significant heritage places. Other methods include conservation management plans and transferable rights.*
10. *The ARC will encourage interdisciplinary approaches to the management of urban land use and transport systems.*

11. *In relation to the Waitakere Ranges Heritage Area (refer Appendix I) the ARC and TAs will advocate for and support initiatives that promote objective 2.6.1.20 including support for weed and pest eradication, Waitakere Ranges Heritage Area covenants, visitor management, rural activities in the foot hills, design guidelines, and provision of Local Area Plans.*
12. *The ARC will advocate for and support initiatives to improve understanding across disciplines of integrated urban design outcomes, the importance of interdisciplinary approaches to achieving sound design outcomes, and the contributions different disciplines have to make.*
13. *The ARC and TAs will continue work with other agencies, including Transit, ARTA, LTNZ, Housing New Zealand Corporation, the Ministries of Transport and the Environment, on improving the contribution that transport and land use make to integrated urban design outcomes, both at a regional and local level.*
14. *The ARC will advocate for and support initiatives to improve:*
 - (i) *the liveability and sustainability of building outcomes;*
 - (ii) *energy, water and materials efficiency and conservation;*
 - (iii) *the appropriate management of mixed use and medium and high density work and living spaces.*

2.6.10 Reasons - Urban Design

The development of new and existing urban areas should ensure the highest quality design outcomes. Approaches to urban development in the past have typically had an emphasis on land use segregation and hierarchical street systems, and designs focused on engineering, surveying and lot yield efficiency. Today's urban development should establish a design framework for communities which are sustainable, safe, vibrant and efficient. This involves an integrated approach to urban design, seeking site and community specific design responses within the overall framework of the "Growth Concept" in the Regional Growth Strategy.

Urban design is critical to the development of a network of connected communities, an effective passenger transport system, and the layout of buildings, roads, open spaces and physical and social infrastructure. Quality

urban design should maximise economic opportunity, social wellbeing, cultural diversity, environmental health and choice for residents. Particularly important to the Growth Concept is the design of walkable, safe, convenient and attractive communities that meet the diverse needs of people, and which are adaptable to future change.

The Strategic Policy sets out a range of matters that need to be taken into account in the design and layout of new development. Particular emphasis is placed on the design of buildings, streets and public spaces. Together these design elements should combine to create environments of high amenity that are valued community resources.

Sites and developments cannot be designed in isolation. Quality urban design needs to respond to the natural and physical environment, protecting and enhancing those environmental values important to the character, amenity and identity of a community. Protection of heritage, waterbodies, beaches, significant vegetation and habitat, more sustainable urban water management and incorporation of areas of cultural significance is also important.

As the intensity of High Density Centres and Intensive Corridors increases through redevelopment, design becomes increasingly important to the maintenance and enhancement of built character, civic spaces, streetscape and pedestrian amenity. With the prospect of more mixed, intensive urban environments, high standards of urban design are essential to ensure that centres develop as integrated attractive residential, employment and community hubs. Poorly designed development may detract from the character of these centres and adversely affect their vitality and vibrancy, in turn affecting their ability to attract further activities and development. Mixed use activities where appropriate should be located in association with passenger transport stations and terminals.

The development of a range of residential densities and diversity of dwelling types provides more housing choice for today's diverse household types. Higher density forms of residential living should be actively encouraged as part of urban intensification, potentially as part of multi-storey mixed use development. The provision and design of residential activities within High Density Centres and Intensive Corridors helps bring vitality to these areas, but due to their sensitivity to noise and other effects, they can have an impact on the operation of surrounding

town centre activities. Particular attention is required to the design and form of residential living, responding to the character and amenity of the neighbourhood and providing adequate open space, daylight access, acoustic attenuation and privacy.

The design of buildings, public spaces and infrastructure should provide for long-term sustainability, being more water and energy efficient with less construction and operation waste outputs. Government agencies and territorial authorities should be proactive and lead by example, incorporating advancements in sustainable building practices into all public buildings and infrastructure projects.

2.6.11 Strategic Policies - Land Use and Transport Integration

1. Land Use and Transport shall be integrated throughout the region to ensure that:

- (i) within urban areas land use patterns provide communities with improved access to a range of services and activities and opportunities to work locally;*
- (ii) within urban areas new urban development and subdivision provides for improved connectivity for all transport modes including walking and cycling;*
- (iii) within urban areas new development and redevelopment provides for safe and attractive walking and cycling environments;*
- (iv) the transport network is not compromised by inappropriate land use and subdivision and is planned and developed to support land uses;*
- (v) high traffic generating activities, where not located within High Density Centres or on Intensive Corridors, locate on transport corridors served by public transport appropriate to the particular activity;*
- (vi) within rural areas Countryside Living avoids, remedies or mitigates adverse effects on the regional roading network including limiting its provision and only providing for Countryside living in selected locations (refer to Policies 2.6.17);*
- (vii) urban activities shall be located in urban areas, except as provided for in Strategic Policies 2.6.2.1 and 2.6.2.2, as well as Methods*

2.6.3;

- (viii) the roading system is developed and managed to be an efficient, safe and sustainable network utilising, to its full extent, existing roading infrastructure;*
 - (ix) land use development along existing and proposed regional arterial roads identified in Appendix K or in District Plans, is to be managed to ensure that adverse effects on the transport function, or functions, and safety of these routes are avoided, remedied or mitigated;*
 - (x) so far as is consistent with their statutory authority the funding processes of the RLTS and ARTA shall give effect to the strategic direction and strategic policies set out in this ARPS;*
 - (xi) all Future Urban Areas can be:*
 - (a) effectively served by public transport;*
 - (b) provide attractive walking and cycling opportunities and environments; and*
 - (c) item (xi)(a) above shall not apply for the expansion of existing coastal and rural settlements that cannot be efficiently served by public transport;*
 - (xii) existing urban areas within the MUL are better served by public transport;*
 - (xiii) industrial land uses are located where they have good access to freight corridors;*
 - (xiv) reverse sensitivity effects on the transport network are considered in land use development;*
 - (xv) opportunities for urban intensification at Passenger Transport Nodes within urban areas may be enabled where these:*
 - (a) are integrated with and supported by rapid, frequent and integrated transit services; and*
 - (b) provide for the medium to high density intensification of residential activities within walking distance of the Passenger Transport Node to support public transport.*
- 2. Land use and Transport shall be integrated within High Density Centres and Intensive Corridors (refer to Policies 2.6.5) to ensure that:**

- (i) *High Density Centres and Intensive Corridors are able to be served by an efficient and effective public transport network;*
- (ii) *High Density Centres on the rail rapid transit network and on the bus rapid transit system are served by a fast, frequent and reliable public transport service;*
- (iii) *High Density Centres and Intensive Corridors are planned to develop to a density which supports planned transport infrastructure and service improvements (refer to Appendix H);*
- (iv) *provision is made for transport improvements which deliver a multi-modal transport system (including walking and cycling) in a manner which supports quality, compact and contained High Density Centres and Intensive Corridors;*
- (v) *central and local government services, as well as associated support services and facilities (consistent with Policy 2.6.5.6), should locate within High Density Centres and Intensive Corridors;*
- (vi) *High Density Centres and Intensive Corridors are not compromised by inappropriate transport infrastructure. This includes avoiding, remedying or mitigating the severance of communities;*
- (vii) *High Density Centres and Intensive Corridors and major public transport interchanges and stops should, where possible, develop as multi-purpose destinations;*
- (viii) *the road network within all residential development areas should ensure:*
 - (a) *good access by buses;*
 - (b) *the facilitation of good, direct pedestrian access routes to bus stops; and*
 - (c) *the Region's parking issues are planned and managed in a way that supports integrated land use and transport.*

2.6.12 Methods - Land Use and Transport Integration

1. The Strategic Policies: Land Use and Transport

- integration shall be given effect, through the provisions of any relevant regional plan, changes to the RPS, district plans, and the RLTS, and should be reflected in the LTCCP process and any strategic planning process undertaken by the region's councils.*
- 2. *The RLTS shall define those transport corridors with key public transport services.*
- 3. *The ARC and TAs shall implement Land Use and Transport policy by reference to Appendix H.*
- 4. *The ARC will ensure that the RLTS and ARTA's Land Transport Programme give effect to the landuse and transport outcomes set out in the Growth Concept contained within the Auckland Regional Growth Strategy.*
- 5. *TAs shall provide for significant new areas proposed for urban development, existing urban areas proposed for significant re-development, or significant new areas proposed for Countryside Living purposes through the structure planning process (or other similar mechanisms).*
- 6. *The ARC, TAs, ARTA, NZ Transport Agency and ONTRACK, in conjunction with the relevant transport operators, will implement improvements to the public transport network to support the development of areas listed in Schedule 1.*
- 7. *TAs shall ensure that proposals to amend the MUL, Structure Plans, Plan Changes, Variations and resource consent applications which enable major trip generating activities are subject to an Integrated Transport Assessment.*
- 8. *Development through a Change to the ARPS of a regional parking strategy that provides strategic policy direction on regional parking issues including reference to parking issues in High Density Centres and Intensive Corridors. One of the ways in which the strategic policy direction should be implemented is through District Plans.*
- 9. *The ARC and TAs will jointly identify a regional approach to accommodate retail activity (having regard to their associated characteristics and commercial/ operational requirements) that integrates land use and transport.*
- 10. *The ARC and TAs will jointly develop a classification framework for High Density Centres and Intensive*

Corridors which provides guidance on the appropriate activities in these locations. The classification of Corridors may be defined utilising three functions:

- (i) freight or private vehicle movement;*
- (ii) mixed use and intensity – as anticipated by the Auckland Regional Growth Strategy;*
- (iii) arterial roads linking High Density Centres and Intensive Corridors that have a mix of (i) and (ii) plus Public Transport (PT);*

The classification should be based on the predominant function of the High Density Centre and Intensive Corridor and will take into account matters such as transport efficiency, safety, distributional and amenity effects. The classification framework will be developed initially through changes to Schedule 1.

11. *TAs shall investigate and may where appropriate provide for medium to high density residential environments associated with Passenger Transport Nodes, in locations where these:*
- (i) do not compromise the achievement of Policies 2.6.5.1, 2.6.5.9, 2.6.5.11 and 2.6.5.12;*
 - (ii) enable neighbourhood and convenience based commercial and employment activity, commensurate with the nature and extent of proposed household development within a 400m radius or a 5 minute walk of the station or terminal on which the node is centred;*
 - (iii) are supported by transport and infrastructure networks necessary to serve such intensification;*
 - (iv) enhance public transport network efficiency and effectiveness;*
 - (v) maintain the function of the supporting road network; and*
 - (vi) demonstrate consistency with the Policies in 2.6.8.1, such as by way of structure plan.*

2.6.13 Reasons - Land Use and Transport Integration

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

A key issue in realising the strategic direction outlined in the RPS is the recognition of the need to develop land use patterns that support reduced vehicle demand and increased use of passenger transport, walking and cycling. A long-term solution to the region's transport problems thus requires a shift in land use patterns towards a more compact and sustainable urban form. An improved public transport system will provide opportunities in High Density Centres, transportation nodes and Intensive Corridors for intensified growth within selected areas, and conversely, the realisation of future intensive development opportunities will support the public transport system.

There is also a direct link between land use, the transport system and the direct effect on the environment. By aligning land use and transport systems the following benefits to the environment can be achieved:

- Reduced levels of air pollution in the metropolitan area
- Reduced generation of contaminants associated with motor vehicle and road use
- Reduced consumption of non renewable resources including fossil fuels, construction material and land
- Reduced community disruption including community severance
- Reduced health and safety effects on the community.

Land use activities produce and attract trips. These trips are distributed over the transport network depending on available choices in transport mode and route, distance time and cost of travel. The characteristics and density of the population, the nature and distribution of employment and the location of activities all effect the use of the transport system and the transport system influences decisions on the kind of land use activities.

The adverse effects on the environment from both urban development and transport can be mitigated by making conscious land use and transport decisions. From a land use perspective a more contained and intensive form of urban development that supports local accessible employment and is focused on the public transport network will bring about a land use pattern that provides the community with shorter trips and more choice of transport mode including walking and cycling.

To encourage more trips to be made by the more sustainable modes like walking and cycling it is

important that safe and attractive connections are made within existing and new urban areas. Increased walking and cycling opportunities improve the cohesion of and movement within High Density Centres and Intensive Corridors. These opportunities can be improved and secured at both the structure planning and subdivision/development stages of the planning process.

At the same time, it is recognised that even with significant increases in public transport patronage, the majority of trips will be made by private transport in the foreseeable future. For instance, it is recognised that where high traffic generating activities (such as larger format retail activities) are enabled, in areas other than High Density Centres or Intensive Corridors, some access by public transport should be available, although the level of such access would be dependent on the particular activity.

It is also important that activities which generate vehicle trips and are not able to be supported by alternative transport modes are managed carefully. In this regard countryside living and non rural activities in rural areas need to be limited or avoided because of the direct adverse impact they have, by encouraging longer distance vehicle trips, and on the efficient operation of the roading network.

Transport improvements add to the attractiveness of areas serviced by those improvements for further urbanisation. While this is beneficial to those areas identified for future growth, such as High Density Centres and Intensive Corridors and identified greenfield sites, these investments may also create growth pressures in areas where urban expansion is not desired. It is important that the growth pressures associated with improvements to the transport system are understood and managed to avoid urban growth in areas not identified for future growth. This requires a transport system and land use policies which act in unison to manage urban growth pressures in areas where urban growth is not planned.

As mentioned the urban form promoted in Policy 2.6.5 promotes and facilitates a more sustainable transport network. The more urban development is planned around High Density Centres and Intensive Corridors the more this development will support the public transport network, walking and cycling modes and reduce the number of vehicle trips made. It is therefore important that all new urban development is planned

with more sustainable transport modes in mind.

To achieve this, the level of urban development needs to be at a scale which can support investment in a rapid transit system for it to provide a service which will compete with private vehicle use. Evidence from Australia and the United States shows that certain thresholds of urban density are required to support public transport systems. The more fixed and rapid the public transport system the greater the densities required to support it become.

“Cities for Tomorrow: Best Practice Guide” (Austroads,1999) suggests a minimum of 15-20 dwelling units per hectare are required to support a good local bus service and 50 or more dwelling units per hectare are required to support a rapid rail system of the type being developed in Auckland. As it is not sufficient simply to develop a higher density of housing within High Density Centres and Intensive Corridors, employment density too should increase. Employment should range from 100 employees per hectare for a local bus service to 450 employees per hectare to support rapid rail.

The densities required in Appendix H are average minimum densities required within the High Density Centres and Intensive Corridors. However, it is equally important that the highest densities occur closer to the transport interchange, graduating to lower densities towards the edge of the centre.

Every centre however has its own characteristics and while every effort should be made to reach these densities this must be done with regard to achieving high quality urban design outcomes. The monitoring of densities being achieved within these High Density Centres and Intensive Corridors is an important part of the process and the densities required in Appendix H should be updated in light of this monitoring.

As the region grows, the transport network will be required to increase in capacity to service this growth. Roothing, rail, public transport, walking and cycling networks will all come under pressure from future growth, particularly in those parts of the network in and around High Density Centres and Intensive Corridors identified in Schedule 1. This growth and development will need to be managed carefully particularly with regard to the strategic roading and rail network. Transport space is a scarce resource and is becoming increasingly scarcer in the region. Therefore managing major traffic generators, parking standards

and requirements, vehicle access onto existing roading networks etc are all issues that will need to be considered carefully as the region grows and intensifies.

An effective transport system that supports and responds to the proposed land use pattern is a key element of this RPS, and the RLTS is a key mechanism in developing that transport system. It is important that land use development is managed in a way that does not compromise the transport function or functions of the Strategic and Regional Arterial Network identified in Appendix K. These transport functions are multidimensional and comprise access and the movement of people and goods, with a focus on provision for public transport, pedestrians and cyclists on the Regional Arterial Network. The design and operation of regional arterial roads should support the amenity of the communities they pass through, and where they pass through High Density Centres and Intensive Corridors the balance of travel and landuse demands should be carefully considered to ensure that the road network supports the RGS in an integrated manner.

Another key dimension of managing the relationship between land use and transport planning is addressing the reverse sensitivity effects associated with the transport system especially in high volume corridors generating pollution (e.g. noise, air quality, vibration, community severance).

The Structure planning process plays an important role in this regard by ensuring that the best land use / transport outcome is achieved and that the cumulative effects on the transport system from inappropriate land use and subdivision are avoided.

2.6.14 Strategic Policies - Infrastructure

1. The operation of existing regionally significant infrastructure and the provision of new or upgraded regionally significant infrastructure shall:

- (i) be consistent with the Strategic Direction of the Regional Policy Statement;**
- (ii) support and reinforce the Regional Growth Strategy and the proposed outcomes of that strategy; and**
- (iii) ensure that any adverse effects of those activities on the environment (including human health) are avoided, remedied or mitigated in a manner consistent with the**

relevant provisions of this RPS.

- 2. Provision is to be made to enable the safe and efficient operation, maintenance and development of regionally significant infrastructure which is necessary for the social and economic wellbeing of the region's people.**
- 3. Land use change should avoid significant reverse sensitivity effects on regionally significant infrastructure.**

Refer also to Strategic Policies 2.6.2(2) (viii), 2.6.11(1) (n), 2.6.17(e) (i) and 2.6.17(4) (ii).

- 4. The provision and operation of infrastructure, including transport infrastructure should support the development of high quality urban amenity.**
- 5. In the operation of existing regionally significant infrastructure and the provision of new infrastructure consideration and appropriate provision is to be made for the following matters:**

- (i) the avoidance of significant adverse effects (including cumulative adverse effects) on:**
 - (a) the environmental values protected by defined limits to metropolitan Auckland and defined limits of rural or coastal settlements;**
 - (b) significant and outstanding coastal and natural landscapes, vegetation and fauna areas;**
 - (c) amenity values throughout the whole of the region and the rural character of rural areas in the Region;**
 - (d) human health;**

where significant adverse effects cannot be avoided they shall be remedied or mitigated;

- (ii) avoiding prematurely foreclosing, or compromising options for future urban and rural and coastal town growth including areas identified in Schedule 1;**
- (iii) consideration of alternative locations (including locations in urban areas) for utility service facilities which give rise to significant adverse effects on the environment;**
- (iv) environmental enhancement and/or remediation opportunities.**

2.6.15 Methods - Infrastructure

1. *TAs and the ARC shall include policies and methods in regional and district plans that facilitate and enable the development of appropriate transport infrastructure, including provisions that enable the development of the Auckland passenger rail network. This shall include providing for a 'passenger rail zone' or similar, that permits the development of the passenger rail network on all land and airspace necessary for that purpose. This shall include land and air space underlying any existing designation of the rail Corridor, as well as outside any designation that is necessary for development of the passenger rail network.*
2. *Policy 2.6.14 shall be given effect through the provisions of district plans and/or the designation process (Part 8 of RM Act) and/or through the Regional Land Transport Strategy (Land Transport Act).*
3. *Policy 2.6.14 should also be reflected in TA strategic plans and LTCCP's and in any strategies, plans and programmes of major operators or providers of regionally significant infrastructure and services.*
4. *Regionally significant infrastructure should be identified within District Plans. TAs should adopt a consistent region-wide management approach to addressing the adverse effects of, and on, such infrastructure. TAs need to take account of the cross-boundary issues where such infrastructure extends over many jurisdictions.*

2.6.16 Reasons - Infrastructure

The social and economic well-being, and health and safety of the regional community are dependent on the availability and efficient operation of necessary services, and the Region's sustained growth brings with it requirements to upgrade, expand or provide services. How and where this is done not only affects natural and physical resources, but also can facilitate or inhibit directions of urban development and promote or inhibit intensification. It is of key importance to ensure that investment in provision, expansion or upgrading of infrastructure is, as far as practicable, consistent with the Strategic Direction, and does not undermine the integrity of the metropolitan urban limits and are consistent with strategies for planned expansion of rural towns and coastal settlements.

The implementation of an improved transport system is critical for the region, particularly for the sustainable development of High Density Centres and Intensive Corridors.

The policy requires that the whole range of effects (including potential cumulative effects on development patterns in the Region) should be considered when changes are proposed to, and future sites designated for, regionally significant infrastructure, facilities or services. Decisions within the context of the RM Act, regarding changes to or the identification of future sites for regionally significant infrastructure, should have regard to the matters set out in Policy 2.6.14, and especially to the consistency of any such proposal with the Strategic Direction. Not only is it essential that these provisions be reflected in district plans, but (as provided by section 104 of the RMA) consent authorities must also have regard to them when considering applications for resource consents for regionally significant proposals to provide, extend or upgrade regionally significant infrastructure or services.

It will be desirable for service providers to consult with local authorities, and especially with the ARC, in the course of preparing proposals for regionally significant infrastructure facilities or services. Service providers should also consider ways of providing services more efficiently, including (where practicable) the shared or multiple use of facilities.

2.6.17 Strategic Policies - Rural Areas

1. *The use, development and protection of natural and physical resources and the subdivision of land outside of the Metropolitan Urban Limits and the limits of rural and coastal settlements are to be managed in an integrated manner, that:*
 - (i) *gives effect to Part 2 of the RMA and the other Strategic Policies;*
 - (ii) *is consistent with the relevant provisions of Chapters 3 to 18 inclusive of this RPS;*
 - (iii) *safeguards the life-supporting capacity of rural soils so far as practical;*
 - (iv) *maintains the ability of rural resources to meet the needs of future generations;*
 - (v) *takes account of and makes appropriate provision for the following matters;*

- (a) *the avoidance of significant adverse effects on:*
- *the environmental values protected by defined limits to metropolitan Auckland and defined limits of rural or coastal settlements;*
 - *the safe, efficient and sustainable operation of existing regionally significant infrastructure including land transport infrastructure and services;*
 - *the necessary upgrading of existing regionally significant infrastructure;*
 - *the provision of new regionally significant infrastructure;*
 - *human health;*
- where significant adverse effects cannot be avoided they shall be remedied or mitigated;*
- (b) *avoiding prematurely foreclosing, or compromising, options for accommodating the further growth and development of urban areas;*
- (c) *significant adverse effects on the regional transport network are avoided, remedied or mitigated;*
- (d) *avoidance of the creation of conflicts between quarrying (and similar activities dependent on locationally specific natural resources) and other incompatible activities;*
- (e) *avoidance of conflicts between incompatible activities. Where such conflicts cannot be avoided they shall be remedied or mitigated;*
- (f) *management of the use of rural land with regard to the availability and sustainability of water resources;*
- (g) *protection of the versatility and productive potential of rural land;*
- (h) *consideration of alternative locations (including locations in urban areas) for activities which give rise to significant adverse effects on the environment;*
- (i) *environmental enhancement and/or remediation opportunities;*
- (vi) *avoids adverse effects on significant landscapes and heritage values identified in the ARPS;*
- (vii) *avoids, remedies or mitigates significant adverse effects on the rural character of the region; and*
- (viii) *avoids adverse effects on the Waitakere Ranges and promotes the protection, restoration and enhancement of those features that contribute to the natural and cultural heritage, landscape, amenity and recreational values of the area and to the wellbeing of local communities (refer Appendix I).*
2. *In rural areas provision shall be made for marae, papakainga and customary uses of ancestral taonga in accordance with Policy 3.4.4, and with regard to the matters set out in Policy 2.6.17.1.*
3. *Countryside Living may be provided for, subject to the constraints set out in (i) – (vi) below relating to location, extent and scale:*
- (i) *Countryside Living is avoided in areas:*
- (a) *where the location of Countryside living would result in conflicts between incompatible activities;*
- (b) *where Countryside living would undermine the integrity of the metropolitan urban limits;*
- (c) *identified in the Regional Policy Statement or district plans for the further growth and development of urban areas;*
- (ii) *Countryside living avoids development in those areas or parts of areas identified, in the RPS, including Appendix B, or in regional or district plans, as having significant ecological, heritage or landscape value or high natural character and that contain:*
- (a) *significant ecological value; or*
- (b) *significant historic heritage (excluding significant historic built heritage); or*
- (c) *outstanding natural features and landscapes; or*
- (d) *high natural character;*

- (iii) *Adverse effects of Countryside living on the following are avoided:*
- (a) *the safe and efficient operation of existing regionally significant infrastructure;*
 - (b) *the necessary upgrading of existing regionally significant infrastructure;*
 - (c) *the provision of new regionally significant infrastructure;*
 - (d) *mineral resources identified in district plans and lawfully established or consented mineral extraction sites;*
 - (e) *the regional transport network;*
 - (f) *significant ecological, heritage and landscape values;*
 - (g) *areas of high natural character;*
 - (h) *areas where there is a risk of damage to land or property or of loss of life occurring as the result of the impact of natural hazards, such as flooding or land instability;*
- (iv) *Adverse effects of Countryside living on the following are avoided, remedied or mitigated:*
- (a) *the rural character of the region;*
 - (b) *the versatility and productive potential of prime agricultural land;*
- (v) *Where Countryside living is provided for in accordance with Policy 2.6.17.3, it shall appropriately provide for environmental restoration and enhancement and recognise and protect those measures through legally binding protection mechanisms;*
- (vi) *The creation of lots for Countryside living purposes within each of the rural areas of the geographical Sectors (North/West, Central or South) shall be managed by:*
- (a) *allowing for the relocation of existing and/or consented Countryside living lots where that relocation will better achieve the outcomes sought through Policies 2.6.17.3(i) - (iv); and*
 - (b) *restricting the number of additional lots for Countryside living purposes to the subdivision opportunities available*

under the applicable District Plan(s) as at 21 March 2012 (including subdivision provisions that subsequently became operative but arose from proposed plans, plan changes and variations notified by that date), unless it can be shown that:

- *there is insufficient provision for Countryside living within the relevant geographical Sector, having regard to the capacity for growth survey referred to in Method 2.6.18.7; and*
- *the outcomes sought through Policies 2.6.17.3(i) - (iv) will be achieved.*

4. *Notwithstanding 2.6.17.3 above, no further subdivision for Countryside living purposes shall be provided for in that area identified in Appendix I, except where additional lots have been made available under the District Plans as at 30 November 2009, which includes those additional lots arising from plan changes publicly notified at that date.*

2.6.18 Methods - Rural Areas

1. *TAs whose districts contain significant areas of rural land (Franklin, Papakura and Rodney District Councils, and Manukau, Waitakere and Auckland City Councils) will, in consultation with the ARC, identify rural locations in which the existing or potential (i.e. have not yet been issued with a certificate of title) subdivisional pattern is likely to result in outcomes that fail to give effect to Part 2 of the Act, and are inconsistent with the Strategic Direction, and with the matters set out in Policy 2.6.17.*
2. *In the localities identified pursuant to Method 2.6.18.1, and in Countryside living areas, TAs shall, in consultation with the ARC, manage activities, including through district plan subdivision rules, to avoid, remedy or mitigate the adverse effects which could stem from the existing or potential subdivision pattern. Such management may include:*
 - (i) *transferable development rights, including the transfer of rights between TAs, provided such measures will contribute to achieving outcomes consistent with the Strategic Direction and Policies 2.6.17;*

- (ii) *redistribution of current capacities for countryside living within the district or between TAs;*
 - (iii) *management of the erection of buildings (including dwellings) including, where appropriate, provision for the erection of buildings to be contingent upon the acquisition of transferable development rights;*
 - (iv) *where buildings are permitted, management of their location, size (through methods such as curtilage control), use and appearance, to the extent necessary to avoid, remedy or mitigate significant adverse effects (including cumulative effects) on the environment.*
3. *TAs will, in consultation with the ARC, evaluate the extent to which the provision of activities and rural subdivision approaches comply with Policies 2.6.17. Such an evaluation must consider the cumulative effects that provision for rural subdivision and activities will have in conjunction with other developments (including countryside living opportunities, and urban living opportunities) both within the district and where appropriate within adjoining districts.*
 4. *TAs shall include in their district plans assessment criteria, including in relation to the matters in Policies 2.6.17.3, against which subdivision applications for countryside living shall be assessed.*
 5. *Outcomes of the programme of urban growth monitoring and management identified in Method 2.6.3.6 may have an impact on the rural policies of this RPS. To ensure consistency with Method 2.6.3.6 changes to the rural policies of this RPS may be notified (unless as a result of the process set out in Method 2.6.3.6 it is unnecessary or inappropriate to do so).*
 6. *Areas identified in Policy 2.6.17.3 for Countryside living purposes are to be developed through the structure planning process that as a minimum meets the requirements of Appendix A: Structure Planning.*
 7. *The ARC and TAs will undertake 'Capacity for Growth' surveys every five years to determine the provision and take up of Countryside living opportunities available in rural areas.*
 8. *In relation to the Waitakere Ranges the ARC and relevant TAs will advocate for and support the initiatives that promote Strategic Objective 2.6.1.20, including support for weed and pest eradication, Waitakere Ranges Heritage Area covenants, visitor management, rural activities in the foothills, design guidelines, and provision of Local Area Plans.*
 9. *Where provision is made for Countryside living, any areas of significant ecological value, or of significant historic heritage, or of outstanding natural features and landscapes, or of high natural character shall be identified. These areas shall be identified in policy statements and plans either spatially, by scheduling, or descriptively (through criteria) and by reference to the RPS. Where district plans provide for Countryside living they shall contain provisions to ensure that development (such as earthworks, buildings, roads and driveways) within the above areas is avoided.*

2.6.19 Reasons - Rural Areas

The Strategic Direction of the RPS is dependent on the ability to manage growth and control adverse effects. This results in the separation of urban and rural areas, and is primarily achieved through the definition of urban limits and management of activities, including subdivision, in rural areas. It is designed to avoid the adverse effects of urban Auckland on areas outside the metropolitan area, protect the region's natural resources from significant adverse effects of urban development, retain options for future use of resources and to improve the efficiency of urban Auckland by encouraging development at locations that will promote cost-effective servicing by transportation systems, utility network systems and other works and services.

People place different values on resources and the activities that are undertaken in rural areas. These values influence what people consider to be issues. Integrated resource management in rural areas requires trading off different values to achieve the purpose of the RM Act. Decisions can not be based on the consideration of a narrow set of issues or values. Inevitably, when there are competing potential uses for the same resources, trade-offs will have to be made between those uses.

Part 2 of the RM Act (and the RPS policies) requires that a wide range of factors be considered when decisions are

made about the use, development or protection of natural and physical resources in rural areas. The following are examples of the range of matters that the policies require to be considered. It is not an exhaustive analysis.

Different resources and activities have differing degrees of flexibility as to their form and location. For example Class I and II soils comprise approximately 120,900 ha of the region and are in fixed locations. Water resources also occur in fixed locations, but water can be piped from where it occurs to where it is needed. Because of the adverse effects of some activities on the versatility and productive potential of soils such activities may be more appropriately located on soils of lower versatility.

Some activities may be necessary for the social, economic or cultural well-being of people and communities, but may preclude alternative future uses and may reduce the options available to future generations. It is important that options for the future are not narrowed prematurely or unnecessarily.

Activities which fail to have appropriate regard to the value and vulnerability of soil and water resources, may not only deplete the potential of those resources to provide for the needs of future generations, but may also fail to safeguard their life-supporting capacity and adversely affect environmental quality.

Some activities produce outputs which are economically or socially important, but are accompanied by adverse effects which extend beyond site boundaries. Examples include orcharding, which can give rise to spray drift and noise; or intensive animal farming which can generate odour and wastes which potentially can pollute nearby streams.

Failure to:

- choose suitable locations for such activities, and sites of appropriate size and land quality; or
- impose or enforce necessary operating conditions, or;
- segregate such activities from sensitive neighbours or vulnerable resource features;

can result in adverse effects to health, reduce amenity values, or may diminish the quality of the environment.

The temporal dimension of sustainable management must also be considered. Future users of the Region's resources cannot participate in today's market, and this means that the current market values for resources may

not accurately reflect their long term value. Therefore, resource management agencies, when making decisions which commit resources in rural areas in ways that are not easily changed at a later time, must carefully consider the potential needs of future generations. For example, when considering options for future urban growth, or countryside living or the location of urban related activities, the financial return from such development will generally exceed even the most profitable farm crop, and in the absence of resource management processes rural land might well be inappropriately urbanised or used for Countryside living or urban related development. If the life supporting capacity of soils in rural areas and the versatility and productive potential of rural land is valued for future generations, current resource management policy and practice should ensure that such soils continue to be available for rural production activities, as well as the potential needs of those future generations.

In considering the life supporting capacity of rural resources (refer policy 2.6.17) reference may be made to the productive potential of the resource. Such potential may or may not include uses that are economically advantageous. But all such uses should be ecologically sustainable.

With regard to the subdivision of rural land and the subsequent erection of buildings this has resulted in the fragmentation of significant areas of rural land. In addressing the issue of rural subdivision the policies require that a comprehensive approach is adopted to ensure that as far as possible options for future generations are maintained. Matters that will have to be taken into account include:

- the size of the lots so that they are capable of accommodating a range of activities. At the district level this may mean ensuring that a variety of lot sizes are available;
- the quality and quantity of the soil and water resources.

Activities, including land development and land use changes which follow consequentially from land subdivision can affect rural landscapes in a variety of ways. In some instances the changes can be beneficial, but in others they can be adverse. It is important that the use, development and protection of rural land is managed with regard to the quality and sensitivity of the landscape, as provided by Policy 6.4.22.

In some parts of the Region there is an underlying subdivision pattern of unoccupied titles which have not, to date, been built on. There may be a need in such areas to mitigate as far as possible the adverse effects of excessive fragmentation of land titles. Such adverse effects include impacts upon rural character and amenity and the reduction in the versatility of such lots for a range of productive activities. Mitigation may be achieved by a number of methods, one of which is by introducing a system of transferable development rights. This technique may take various forms, and generally involves establishing a regime in which subdivision to, for example, provide for countryside living or expansion of rural or coastal settlements is dependent on acquiring a development right created by the amalgamation of small lots in rural areas into lots of greater area. This approach is provided for by Method 2.6.18.2. To be effective, it will require co-operation between TAs.

Management of the natural and physical resources of the rural parts of the islands of the Hauraki Gulf is driven primarily by the high quality of the heritage, landscape and amenity values of the islands, rather than their agricultural potential or mineral resources. The values which give priority to protection of the heritage and landscape qualities also prevent exploitation of mineral resources, except to meet local needs.

Land quality and historic access limitations have constrained primary production activities on the gulf islands. Recently however, particular combinations of climate and land quality have led to the establishment of specialist elements of the wine industry on parts of Waiheke. While Policy 2.6.17 gives priority to protection of natural resource quality, heritage resources and landscape values, primary production activities of this sort should be enabled.

A greater commitment is also needed to developing databases on such subjects as the nature, volume and value of primary production, land values, land holdings and cadastral information as a basis for identifying rural trends and monitoring the effectiveness of plan provisions (see 2.8 Monitoring).

The adverse effects of subdividing rural land into small lots can include the following:

- reduced versatility of potential use of rural land and mineral resources
- compromised natural resource values (native

vegetation, habitat, and water quality), cultural heritage values, rural landscape and amenity values, and a change to the character of rural areas

- increased demands arise in some areas for the provision of urban-type services which are costly and inefficient to provide at rural-residential densities.

These effects are inconsistent with the objectives of the RPS which aim to bring about the sustainable management of the Region's urban and rural lands.

Careful planning is necessary in order to ensure that provision is made for countryside living in a manner that gives effect to Part 2 of the RM Act, and is not inconsistent with the Strategic Direction and with all relevant provisions of this RPS. The RPS does not indicate priorities as to the significance to be attributed to the different outcomes described in Policy 2.6.17. This will depend on giving effect to Part 2 of the RM Act, and on the context within the region and district. An evaluation is however required to include specific reference to how each of the stated outcomes are dealt with, the decision making process including the weightings and reasons for weightings given to each, and on what basis the final decision is made. Where a proposal is evaluated and found to be not inconsistent with the policies, though not actively promoting them, such a proposal may be considered to have made appropriate provision for the policies.

In order to achieve integrated management an evaluation of Policy 2.6.17 (which cross references to other chapters of the RPS) shall include the following matters:

- Chapter 3 - Iwi concerns; the existence of features and qualities of significance to Maori;
- Chapter 4 - the cumulative effects on the region's transport network, and the effects of intensification of rural settlement patterns on the safe and efficient functioning of local roads;
- Chapter 5 - the cumulative effects within the region of low intensity settlement patterns in terms of energy use and especially of transport energy;
- Chapter 6 - the existence of features or qualities which are significant in terms of natural or cultural heritage; the quality and sensitivity of the landscape, and the effects on it of more intensive subdivision and settlement;

- Chapter 7 - effects on the coastal environment, and the need to preserve the natural character of the coastal environment;
- Chapter 8 - the effects of intensification of rural land use on the quality of natural water bodies, with particular reference to stormwater and wastewater treatment and disposal;
- Chapter 9 – the effects of intensification of rural land use on the quantity of natural waterbodies with particular reference to increased demand for potable water supply;
- Chapter 11- the need to avoid or mitigate the effects of natural hazards, including land instability and flood risk;
- Chapter 12 – minimising the loss of prime agricultural land with greatest protection to elite land;
- Chapter 13 - avoidance of unnecessarily compromising regionally significant mineral extraction activities and mineral deposits;
- Chapter 17 - avoidance of contaminated sites, or provision for remediation or mitigation of their adverse effects.

The RPS recognises the need to provide for appropriate Countryside living within the region as a viable method of accommodating the region's rural population growth. Hence, in the same way that Strategic Policies 2.6.2 – Urban Containment establish matters for consideration when addressing urban growth, Strategic Policies 2.6.17 – Rural Areas establish those matters that need to be considered when addressing the issue of growth outside the metropolitan urban limits, including Countryside living.

The fundamental intent of Policies 2.6.17, and in particular 2.6.17.3, is therefore to inform and enable District Plan processes to address the environmental effects of Countryside living in rural areas. The potential environmental effects of Countryside living include (but are not limited to):

- Increased pressure on the regional roading system, leading to increased transport costs and increased demand for transport infrastructure to service Countryside living as the provision of Countryside living results in people living in areas where they are often still dependent on commuting to regional

centres. Countryside living can also give rise to cumulative effects on the regional roading system (in combination with other development opportunities) and can have cross boundary implications.

- Adverse effects on the safe and efficient operation of existing infrastructure, in particular regionally significant infrastructure. For example, Countryside living adjoining or close to a regionally significant airfield, even at low densities, can give rise to conflict.
- Adverse effects on water quantity and quality resulting from the stormwater run-off from increased impermeable surfaces associated with Countryside living.
- Adverse effects on rural character, including landscape. The provision of Countryside living can change the landscape and character of an area from one of open space to a comparatively more intense and less open character.
- Reverse sensitivity effects where conflict occurs between the expectations of people living in the area for the lifestyle and the production based activities occurring in these areas.
- Cumulative effects. Consideration must be given to the cumulative effects that provision of countryside living may have in conjunction with other developments (including other rural opportunities, and urban living opportunities) both within the district and, where appropriate, within the region.
- Potential to undermine urban management policies or methods and foreclosure of opportunities for future expansion that arise from consideration of Policies 2.6.2. For example, the expansion of a particular settlement in a certain direction may be controlled in order to preserve an area of open space. Prior to identifying Countryside living opportunities, particularly those adjoining urban areas, an assessment will be required as to the preferred form of development in any given area. This should include consideration of whether urban development may be the more appropriate option. This will require integration with the relevant settlement growth strategy (refer to Method 2.6.3.5). Where urban growth is the preferred option for the future use of that land, consideration should be given to ensuring compatibility with councils' rating policies.

Policy 2.6.17.3(i) acknowledges these potential effects and outlines that Countryside living is to be avoided where it would result in conflicts between incompatible activities such as reverse sensitivity effects, result in the undermining of the integrity of the metropolitan urban limits, or compromise future urban areas.

Policy 2.6.17.3(ii) also requires Countryside living to avoid development in areas identified in the RPS or in district plans as areas of significant ecological value, or of significant historic heritage, or of outstanding natural features and landscapes, or of high natural character; including areas or parts of areas identified in Appendix B that contain these values. These areas represent the Region's most precious resources, and their protection and/or preservation is consistent with both section 6 RM Act and the promotion of sustainable management. The Region contains a sizeable rural area and there is considerable opportunity for Countryside living development outside of these areas. Clear priority is therefore given to a location outside of those areas. It is acknowledged that in some circumstances, provided that development (including earthworks, buildings, roads and driveways) is avoided within those identified areas, Countryside living provisions can result in the protection of the values and features, for instance through permanent legal protection or the creation of special lots or reserves.

Policy 2.6.17.3(ii)(b) specifically excludes countryside living development from having to avoid built heritage. This recognises that sometimes restoration and hence development of historic buildings and structures is required to protect and preserve them. However, the building, structures and their context contain significant heritage values and so Policy 2.6.17.3(iii)(g) states that any adverse effects of countryside living on these values are avoided.

Policy 2.6.17.4 states that no further subdivision for Countryside living purposes is to be provided for in the Waitakere Ranges Heritage Area where there is a need to protect, restore and enhance heritage features and there is limited capacity to absorb future subdivision.

There are already significant Countryside living opportunities within the Auckland region. Some of the Countryside living lots are not, however, in a location, or of an extent or at a scale where regional objectives and outcomes can be achieved. Some are, for example, located a considerable distance from arterial transport

routes, commercial facilities and/or employment opportunities.

Policies 2.6.17 and Methods 2.6.18 do not specify how countryside living shall be provided, for example, whether it be by way of defined areas or by way of scattered opportunities or by some other method. Where Countryside living is provided by way of scattered opportunities throughout the rural areas, however, the potential for conflict with Policies 2.6.17 may be greater. One way of mitigating these conflicts is to confine countryside living to specific areas. It is therefore expected that structure plans or other similar mechanisms will be utilised to guide the development of defined Countryside living areas so that adverse effects are avoided, remedied or mitigated (Method 2.6.3.5). This may offer a means of giving effect at a local level to Part 2 of the Act, and to achieving the outcomes that are referenced in Policies 2.6.17.

Policy 2.6.17.3(vi)(a) and Method 2.6.18.2 highlight the potential for the rationalisation of unoccupied titles through the transferable development rights (TDR) system as one method of providing for Countryside living in more appropriate areas. Such an approach not only seeks to prevent excessive fragmentation of land titles, but also enables the provision of Countryside living lots to achieve the regional objectives and outcomes (e.g. environmental, landscape and infrastructure efficiency outcomes) as set out within the RPS by ensuring they are suitably located and of an appropriate extent and scale. Rationalisation could be achieved, for example, by trading rights for Countryside living (the transfer of titles from a donor area to a recipient area), or through the re-organisation or reconfiguration of existing or potential titles, whilst not increasing the amount of Countryside living capacity.

Policies 2.6.17.3 and 2.6.17.4 recognise that there are already significant Countryside living opportunities within the Auckland Region and that, if all such opportunities were taken up, then significant adverse effects would result. Rural capacity studies based on 2006 data have determined that the Region already has over 20 years of Countryside living theoretical capacity, as calculated from the various district plan provisions in countryside living zones and general rural zones. Even accepting that the capacity likely to be taken up may be less than the theoretical figure, the possibilities currently available for countryside living are likely to cater for a reasonable forward planning period up to

and probably beyond 2020. These policies recognise that the environmental effects associated with existing Countryside living opportunities need to be managed, in addition to the effects of any new Countryside living opportunities.

Having regard to the above, it is necessary that a conservative approach be taken to any further provisions for countryside living in that region. Policy 2.6.17.3(vi) (b) further provides that additional Countryside living lots shall not be created unless it is demonstrated that there are insufficient opportunities for countryside living within a particular geographical sector. In the context of this policy, the provision of Countryside living opportunities will need to be assessed by taking into account the turnover of Countryside living lots existing undeveloped countryside living lots (and the likelihood or ability of these lots to be developed or transferred) and the provision for countryside living lots within the existing district plans relevant to that part of the region under consideration (North/West, Central or South). Capacity is therefore one factor in the assessment of countryside living provision.

Countryside living capacity will be recalculated on an ongoing basis in accordance with Method 2.6.18.7. Such calculations will be used to inform the District Plan process and will be made available to the public.

2.7 Strategic and Environmental Results Anticipated

Having given effect to the Strategic Direction the following results are anticipated:

- (a) More than 70% of total growth within the Auckland region up to 2050 will be contained within the Metropolitan Urban Limits as were made operative in November 1999.
- (b) 30% of total regional population will be contained within High Density Centres and Intensive Corridors.
- (c) The public transport level of service will increase generally in the urban area, and specifically in High Density Centres and Intensive Corridors. Explanation: The public transport level of service denotes how many public transport services pass through the pedestrian catchments of bus, ferry, and train stations during the traffic peaks (morning and evening and the inter-peak).
- (d) 20 years capacity for urban development will be provided within the region.
- (e) Auckland's population growth and economic development will be accommodated while retaining the Region's intrinsic natural qualities.
- (f) The land supply available for peripheral expansion and urban intensification will be used efficiently in the long term.
- (g) There will be a shift of emphasis from continued peripheral development to greater levels of urban intensification.
- (h) Urban development will occur at such locations and in such a way as to promote cost-effective servicing by transportation systems and networks and public utility services.
- (i) Development in the Region will be managed so that it does not constrain the efficient and safe operation of regionally significant infrastructure and facilities.
- (j) A strategic approach will be implemented to deal with the impacts of urban intensification, taking into account stormwater runoff on a catchment basis, infrastructure requirements, amenity values, open space and community services.
- (k) Those features which give Auckland its unique sense of place, such as the coastal environments, outstanding natural features and landscapes (including in the Waitakere Ranges Heritage Area refer Appendix I, and the volcanic cones) and its natural and cultural heritage will continue to be protected from inappropriate subdivision, use and development.
- (l) Urban development will be directed away from areas prone to flooding, from geologically unstable areas and from catchments draining into pollution sensitive estuaries and inlets.
- (m) Adverse effects including the cumulative effects of development on the environment will be minimised.
- (n) Subdivision and development of rural land for urban purposes will be managed.
- (o) Sporadic urban-related development in rural areas will be managed to avoid, remedy or mitigate adverse effects.

- (p) Countryside living and similar development will be focused into areas where the rural natural resource values and the values protected by the urban containment strategy will be maintained.
 - (q) The soil resources of the region, particularly prime agricultural land and elite land, are protected.
 - (r) Water pollution, air quality concerns, adversely affected ecosystems and contaminated land sites, will be reduced in the long term.
 - (s) Better urban structure and improved urban design outcomes for all new urban (re)developments.
 - (t) Housing will be of a good quality and affordable, and a range of housing choice is provided.
 - (u) Relationships between resource management agencies and Tangata Whenua will be enhanced.
 - (v) A built environment that achieves a higher level of long term sustainability with respect to water and energy conservation, reduction of waste and pollution, and efficient use of resources.
 - (w) Regionally significant infrastructure will be maintained and provided in such a way and to an extent that it efficiently and effectively supports anticipated growth within the Region.
- (iii) *A full capacity monitoring assessment of the matters outlined in Section 2.6.3.6. Such assessments should be undertaken regularly to ensure that a minimum of 20 years capacity is maintained for future development. The monitoring survey will be published and made available to the public.*
4. *The ARC in consultation with utility providers and TAs will monitor and report on the co-ordination of development in the Region with the provision of infrastructure.*
 5. *The ARC and TAs will jointly produce, adopt and notify a monitoring report that will monitor the state of the environment of the Waitakere Ranges Heritage Area (refer Appendix I) and progress made towards achieving strategic objective 19 by 2013 and at intervals of not more than five years after that.*

2.8 Monitoring

1. *The ARC will monitor and report annually on the form and direction of Regional development, and will monitor the performance and effectiveness of regional policies.*
2. *Every five years the ARC will collate and interpret Census data which is relevant to assessing the strategic objectives.*
3. *The ARC will periodically collate and report on results of monitoring undertaken by TAs in the Region, with regard to the extent to which the provisions of district plans result in outcomes which are consistent with the Strategic Direction and the Strategic Policies, and also with reference to:*
 - (i) *Take-up of the development capacity of residential and employment activity within TA districts;*
 - (ii) *The cumulative effects of development in rural areas on rural resources;*