Greater Christchurch Urban Development Strategy













Greater Christchurch Urban Development Strategy and Action Plan 2007











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Message: UDS Forum Chair, Regional Chair, Mayors and Transit NZ Chair

This Greater Christchurch Urban
Development Strategy (the Strategy)
is a significant milestone for the area
and the Strategy partners; Environment
Canterbury, Christchurch City Council,
Selwyn District Council, Waimakariri
District Council, and Transit New Zealand.

The adoption of the Strategy follows an extensive joint public consultation programme undertaken by the partners in the area, which resulted in over 3250 submissions on the growth management options.

A Community Charter was developed from what the community said about how the area should grow and change. The Charter underpins the development of the Strategy. It provides the principles and framework for implementation of the Strategy. The partners also collaborated in the UDS 'Inquiry by Design' process to develop a preferred settlement pattern.

Growth brings many challenges to the area. The UDS project was initiated in 2004 arising from concerns about the lack of collaborative leadership and institutional arrangements to manage growth in a sustainable way in the subregion.

With a long-term outlook to 2041, the Strategy provides a comprehensive context for making decisions now for present and future generations.

The Strategy reinforces the importance of some familiar issues, including the location of future housing, development of activity centres, providing areas for new employment and the impact of land use change on transportation networks. It also highlights the need to address issues in a more integrated manner. The theme of 'integrated land use, infrastructure and funding' underpins much of the Strategy and associated implementation actions.

Population growth, land and building development will continue in the area for the foreseeable future, and will continue to present new challenges. The challenge ahead is to successfully complete and implement the Strategy so the area benefits from this investment made in its future, ensuring that the partners speak and act as one on the key issues facing the area and their resolution through the UDS framework.

On-going engagement, shared planning and resourcing through working together with Central Government are critical to successfully implementing the Strategy. For this to be achieved it is essential that partners work together to develop the agreed actions that will follow.

We entrust this Strategy to the Greater Christchurch Community, along with our thanks for all the community input in its development. We commit to this strategy, and encourage you to assist us with its implementation.



Bob Parker, UDS Forum Chair

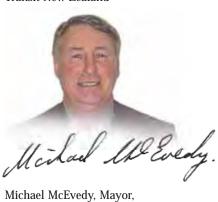


Garry Moore, Mayor,

Christchurch City Council



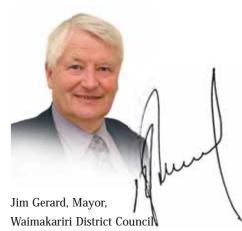
Bryan Jackson, Acting Chair, Transit New Zealand



Michael McEvedy, Mayor, Selwyn District Council



Sir Kerry Burke, Chair, Environment Canterbury



Tangata Whenua – Ngai Tahu

The Treaty of Waitangi provides principles for the engagement of, and relationship building between, Tangata Whenua / Maori and Councils. Tangata Whenua and Local Authorities recognise the Treaty of Waitangi will continue to be a foundation for future mutual relationships together with other strategic partners within the area.

Ngai Tahu holds manawhenua and kaitiakitanga over much of the South Island, the largest territory of any tribe in New Zealand. Ngai Tahu's takiwa (tribal territory) runs from Te Parinui-owhiti (White Bluffs) on the east coast to Kahurangi Point on the West Coast, and southwards to Rakiura (Stewart Island).

Ngai Tahu are the iwi comprised of Ngai Tahu whanui, or the collective of the individuals who descend from the five primary hapu of Ngai Tahu, Ngati Mamoe and Waitaha, namely Kati Kurî, Ngati Iraheku, Kati Huirapa, Ngai Tuahuriri and Ngai Te Ruahikihiki.

As part of the settlement negotiated with the Crown, Ngai Tahu received cultural redress in the form of confirmation of the ability for Ngai Tahu to express its traditional kaitiaki relationship with the environment. Other tribal redress included an apology from the Crown, acknowledgement of Aoraki/Mt Cook as a tribal taonga, economic redress in the form of a payment of \$170 million and a first right ability to purchase property from the Crown.

The settlement has allowed the tribe to reestablish itself as an economic force within the South Island whilst continuing to be a leader in sustainable environmental management through its principle of kaitiakitanga. Ngai Tahu currently has interests in fishing, tourism and property as well as a diversified equities portfolio, all of which are managed through Ngai Tahu Holdings Ltd. Protection of Ngai Tahu's customary rights and environmental monitoring and protection are undertaken by the Toitu Te Whenua Unit.

Te Runanga o Ngai Tahu was established by the Te Runanga o Ngai Tahu Act 1996. It works on behalf of the iwi to manage the collective assets of Ngai Tahu whanui, and to promote and ensure the interests and aspirations of Ngai Tahu whanui for the future.

As kaitiaki, Ngai Tahu has an intergenerational duty to ensure that the mauri and the physical and spiritual health of the environment is maintained, protected and enhanced. This is partly addressed through Ngai Tahu 2025, which provides the guiding vision for the tribe and identifies the contribution Te Runanga o Ngai Tahu will make to that vision. It is a 25-year future road map that clearly identifies and details the specific areas of importance for Ngai Tahu to impact and influence.

Resource protection and development can be addressed through Hapu and Iwi Resource Management Plans.



The Strategy promotes and supports the development of Hapu Management Plans, and acknowledges Te Whakatau Kaupapa (Ngai Tahu Resource Management Strategy for the Canterbury Region), the Te Taumutu Runanga Natural Resources Management Plan 2003 and Ngai Tahu 2025 as fulfilling an environmental protection role. Mutually agreed protocols, additional resources, and processes in district plans are necessary to support and complement the resource management and development principles of Tangata Whenua. The Strategy must address issues relating to developing resources important to Tangata Whenua in addition to issues facing the wider community. This must include supporting and providing for traditional Ngai Tahu communities, particularly Tuahiwi, Rapaki and Wairewa, to maintain their relationship with their ancestral lands as they may from time to time determine for themselves.

The natural environment consisting of air, land, waters, coasts, oceans, flora and fauna and how they are engaged with, is crucial to Ngai Tahu identity and culture. This means that the actions and programmes in this strategy will respect and promote the protection of these taonga, including:

- > The spiritual aesthetic nature of air;
- Environmental quality and quantity is sufficient to provide for healthy mahinga kai;
- > Indigenous flora and fauna and their habitats are maintained and enhanced;
- > Important landscape features and markers are visible and respected;
- Green corridors for birds and other animal passage are restored and maintained
- > Visual amenity and landscape values;

Water quality is maintained and enhanced for the waters of the:

- > Ashley/Rakahuri;
- > Waimakariri;
- > Avon/Otakaro, Heathcote/Opawaho and Selwyn/Waikirikiri;
- > Avon Heathcote Estuary/Ihutai;
- Lake Forsyth/Wairewa and all its tributaries;
- > Lyttelton Harbour/Whakaraupo;
- > Lake Ellesmere/Te Waihora and all its tributaries:
- > Wetlands are protected and, if needed, restored:
- Mauri of waterways and freshwater resources; and
- > Surface and ground waters are managed sustainably.
- > Wahi tapu and urupa are protected¹.
- Greater involvement of tangata whenua in management of significant sites and wahi taonga in developed areas.
- Maintaining relationships with ancestral lands.
- > Working with our wider communities.

I encourage our Ngai Tahu whanau, communities and other Maori to read this important strategy which will impact, potentially both in a positive and negative way, on us and our future generations.

Mu toroner

Mark Solomon,

Kaiwhakahaere Te Runanga o Ngai Tahu

1 Proposed Natural Resources Regional Plan, Chapter 2, Environment Canterbury. As Greater Christchurch continues to grow, increasing pressure is placed on the area's ability to cater for its expanding population. The Urban Development Strategy (the Strategy) is a step towards a far more collaborative means of addressing these pressures. The Strategy is a single point of reference for the community to help develop awareness and understanding of the approaches being taken to growth management.

Over 3250 submissions were received in April 2005 when the public were asked which growth option they preferred for the future of Greater Christchurch. The responses were then translated into the Community Charter, which serves as the foundation for this Strategy.

Building on this foundation, the intent of the Strategy is to provide the primary strategic direction for the UDS area and establish a basis for all organisations and the community to co-operatively manage growth. A crucial part of the document is the identification of the costs of growth and determining the main sources of funding, especially for infrastructure such as transport, wastewater, stormwater, recreation and cultural facilities.

Implementation of the Strategy is the responsibility of the Strategy partners, and also government and non-government agencies, the private sector, Tangata Whenua and the community. All have a significant role to play to support this continuing collaborative approach to ensure the Strategy is implemented.



1.1 Vision

By the year 2041, Greater Christchurch has a vibrant inner city and suburban centres surrounded by thriving rural communities and towns, connected by efficient and sustainable infrastructure. There are a wealth of public spaces ranging from bustling inner city streets to expansive open spaces and parks, which embrace natural systems, landscapes and heritage.

Innovative businesses are welcome and can thrive supported by a wide range of attractive facilities and opportunities. Prosperous communities can enjoy a variety of lifestyles in good health and safety, enriched by the diversity of cultures and the beautiful environment of Greater Christchurch.

The Greater Christchurch area will have:

- > Enriched lifestyles
- > Enhanced environments
- > Prosperous economies
- > Managed growth, and
- > Integrated and collaborative leadership.

1.2 Leadership, Partnership and Collaboration

The Strategy is a new way for the Strategy partners -Christchurch City Council, **Environment Canterbury (the Regional** Council), Waimakariri and Selwyn District Councils and Transit New Zealand- and the community to work together - a new approach to strategic planning. It considers the complexity and inter-relationships of issues around land-use, transport, and infrastructure including community facilities, while incorporating social, health, cultural, economic and environmental values. The Strategy provides leadership to integrate and manage these issues in a more collaborative way between councils, strategic partners and the community.

The Greater Christchurch area includes the eastern parts of Waimakariri and Selwyn District Councils and the urban and some rural areas of Christchurch City Council including the Lyttelton Harbour Basin.

Issues do not stop at boundaries. If the issue requires an area outside to be considered, it will be.

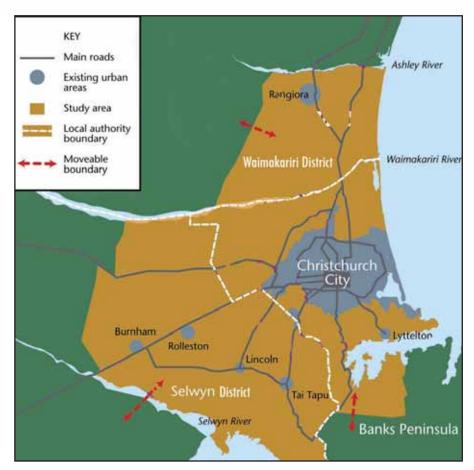


Figure 1

1.3 Purpose and Emphasis

The UDS takes a principled, but practical, view of the role of the partner councils in managing the growth of Greater Christchurch, based on three assumptions:

- > That population growth in the area will continue to occur due to natural increase and inwards migration;
- > That the partner councils have statutory obligations to take action in managing growth; and
- > That the community and business sector expressed an expectation through public consultation that the partner councils will take a proactive, integrated, and collaborative approach to managing Greater Christchurch's growth.

The purpose of the Strategy is to achieve the vision through the establishment of clear, robust, transparent, accountable, and integrated strategies, policies, and processes for managing the growth of the Greater Christchurch area over time.

It will also:

> Raise community awareness, understanding and commitment, including through community partnerships, to implement the strategy's actions.

- > Provide an understanding of the potential impact of growth on the environment, including Tangata Whenua values, local communities (social, health and cultural needs) and the built environment.
- > Provide quality information to meet, as a minimum, the requirements of section 32 of the Resource Management Act 1991 (RMA) including social, health, cultural and economic benefits and costs to underpin the implementation of the Strategy by partner councils in their RMA 1991 planning processes and documents.
- > Identify future infrastructural demand patterns, so partner councils can examine the most cost-effective service delivery options and make the most efficient use of public resources so infrastructure costs over the long-term can be kept as low as possible.
- > Provide prudent asset management and cost-effective long-term provision of infrastructure services, such as water, wastewater, roads and public passenger transport.

- Engage infrastructure and service agencies; and provide a basis for agreement and commitment on the strategies and actions in their own longterm planning.
- Provide links for transport, walking, cycling, environmental assets and community facilities.
- > Provide a strategy and implementation plan, based on a sound understanding of growth drivers, and providing investment certainty to local communities, developers and service providers as well as the partner councils.
- > Demonstrate local government leadership, by balancing the needs of local communities, developers and infrastructure and service agencies to determine priorities and shape the future of the area through the strategy's Implementation, and
- > Provide a comprehensive and robust framework to address the continuing and projected growth in the area; and
- > Promote Greater Christchurch as a great place to live.

1.4 Greater Christchurch Growth Management

The scope and emphasis of the Strategy is on Greater Christchurch development matters which the partner councils have statutory jurisdiction, power or influence over:

- Governance, administration and associated funding.
- > Provision and funding of infrastructure including transport.
- Land and building development and design.
- > Land-use, supply and choice..
- > Use and development of natural resources.
- Protection, maintenance and enhancement of ecosystems;
- > Protection, maintenance and enhancement of heritage.
- Provision and funding of community infrastructure and services; and
- > Advocacy on behalf of the community.

Residence Existing urban areas Study area Local authority boundary Moveable boundary Walm, kariri District Christchurch City Solwyn River Solwyn River Banks Peninsula

Figure 3: UDS Study area showing the three "activity corridors".

1.4.1 Areas Outside of the UDS Area

Most of Banks Peninsula and the western parts of the Waimakariri and Selwyn Districts are outside the Greater Christchurch area.

Investment in improved road and rail links and the reducing cost of travel and communications have progressively increased the influence of the area's day-to-day economy. These changes bring towns and rural areas within commuting distance of Greater Christchurch, so that a small but increasing proportion of the area's population and housing has transferred to these areas.

It is important to ensure linkages with the western areas of Waimakariri and Selwyn Districts and the southern part of the Hurunui District outside of the area. This will occur by taking an "activity corridor" approach to the Strategy's settlement pattern.

The three corridors are described as follows:

- > North-South.
- > Central.
- > Southwest.

The corridors provide the potential to enhance economic links, integrate land use and transportation, and ensure connectivity between all parts of the partner council areas, to achieve an integrated, responsive and sustainable land transport system under the Land Transport Management Act (LTMA) 2003.

1.5 Values and Expectations of the Community, Business Sector, and Partner Councils

The Strategy aims to satisfy three sets of values and expectations:

1.5.1 Community values and expectations

During the public consultation, the community asked for:

- > Protection of the groundwater quality in aquifers.
- Protection and enhancement of ecosystems and outstanding natural and rural landscapes.
- > Minimum loss of productive rural land.
- > More concentrated settlement/ development patterns focused on welldefined existing urban centres.
- > A defined boundary between urban and rural areas.
- Affordable travel through more choice of transport options, particularly walking, cycling and public transport.
- Public passenger transport integrated with commercial and residential development.
- Enhanced community character, diversity and facilities, and
- Enhanced 'sense of place', heritage, open space networks, and urban and site design.

1.5.2 Business sector values and expectations

Better integration between land-use infrastructure and funding, to provide certainty and to support and enhance a diverse and prosperous local economy.

1.5.3 Partner values and expectations

Direction for growth management through:

- Community outcome processes in partner councils' Long-Term Council Community Plans (LTCCPs).
- > Regional Policy Statement.
- > Regional Land Transport Strategy.
- > City and District Plans.
- > Transit New Zealand State Highway Forecasts.

These expectations align with the New Zealand statutory planning framework. They provide a clear, robust, transparent, accountable, and integrated policy and implementation process that can achieve and surpass legislative compliance (i.e. the requirements of the Local Government Act 2002 (LGA), Land Transport Management Act 2003 (LTMA), and the Resource Management Act. This relationship is illustrated in Figure 3 on page 13.



1.6 Status of the Strategy

This Strategy is a broad scale, long-term, land-use strategy prepared under the Local Government Act 2002. It will be used to guide the future development of Greater Christchurch. The Strategy will be implemented through tools such as the Regional Policy Statement under the RMA 1991, amendments to the Regional Land Transport Strategy as mandated by the Land Transport Management Act 2003 and Long Term Council Community Plans prepared under the Local Government Act 2002. Implementation will also involve agreements between the UDS partners, Central Government and other agencies.

Greater Christchurch Urban Development Strategy and Action Plan

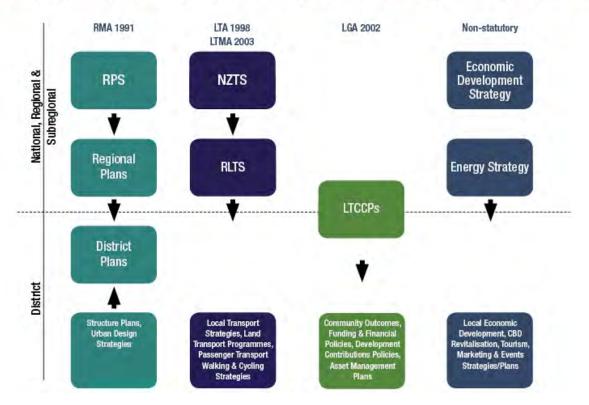


Figure 3: Relationship of the UDS to the Statutory and Non-Statutory Documents and Processes of the Strategic Partners.

Guiding Principles and Strategic Directions

2 Guiding Principles & Strategic Directions

These principles underpin and provide context for the Strategy, and shape and guide decisions on planning, transport and infrastructure investment. They will also guide the actions of the Strategy as it is implemented.

Using the information gathered from the consultation feedback, the assessment criteria developed for the Options process and relevant guiding national policy documents, particularly for the Sustainable Development for New Zealand Programme of Action (January 2003), these principles balance social, cultural, economic and environmental goals.

Sustainable prosperity is the overarching principle and it requires having a better understanding of the systems that supports life in the community. This is a broad view, to recognise that our day-to-day activities can simultaneously affect our economy, environment and community.

Sustainable prosperity will be achieved through:

Leadership	providing good governance, making decisions, taking action and accepting responsibility, ensuring the impacts and outcomes are monitored, reviewed and managed effectively.
Partnership	working in a collaborative and coordinated manner with one another, the community, strategic partners, government, and other organisations through short-term actions based
	on long-term goals and continued commitment to effective engagement in respect of
	strategy development and implementation.
Responsibility	continually working towards ensuring our communities are great places to live, work and play, and are safe and economically secure, and are physically and socially healthy.
Resilience	managing risk and uncertainty through strategy and implementation frameworks that enhance how individuals, communities and organisations respond to hazards and the unexpected.
Adaptability	taking into account the past and anticipating the future, putting in place strategy and implementation frameworks that are adaptable to change.
Innovation	strategic partners and the community collaborating to find creative, pragmatic, cultural and resourceful approaches and solutions.
Integration	integrating environmental, land-use, infrastructure, social, cultural, economic and governance goals in all decision-making, policies, plans and activities by recognising the connections between systems, giving effect to the regional and local metropolitan context.
Restoration	ensuring our natural systems are valued and protected through restoring and enhancing biodiversity and ecological integrity.

The Strategic Directions shape and guide this Strategy. They were developed as a result of the option development, community consultation and Strategy development processes and are key components of the Strategy Vision. They outline the outcomes the Strategy seeks to achieve. How they will be achieved is outlined in Section 6, which provides specific actions.

Enrich Lifestyles by:

- Ensuring that the Greater Christchurch area is a liveable, safe, prosperous and healthy place.
- Recognising and protecting cultural identity and enhancing a sense of place.
- > Improving community safety and encouraging neighbourhood design that makes people feel safe.
- Increasing the supply of well-located, affordable housing.
- Planning for a more equitable distribution of community infrastructure, and
- Developing a strong cultural environment and increasing community access to arts, recreation and other cultural facilities.
- > Ensuring buildings and homes are energy-efficient, warm, well-built, aesthetically pleasing and affordable.
- > Promoting good urban design to make our communities more liveable and attractive with good connectivity.
- > Developing an open space network.
- Providing additional recreational opportunities in parks and natural areas.
- Maintaining and protecting the heritage values of established suburbs, rural towns and settlements.

Enhance Environments by:

- > Protecting the quality and quantity of groundwater in the aquifers and natural catchments as a top priority.
- > Protecting and enhancing indigenous vegetation and the ecosystems they contain.
- > Recognising the value of, and protecting the coastline, estuaries, wetlands and waterways.
- Ensuring development protects and enhances natural systems and environmentally sensitive areas.
- Promoting energy and water conservation and ensuring clean air, and
- Protecting outstanding landscapes such as the Port Hills and iconic rural outlooks.

Encourage Prosperous Economies by:

- Maintaining a secure and productive resource base, including minimising the loss of productive land
- Protecting and enhancing strategic regional infrastructure, including utility hubs and corridors, Christchurch International Airport and Lyttelton Port
- Ensuring adequate and appropriate land for commercial and industrial uses, and
- Ensuring the connection between homes, jobs, recreation and environment through mixed land uses and integrated transportation modes



Manage Growth by:

- Defining and maintaining clear boundaries between urban and rural areas using networks of open space
- > Redeveloping existing urban areas in a more concentrated form.
- > Providing for new urban development that is well integrated with existing urban areas and towns.
- > Obtaining greater efficiencies from the transportation infrastructure.
- > Creating an urban form that minimises the use of energy and water.
- > Ensuring the integration of land use, infrastructure and funding.
- Delivering a vibrant and diverse city and town centres, in which to live work and play, and which support safer and healthier communities with access to community facilities.
- > Providing an effective and efficient transport system to people and businesses.
- Ensuring public passenger transport, cycling and walking are part of the way of life for Greater Christchurch residents.
- > Identifying and safeguarding future transport corridors
- Ensuring infrastructure is provided in a timely and affordable manner with an environmental focus, and
- > Protecting and enhancing strategic regional and sub-regional infrastructure and service hubs including Christchurch International Airport, Lyttelton Port and road and rail corridors.

Effective Governance and Leadership by:

- Continuing to work together in partnership, with the community,
 Tangata Whenua, strategic partners and central government
- > Ensuring that the Strategy is integrated into:
- Long-Term Council Community Plans
- · Regional Policy Statements and Plans
- · Regional Land Transport Strategy
- · City and District Plans, and
- Long term plans of Transit NZ, Land Transport New Zealand and other agencies
- > Preparing the Strategy's implementation framework to translate vision into actions, monitor and review progress at agreed milestones and adapting to change over the longterm.
- Ensuring Individuals and groups in the community, organisations and central government agencies are effectively engaged and participate in implementation.
- > Enabling private and public partnerships to support the implementation of the Strategy.
- > Putting in place mechanisms to assist in resolving different points of view and approaches to issues, to achieve collaborative action, and
- Vising collaborative and innovative approaches to support implementation involving Tangata Whenua, strategic partners including central government, the wider community and partner councils.

Integrate Implementation by:

- > Ensuring the integration of environmental, social, health, cultural, and economic matters in all policies, plans and activities and working in partnership with surrounding communities, to achieve the strategic outcomes, and
- > Improving the coordination and timing of the installation of services and infrastructure.

PARTNERSHIP RESIDIENCE RESPONSIBILITY RESILIENCE ADAPTABILITY

Sustainable Prosperity



Figure 4: Sustainable Prosperity is the core of the guiding principles

The global, national and regional operating environment influences long-term planning. The Strategy takes into account the effects of wider global changes.

3.1 Global

Continuing Globalisation

Globalisation is the complex series of technological, social, economic, cultural and political changes seen as increasing interdependence, integration, and interaction between people, communities, companies and nations. A number of global businesses operate in New Zealand and New Zealand exports goods and services around the world.

Climate Change

Changing weather patterns, and the potential for sea level rise and fresh water scarcity, will impact on agriculture, horticulture, forests, and fisheries. They also may change future settlement patterns and lead us to need to change from being a carbon-based economy and society.

Virtual Connectivity and Logistics

Information and knowledge, collation and storage of materials, goods and services are likely to be more available as information technologies continue to improve and advance. Virtual connectivity simultaneously complements, challenges, and changes existing social, economic, cultural and political structures and networks. Improving Greater Christchurch's information technology infrastructure, connectivity and capacity will be increasingly important.

Increased Competition for Natural Resources Within and Between Natural Resource Economies

There will be increased scarcity of certain natural resources such as cheap hydrocarbons and other energy, key minerals, fresh water, fisheries, land for primary production, water views and natural amenities. The likelihood of competition, within and between some natural resource economies, is increasing.

Global Planning Trends

Policy initiatives have shifted towards a greater concern for quality of life in Australia, United Kingdom, Canada and the United States. These initiatives seek a more comprehensive and integrated approach to growth-related policy development to ensure high quality of life for current and future generations and the protection and enhancement of natural systems.

Quality of life has become a primary factor in long term planning including:

- A diversity of opportunities for planned and random social interactions.
- > A rich variety of services and local 'goods', including cafes and restaurants, live-performance venues, museums, theatres and cinemas, and access to outdoor recreational activities.
- > Landscape and built aesthetics, including urban design, architecture, historic places, natural environment and climate.
- Good public services, including quality schools, medical facilities and other initiatives such as, crime prevention through environmental design (CPTED).
- > The ease with which individuals can move around between live, learn, work, play, and relax, and
- Energy costs and their impact on infrastructure requirements.

3.2 National

New Zealand is a relatively urbanised country with more than 85% of its people living in cities and towns. The New Zealand population is projected to grow to 4.4 million by 2021, to 4.6 million by 2051 and to fall slightly, to 4.2 million, by 2101.

In general terms, New Zealand has many emerging issues that relate to growth management:

- > A more mobile population.
- Migration from cities to rural areas and to the coast for lifestyle changes.
- Slowing growth in the labour force because of lower population growth.
- Changing population structure including an ageing, longer living and more ethnically diverse population.
- > Infrastructure deficits.
- > Funding uncertainty (particularly for the longer term).
- > Declining affordability of housing.
- Responding to climate change and environmental protection imperatives.
- Managing natural resources sustainably.
- Completing Treaty settlements and progressing Tangata Whenua development initiatives.
- > Continued growth in tourist visitors.
- > Furthering New Zealand's national identity in heritage, arts and culture.
- Opportunities arising from increased internet availability and use.
- > Sustaining adequate energy supplies.

Central Government has responded to growth management issues through a number of policy documents. All of these polices and programmes provide local government with a framework for managing growth. Some of the central government policies are:

- Regional Development Strategy and Programme (2000).
- National Energy Efficiency and Conservation Strategy (2001).
- > New Zealand Tourism Strategy 2010 (2001).
- Growing an Innovative New Zealand (2002).
- > The New Zealand Transport Strategy (2002).
- Sustainable Development for New Zealand: Programme of Action (2003), Sustainable Cities being one of four priority issues.
- New Zealand Urban Design Protocol (2005).
- > New Zealand Housing Strategy (2005).

The key statutes relating to growth management and planning in New Zealand are the Resource Management Act (RMA), Local Government Act (LGA) and Land Transport Management Act (LTMA). Each statute has a number of associated statutory and non-statutory tools.

Common threads running through the legislation are 'sustainability' and 'integration', particularly the importance of linking growth, infrastructure, and funding. The following growth management principles can be derived from these planning statutes:

> Sustainable management of natural and physical resources through the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing (RMA).



- > Taking account of people and communities; the built environment as well as the natural environment; amenity values; and social, economic, aesthetic, and cultural conditions (RMA).
- > Providing for the social, economic, environmental, and cultural wellbeing of communities through a sustainable development approach (LGA).
- Recognising Maori culture and traditions and maintaining and improving opportunities for Maori to contribute to decision-making (RMA, LGA, LTMA).
- > Prudent financial management (LGA).
- > Accountability to local communities (LGA, RMA, LTMA).

- > Assisting economic development; assisting safety and personal security; improving and protecting public health, improving access and mobility and ensuring environmental sustainability (LTMA).
- > Integration and responsiveness (LTMA).
- An integrated approach to land transport funding and management (LTMA).
- > Improving long-term planning and investment (LGA, LTMA).

In summary, the achievement of the purposes of the principal planning statutes is dependent on the agents, tools and processes of each statute supporting the others in an integrated way.

This means looking across the purposes, outcomes and processes of the three statutes in a collective manner. These principles are reflected in the Strategy.



Growth Drivers



Figure 5: Growth Drivers showing trends over the last 20 years. These vary across different parts of the country. Moving to coast, lakes and rural areas for lifestyle are significant components of settlement pattern changes in New Zealand.

3.3 Regional

Canterbury is the largest region in New Zealand, covering a land area of over 40,000 sq kms. The region extends from the catchment of the Clarence River to the catchment of the Waitaki (Kaitiaki) River. The Main Divide is the western boundary and the region extends 12 nautical miles into the Pacific Ocean. Within the region there are nine district councils, Christchurch City Council and Environment Canterbury.

Issues and trends for Canterbury:

- > Health and well-being.
- > Opportunities for Tangata Whenua.
- > Housing standards.
- Land and housing affordability.
- > Air quality.
- > Linking rural and urban areas.
- > Transport and travel needs.
- > Managing natural resources, particularly water.
- > Protecting the environment (including outstanding natural landscapes), major wetlands and significant habitats.
- > Pressure on the coastal environment.
- > Growing the economy.
- > Management and disposal of waste.
- > Secure and reliable energy supply.
- > Changing settlement patterns: the rise of rural lifestyle and coastal and waterside living.
- Marketing Canterbury as a place to live and visit, and
- > Providing for and managing tourism in the region (eg Kaikoura, the Southern Alps, Waipara and Hanmer Springs).

3.4 Greater Christchurch Area

3.4.1 Area description

Greater Christchurch is the largest urbanised area in the South Island encompassing 1,426 sq kms. With an estimated 2006 population of 414,000 people it is the third largest urbanised area in New Zealand. Within Greater Christchurch most people live in Christchurch City and the towns of Rangiora, Kaiapoi, Lincoln, Rolleston and Lyttelton. There are other smaller settlements throughout the area, such as Woodend, Prebbleton and Templeton. The residents of Greater Christchurch value and seek to preserve the varied lifestyles provided in these communities.

On the periphery of Christchurch City, and within Selwyn and Waimakariri Districts, are significant pressures for residential development. A new town, Pegasus, north of Woodend is proposed to house 5000 residents in the next 10 years. Development north-west and south-west of the City will impact on Greater Christchurch's roading network and add pressure to preserve the pristine drinking water and environmental assets.

The Greater Christchurch area offers many recreational opportunities because of the close proximity of the beaches of New Brighton and Sumner to the Port Hills and the Lyttelton Harbour basin and beyond.

Greater Christchurch has significant natural resources. Coastal scrubland and forest and native grasslands support significant wetland areas, marine, estuarine and freshwater habitats. In the past, wetlands were regarded as unproductive land and used to dump rubbish, or drained for farmland or housing developments. Wetlands are now recognised as special and complex ecosystems providing significant recreational value for residents as well as having an important functional role of purifying water and helping to reduce flooding.

3.4.2 Population, Households and Labour ForceChange

The population of Greater Christchurch will change significantly over the next 35 years. By 2026 the number of people living here is projected to grow to 501,000 reaching around 549,000 by 2041, if Greater Christchurch experiences continued high migration (see Table 1). This growth is the result of natural increase in the existing population and migration into the Greater Christchurch area from other areas in New Zealand and from overseas. While the Strategy provides for this increase in population, there is also expected to be a significant change in the demographic composition of the population.

The average age is increasing and this means that housing, servicing and population distribution requirements will change.

- > By 2021 about 20% of people will be over 65 compared to 14% today. There will also be a significant increase in the number of people who are over 80.
- > The ethnicity of Greater Christchurch is changing as more people are coming from non-European countries.
- > Traditional families (mum, dad and children) will increasingly be a smaller proportion of the population, with more people living alone.

The changing demographic composition raises issues for the types of households that will be needed, where they will be located and what social infrastructure and transport connections will be needed to support them. The changing household composition means there will still be a strong demand for housing, as fewer people are expected to live in each household. The Strategy provides for an increase of 75,000 households over the 35 years to 2041, two-thirds of which will occur over the first 20 years to 2026 (see Table 1). Thereafter, household growth slows considerably. There will also be a greater demand for different types of housing, particularly apartments and town houses. It is a fundamental requirement of the Strategy to anticipate and provide for these differing housing needs in the future.

The three key drivers of growth are population, household formation and labour force demand. The Strategy is based on the best available current data for these drivers and projections for the next 35 years, (see Table 1).

They will need to be carefully monitored over time and the Strategy adjusted accordingly to reflect any changes in these core data.

The area is the economic hub of the South Island. In addition to the region's commodity-based agriculture businesses, Greater Christchurch also has some large industry clusters, such as outdoor/lifestyle clothing, marine, electronics, software and aviation engineering. Construction businesses comprise 48% of industrial employees, with 24% each for manufacturing and wholesale. Manufacturing is the most dominant industrial sector within the Greater Christchurch and is equivalent to 48% of industrial employment.

About 90% of people within the industrial sector are employed within urban Christchurch, with the remaining 10% being shared among Lyttelton, districts, Selwyn and Waimakariri. Employment within the traditional industrial activities is projected to decline, though the majority of employment will remain in Christchurch City.

Tourism plays a key role in the economy with Greater Christchurch hosting more than 2.5 million visitors annually. Tourism is the largest export industry in Canterbury, with 12% of the Christchurch workforce employed in businesses dependent on tourism. The tourism industry is in turn dependent on the unique natural and landscape values.

Even under 'high migration' assumptions, labour force growth over the next 20 years slows then dramatically declines between 2026-41 (Table 1). A key issue is the slow rate of increase in the supply of labour to meet the employment needs of business growth.

	2006	2026	2006-2026 Increase	% Increase	2041	2026-2041 Increase	% Increase
Population ¹	413,500	501,300	+87,800	+21%	548,520	+47,220	+9%
Households ²	164,100	212,900	+48,800	+30%	238,910	+26,000	+12%
Labour Force ³	221,900	260,400	+ 38,500		269,400	+ 9,000	+ 3%

- The population projections are based on the estimated population at June 2006, (which has a 2001 census base) and assumes medium mortality, medium fertility and a constant rate of net migration after 2006 for each five year period of 8000 for Christchurch City and 3000 for Selwyn and 3500 for Waimakariri District Councils.
- Household projections use the Strategy population projections and assume medium household and family formation assumptions.
- Labour Force projections were produced by applying labour force participation rates to the Strategy population projections by 5 year age groups and sex. Labour force participation rates were based on the 2001 census. These rates were adjusted in line with the national labour force participation rates used in the national labour force projections 2001 (base) - 2051 update.

Note: Long-term population and household projections and shorter term changes will continue to be monitored for their impact on the Strategy and will be formally reviewed in light of the 2011 census results. At the time of adoption of the Strategy the highest projected practical rate of growth was assumed for planning purposes.

Table 1: Greater Christchurch Area Population, Household and Labour Force Projections, 2006-2041.

Source: Produced by Statistics New Zealand in September and October 2006 using the assumptions specified by the Strategy Project Team.

3.5 Overview of Growth Issues

A number of key issues influencing the future growth of Greater Christchurch are given below. For the Strategy to be effective and deliver quality outcomes, the impact of these needs to be addressed.

- Dispersed urban growth in Greater Christchurch has resulted in a loss of connectivity between living and working. People are now travelling increased distances to see friends, go to work or obtain goods and services.
- > High quality open space is becoming increasingly scarce. As population and dwelling densities increase it becomes even more important to provide and adequately manage open space.
- > An aging population requires different infrastructure and new investment. As the population ages, the requirements for recreation and transport facilities, in particular, may change.
- Winter air quality is poor in Christchurch City, Rangiora and Kaiapoi.

- Increasing urban development puts pressure on suburban centres and towns to maintain their individual and district identities.
- Maintaining the quality and quantity of groundwater, suitable for human consumption without treatment, and in sufficient quantity to meet the growing population is critical. The unconfined aquifer, to the west of Christchurch, restricts intensive land uses, including those that involve the use, storage, transport and disposal of hazardous substances.
- > Recent examples of housing infill have raised issues about the loss of period houses, light and privacy, open space and greenery (particularly large trees) and increases in noise and a neighbourhoods ability to maintain its identity.

- > Previous patterns of urban growth have shown little consideration for the customary relationships and practices of Tangata Whenua. As new development occurs, Tangata Whenua need to be actively engaged to ensure the protection and promotion of their cultural heritage and values.
- > Outstanding natural features and landscapes with amenity and ecological value, which reflect our sense of place, are under threat from unconstrained urban growth.
- > Flooding, earthquake risk and liquefaction, tsunami, shoreline recession, storm surges and coastal inundation all pose varying degrees of risk to the area and will constrain further growth.
- > Climate change risks are more likely to result in coastal inundation from increasing storm surges especially for those areas at, or below, sea level.



- > The continued use of rural land for urban lifestyle activities can significantly impact on the protection of versatile soils and water quality.
- The cost of electricity and the security
 of supply are increasing concerns
 for domestic and industrial users.
 Further growth will increase the demand
 for electricity and the dependency on
 non-renewable energy sources.
- New, higher standards for the management of wastewater and discharge of stormwater require innovative solutions for new development, especially in intensification and sensitive areas.
- > The physical infrastructure needed for water supply and stormwater and wastewater management is expensive and requires a high level of coordination for management and implementation.
- > Lyttelton Port plays a key role in the regional economy. It is increasingly important to balance protecting and managing the port functions, including access, while also providing protection to the harbour, its landscapes and cultural values.

- > The extent of the airport noise contours, and their associated restrictions, which cover large areas of land to protect the public from aircraft noise, while ensuring the continuing smooth operation of airport activities.
- > Freight links are vital for Greater Christchurch and Canterbury. It is important that the key connections are developed and enhanced to support improved economic vitality and growth.
- Screater Christchurch's economy is largely based on agriculture, service industries, manufacturing, education and tourism, most of which depend on the environment and the use of natural resources.
- The needs of the tourism industry must be integrated into planning for the predicted growth as it uses many of the same services and facilities as the general population.

- The predominant transport vehicle is the private motorcar making up approximately 80% of all (non walking) trips. Traffic volumes are anticipated to increase by 40% 50% over the next 20 years and contribute to a threefold increase in congestion by 2021. This has a number of adverse consequences, including reducing safety for other transport options such as cycling, health issues through reduced air quality, less active people and congestion.
- Increasing urban development puts pressure on the capacity of existing solid waste infrastructure.
- Current telecommunications infrastructure restricts the growth and capacity of business.



3.6 Growth Management Assumptions

The assumptions that underpin the Strategy provide the basis for implementation.

Enrich Lifestyles

- > The central business district of Christchurch is a major cultural, economic and social hub for the South Island.
- > Rolleston, Rangiora, Prebbleton, Lincoln, Woodend and Kaiapoi retain their individual identities as distinct towns.
- > Open space is provided to reflect changing demographic profiles and increasing urban density.
- Good urban design is an essential element of implementing this Strategy.

Enhance Environments

- > The Strategy is based on the Sustainable Development for New Zealand, Programme of Action 2003 that balances social, cultural, economic and environmental goals.
- > Land over the unconfined aquifer to the west of Christchurch City will not be available for urban development.
- Conservation areas owned by Department of Conservation, councils and areas of importance to Ngai Tahu will not be used for urban development.
- Development of land on the Port Hills is limited.
- Not all land within current urban boundaries will be used for development.
- > A risk avoidance approach is taken in selecting new areas for residential and commercial development on land affected by slippage and instability, earthquakes and liquefaction, flooding and rising sea levels.
- > Fossil fuels will become less available. The urban form needs to be sufficiently resilient and flexible to accommodate changes in energy forms and availability. This Strategy will continue to be strongly influenced by Central Government energy and transport policy as it develops.
- > The cost of fuel for transport is anticipated to steadily increase over the next 20 - 30 years, i.e. everincreasing real cost, but no sudden and catastrophic real escalation in price or supply shortage.

Encourage Prosperous Economies

- National and regional assets will be protected including: Christchurch International Airport, Lyttelton Port, Burnham Military Base, West Melton Training Centre and the agricultural research centres and farms as these are essential infrastructure and need to be served with good transport links. The noise contours remain in place and limit urban growth around the airport where residential development and other noise sensitive activities are discouraged within the 50 DBA Ldn noise contour line.

 Similarly, further residential
 - development and other noise sensitive activities need to be carefully managed in close proximity to the port.
- > Office space in Central Christchurch is within walking distance of the retail heart with some expansion of town and suburban centres.
- > There will be an adequate supply of serviced business land, distributed through the area based on 'live, work and play' principles.
- Business land use will become more intensified.
- > Recognise the need for continued retail development.

Manage Growth

- Growth will be managed not promoted or inhibited.
- > The area is not constrained by local authority boundaries.
- > Greater Christchurch is growing. By 2041 the population is projected to be as much as 549,000. This is based on Statistics New Zealand's medium-high projections for births and deaths and high projections for migration.
- > The Strategy provides for an additional 87,800 people in the Greater Christchurch from 2006 to 2026, and a further 47,000 in the following 15 years to 2041.
- The proportion of older people is increasing as a percentage of the total population, 20% will be over 65 by 2021 compared to 14% today.
- Versatile soils should be protected where practical. The Strategy accepts that in circumstances where there are reverse sensitivity issues such protection may no longer be appropriate.
- > The make-up of households is changing. The average number of persons per household will decline from 2.54 to 2.36. 74,800 additional households are required between 2006 and 2041.
- Residential densities are a critical part of containing the extent of urban development.

The following density assumptions for households per hectare (hh/ha) refers to a net residential density, including roads and open space, but excluding stormwater management areas:

- Christchurch central city intensification areas - 50 hh/ha
- Christchurch city intensification areas
 30 hh/ha
- Christchurch greenfields areas 15 hh/ha, and
- Selwyn and Waimakariri greenfields areas – 10 hh/ha
- > An adequate supply of zoned land will be maintained. Land shortages can affect the affordability of housing, it is also recognised that land availability is only one component of this complex issue.
- > Land ownership does not solely influence decisions on potential growth.
- > A Greater Christchurch Urban Limit will be established to ensure that growth is contained within an urban boundary.
- > The key transport networks will be in place north and south of Christchurch so residential and employment growth is accommodated. In particular, the Southern Motorway will be in place between 2010 and 2013, provided funding indicated in the State Highway forecast is released, and the Northern arterial between 2013 and 2016.
- > Transport choices, including public passenger transport, walking and cycling will be encouraged to achieve a greater share of trips.

- Public passenger transport will focus on buses for the short to medium term.
 Passenger rail will not be excluded as a potential transport option.
- All new residential, commercial and industrial development will be fully reticulated for water, stormwater and wastewater systems, and for telecommunications and electricity. Transport is a key factor in the planning for new developments.
- > Land development and infrastructure will be sequenced and timed appropriately to ensure that integrated planning occurs (between land use activities, infrastructure and funding).
- > Provision is made in Selwyn and Waimakariri Districts for smaller, rural residential development in appropriate localities to assist in maintaining the rural character between towns.
- > The location of rural residential development must not inhibit the longterm growth of the existing towns.

Effective Governance and Leadership

- The partner councils will continue to work together to complete and implement the Strategy.
- The Strategy partners will resource the implementation of the Strategy.
- Regional and central government will work together in a collaborative manner, particularly on infrastructure projects.
- The partners will align the Strategy and its transport funding implications by 2007/ 2008.

Integrate Implementation

- > Christchurch City Council will develop and implement a comprehensive funding programme for intensification areas in Christchurch City.
- > The Strategy manages growth over the next 35 years (2006-2041).
- The Strategy will be kept current and relevant with a first review completed in 2011- 2012.
- > The true costs of growth will be recovered equitably.
- > The Selwyn and Waimakariri Districts' rural residential areas are one land market for rural residential and the regulatory frameworks of each Council should promote a consistent approach.
- > The costs of growth are understood and that the principle of growth paying for growth is accepted to ensure anticipated growth is affordable for existing residents, and
- > That capital will be raised, often from multiple funding sources, to fund key infrastructure projects in a timely manner. Without significant additional capital for transport, the Strategy will not achieve a desirable urban form or meet the growth targets set.

Strategy Resilience

There is neither data nor capacity to present the Strategy within the framework of a completely understood ecological footprint. The Strategy has been developed on the following principles:

- > a clear statement of all assumptions.
- identification of actions for each component of the Strategy.
- inclusiveness of approach taking account of environment, social, economic and cultural well-beings.
- > a specific Strategy action monitoring and review programme that provides the framework for adaptive actions to occur if there is a need for these, for example energy.
- > a recognition that things will change over time and the Strategy will need to be updated to reflect this.

It is important that the Strategy be adapted as circumstances change. This includes growth rates that differ from expectations, cataclysmic world events and other global changes. It needs to be kept current and relevant.

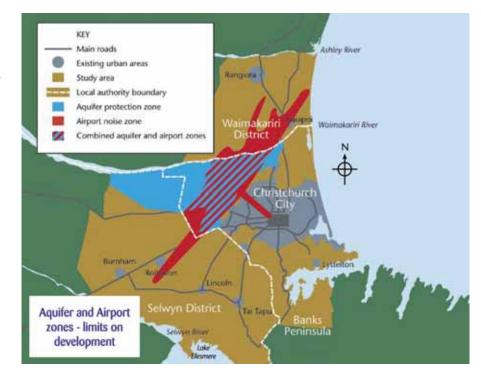


Figure 6

3.7 Historical and Existing Approaches to Growth Management

The settlement of Christchurch was planned in England using the standard rectangular grid of colonial settlement. Regularity was only broken by the Avon River and two diagonal streets. Christchurch is the clearest example in New Zealand of the classical grid plan, which was made feasible by the flat expansive nature of the site.

Decentralised Pattern of Development

Growth in the area has been characterised by a decentralised pattern of development. This has occurred as a result of demographic and socio-economic changes (e.g. steady population growth, higher household incomes, desire for home ownership and changes in the dominant modes of transport – from foot, bicycle, and tram to the private car).

The response to this pattern of development was the adoption by successive regional planning authorities during the period between 1959 and 1991 of spatial policies for containment of urban growth within the Christchurch built-up area, combined with planned decentralisation of population at designated satellite growth centres at Rangiora, Kaiapoi, Woodend and Rolleston.

Green Belt Policy

The desired pattern of development was first sought through implementation of a 'green belt' policy in the regional plan. The green belt acted as an urban fence by excluding non-rural uses within the protected green belt areas. The urban fence was defined to allow enough additional land within the urban areas of the area to accommodate estimated increases in urban population within a 15 to 20 year period. The provisions were binding on the constituent territorial councils and landowners within the region.

The green belt policy was partially successful in promoting urban containment and consolidation, but ceased to be binding following the enactment of the RMA and publication of the Canterbury Proposed Regional Policy Statement (RPS) in 1993.

Growth management under the RMA

The three constituent territorial authorities developed urban growth policies largely independently of each other in the first generation of district plans under the RMA.

The individual territorial authorities' approaches to growth management have been criticised for facilitating a decentralised pattern of development by being too permissive and market-driven.

The data shows a strong trend towards decentralisation of population growth to the settlements beyond Christchurch City. The growth rates for Selwyn and Waimakariri Districts have considerably exceeded Christchurch City over the past ten years and they are currently two of the fastest growing territorial authorities in the country.



Current Growth Containment

Christchurch City Council has a policy of urban containment that has discouraged development on the urban fringe and promoted consolidation within existing urban areas. Demand for urban land that cannot be met in Christchurch has been accommodated in the surrounding districts. This Strategy has been initiated in response to the adverse effects arising from the location and form of urban growth.

Settlement Strategy

There is no overarching strategy to direct the location and timing of settlement at the area level. The regional policy statement settlement and Built Environment policies are stated as indicative only and do not purport to direct settlement to any location.

Christchurch City Council settlement outcomes are determined by City Plan objectives and policies focused on consolidation and infill. Selwyn District deals with urbanisation pressures through a reactive landowner-led process involving private plan changes within the framework of identified policies for individual settlements. Waimakariri District has a "District Development Strategy" that endeavours to predict the timing and location of growth and to accommodate development in an integrated way.

District Plan Objectives, Policies and Methods

With no direction at regional level, district plans provide a key statement of strategy for settlement and growth management. District plans therefore reflect the differing approaches to growth management within the area.

Long Term Infrastructure Plans

LTCCPs identify major infrastructure requirements and linkages to development contributions. The plans are considered up to date, except in Selwyn where a review is currently underway.

Growth Funding

A combination of policies under both the RMA and LGA are in place for recovering financial and development contributions. Significant policy development work is underway to increase the yield of revenue for growth-related capital expenditure.

Governance and Management Structures

Outside the governance and management structure for the Strategy, growth issues are addressed across the organisations in a generalised manner.

Waimakariri District is an exception and has established a special purpose working party to oversee the planning for managing growth. The purpose in establishing this grouping is to ensure an integrated approach that takes account of all relevant economic, social, health, environmental and cultural aspects of managing growth in that district.

Individual Approach

The partner councils are individually undertaking planning work aimed at addressing future growth. However, there is significant variability in approach, and resourcing, and there is no agreed long-term integrated approach.



Four settlement pattern options for managing future growth were developed and consulted during 2004 - 2005.

Figure 7: Business as Usual

This settlement pattern would continue with the current trends of development spreading out around the Greater Christchurch area in new subdivisions, with some housing in urban renewal developments. Councils would continue to pursue independent growth strategies.



Figure 9: Option B

This balances future urban development between existing built areas with some expansion into adjacent areas.

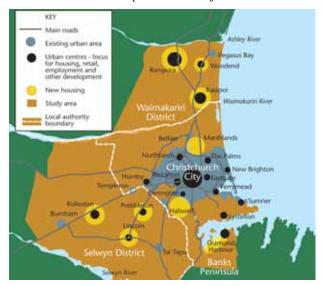


Figure 8: Option A

This concentrates development within Christchurch City and the larger towns in the surrounding districts.

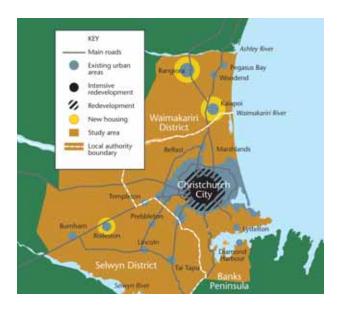


Figure 10: Option C

This disperses development out around the Greater Christchurch area away from established urban areas.



4.1 Evaluation Process

The options were developed and assessed according to the following criteria:

- > Economic Well-being: future economy and distribution; access to employment and commercial activity; public cost (or benefit); private cost.
- Social Well-being: community identity and social cohesion; residential quality; community health; community education and learning; access to open space.
- > Cultural Well-being: cultural identity; heritage well-being.
- Environmental Well-being: impacts on energy use; impacts on air emissions; impacts on water; impacts on land; impacts on strategic infrastructure; risks from natural hazards.
- > Other: robustness and adaptability of development patterns to changing circumstances such as increases in immigration and fuel prices and changing weather patterns.

As a means of further understanding the options assessment, key indicators were developed to provide a comparison between the options. These key indicators were:

- > Infrastructure costs
- > Private costs (transport)
- > Transport choice and access
- > Community identity
- > Housing choice
- > Average section size
- > Parks and open space
- > Air emissions
- > Transport energy use
- > Water demand (residential), and
- > Land required for development

4.2 Consultation

The issues and options were put out for public consultation in April 2005. Over 3,250 submissions were received. A total of 22 community meetings were held during the consultation period.

Option A was the preferred choice, with 62% of the submissions received supporting this settlement pattern. It also scored the highest in the evaluation process. Option A involves a more concentrated development pattern including a focus on well-defined urban centres.



Greater Christchurch Settlement Pattern

5.1 Introduction

This section describes the proposed Greater Christchurch settlement pattern. There is a difference between the community's preferred Option A and the settlement pattern proposed here.

Option A indicated that 60% of all future growth would be accommodated in intensified development within existing urban areas, with the remaining 40% in greenfield areas. Option B had 40% growth in intensification areas and remaining 60% in greenfield. What is proposed here in this Strategy is a mix of Options A and B.

The reasons for this are:

- > 60% intensification is a significant shift from the current development split (of 23%, 2002 – 2006) and the market cannot be changed within such a short timeframe.
- There is zoned land available for development now – it would be very difficult to zone these back to rural, and
- Communities outside Christchurch City will continue to grow and provision must be made for this to occur.

The Strategy sets a target that new development will, in time, be split 60% intensification, 40% new developments, but it will take the 35 year life of the Strategy to steadily increase intensification to achieve this growth distribution.

This rate of intensification may be increased to better match community expectations. The Strategy partners will further examine this possibility as the Strategy is finalised.

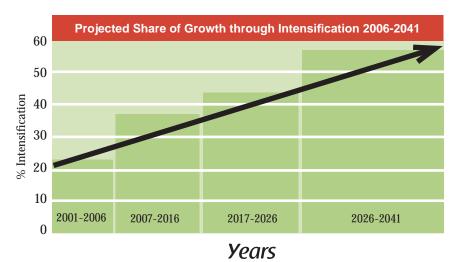


Figure 11: Projected share of growth through intensification

5.2 Proposed Settlement Pattern

The proposed settlement pattern was initiated during two week-long design workshops. Based on these workshops and subsequent analyses, the Strategy proposes 71% of Greater Christchurch's growth would be accommodated within Christchurch City, with the remaining 29% in Selwyn and Waimakariri Districts.

This Strategy proposes that for the first 20 years, 39% of all new housing is in intensification areas within Christchurch. The balance is provided in new development areas with housing at increased densities. Intensification would increase to 56% over the following 15 years. Overall, 45% of growth over the 35 year period is in intensification, including a small but declining amount of infill.

After 2026 the proportion of growth in Christchurch City increases - 72% will need to be housed within the Central City and activity centres if intensification targets are to be met. This planned approach is to increase density without loss of local character and to retain existing leafy suburbs.

5.2.1 Inquiry by Design

Options for growth and intensification areas were developed using a 'principle-led' approach. This occurred during two week-long Inquiry by Design technical workshops, where technical specialists and staff from the partner councils and relevant government agencies worked together to develop the settlement pattern.

Different combinations of social and cultural elements, environmental, growth, conservation, movement and land use were developed and evaluated. Options that compromised any of the key interests were not pursued.

The proposed settlement pattern maximised benefits available to each interest area, with potential to allow for 'synergies' between them - such as combining social, intensification, employment, and passenger transport preferences together to make a much stronger outcome for each.

This resulted in the development of preferred patterns for the following networks:

- Green network (existing and future open space)
- > Blue network (river, streams, waterways and links to the coast)
- Movement network (all transport modes)
- Social network (community facilities)
- Economic network (activity centres, future employment and commerce)

The practical effect of the Inquiry by
Design is to demonstrate a potential
settlement pattern for the area that best
takes into account all of the networks
outlined. The Inquiry by Design provides
an important contribution to the Strategy
and forms one component for investigating
options for future urban development.

Urban Development Strategy Growth Dynamics

2006 - 2026 Growth

More certainty

Relatively rapid growth

More mobile population

More younger people

More migration

Predictable energy and resource needs

Almost all current planning is or can be slightly extrapolated to this time (e.g. health, schools, power, etc)

More market desire for wider range of lifestyle choices

2026 - 2041 Growth

Less certainty

Growth begins to slow?

Less mobile population?

More older people?

More natural increase?

Unknown energy and resource needs?

Virtually no current planning extends to this time (e.g. health, schools, power, etc.)?

More market desire for smaller more compact lifestyle choices?

Figure 12: - Growth Dynamics

5.2.2 Description of the settlement pattern

The Strategy recognises that the communities of interest within Greater Christchurch do not relate well to local authority boundaries. The area has been analysed on the basis of three main communities of interest based around social interactions and connections. These generally relate well to the transport network, although there are constraints to the northern community integration due to transport capacity over the Waimakariri River.

North - The Northern sector includes the Waimakariri District towns of Rangiora, Woodend and Kaiapoi. It also includes the northern parts of Christchurch City to Belfast.

South West - The South-West Sector includes the Selwyn District towns of Lincoln, West Melton, Prebbleton and Rolleston. It also includes the southern parts of Christchurch City from Hornby, Wigram and Halswell.

Central – the Central sector includes the rest of Christchurch and the Lyttelton Harbour Basin.

5.3 Implementing the Settlement Pattern

The following actions are prioritised to ensure the necessary governance structures and implementation framework are put in place within the next three years. These provide the key implementation direction for the Strategy partners. The other actions will be undertaken as resources become available ensuring comprehensive implementation of the Strategy.

These additional actions will be considered for prioritising by the Urban Development Strategy Implementation Committee no later than the first review of the Strategy scheduled for 2011. Individual councils may progress the actions in the meantime.



Top Twenty priority actions	Linked to Strategy
(1) Prepare Chapter 12A of the Regional Policy Statement	6.33.4.(2) See Appendix 1
(2) Establish the Urban Development Strategy Implementation Committee (UDSIC) with an independent chair to carry out Strategy, including the creation of a Strategic Partner Forum and undertaking a risk management strategy	6.28.4 (1, 2 and 5) 6.32.4 (1 and 2)
(3) The Urban Development Strategy Implementation Committee (UDSIC) develops a programme of action to implement the Strategy.	6.28.4 (4 and 9)
(4) Develop integrated transport and land use programmes and patterns for the development of funded transport projects for the southwest (Christchurch & Rolleston Environs Transport Study – CRETS) and northern corridors to enhance strategic transport. This will require the development of a funding programme with Central Government.	6.26.4 (3, 6, 8 and 9) 6.29.4 (2),
(5) Reflect infrastructure staging and timing to give effect to the preferred long-term sub-regional growth pattern, including staging and timing; within respective Council Long-term Council Community Plans and ensure all strategy and planning documents are aligned with the Strategy.	6.20.4 (1), 6.30.4 (4)
(6) Prepare and implement district plan changes to reflect the Regional Policy Statement Change Chapter 12A. This will include appropriate changes to deliver the sub-regional settlement pattern including activity centres, intensification areas, rural residential provision, and urban activities.	6.25.4 (1), 6.9.4 (4) and 6.18.4,(2)
(7) Amend the Regional Land Transport Strategy to reflect the adopted UDS, this may include a transport strategy for Greater Christchurch and travel demand management strategy and action plans.	6.26.4 (1, 2 and 4) and 6.29.4 (2)
(8) Develop a communications strategy to inform Greater Christchurch about the Strategy and its implementation.	6.28.4 (6)
(9) Implement the Central City Revitalisation Strategy by providing directives, information and incentives for achieving the density targets while providing affordable housing and protecting neighbourhood identity.	6.10.4 (1 and 7)
(10) Investigate and establish, in partnership with others, a dedicated city revitalisation agency to develop and administer programmes; to assemble key redevelopment sites; and to tender land for specific redevelopment proposals. Benchmark the framework of the agency against other related organisations in New Zealand and overseas.	6.10.4.(5)

Top Twenty priority actions	Linked to Strategy
(11) Develop a Business Land Management Strategy within the context of agreed wider economic development strategies that defines the role and function of business areas and centres and includes a staging programme for land release.	6.17.4 (1,3, 4, 7, 8, 13)
(12) Establish the capital requirements for key sub-regional infrastructure for the 2009-19 LTCCP period together with possible sources of funding as well as shortfalls.	6.30.4 (1)
(13) Develop an integrated programme for monitoring demographic, social, economic and environmental change together with development activity across Greater Christchurch that enables effective measurement of the outcomes of strategy implementation.	6.31.4 (1) and 6.6.4 (2)
(14) Administrative alignment within the partner organisations to ensure that all decisions and actions of Councils are working to achieve the UDS.	6.28.4.(4)
(15) Carry out a study of housing affordability options around inclusive zoning, increasing the stock of social housing, partnerships with developers and monitoring the supply and demand of affordable housing at local and regional levels.	6.4.4 (2 and 4)
(16) Develop an urban design strategy to apply the principles of good urban design reflecting the character and diversity of the communities in the Greater Christchurch.	6.9.4 (1)
(17) Prepare Outline Development Plans for initial greenfield and intensification areas together with Structure Plans that support intensification of Key Activity Centres. Identify candidate "brownfields" conversion areas.	6.10.4 (5) and 6.17.4 (9)
(18) Prepare Integrated Catchment Management Plans to assist with coordinated decision-making in relation to surface water management.	6.12.4 (3)
(19) Develop a community engagement programme to take into account the principles of collaboration and to develop awareness and understanding of issues as a foundation for agreement, commitment and action.	6.28.4 (10)
(20) Urban Development Strategy Implementation Committee is to produce a Strategy Implementation Plan every three years as a basis for detailed growth management through agency plans (preceding the LTCCP) Review all actions that need to be achieved during that period.	6.28.4.(4)

5.3.1 Key Actions and Approaches

- > Planned intensification targets in the Strategy are ambitious. A change programme of planning, funding and infrastructure works to begin in the short-term upon Strategy confirmation is required. These initiatives will need to be consistently applied over the life of the Strategy. New structures and ways of working between public agencies and private organisations are required. Adjustments to planning provisions alone will not achieve the required transformation.
- > Confirm the settlement pattern in light of more detailed analyses of 2006 census data.
- > Complete in-depth investigations of all identified greenfields and intensification areas.
- > Amend the regional policy statement and district plans to reflect the proposed settlement pattern including establishing urban limits for Christchurch City and settlements in Selwyn and Waimakariri Districts.
- > Develop Outline Development Plans for intensification and growth areas.

- > Align Development Contributions and other development charges using, wherever practicable, consistent growth assumptions and formulas.
- > Develop a business distribution plan for commercial development.
- > Implement strategic transport network improvements in accordance with funding alignments.
- Develop a consistent approach to airport noise contour/residential suitability issues.
- Ensure that growth areas are supported by movement networks and public passenger transport.
- Maintain the identity-defining character of settled areas, and
- > Reinforce live, work and play design principles.

5.4 Key Assumptions: Settlement Pattern

> There are currently around 7,000 lots available for development within Christchurch City. These figures include around 2500 greenfield lots at the city edge. The remaining 4,500 are small area or individual vacant, zoned and undeveloped residential lots elsewhere in the city.

- > Residential development rates in the city's intensification areas need to increase by around 200% by 2026 increasing by 300% between 2026 and 2041 as compared to 2001-06. To achieve these targets will require long-term council initiatives to make intensification more desirable.
- Some ongoing infill occurs independently of planned intensification but this is projected to decrease with time as opportunities are used up.
- Major greenfield areas in the southwest and the north provide adequate development capacity for at least 30 years, provided zoning and servicing can be achieved in a timely manner, and
- > Sufficient business land is provided to support ongoing growth of the labour force and continuing development of the regional economy.



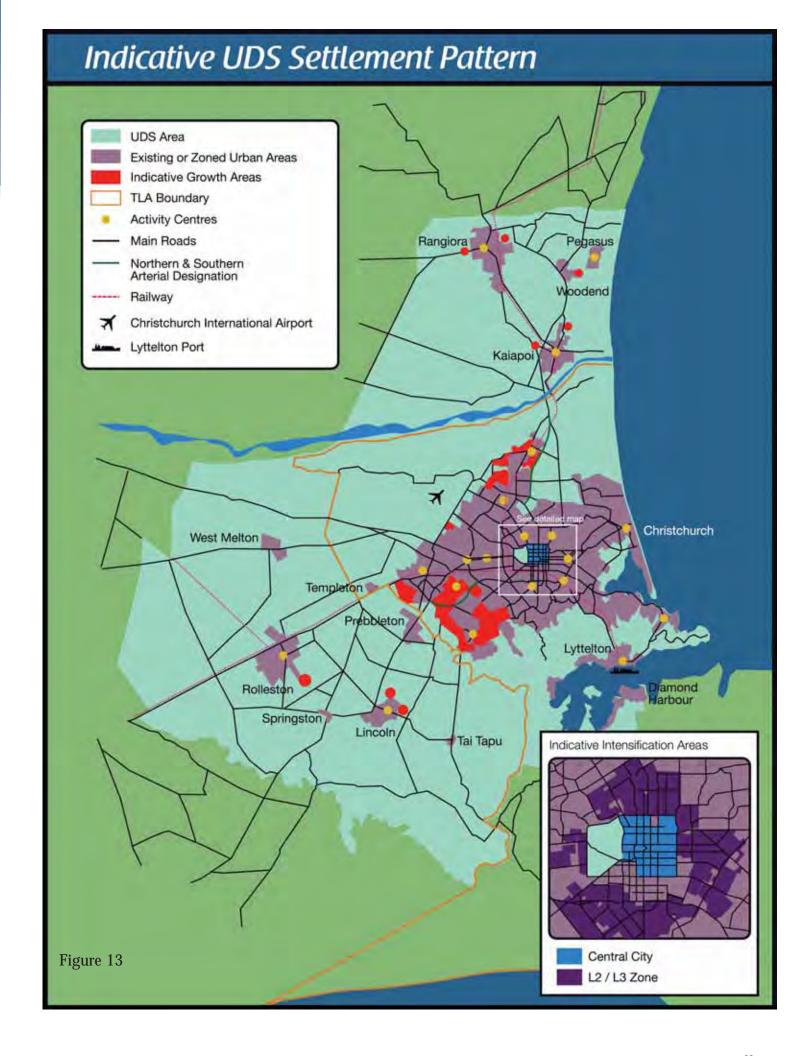
5.5 Broad aims of the Settlement Pattern

The proposed settlement pattern is based on a distribution of households and employment throughout the area that seeks to:

- > Achieve high quality social outcomes for residents in both existing and new urban areas.
- > Provide opportunities to minimise journey-to-work trip lengths and maximise public passenger transport, walking and cycling potential.
- > Reinforce identified existing activity centres for maximum local economic benefits and social cohesion.
- Ensure that sustainable, safe and integrated transport networks all support growth areas.
- > Maintain the character of settled areas, in particular rural qualities.
- > Reinforce "live, work and play" design principles.
- > Allow needs of localities beyond the area to be most effectively served.

5.5.1 Key Features of the Settlement Pattern

- > 71% of growth in households is in Christchurch City.
- > 16% of growth in households is in Selwyn District, while maintaining small town and rural character.
- > 13% of growth in households is in Waimakariri District, while maintaining small town and rural character.
- A 'southern' motorway connection that better links southern and mid Canterbury to Lyttelton Port within 2010 - 2013.
- Subject to agreed funding, anticipates construction of the northern arterial within 2013 – 2016.
- > Growth avoids sensitive environmental areas (over the unconfined aquifer and Port Hills).
- > The operation of Christchurch International Airport is not compromised by growth and the health and well-being of people is not compromised by aircraft noise.
- Provides employment opportunities for new knowledge economy and business activities.
- > Promotes new city edge activity centres in the north at Belfast and in the south at Hornby/Halswell which meet the needs of residents within the city and the northern and southern corridors.
- > Central Christchurch becomes a thriving living environment.



5.5.2 Key Features: North

- > Waimakariri District could grow by an additional 7,600 households to 2026 and a total of 9800 new households by 2041. This growth is mainly in new development areas integrated with the existing towns of Rangiora, Kaiapoi and Woodend and the new Pegasus town, with minor intensification possible within existing built areas.
- > Rangiora and Kaiapoi remain the main towns for the District, serving the people beyond as well as those living within the rural part of the area. The future growth form of Kaiapoi will be reviewed in light of resolution of the airport noise contour issue currently before the Environment Court.
- > The rural character of Waimakariri District is retained, by maintaining the scale, sense of place, and unique identity of these towns.
- Strategic road connections through Waimakariri into Christchurch City are improved, including a Woodend by-pass and northern arterial into Christchurch.
- > Public passenger transport is enhanced as a Waimakariri 'ring' internal system circulating between Rangiora, Kaiapoi, and Woodend/Pegasus with highfrequency public passenger transport services into Christchurch.
- New areas of land zoned for business development are provided to make the district more self-sufficient in employment opportunities.

- North Christchurch is provided with new residential areas focused around Belfast, which forms the northern gateway into the City and a community services focal point. There will also be limited opportunities for employment growth.
- Major open space at Pegasus and recreational open spaces adjacent to the Waimakariri River are improved.
- Development of the 'Chaneys' area may be necessary to manage Christchurch City's growing population depending on achievement of intensification targets.
- > Housing is suggested at Tuahiwi/ Woodend in accordance with a structure plan to be approved by the Waimakariri District Council.
- Limited provision is made for small rural residential lots, possibly within Maori Reserve 873 and Mandeville, provided reticulated services are available. There is separation between the growing towns of Rangiora, Kaiapoi and Woodend and Pegasus. Final details will be completed as part of the outlined development plan process provided by the Regional Policy Statement.

5.5.3 Key Features: Central

- > Christchurch City could grow by an additional 33,000 households by 2026 and a total of 53,000 new households by 2041.
- > This growth can be provided in new development areas to the north and south west of existing areas, but by 2041, 63% of it will need to be within existing urban intensification areas.
- To 2026, 43% of the growth is in the new development areas as intensification increases. After 2026, 72% needs to be in Central Christchurch and in planned intensification areas to achieve Strategy targets.
- New developments provide greater flexibility than the traditional range of uses, allowing greater provision for local shops and services, reducing vehicle trips and pressure on main roads.
- > Central Christchurch becomes more 'liveable' with an increase in the range of housing available.
- > A greater sense of community identity is developed within the Central Christchurch, and emphasis is given to retaining existing residents during redevelopment.
- > High-quality medium density housing is common within 800m of town centres and transport interchanges.
- Mixed use and higher-density residential development is provided within the intensification areas, including town houses, terracing housing and up to 4-storey apartments. Higher and more intensive housing is provided within Central Christchurch.
- > High frequency passenger transport services continue to grow.

5.5.4 Key Features: South-west

- South-West Christchurch will accommodate significant growth with an additional 10.000 households.
- Selwyn District could grow by an additional 8200 households to 2026 and a total of 11,900 new households by 2041. This growth is provided in new developments around the main towns of Rolleston and Lincoln with some growth of West Melton and Prebbleton.
- > Rolleston becomes the main town for the District, and the service focal point. The future growth form of Rolleston will be reviewed in light of resolution of the airport noise contour issue currently before the Environment Court.
- The rural character of Selwyn is retained, maintaining the scale, sense of place, and unique identity of its towns.
- Strategic road connections through Selwyn District into Christchurch City are improved, as proposed by the Christchurch to Rolleston and its Environs Transport Strategy, along with a new southern motorway extension completed by 2013.
- > Public passenger transport is developed into a Selwyn 'ring' system circulating between Rolleston, Lincoln, Prebbleton and Hornby. High-frequency services run from Rolleston and Lincoln into Christchurch, and between Hornby and Lincoln.
- > Lincoln develops to require its own full-service supermarket.

- Somethin Prebbleton is limited to maintain its distinct identity from the main Christchurch urban area.
- > Hornby/Halswell become areas of significant new investment.
- > Important transport interchange develops in Hornby with community facilities such as large-scale pool facilities and library improvements.
- > Development at Wigram includes substantial provision for business land to promote local employment.
- > The 'I-Zone' Southern Business hub at Rolleston remains the main employment area for Selwyn District.
- Limited provision is made for 0.5 to 2 ha rural residential development near the existing towns.

5.6 Relationship to TownsOutside GreaterChristchurch

At each review of the Strategy the patterns of settlement outside of Greater Christchurch will be assessed to determine if the Strategy boundary should be adjusted. At this stage no further changes to rural subdivision provisions are proposed to the Christchurch City (including Banks Peninsula), Selwyn or Waimakariri District Plans.

District Plans will continue to maintain the small town character of settlements outside of Greater Christchurch.

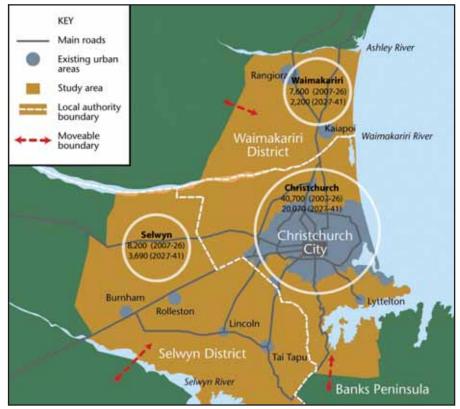


Figure 14: Anticipated growth.

5.7 Proposed Settlement PatternGrowth Projections Summary

The Strategy was developed using data provided by Statistics New Zealand based on a set of agreed assumptions for the Strategy partners. These data are the foundation for the proposed settlement pattern, using high growth scenario and potential for development within existing zoning (see Table 1 for details).

The ongoing development and growth will be monitored throughout implementation of the Strategy. If significant changes are needed, these can be made at the review of the Strategy in 2010.

Tables 2 and 3 summarises the projected distribution of growth by area and type of development over the 35-year Strategy period. As indicated in Table 1, under high projection assumptions the area would need to accommodate an additional 75,000 households.

An assessment was made of the capacity for planned intensification in Central Christchurch and elsewhere in the existing built up area of Christchurch, together with an allowance made for ongoing infill. In total these areas are to be planned and (re)developed to accommodate an additional 33,500 households, indicating a rate of 45% intensification and infill as the Strategy target.

A further 19,500 households are proposed for new developments on the edge of the city and the balance of 22,000 households mainly through greenfield development integrated with existing district towns, the Pegasus new town and planned provision for rural residential development.

Tables 2, 3 and 4 follow.

Table 2 details the projected increase to be accommodated over the first and second ten-year periods to 2026, and the third, 15-year period to 2041. The area totals at 2016, 2026 and 2041 are the projected households at these times in accordance with the demographic projections.

Table 3 breaks these down by 5-year increases, in comparison with the most recent 5-year period, 2001-06. All figures in this table are for 5-year periods.

Table 4 shows the indicative distribution and sequencing of household growth to achieve the proposed settlement pattern.

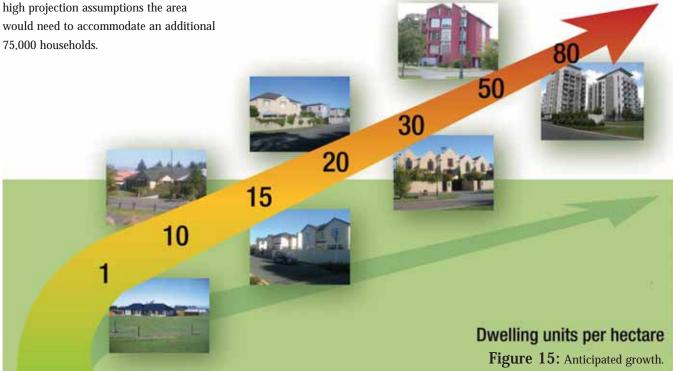


 Table 2: Strategy Household (Hh) Growth Projections, 2006-41*

Area and Type of Development	2006 Total Hh	2026 Total Hh	2041 Total Hh	2007-16 Increase	2017-26 Increase	2027-2041, Increase	2006-41 Total Increase
				(10 years)	(10 years)	(15 years)	(35 years)
Christchurch City							
1. Intensification Areas:							
a. Central	17638	24638	31628	+3000	+4000	+6990	+13990
b. Rest of City	18056	26056	32566	+3000	+5000	+6510	+14510
2 Ongoing Infill	93623	97623	98613	+2500	+1500	+990	+4990
3. Greenfield Areas**	13483	27583	33163	+6510	+7590	+5580	+19680
Total	142800	175900	195970	+15010	+18090	+20070	+53170
Selwyn District							
3. Greenfield Areas**				+3200	+3400	+2640	+9240
4. Rural Residential				+700	+700	+1050	+2450
5. Rural – rest of Strategy area				+100	+50	+50	+200
Total	7700	15800	19490	+4000	+4200	+3690	+11890
Waimakariri District							
3. Greenfield Areas**				+4150	+2150	+1590	+7890
4. Rural Residential				+500	+500	+510	+1510
5. Rural - rest of Strategy area				+200	+100	+100	+400
Total	13600	21200	23450	+4850	+2750	+2200	+9800
UDS Total	164100	212900	238910	+23860	+25040	+25960	+74860
1 & 2 - Intensification & Infill				+8500	+10500	+14490	+33490
% Share 1 & 2				36%	42%	56%	45%

Table 3: Greater Christchurch Household (Hh) Increase - 5 years to 2006 and Projected Average Increase by Period, 2006-41

Area and Type of Development	2002-06	2007-16	2017-26	2027-41
Christchurch City				
1. Intensification Areas:				
a. Central	+550	+1500	+2000	+2330
b. Rest of City	+550	+1500	+2500	+2170
2. Ongoing Infill	+2200	+1250	+750	+330
3. Greenfield Areas***	+7699	+3255	+3795	+1860
Total	10999	+7505	+9045	+6990
Selwyn District				
3. Greenfield Areas***		+1600	+1700	+855
4. Rural Residential		+350	+350	+350
5. Rural - rest of Strategy area		+50	+25	+25
Total	1400	+1950	+2100	+1230
Waimakariri District				
3. Greenfield Areas***	+1459	+2075	+1075	+530
4. Rural Residential	+142	+250	+250	+170
5. Rural - rest of Strategy area	+499	+100	+50	+50
Total	+2100	+2425	+1375	+750
UDS Total	+14499	+11880	+12520	+8670
1 & 2 - Intensification & Infill	+3300	+4250	+5250	+6300
% Share 1 & 2	23%	36%	42%	56%

 $^{^{}st}$ Based on Statistics NZ high migration projection 2006 – 2041

^{**} Greenfield areas include existing zoned and vacant urban land (e.g. Pegasus, Aidanfield, Rolleston). At the first review the balance between greenfield and rural residential will be considered for the Christchurch City Council.
*** Greenfield areas includes existing zoned and vacant urban land (e.g. Pegasus, Aidanfield, Rolleston)

 $\textbf{Table 4:} \ \, \textbf{Indicative Distribution and Sequencing of Household Growth to Achieve Proposed Settlement Pattern.}$

Area and Type of Development	Target Density (hh/ha)	2007-16	2017-26	2027-41	Comments
Christchurch City					
1. Intensification Areas:					
a. Central City, L4 zone and central city edge	50	ح	ح	ے	Ongoing programme
b. Rest of City L2, L3 and L4 as shown in the City Plan, with planned intensification areas to be identified within these zones.	30	3	ے	3	Nature and timing of (re)development by area subject to Outline Development Planning process
2. Ongoing Infill	As permitted	3	3	3	Declining rate across city as opportunities reduce
3. Greenfield Areas:					
Aidanfield (zoned), Belfast s293, Burwood (zoned), Kennedy's Bush, Masham (zoned), Wigram, Awatea	15	3			Sewer construction/upgrade and implementation of Southern Arterial required
East Belfast, Russley, South Halswell, West Belfast, West Halswell, Upper Styx	15		3		Northern Arterial timing to be determined
South West Halswell, West Halswell, Sparks Rd	15			د	
Selwyn District					
3. Greenfield Areas:					
Lincoln (zoned), Rolleston (zoned and new) and West Melton (zoned)	10	3			Subject to Eastern Selwyn sewer proposal and resolution of noise contour issue
Lincoln, Rolleston and Prebbleton	10		3		
Lincoln, Rolleston and Prebbleton	10			3	Prebbleton sewer and stormwater issues (TDB)
4. Rural Residential	1	3	3	3	Locations to be determined
5. Rural	0.25	3	3	3	Existing rural zone
Waimakariri District					
3. Greenfield Areas:					
Kaiapoi North and West, Pegasus (zoned), Rangiora East and West (zoned), Rangiora West , Woodend East (zoned)	10	3			Kaiapoi areas subject to current plan change process
Kaiapoi North and West, Rangiora East and West, Woodend East	10		3		Kaiapoi areas subject to current plan change process
4. Rural Residential	1	ے	٠.	د	Locations to be determined
5. Rural	0.25	3	3	3	Existing rural zone

Note: All areas not already zoned are indicative only and are subject to confirmation of sequencing by each territorial authority and rezoning process under the relevant district plan.

6.1 Introduction

This section contains the implementation actions for the Strategy. They are grouped under the six Strategic Direction areas.

The aim is to clearly move beyond the ideals of the vision and strategic direction statements to a pragmatic programme of actions to implement the Strategy.

6.1.1 Format of the Action Information

Information provided in each implementation action area addresses:

- Explanation
- · Growth issues
- · Key Approaches
- Actions

For each action, a table is presented which sets out key information.

6.1.2 Explanation of Action Components

Explanation – This outlines the information about why this particular action is being undertaken and how it may be carried out.

Growth Issues – These are a summary of the issues identified through extensive Strategy research and consultation that have helped define actions.

Key Approaches – These are the approaches to be taken that will guide implementation of the actions.

Actions tables – Table 5 shows the format of each of the Action Tables.

Table 5: Format of each Action Table.

Action	Lead Agency	Support	Cost	Implementation	Linked to	Timing
		Agencies	Implications	Tools	Strategy	

Actions

Actions are the specific tasks that need to be carried out to implement the Strategy. A number of specific actions are subject to their own statutory processes, and the documents will be prepared in accordance with the legal requirements. Actions fall into different types. Specific actions are those that are generally one off or occur over a period of time at specific dates. They may include research or policy development. Others may be actions to anchor Strategy implementation or physical development including services and infrastructure. A third type of action may be more about process and working collaboratively over the longer-term such as setting up working groups to deal with a range of tasks.

Lead agency

The lead agency is the organisation responsible for initiating and leading the action. It may be a local government organisation, government department or other external agency.

Lead agency responsibilities do not provide for unilateral action. Policy direction will result from the lead and support agencies working collaboratively. Carrying out tasks as a lead agency involves an effective partnership and a collaborative approach.

Each component of the table is explained below. One or more actions are proposed with details. Abbreviations used in the Action Tables can be found in the list of Acronyms on page 194. The most common are:

AMPs	Asset Management Plans	MfE	Ministry for the Environment
CCC	Christchurch City Council	MoE	Ministry of Education
CCHL	Christchurch City Holdings Limited	NZHPT	NZ Historic Places Trust
CDHB	Canterbury District Health Board	PHO	Public Health Organisation
СРН	Community and Public Health	PPP	Private Public Partnerships
CREDS	Canterbury Regional Economic	SDC	Column District Council
CREDS	Development Strategy	SDC	Selwyn District Council
DCP	Development Contributions Policies	TNZ	Transit New Zealand
ECan	Environment Canterbury	WDC	Waimakariri District Council

Support agencies

The support agency can be one or more organisations that will help the lead agency deliver the Action.

Cost Implications

This is an estimate of the cost to implement the Action. Costs are total project costs, unless otherwise stated (e.g. where a cost may be an on-going annual cost).

Costs are not necessarily additional costs as there may be a change of priorities within organisations to carry out actions. Often actions are already committed or being covered from current resources of an organisation. This is noted where it applies. Estimates may vary in the level of confidence.

Rating	Definition/Example
High	Over \$500,000
Medium	\$100,000 to \$500,000
Low	Up to \$100,000
Internal	Using internal resources
	within current funding

 Table 6: shows the Cost Estimate Range.

Implementation Tools

These are the mechanisms or processes put in place to implement the Strategy actions.

Linked to Strategy

Actions can be linked to other sections within this Strategy. For example 6.2 means linked to Health actions in Section 6.2. They can also be linked to partner councils other internal strategies or to support agency strategies as indicated.

Timing

The timing sets when the action needs to be completed. Those actions without times will be set by the UDSIC.

Enrich Lifestyles

6.2 Health and Wellbeing

6.2.1 Explanation

The ability of individuals to prevent illness, stay healthy and manage disability appropriately is largely an outcome of the settings in which people live their lives. Factors (health determinants) which determine health outcomes include diet, housing, safe neighbourhoods, clean air and water, access to transport, recreation, education, employment and social deprivation. Most of the central and local government agencies whose actions affect these settings lie outside of the health sector.²

Local councils are required under the Local Government Act 2002 (LGA) to identify desired community outcomes focused around social, economic, environmental and cultural well-being. A sustainable development framework underpins local government work. This framework is represented by the four well-beings (as defined in the LGA), which also encompass the wider determinants of health. This means that, although they work in different ways, the over-arching goals of district health boards and local government are aligned.³

Public health has long been strongly associated with infrastructure such as water and wastewater services. The management of these and similar services has ensured that many infectious diseases such as typhoid are no longer serious threats to health in Canterbury. This strong focus needs to continue. Ensuring that Greater Christchurch's world-class water remains pristine is important, as

well as the excellent services in the areas of wastewater, collection of other wastes and basic services such as power and communication lines. All are vital for ongoing public health.

It is equally important to realise that emerging challenges for our population's health lie in the area of chronic diseases. Urban form that prioritises active transport modes will be needed to combat the obesity epidemic and diseases such as diabetes, cancers and heart disease. Socio-economic inequalities in our society threaten health at an individual and population level.4 The aging of our society will bring new challenges in providing appropriate healthcare services, housing and transport. The looming energy crisis threatens our ability to provide warm homes in an affordable fashion. Appropriately managing these issues is everyone's business. For example, dealing with Christchurch's air pollution issues will require active collaboration between regional and local governments, the health sector, energy sector, building industry and providers and users of heating appliances.

Ultimately the health of the people is dependent on the health of the environment in which we live.

² Health is Everyone's Business – Public Health Advisory Committee, 2006, p5

³ Health is Everyone's Business – Public Health Advisory Committee, 2006, p27

⁴ Social determinants of health. The Solid Facts World Health Organisation, 2003.

6.2.2 Growth Issues

- Policies and actions that affect health are made by central and local government agencies all of which lie outside the health sector.
- Continued use of wood burners to heat houses contributes to poor air quality and respiratory illnesses.
- > Urban development over the unconfined aquifer is likely to contaminate Christchurch's drinking water.
- Existing houses are not warm enough in winter.
- > Current development does not adequately provide for multi-modal and active transport.
- > Transport connections can sever communities.
- Main transport routes and congestion contribute to poor air quality.

6.2.3 Key Approaches

- > Ensure our planning encourages and promotes healthy lifestyles.
- Protect the unconfined aquifer to ensure continued access to high quality drinking water.
- Ensure existing and proposed local and regional government policies are assessed for their potential impacts on health outcomes, and their suitability for formal health impact assessment.
- > Encourage active transport and ensure the network is pedestrian- and cyclefriendly.
- Encourage and promote accessibility for all including people with disabilities, youth, older people, and families with young children.
- > Promote measures that reduce car dependency.
- Encourage and promote access to wholesome, locally-produced food.
- Ensure proposals are consistent with the Safe Waimakariri Strategy, and Safer Christchurch Strategy. The key goals are injury prevention, road safety, crime reduction.
- Develop intersectoral projects that specifically focus on significant public health issues prioritising: active transport and public passenger transport energy efficiency housing, and clean and affordable heating options to improve air quality.
- Educate the community about the current threats to public health and their solutions.



6.2.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop an integrated	CDHB	WDC, SDC, CCC,	Internal		6.32	2008
monitoring programme.		ECan				
01 0					Healthy	
					Christchurch	
(2) Continue to support	MSD	CDHB	Internal		6.6.4.1, 6.32,	Ongoing
and participate in local					Healthy	
service mapping to					Christchurch	
identify and rectify local						
service gaps.						
(3) Assess local and	CCC	CDHB, WDC,	Internal	PHAC Guide to	6.32	Ongoing
regional government		SDC, ECan		HIA		
policies for their						
potential impacts on						
health outcomes, and						
their suitability for						
formal health impact						
assessment.						
(4) Set formal links	CDHB	ECan, WDC,	Internal		6.32, 6.14	2007
through a health		CCC, SDC, PHO's				
action forum between						
the CDHB, Primary						
Healthcare Organisations						
and local government to						
monitor health issues.						

6.3 Education

6.3.1 Explanation

Education provides people with knowledge and skills that enable them to contribute and be involved in the community socially, culturally and economically.

For many people the opportunity to learn happens in informal settings in self-directed ways over their lifetime. A range of opportunities (resources and places) will encourage higher levels of participation in lifelong learning.

There is an important relationship between education, research and the new economy as well as with social and cultural development.

It is also vital that independent learners have educational and training opportunities that support their literacy, reading, knowledge and skill development through association with agencies such as libraries and learning centres, via community-based and on-line learning.

To ensure education provision meets economic, environmental, social and cultural needs, it is important that education providers involve industry, employers, research organisations, businesses, communities, targeted population groups and other education providers in the planning and decision-making process for future provision.

6.3.2 Growth Issues

- > Population growth and the location of this growth is considered in the provision of education services at all levels: early childhood, primary, secondary and tertiary, and the location of other learning facilities (eg public libraries).
- > Demographic and social changes, including population aging, ethnic diversity and disparities that exist for some populations (including ethnic groups, people with disabilities, migrants, refugees and low socioeconomic groups), indicate the changing needs for education services at all levels: early childhood, primary, secondary and tertiary.
- > Economic growth trends indicate increasing employment opportunities in the technology sector rather than the manufacturing sector. Education opportunities will reflect trends in local services, and by lifting skills, qualifications attainment and productivity, will contribute to the economy.
- National and international trends are monitored to attract students and to support local industry and commerce working in an international market to attract suitably educated staff.
- > Provision of tertiary education and research facilities are likely to have flow on effects for the region in terms of investment and higher wage employers.

- > Education contributes to the wellbeing of families and communities, to social, cultural and economic development and environmental sustainability.
- > Provision of childcare centres may need to be improved to meet future demands for working families.
- Private tertiary providers are a significant provider of adult education courses.
- With the changing social trends, public libraries play a significant role in supporting the aspirations of independent learners in the community.
- > Provision and location of suitable infrastructure caters for local students. For example affordable housing and transport links, early childhood education and care providers for adult students/parents returning to further education or employment.
- > Growth through intensification will increase the value of 'green/openspace' represented by the existing network of schools. These spaces should be recognised as valuable community assets, with property development occurring at schools in a way that preserves these spaces in the best possible manner.

6.3.3 Key Approaches

- > Develop new schools from the outset in new developments and ensure they keep pace with population growth in the relevant catchments and the range of services required.
- > Life-long learning is encouraged.
- > The range of methods by which people learn is recognised and utilised in the delivery of education.
- All families and disadvantaged groups are able to access education opportunities.
- > Education providers and councils plan with the community for the integration of shared facilities such as schools and libraries.
- > Education and research facilities meet the needs of the community and reflect the community's unique character.
- > Demographic, social and economic changes provide direction for informal learning programmes, and the provision of support for individual learning.
- > Early childhood education centres continue to be provided locally and their value is recognised.
- > Public libraries are provided by the council to best meet the needs of their local communities and to support learning to meet personal and economic goals.
- > Education providers build relationships with one another, employers and learners to provide relevant and quality education.

- > Public libraries take advantage of opportunities to work collaboratively with other providers, groups and organisations, businesses and those committed to developing high quality materials for the information age.
- > It is recognised that different tertiary education providers have different areas of expertise and key strengths. This enables best use of limited resources and provides specialist education and research in specific fields.
- > Continue to improve employers' knowledge of the links between skills development and improved business.



6.3.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Investigate the potential for shared community and school facilities.	МоЕ	MSD, CCC, SDC, WDC, ECan	Medium	City Plan, District Plans, LTCCP	Neighbourhood Plans, LTCCP	Ongoing
(2) Establish working group which includes education providers to research demographic knowledge and community and economic trends for providing education programmes.	CCC	MoE, Dept of Labour SDC WDC	Internal		MoE - all community strategies	TBC
(3) Ensure planning for and/or provision of additional and expanded education facilities early childhood education, state primary and secondary schools and public libraries to meet growth demands in or affected by development of growth areas and consolidation areas.	CCC, WDC, SDC	MoE ECE	Internal	District Plans	LTCCP, MoE, ECE Strategic Plan	Ongoing
(4) Promote the importance of the role and support the tertiary education sector	CCC	UC, Lincoln U, CPIT	Internal			Ongoing
(5) Work with school Boards of Trustees to protect and enhance school open space for community use	CCC, SDC, WDC	MoE Schools	Internal	LTCCP	6.5, 6.6	Ongoing

6.4 Housing (including housing affordability)

6.4.1 Explanation

Providing housing choice is a key outcome of this Strategy. A key part of achieving this is having a clear understanding of future household drivers, for example:

- > The changing nature of households (over the next 35 years there will be a significant increase in single and two person households).
- > The average number of persons per household will decline from 2.54 to 2.36. and
- > It has been forecast that an additional 74,800 households will be required in the area out to 2041.

6.4.2 Growth Issues

- > There is not an adequate range of housing types to fulfil current demand.
- > There will be a shortage of zoned and serviced land which is potentially affecting the affordability of housing although this is only one aspect of the complex issue of affordability.
- > Providing for the housing needs of an ageing population.
- > Residential housing can be exposed to excessive noise if located adjacent to transport interchanges or industrial zones.
- > A more compact urban form will need to be supported by good urban design, including adequate provision of services and amenities.

6.4.3 Key Approaches

- > Promote an appropriate housing mix that reflects a range of size, price, density and locations.
- > Promote affordable, high-quality housing for the community.
- > Promote warm healthy homes that support the less able.
- The desirability of locating housing within walking distance of passenger transport.
- > Recognise and provide for Papakainga housing.
- > Manage the scale of buildings in intensification areas to protect amenity and privacy.
- > Promote housing that integrates all socio-economic groups. Recognise the importance of social and community networks and providing this close to where people live.
- > Provide opportunities to live, work and play.

- Promote good sub-division and section design.
- > Promote housing that is safe and secure.
- Incorporate passive solar and other ecological design principles.
- Avoid severing communities from facilities by major highways.
- Promote housing for multigenerational and extended families as well as an ageing and ethnic population.
- Publicise examples of well-designed affordable housing.
- Continue the redevelopment of and renewal of public housing stock to better meet the needs of existing and future clients.
- Provide housing for the elderly including retirement villages, accessible communities, apartment living and suburban housing.



6.4.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Publish sustainable and energy efficient housing design guides specific for Canterbury and incorporate these in planning provision and building controls.	ECan	HNZ, CCC, SDC, WDC, EECA	Internal	District Plans	6.27, 6.14, 6.2	TBD
(2) Carry out study of housing affordability options to enable inclusive zoning, including the most efficient means for increasing the stock of social housing and partnerships with developers.	CCC	SDC, WDC, HNZ	Internal	LTCCP	6.6	2007
(3) Support improvements to existing older housing stock while ensuring heritage values are protected where necessary.	CCC	SDC, WDC, ECan, HPT, Developers	Medium	District Plans, LTCCP	6.8	2007
(4) Monitor supply and demand of affordable housing at local and regional levels.	Housing NZ	CCC, WDC,	Low	LTCCP, Housing Strategy (CCC)	6.6, 6.32	2007
(5) Develop and implement initiatives to increase the supply of appropriately located affordable housing throughout the area.	CCC	SDC, WDC	High	Housing Strategy (CCC)	6.6	2007

6.5 Open Space, Sports, Leisure and Recreation6.5.1 Explanation

Open space supports and underpins many aspects of urban living. It includes civic squares and parks, formal and informal sports, active and passive recreation, natural heritage and nature conservation, and space and corridors for surface water and indigenous vegetation. It also provides access to the coast, the mountains and the plains.

This spectrum of open space makes a major contribution to the quality of life of residents in the region. It helps provide for social, cultural, environmental wellbeing and economic prosperity.

Community expectations about open space are changing. Social and demographic changes, such as ageing population, changes in household composition, greater life expectancy, changing leisure patterns and increasingly sedentary lifestyles are altering both the needs for and demands placed on open space.

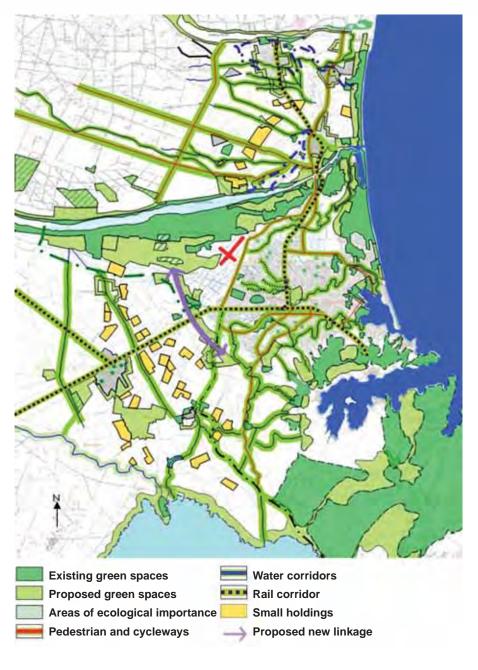
The open space network and associated facilities therefore need to meet changes in order to remain relevant and sustainable.

6.5.2 Growth Issues

- > How to create, restore and maintain what is remaining of the contrast between urban and rural, with defined urban areas and wide-open spaces for productive rural land, conservation and environmental values as well as to give a sense of identity to urban settlements.
- > How to protect and provide for strategic open-space networks.
- Loss of accessibility to, and difficulty in acquiring, high quality open-space.
- How to provide community facilities that are adaptable and multipurpose to meet the requirements of the future.
- > Whether service providers can afford more sophisticated and diverse community facilities.

- Recognising and building on the identity of existing towns and neighbourhoods.
- > Protecting outstanding natural features and landscapes of the region and providing a wide range of recreational opportunities that bulid on the features of the landscape.
- How to use open space to both manage urban growth and provide a multi-purpose urban edge including recreational, ecological, landscape and surface water drainage opportunities.
- How to secure that the productive use of versatile rural soils is not compromised or lost by urban expansion.
- How to acquire or protect strategic open space at a reasonable price as land values around the urban settlements escalate.
- How to ensure access to public open space, particularly along the Banks Peninsula coastline and along the major rivers.
- How to provide leisure and recreational facilities that are sufficiently adaptable and multi-purpose to meet changing lifestyle patterns and expectations, in the right location and at the right time.
- > Retention of open space appropriate for intensification.





6.5.3 Key Approaches

- Design and provide appropriate open space in intensification areas
- Implement a co-ordinated approach to the identification, planning and maintenance of a strategic open space network across the region which integrates with and enhances ground and surface water and biodiversity resources.
- > Provide a wide range of types of open space.
- > Promote the multi-functional use of large areas of open space.
- > Use open space to provide green corridors between core habitats, which are designed to contain ecological and recreational values as well as providing walkways and cycleways.

Figure 16: Indicative of green spaces from Inquiry by Design.

- > Use open space to help define the edge of urban settlements.
- > Use open space to help protect the unconfined aquifer and surface water and biodiversity resources.
- Maintain the rural character and amenity of the open space on the plains.
- Design parks, cycleways and walkways to encourage community use and to be safe
- Encourage children to take part in active sports by providing facilities at little or no cost, in order to promote healthy lifestyles and reduce obesity.
- Encourage co-location of leisure and recreational facilities with other community facilities such as libraries, community halls and schools.

- Design future leisure and recreation facilities in ways that enable multiple uses and that allow them to meet changing demands.
- > Use open space to reflect local ecological heritage.
- Carefully consider the location and timing of leisure and recreation facilities to meet current and future needs.
- Acquire land for open space well in advance of urban development and associated speculative land prices.
- Design open space to reflect the heritage and cultural history of the area and create a sense of place and identity.
- Build on existing open space network and ensure accessibility to all residents.

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Create a range and equitable distribution of high quality public spaces consistent with the Urban Design Protocol.	CCC	WDC, SDC, MfE, ECan, NZHPT	High	LTCCP	UDP, 6.6, 6.1	Ongoing
(2) Initiate a co-ordinated approach to the identification, planning provision and maintenance of a regional strategic open space including a regional park network.	ECan	SDC, CCC, WDC, DoC	Internal	LTCCP	CCC and SDC Open Space Strategies	TBC
(3) Provide additional open space, active and passive recreational facilities and leisure facilities to meet the future urban growth needs of the region.	ccc	ECan, WDC, SDC	Cost of land purchase	Strategic land protection policies & plans, LTCCP	CCC and SDC Open Space Strategies	Ongoing

6.6 Community Development

6.6.1 Explanation

Developing and sustaining strong communities is a key element of community development.

A strong community is one in which people feel connected to each other, and are actively involved in community groups.

Community involvement builds knowledge of, trust in, and respect for each other, and enables people to share/develop skills and work together to make things happen, using and leveraging off their own collective resources as much as possible.

Strong and connected communities become, and are able to be, resilient, proactive in difficult times, take responsibility for shaping their own future and care for those who need support.

Effective community development underpins economic development.

Growth and development impact on the well-being of the people living in communities across the sub region. Initiatives, in conjunction with well thought out urban design, and the provision of community services, help to ensure that these impacts are positive.

Partners to the Strategy have direct areas of responsibility in community development.

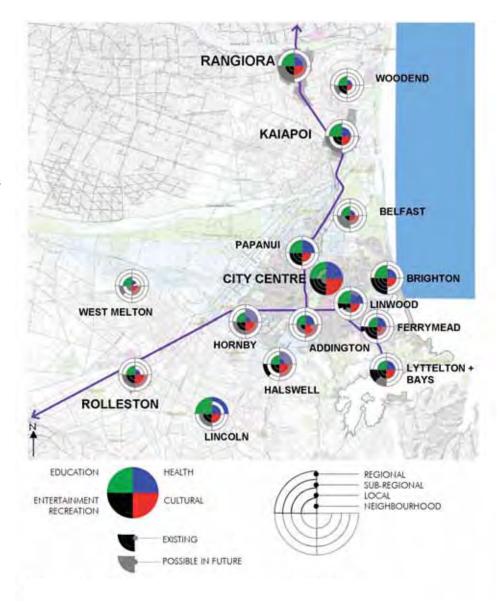


Figure 17: Existing social infrastructure in the Greater Christchurch UDS Area (not to scale)

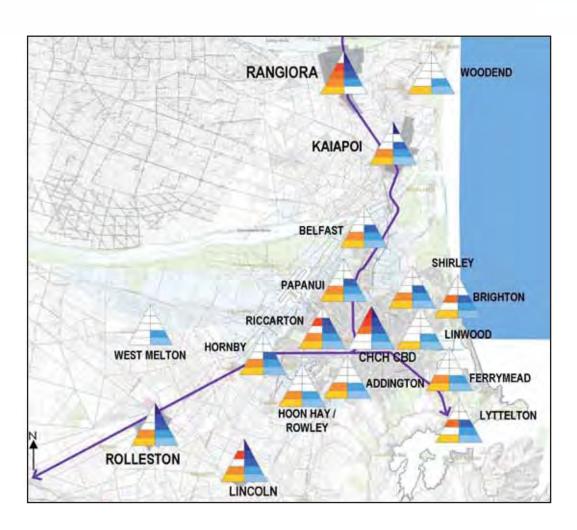
6.6.2 Growth Issues

- Providing opportunities for social interaction, leisure activities and engagement in community issues and decision-making.
- > Achieving robust resilient communities to face significant change, such as that arising from economic instability and natural disasters.
- > Connectedness and information sharing across a wide variety of organisations to support community development.
- > Providing access to services to meet demographic and social changes, including an ageing population and increasing ethnic diversity, to prevent socio-economic disadvantage and pressure on the voluntary sector.
- > Infrastructure developments, such as roading projects are consistent with community capacity building and well-being objectives.
- > Understanding demographic and social changes through research, analysis and reporting.
- Social exclusion is managed by well resourced organisations and networks offering support to vulnerable communities such as older and disabled persons.
- > The pace of residential growth and development has social implications that can be difficult for local communities to recover from.
- > Growth management issues are addressed at both District and neighbourhood levels.

6.6.3 Key Approaches

- > Build effective partnerships and other collaborative relationships with partner Councils and strategic partners.
- > Ensure equitable access to resources, services and programmes through the provision of funding, facilities and infrastructure.
- > Integrate facilities through collaborative projects with partner Councils and key stakeholders, such as hapu and iwi, CDHB, MoE, SPARC, WINZ, HNZ, voluntary organisations and the commercial sector.
- > Involve the community in key decisions to avoid community displacement and severance.
- > Research, monitor and review strategies that promote community development to ensure they meet the changing needs of the community.
- > Provide community support services to meet the growth and changing needs of communities.

- > Encourage civic participation.
- > Develop community spirit and social cohesion within neighbourhoods, through the provision of wellpositioned schools, elements of local identity and use of public spaces.
- > Plan a range of housing types that reflect and promote community diversity.
- > Produce road, footpath and cycleway design strategies that improve safety.
- Ensure communities needs are recognised and met when developing and constructing roads.
- > Communication strategies are continually monitored, reviewed and developed.
- > Work with local communities to ensure they are prepared for civil defence emergencies.
- Provide good access to public passenger transport that contributes to reducing social isolation.



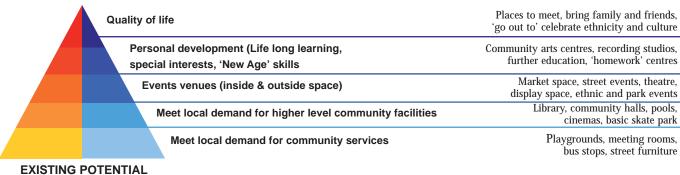


Figure 18: Qualitative assessment of selected UDS social focal points.

6.6.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop a health and social services plan to ensure health and social services are planned and located so accessible for client groups. Support Ministry for Social Development welfare and health mapping project.	CCC	SDC, WDC, MSD CDHB, MoH, MoE, WINZ, NZ Police, DIA, MEM SPARC, NGOs, NZ CSS	Internal	LTCCP	6.2	2007
 (2) Develop an integrated programme for monitoring demographic and social change across the sub region, investigating: How communities are evolving Emerging needs Mapping of needs, services and resources, and Life-cycle - being supportive of critical life stages 	ECan, CCC, SDC, WDC	Statistics NZ, MCH, MSD, DHB	Low	LTCCPs, District Plans, City Plan, QoL report, SoE report, HIA, HNA,	6.32	2007
(3) Initiate a programme to share information across local and national networks for capacity building within organisations.	DIA	SDC, WDC, CDHB, MoH, MoE, WINZ, NZ Police, DIA, MEM, SPARC, NGOs, NZ CSS	Internal	LTCCP	6.32	2007

6.7 Tangata Whenua

6.7.1 Explanation

Ngai Tahu has participated in the development of the Strategy through both input into Strategy options, submissions, discussions and their involvement in the UDS Forum. This involvement should continue into the implementation phases of the UDS.

Ngai Tahu holds manawhenua and kaitiakitanga over most of the South Island. Ngai Tahu are the iwi comprised of Ngai Tahu whanui, or the collective of the individuals who descend from the five primary hapa of Ngai Tahu, Ngati Mamoe and Waitaha, namely Kati Kuri, Ngati Iraheku, Kati Huirapa, Ngai Taahuriri and Ngai Te Ruahikihiki.

The tribe has both resource protection and resource development roles. As part of its resource protection role, Ngai Tahu as kaitiaki has an intrinsic duty to ensure that the Mauri and the physical and spiritual health of the environment is maintained, protected and enhanced. This is partly addressed through Ngai Tahu 2025, which provides the guiding vision for Te Rananga o Ngai Tahu. It is a 25-year future road map that clearly identifies and details the specific areas of importance for Te Rananga o Ngai Tahu to impact and influence.

As part of the settlement negotiated with the Crown, Ngai Tahu received cultural redress in the form of confirmation of the ability for Ngai Tahu to express its traditional kaitiaki relationship with the environment, tribal redress, an apology from the Crown, acknowledgement of the role of Aoraki as taonga, economic redress in the form of a payment of \$170 million and the ability to purchase property from the Crown.

The settlement has allowed the tribe to establish a sustainable economic base. Ngai Tahu currently has interests in fishing, tourism, and property as well as a diversified equities portfolio, all of which are managed through Ngai Tahu Holdings Ltd.

The tribe is also involved in property development through Ngai Tahu
Properties Ltd. It has the potential, given its resources and right of access to former Crown lands, to be a significant partner in Strategy implementation.

Many Maori call Greater Christchurch home. The most common tribal affiliations for Iwi other than Ngai Tahu descent in Christchurch are Ngapuhi, Ngati Porou, Ngati Tawharetoa and Waikato. The Strategy is a LGA document and therefore, also takes into consideration those issues relating to all Maori.

6.7.2 Growth Issues

- > The Maori population in the area is expected to increase.
- > Avoiding alienation of multiple owned Maori land.
- > Cultural heritage management, both physical and natural.
- Protecting significant indigenous ecological habitats.
- > Integrating Hapu and Iwi Management Plans with City and District Plans.
- Taking account of cultural heritage in all infrastructure planning for the area.

⁶ Statistics New Zealand, 2001 Census of Population and Dwellings.

6.7.3 Key Approaches

- > Acknowledge the aspirations outlined in Ngai Tahu 2025.
- > Engage Ngai Tahu as a key implementation partner.
- > Promote and support the development of Hapu and Iwi Management Plans.
- Establish mutually agreed protocols, additional resources, and a process in district plans in order to support and complement the resource management and development principles of Tangata Whenua.
- > Address issues relating to the development of resources that are important to Tangata Whenua in addition to issues facing the wider community.
- Recognise the principles of the Treaty of Waitangi provide a basis for relationships with Tangata Whenua and Maori.
- Recognise and provide for the customary relationships and practices of Tangata Whenua as kaitiaki over their land, waahi tapu and other taonga.
- > Protect the cultural importance of surface water systems to Maori and the wider community.

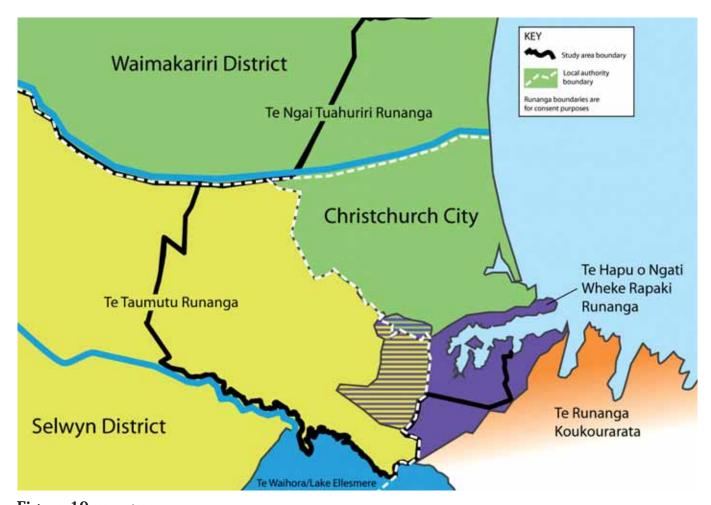


Figure 19: Map of Hapu areas.

6.7.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Investigate the development of housing on MR873 land adjoining Woodend through the preparation, consultation and adoption of an agreed Outline Development Plan for that area.	WDC	ECan, TRONT	Internal	WDC District Plan	RPS	2007/08
(2) Facilitate the development of Maori Land where this aligns with the Strategy.	Relevant Maori land owners	UDSIC	Internal	District Plans	RPS	Ongoing
(3) Complete the preparation of Iwi and Hapu Management Plans. This will allow for Tangata Whenua to meet both their protection and development aspirations.	TRONT	CCC, SDC, WDC	Low		NT 2025	Ongoing
(4) Establish and maintain an area Tangata Whenua and Maori contact database for consultation on resource consents, heritage values and environmental impacts.	ECan	TRONT	Low		6.32	2007
(5) Develop an area cultural heritage framework. This will include developing a robust cultural assessment process and undertaking a cultural and archaeological survey. Set up a process of identification, consultation and engagement of Maori that have a cultural and traditional relationship as kaitiaki with a proposed growth area.	TRONT	ECan	Medium	District Plans	6.8	2008
(6) Undertake further investigation of Iwi demographics for the area to better understand future population growth, housing and employment needs.	CCC	ECan, SDC, WDC	Medium	LTCCP	6.32, 6.6	2009

6.8 Cultural Heritage

The Strategy differs from previous heritage management strategies by building a platform for a collaborative approach to the identification and conservation of heritage. The Strategy links territorial authorities, Tangata Whenua, the local community and the private sector in order to actively participate in the identification of items of heritage value and finding solutions for their retention and reuse.

At present a range of heritage places have been identified in city and district planning documents relating to both Maori and European heritage which include houses, churches, municipal buildings, industrial complexes, rural clusters and archaeological remains. Some archaeological sites are of considerable significance for Tangata Whenua. These heritage places identify areas where heritage is likely to be a significant factor, or constraint, in developing a new settlement pattern or other local level planning.

6.8.1 Explanation

The identity of Greater Christchurch is derived from its unique qualities, of which its cultural heritage is a distinctive part. Cultural heritage is the tangible and intangible values of the community which help to promote a sense of place and belonging. It is therefore important to provide a comprehensive, coordinated approach to the protection and conservation of cultural heritage as growth within Greater Christchurch occurs.

Further research and description of cultural heritage needs to be carried out, especially to understand the intangible values cherished by the community.

Character precincts are distinct residential neighbourhoods that contain a mix of buildings of a similar scale and styles with common elements that make them unique.

What is acknowledged is that new heritage items are likely to be identified over time and added to plans over the life of the Strategy. These will also need to be incorporated into the plans for future growth.

6.8.2 Growth Issues

- Heritage places are constantly under threat of damage or removal as more intensive uses of land are sought in response to development pressures. Greater Christchurch can only be the poorer for the loss of such buildings and features. The need for growth and new development must be balanced against the need for the retention of significant heritage places.
- In rural areas of Greater Christchurch, urbanisation and changing farm practices can destroy features of early farm settlement.
- In urban areas, redevelopment can result in the loss of the original settlement patterns in suburbs, town centres and industrial areas.

- > Carefully managed change can enhance heritage townscape while allowing for the necessary level of redevelopment. However the cumulative impact of poorly planned change can adversely affect heritage, and compromise the diversity and quality of urban environments.
- Seismic strengthening requirements, which seek to ensure that all buildings are robust enough to withstand an earthquake, can reduce the viability of reusing and retaining heritage buildings.
- > Archaeological remains occur in both urban and rural areas. While some are identified in planning documents, and by the New Zealand Archaeological Association, many archaeological sites are unrecorded.
- > Archaeological sites are vulnerable to any activities involving earthworks, so loss of archaeological heritage can be significant when growth is occurring rapidly.

6.8.3 Key Approaches

- > Working partnerships, particularly between Tangata Whenua, the Historic Places Trust, territorial authorities and the local community, are promoted to draw together resources and focus conservation efforts.
- > Outstanding or significant heritage places, which have already been identified, are protected through district plan policies and rules.
- Assess the significance of potential heritage places by appropriately qualified persons.
- Due regard is given to the International Committee on Monuments and Sites (ICOMOS) NZ Charter when assessing proposed changes to heritage places.

- > The provisions of the Historic Places Act 1993 (HPA) relating to archaeological sites are given due regard when planning new developments in areas likely to contain archaeological remains.
- > The process of identification, consultation and engagement of Maori in identifying Maori heritage that has a cultural and traditional significance.
- > Commit to, and promote accessibility to heritage whilst ensuring that access does not jeopardise its integrity.
- > Develop the use of Information and Communications Technologies to better manage and communicate heritage values across Greater Christchurch.

- Encourage voluntary protection options for heritage buildings, to supplement statutory protection mechanisms.
- Consideration is given to the appropriate balance between retaining heritage buildings and seismic and fire safety standards.
- Encourage the use of Regional and District Plans, and heritage protection orders to protect identified places and conservation areas.

6.8.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Establish a cultural heritage technical working party to improve collaboration and approaches.	ECan, CCC	SDC, WDC, HPT, Tangata Whenua	Internal	RPS City, District Plans	Ngai Tahu 2015, HPA	TBC
(2) Develop heritage overview that summarises cultural heritage knowledge, providing a basis for heritage Strategy development.	ECan	CCC, SDC, WDC, HPT Tangata Whenua	No Current funding identified	DPs	6.7, Ngai Tahu 20155	TBC
(3) Develop a regional cultural heritage Strategy.	ECan	CCC, SDC, WDC, NZHPT, DOC, Tangata Whenua	Internal	LTCCP	6.7, Ngai Tahu 2015	ТВС
(4) Investigate the potential for expanding existing heritage grant funds across Greater Christchurch. Trust funds should be investigated alongside Conservation and Open Space Covenants (and associated grants), financial and other incentives as alternative approaches to heritage protection.	CCC	SDC, WDC, ECan	Low	LTCCP	6.7	2007

6.9 Urban Design

6.9.1 Explanation

Urban design is concerned with the design of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them. Its application ranges in scale from a metropolitan region, city or town down to a street, public space or even a single building. Urban design is not only concerned with appearances and built form but also with the environmental, social and cultural consequences of design.⁷

The New Zealand Urban Design Protocol identifies seven essential design qualities:

> Context: Seeing that buildings, places and spaces are part of the whole town/ city

- Character: Reflecting and enhancing the distinctive character, heritage and identity of our urban environment
- > Choice: Ensuring diversity and choice for people
- > Connections: Enhancing how different networks link together for people
- Creativity: Encouraging innovative and imaginative solutions
- Custodianship: Ensuring design is environmentally sustainable, safe and healthy, and
- Collaboration: Communicating and sharing knowledge across sectors, professions and with communities.

To implement the desired urban form the

partner councils have a range of tools that fall into four broad categories:

- i. Championing and raising awareness
- ii. Regulating private developments
- iii. Investing in infrastructure
- iv. Integrating management

The actions in the urban design section are primarily in the area of investing and regulating and are intended to ensure that the quality of urban development that results from the Strategy is in line with the principles of good urban design and can meet the expected outcomes.



Figure 20 - Principles and Elements for good urban design.

Principle Elements Purpose To promote higher intensity development around new nodes and lower density around the periphery. This allows local communities, businesses and public transport to be strengthened, and resource efficiencies to be achieved, whilst DEVELOPMENT reducing environmental impacts on peripheral areas. For the UDS this is fundamental to "Option A" including consolidation PATTERNS AND and dispersal consideration of where stimulated intensification will have the greatest overall benefit - it may be more beneficial to provide INTENSITY medium density development at the periphery of one particular town centre than high density development in the core of another due to the overall urban 'logic' of how people will move around and use each respective environment. To promote development that is integrated and connected with its surrounding environment and other existing or future communities. This facilitates ease of access, economy of movement, and improved social interaction. For the UDS this MOVEMENT integration and has a particular relevance to the way in which the three local authorities connect and interact with each other through the NETWORKS. connectivity BUILDING: strategic and local movement networks, as well as the public transport network. The potential role of rail, either as freight-INTERFACES biased or passenger-freight balanced (or possibly even passenger biased) must also be examined in terms of supporting the establishment of "Option A". To promote choice through the provision of a diverse mix of compatible activities and uses. These built environments can RANGE OF better adapt over time. This facilitates the ability to respond efficiently to social needs, provides a range of market DENSITIES; demands, and allows for changes in lifestyle. For the UDS this has relevance to the type and nature of intensification that diversity and MIX OF USES: adaptability is delivered. An emphasis on "mixed use" can limit the range of business activities that can occur in a town centre, having FLEXIBILITY OF flow-on impacts for the local amployment and social heterogeneity of that environment. Likewise, uniformity in the types of BUILDINGS hauseholds delivered through intensification can undermine the range of social groups that can viably use them. To promote environments that are easily understood by their users, display a strong local identity, and create TOWN FORM: appropriate visual character. This facilitates an enhanced usage, enjoyment, and pride in local place. For the UDS this means that several layers of identity and legibility must be retained. At the highest order, living in the Rural districts. VISUAL legibility and CHARACTER SPECIAL (particularly in the towns) must remain experientially distinct from living within Christoburch City. Secondly, each town identity centre must also be embedded with its own unique sub-character. For example, the use of generic or PLACES. 'main street' treatments repeated in each town centre would be a negative outcome. To promote urban environments that are responsive to natural features, eco systems, water quality issues, reduced energy ECO SYSTEMS: usage and waste production, and balance the spatial needs to achieve this with that required for urbanisation. This GREEN facilitates improved ecological outcomes. For the UDS this means having particular regard to the unique ecological and environmental NETWORK, URBAN WATER biodiversity context of the landform and acosystem. Despite the globally small City population, Christchurch has already responsiveness WASTE had to take action to limit air pollution. Increasing the population within urban areas will present on-going challenges that ENERGY need to be managed at the same pace as growth. To promote 'deliverable' built outcomes that maximise benefits for the local economy and condition. This stimulates employment and economic vitality for communities (a key in prosperous social conditions) as well as recognising the need economic schange and well-being URBAN for all development to be organised and structured to create rather than reduce or undermine opportunities for economic **ECONOMICS** advantage. For the UDS this means understanding the relationship between growth, employment opportunities, and the EMPLOYMENT accessibility / movement connections between the two that can best stimulate aconomic transactions in space for the overall benefit to communities within the UDS area To promote equitable cultural representation in the built environment, enhanced expressions of ownership and genuine OWNERSHIP ocial & cultura rainforcement participation in each 'place', and the provision of targeted built environment amenities where relevant to support communi-INVOLVEMENT ties of interest. For the UDS this means responding to areas of ethnic and cultural interest, as well as particular care in the PRIDE management of movement networks, support services, and connections for different groups based on their unique needs.

 $Figure \ 21 \ \hbox{- Qualities and features for good urban design}.$

Quality	Features	Spatial Implications for the UDS
celebration	STORIES; MYTHS; DELIGHT; HISTORY	To ensure that all growth and development is fundamentally based on celebrating the history, stones, and features that make each local setting a source of inspiration and motivation to users. This means that care must be taken when planning for intensification or expansion to ensure that these traditions are properly integrated into design as the basis for moving into the future, not seen as a divisive segment to be simply 'ring-barked' and placed in a vacuum of conservation or protection.
context	SPATIAL AND SOCIAL RELATIONSHIPS	To realise a dynamic and responsive approach that cen evolve and change over time in response to changes in economic, social, cultural, or ecological setting, it requires implementation mechanisms and ultimately physical environments that are robust, flexible, and adaptable, responding to their environment.
character	DISTINCTIVENESS, IDENTITY, RESPONSIVENESS	To realise development outcomes that reinforce 'place' at the local, district, and sub-regional levels. At the same time change and variety must be recognised as important factors contributing to richness, diversity and ultimately also character. This has key relevance to the way in which intensification is managed.
choice	DEMOCRACY IN SPACE, USES, MOVEMENT	To realise diverse living, working, playing learning, and resting environments that cater to the wides possible range of interest groups and users. The UDS will need to develop a range of intensification approaches that to this point have not been seen in New Zealand which can achieve this and satisfy the needs of different socio-economic, ethnic, and cultural groups.
connections	LINKAGES, ACCESSIBILITY, EQUITY	The UDS must place equal emphasis on facilitating both physical and social connections. This has implications for the delivery of intensification, land use integration with the public realm, legibility, and permeability across a range of movement and communication modes (including electronic and the internet).
creativity	ORIGINALITY, PROBLEM-SOLVING; ARTISTIC	Intensification on the scale sought under "Option A" is new to the UDS area and its communities. To realise it, an equally distinct and unique approach to managing growth within the UDS area including custom-designed implementation techniques is required
ustodianship	RESPONSIBLE; INTER- GENERATIONAL EQUITY	The strategy and its various benefits and costs need to be equitably shared across stakeholders today and also those who will benefit from sound planning tomorrow. It also demands that a sensitive approach be made to the recognition and maintenance of ecosystems, biodiversity and other non-renewable resources.
collaboration	CO-ORDINATION- GOOD-WILL; OPEN MINDEDNESS	This is embedded into the UDS process through the way in which the partner organisations have come together and designed the process. This partnership will need to be maintained during the implementation of the strategy, including possible considerations of equitable distributions of the costs and benefits of the chosen approach.

¹ Source: New Zealand Urban Design Protocol, Ministry for the Environment, March 2005

6.9.2 Growth Issues

- > The success of the Strategy is directly related to the quality of the urban outcomes that result from its implementation. While the Strategy itself has largely been based on the principles of good urban design, there is a significant risk that poor quality urban development will undermine the outcomes even where the development broadly conforms with the directions of the Strategy.
- In general, higher densities associated with consolidation require a higher quality of urban design than lower density developments. At lower densities the negative effects of poor quality development can generally be absorbed more easily within the individual sites without negatively impacting neighbours or adjacent public spaces. At higher densities not only are the effects of poor quality design significantly greater, but they are also more likely to negatively impact on neighbours and adjacent public spaces.

6.9.3 Key Approaches

- > The key approaches, which underpin the urban design philosophy of the Strategy, are derived from 'People Places Spaces', the Ministry for the Environment's design guide for urban New Zealand.
- > Promote quality urban environments that are responsive to natural systems, where water quality, reduced energy usage and waste minimisation are considered at the building design and construction stage.
- > Urban design is incorporated into activity centres, so increased residential density both supports and is supported by community facilities and public passenger transport, cycling and walking facilities and commercial and retail activities.
- > Development plans for intensification areas and activity centres where provision is made for a variety of uses.
- Councils invest in high quality public spaces associated with town or activity centres.
- > Private investment is encouraged to provide higher levels of amenity and environmental quality in the areas where increased density is proposed.
- > Urban design considerations are incorporated into district plan variations and changes to help prevent poor quality developments.
- > Environmental responsiveness is encouraged. Good urban design approaches are used for greenfield and intensification types of development.
- > Promote and encourage comprehensive development and redevelopment to achieve good urban design outcomes.
- > Promote efficient multi-modal connections between activity centres.

6.9.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop urban design strategies through collaboration and resource sharing among strategy partners to ensure all urban development conforms with the principles of good urban design. Urban design strategies will reduce the risk of poor quality consolidation or greenfields development that will not deliver expected outcomes. The strategies will include appropriate implementation tools that ensure individual site developments are designed to fit into the local environmental and building context to promote sustainable urban form.	CCC	WDC, SDC, ECan, Transit	Internal	DPs, Outline Development Plans, Design guidelines, LTCCPs, AMP, RPS	UDP	TBC
(2) Prepare Structure Plans for key activity centres based on principles of good urban design. Activity centres are a key component of the Strategy. They provide the focus for intensification areas where residential density is increased. Community facilities, public transport, and commercial and retail activity will be provided for and promoted in these key activity centres. Structure Plans provide the means of establishing a framework for these centres and will ensure quality living spaces with good amenity and a range of opportunities.	ccc	WDC, SDC, ECan, Transit	High	DPs, Design Guidelines, LTCCPs	5.1	As identified
(3) Outline Development Plans for intensification and greenfield areas, are in place and provision is made for a variety of uses based on the principles of good urban design. Outline Development Plans provide a means of establishing a sound overall framework for new subdivisions, providing certainty for developers while setting the parameters within which they have flexibility and choice.	CCC WDC, SDC,	MED	High	LTCCPs, AMPs	5.1	As identified
(4) Develop a programme for planned intensification areas.	CCC	Transit, NZHPT	Internal	LTCCP		2007-2009

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(5) Prepare a prioritised activity centre capital investment programme for public spaces to support the proposed Strategy regional settlement staging.	CCC, WDC, SDC	UDSIC,	Internal	DPs, Design guidelines	Section 5.1	Ongoing
Council investment in high quality public spaces associated with town or activity centres can act as a catalyst to encourage private investment and set a benchmark for private developments. It provides a signal to the market that Councils are serious about Strategy outcomes and provides higher levels of amenity and environmental quality in the areas where increased density is proposed.						
(6) Prepare appropriate regulatory changes incorporating Low Impact Urban Design and Development (LIUDD) principles into building requirements for new low density developments.	CCC, WDC, SDC	ECan, MfE	Internal	DPs, Design guidelines	UDP	Ongoing
(7) Prepare plan changes for the Central City and other activity centres, rural centres, and residential and rural areas to ensure future developments meet minimum urban design outcomes.	CCC, WDC, SDC, ECan	NZHPT	Internal		Section 5.1	Ongoing
Plan variations or changes to incorporate urban design considerations in district plans covering the main areas of development would go some way to preventing poor quality developments. Some consideration also needs to be given, when drafting any plan or variation that the outcome is not discouraging development in the Strategy area. The aim is to encourage integrated development.						

6.10 City and Town Centre Revitalisation

6.10.1 Explanation

The success of the Strategy is tied directly to how well the City and town centres are revitalised. The importance of centres is borne out through their historical significance and their current roles as the commercial, cultural and social centre of their districts. Christchurch's Central City has a special importance in ensuring that Christchurch and Canterbury continue to function and grow as dynamic places to live, work and play. As the centre of the region's economy and gateway to Canterbury, the success of the Central City is intrinsically linked to the success of the region.

The Central City is the hub of Christchurch and the South Island containing the largest concentration of businesses with 1.7 million sq m of commercial floor area and over 52,000 employees. The Central City contains a third of Christchurch's retail space making it the largest retail centre in the region. It is also the hub for the tourism industry.

The Central City is also the traditional focal point for many of the region's cultural and recreational activities. It is home to the region's most significant religious and cultural institutions as well as its most iconic park, heritage buildings and public spaces. It also has the largest concentration of dining and nightlife activities and each year, it hosts numerous festivals and events. For many residents' their connection with the Central City is closely associated with these places and experiences.

Outside of Christchurch City there are a number of smaller town centres such as, Rangiora and Lincoln, new and developing town centres like Rolleston, and smaller settlements like Lyttleton, Prebbleton and Woodend. These centres serve not only the town, but also the rural catchments surrounding them. Encouraging diversity in services, employment and providing good public space and facilities in town centres will provide a greater degree of self-sufficiency, positively contribute to developing and reinforcing community identity, and reduce traffic generation between the centres and Christchurch. A strong residential presence in the centres will be a vital component of any revitalisation effort.

Presently 8000 people live in the Central City, which has had the fastest rate of growth of any area in Christchurch.

People are returning to live there because of proximity to work and services, enhanced opportunities for entertainment and leisure, less property maintenance and the appeal of living in an urban environment.

Growth in Central City housing has also helped to diversify the region's housing stock by providing a wider range of living options including multi-storey apartments, terrace housing and bed-sits. This housing meets differing needs determined by age, income and social groups and is important to attracting young, skilled labour to Christchurch.



A revitalisation process for the Central City was initiated in 1999. Stage II of the Central City revitalisation project was adopted by the Christchurch City Council in September 2006 and identified the following key priorities for the Central City:

- > Increasing the residential population
- > Growing the business and commercial sector
- > Enhancing vital public spaces
- > Redeveloping underutilised sites, and
- > Improving the transport network

6.10.2 Growth Issues

- > Extensive development of office space in out-of-centre locations.
- Recent suburban retail development has undercut the historic strength of the Central City.
- > Central City streets are currently designed with greater focus on vehicles and vehicular movement, rather than balancing the needs of motorists, cyclists and pedestrians.
- > The Central City Bus Exchange is running at capacity.

- > To reinforce the point of difference for the central city, it is important to capitalise on the adaptive reuse of heritage buildings and support seismic strengthening upgrades.
- > Fragmented land ownership in the City and town centres makes it difficult to achieve coherent redevelopment.
- > The market does not typically deliver good town centre development without a significant degree of intervention from local government.
- Large portions of the City and town centres do not contain the quality public space around which private developers or businesses would choose to invest.
- > The difficulty or perceived difficulty in navigating council consents and approvals for projects is often cited as a deterrent to redevelopment.
- > While the supply of parking in the central city is adequate, there is a need for better management of existing spaces so that it supports the needs of retail and business services, and parking requirements need to align with urban design objectives.
- Many new multi-unit developments lack a relationship to the street or surrounding neighbourhoods.
- > Town centres do not provide the public open space and facilities which will support the live, work and play requirements which are principles of this Strategy and requirements of the community.
- > Reliability of public passenger transport is negatively impacted by growing traffic congestion.

6.10.3 Key Approaches

- > The Central City remains the cultural, economic and social hub of Greater Christchurch and for much of the South Island.
- > Retail continues to play a prominent role for the City and town centres.
- Improve the quality of urban design in town centres, particularly provision of adaptable built form and attractive public spaces and street frontages, including space between buildings, footpaths, lanes and alleyways.
- New buildings have good relationships to the street and surrounding neighbourhoods and the environment and include design principles that decrease crime while improving safety and social interaction.
- Bus priority measures will be implemented to improve service levels.
- > Identify significant amenity, character, cultural, natural historic or heritage features and values and show how they will be protected.
- > The Central City Bus Exchange and interchanges will be expanded.
- > Investigate long-term passenger transport options such as light rail within the central city.
- Councils continue to provide leadership in sponsoring and promoting festivals and events.

- > The Central City is developed with a distinct urban sense, as opposed to suburban 'look and feel'. For example street and open space treatments are consistent with a central city 'feel'.
- Promote the identification and preservation of historic streetscapes or key groups of historic buildings.
- > A range of mechanisms and tools will be used to facilitate the redevelopment of vacant or underutilised sites for new apartments/ terrace houses/bedsits and businesses.
- Ensure the viability and vitality of town and village centres in Selwyn and Waimakariri Districts, and where possible encourage growth that will make these centres more selfsufficient.
- Improve the quality of urban design in town centres, particularly the provision of adaptable built form and attractive public space and street frontages.
- > Work with central government agencies to ensure community support services are well represented and strategically located in town centres.
- > Conserve the character and diversity of established neighbourhoods not included in intensification areas.

6.10.4 Actions

Central city – these actions will be primarily developed as part of the implementation of the Stage II Central City Revitalisation Strategy

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Implement the Stage II Central City Revitalisation Strategy.	CCC	CECC, CDC, CCHL	High	Business Improvement District, DCPs LTCCP		2007- 2011
(2) Advocate and facilitate Central City development.	CCC	CCHL	High	New statutory/ capital funding authority		2007- 2011
(3) Identify sites for new visitor accommodation in the Central City.	CCC	NZ Hotel Council, Motel Association	Internal	City Plan, Council Facilitation	Visitor Strategy	2007- 2016
(4) Facilitate the development of visitor accommodation.	CCC	NZ Hotel Council, Motel Association	Internal	City Plan	Visitor Strategy	2007- 2016
(5) Develop Master Plans for Precinct and redevelopment areas within the Central City.	CCC	Private Sector, NZHPT	To be fully determined \$6.8m dedicated to Central City street projects.	City Plan, DCPs Statutory/ capital funding authority, CR Policy, LTCCP	Central City Transport Concept	2007- 2021
(6) Acquire and redevelop strategic, under-utilised Central City sites. Scope and launch a commercial redevelopment incentives programme focusing on sustainability.	CCC	CCHL	\$4m to be reinvested from Turners and Growers.	LTCCP, Council rating policy DPC Statutory/ capital funding authority,	Central City Stage II Revitalization Strategy	2007- 2011
(7) Create incentives to produce affordable housing in the Central City. Examine options for creating affordable housing. Implement report recommendations for creating affordable housing.	ccc	HNZ, CCC, SDC, WDC	Medium	City Plan. Market incentives, Council rating policy, DCP	6.4	2007- 2011
(8) Amend the City Plan to improve the design of new residential developments in the Central City.	CCC		Within operation budget	City Plan	Urban Design Protocol	Ongoing

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(9) Monitor housing developments in the Central City and prepare a triennial housing monitoring report. Monitor for a range of housing design, people accommodated etc.	CCC		Internal		6.32, Central City Stage II Revitalization Strategy	Ongoing
(10) Renovate the City Mall.	CCC		\$10.5m in capital budget	LTCCP, Business Improvement District, New statutory/capital funding authority	Central City Stage II Revitalization Strategy	2007- 2009
(11) To improve the lanes within the Central City develop a plan for improving Central City lanes. Upgrade one Central City lane per year.	CCC		\$6.8 million for Central City streets	City Plan, LTCCP	Lanes Plan	2007- 2016
(12) Improve Bus Exchange capacity.	CCC	ECan	High	LTCCP	Stage II Revitalization Strategy	High priority
(13) Implement bus priority corridors.	CCC	ECan	High	LTCCP	Stage II Revitalization Strategy	Priority
(14) Investigate and establish, in partnership with others, a dedicated city revitalisation agency to develop and administer programmes; to assemble key redevelopment sites; and to tender land for specific redevelopment proposals. Benchmark framework of the agency against other related organisations in New Zealand and overseas.	CCC, CCHL	Ngai Tahu properties and other private sector developers	Establishment costs internal. Operating costs to be negotiated between the business partners	Formalise business partnership, specific amendments to CCHL statement of corporate intent.	Activity centres and intensification areas UDS	Set up by September 2007. Amendment to CCHL Statement of Intent for 2008/09 financial year
 (15) Better manage parking in the Central City: Review parking management options Implement recommendations of parking management study. 	ccc		Internal	City Plan	Parking Strategy, Central City Transport Concept, Stage II Central City Revitalization Strategy	2007- 2010
TOWN CENTRES						
(16) Ensure Structure Plans provide for activity centre development or redevelopment that enhance public space and facilities.	CCC, SDC, WDC		Internal	District Plans LTCCP		As Identified

6.11 Biodiversity and Ecosystems

6.11.1 Explanation

By protecting and enhancing our indigenous biodiversity, New Zealand can make a unique contribution towards the maintenance of global biodiversity. More than 72 species are threatened locally through modified or fragmented habitats.

Coastal areas and lowland bush fragments in particular are vulnerable to pests and downgraded habitat, dry land ecosystems to unsympathetic subdivision and waterways to pollution and pests.

Biodiversity contributes directly toward making Greater Christchurch a pleasant place to live. Urban areas with healthy and abundant green space can support biodiversity. Biodiversity underpins the viability of aspects of the area's agricultural industries and contributes to the area's rich rural and landscape heritage. It also provides for a range of recreational, ecological, spiritual and visual experiences. Local solutions to protect biodiversity need to integrate council, government, Ngai Tahu, development and community initiatives.

For indigenous biodiversity to be sustained it is essential that ecosystems are maintained in a healthy functioning state. This also means water ways, estuaries and lakes are well managed.

Outside core indigenous ecological sites, such as the Port Hills, Banks Peninsula, estuaries and rivers and lakes, the biggest challenge facing biodiversity is the degradation of water quality and quantity. Urbanisation can result in the loss of about half of in-stream invertebrate life usually as a subdivision is first developed.



6.11.2 Growth Issues

- > The importance of biodiversity and associated ecosystems are often undervalued and misunderstood.
- How to maintain water quality to support biodiversity and be safe for recreation.
- No control of street and hard surface run-off eventually leads to a build up of contaminants in waterways that reduces biodiversity.
- The traditional installation of stormwater infrastructure can lead to the diversion of water from natural springs and waterways affecting biodiversity.
- Biodiversity continues to decline because of urban development and land use fragmenting habitats and ecosystems.
- Management of small lot sized subdivisions make biodiversity vulnerable to habitat fragmentation especially dry land communities at McLean's Island and westward along the Waimakariri River.
- Loss of the smaller habitat patches with limited natural values often leads to cumulative biodiversity loss within an ecosystem type.

- > Urban activities and development and rural land use are causing a reduction in surface water quality and quantity.
- Ensuring indigenous flora and fauna are valued, while still valuing and preserving the historic gardens and garden image of the area.
- > Few remnants of wetland podocarp, native forest and grassland vegetation remain within Greater Christchurch.
- Loss of existing and potential tree cover, due to infill, small section sizes and urban consolidation areas, undermines the provision of habitat, mitigation of pollution, moderation of temperature and reduction of other environmental benefits provided by trees
- > Removal of vegetation from undeveloped areas before the new replacement vegetation is sufficiently mature fails to provide interim habitat and ecosystem services.
- Intensification of agricultural practice and rural lifestyle developments in areas with existing natural values can be detrimental to the indigenous elements, depending on the type of management that the owner instigates. Small lots can be difficult to manage in a way that supports existing natural values, especially where extensive grazing is required.

- In situations where limited natural values exist, opportunities to improve the situation are not often taken, and are not always supported by information and/or funding.
- > Access to the coast and waterway margins is important to social and cultural well-being, however, there can be conflicts with ecological and recreational values that need to be protected.
- The coast contains significant ecosystems and landscape features that require protection in the face of growing population pressure.
- > Restoration planting of waterways with a small range of species has led to loss of species diversity compared with the preplanted state. This will change over time.
- Many existing dry land communities, wetlands, waterways, indigenous forest and shrublands are still unprotected.

6.11.3 Key Approaches

- > Biodiversity is perceived as an expression of local character.
- > Core habitat under avian flyways are protected and enhanced as a priority and opportunities taken to extend habitat under flyways.
- > Habitats, such as indigenous forests, that are now uncommon, are re-established.
- > Biodiversity protection is holistically integrated across the area.
- > Ecosystem processes that cross boundaries are managed in a coordinated way.
- > Efforts by partner councils for biodiversity protection include cooperation with biodiversity strategies and capital and operational works.
- > Partnerships to foster biodiversity are formed.
- > Surface water, public open space, and biodiversity initiatives are integrated and designed to maximise collective benefits.
- > Raise awareness of biodiversity issues and opportunities.
- > Urban form is developed in a sympathetic and integrated way with natural landform, waterways and associated indigenous biodiversity remnants.
- > Protection and enhancement of green infrastructure contributes to the overall ecosystem health biodiversity.
- > Provisions within District Plans are strengthened to ensure ecosystem- friendly green space is integral to urban development, and core habitats are protected.
- > Encourage all landowners to contribute to biodiversity with incentives and grants and to undertake biodiversity initiatives.
- > Ensure existing biodiversity is protected and enhanced for all.



6.11.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Ensure the Regional Policy Statement adequately addresses regionally and nationally important indigenous biodiversity including enhancement and retention of key habitat areas.	ECan	CCC, SDC, WDC, DoC,	Internal	Objectives & Policies in the Regional Biodiversity Strategy	Open Space Strategy, CCC Biodiversity Strategy	Ongoing
(2) Support the implementation of national and regional biodiversity strategies.	ECan	WDC, CCC, SDC	Internal	RPS, NZCPS, DP's, local Strategy/action plans	Open Space Strategy, CCC Biodiversity Strategy	ТВС
(3) Promote provisions within the NZ Coastal Policy Statement to adequately address nationally and regionally important indigenous biodiversity, and key habitat areas.	ECan	CCC, SDC, WDC, DoC	Internal	NZCPS, Actions Plans	Open Space Strategy, 6.5	TBC
(4) Complete the inclusion of provisions in City and District plans for the promotion, protection and enhancement of indigenous biodiversity.	CCC	DoC SDC, WDC	Internal	DPs Environmental compensation provisions, DCPs	Open Space Strategy, 6.5, CCC Biodiversity Strategy	TBC
(5) Identify, protect and create biodiversity sites as part of growth area, via outline development planning and subdivision processes.	SDC, WDC, CCC	ECan, DoC, TRONT	Medium per site	LTCCP	Regional and local biodiversity strategies	TBC
(6) Develop partnerships with Ngai Tahu to explore sustainable use and enhancement of biodiversity, particularly Ki Uta Ki Tai and 2025 Ngai Tahu.	TRONT	CCC, SDC, WDC, DoC, ECan	Internal	LTCCP	NT 2025, Regional and local biodiversity strategies	TBC
(7) Develop "Mountains to Sea" strategic concept plan.	CCC	SDC, WDC, DoC, ECan	Internal	LTCCP	Biodiversity and open space strategies	TBC
(8) Ensure sufficient vegetation mass within urban areas to improve environmental, cultural and aesthetic outcomes particularly in intensification growth areas.	CCC	ECan, WDC SDC	Low	LTCCP DPs	Open space, biodiversity strategies, Air Plan.	ТВС

6.12 Freshwater, Estuaries and the Coast

6.12.1 Explanation

Climate and local weather patterns influence the water cycle which is a fundamental process that regulates, shapes and maintains landforms and soils, plant and animal communities and human society.

Ground water and surface water are part of a continuous system. When dealing with surface water there is the need to recognise the relationship between them.

Freshwater resources include groundwater, springs, waterways, wetlands, and ponding areas. The intrinsic value of freshwater and aquatic habitats requires protection to ensure water resources continue to provide natural functions and support habitats.

Greater Christchurch has an appreciable length of coastline containing a rich variety of features and biophysical systems that provide it with a unique character. These systems also present significant management, development and conservation responsibilities and opportunities.

Three significant estuaries are found within Greater Christchurch and are the site of important physical and biological interactions between marine and freshwater. Estuaries are among the most productive ecosystems in the world and are part of Canterbury's unique coastal wetland system. They provide habitat for a variety of internationally, nationally and locally important bird species.

Over 90% of Canterbury wetlands and lowland habitats have been drained or removed. Freshwater ecosystems are degraded through habitat modification, increasing intensity of land use, including rural land use and changes to flow regimes from stormwater. Sewage overflows also continue to impact on a number of waterways in Christchurch City and Waimakariri and wastewater is discharged into coastal waters.

Water quality and quantity are key indicators of ecosystem health. Where water quality is high the natural values are also likely to be high.

The management of waterways has changed from highly engineered works



to a recognising them as natural systems. Replanting banks and riparian areas, instream naturalisation and enhancements to how stormwater is managed resulting in large improvements in many urban waterways.

Specific attention is required for the small settlements on the steep slopes of Banks Peninsula, where water management is currently unsophisticated and sediment loads are high.

6.12.2 Growth Issues

- > Recognition of the intimate relationship between the dynamics of groundwater quality and quantity, surface water and importance to ecological, as well as open space and recreational values.
- Ensuring that waterways are recognised for providing benefits such as landscape, ecological enhancement and recreational use and not just for stormwater disposal.
- > There is growing demand for coastal housing and for intensification of the coastline. This has created desires to remove fore-dunes for views, which in turn raises development, hazard protection and sustainability issues.
- Constructed wetlands are designed to address specific objectives to remove sediment, phosphorus, nitrogen or all three
- Increasing sediment loads on estuaries, wetlands or waterways from roading and housing developments particularly in the Avon Heathcote Estuary Ihutai and Lyttelton Harbour basin.

- > Sewer overflows to surface water are better managed.
- > The ecological values of freshwater and wetlands, and fish passage along rivers and streams, are factored in to developments.
- Ongoing investigation, monitoring and management of stormwater and wastewater contaminants including sediments, nutrients and heavy metals.
- > Wetlands are particularly sensitive to changes in wetting and drying cycles. Attention to flow management is needed to design urban developments, are sustainable, when stormwater flows to wetlands.
- > Protection of the aquifer recharge zone from further intensive or urban development.
- > Where land use changes from rural to urban, the environmental impacts from increased flood flows impact on waterways.
- Heavy metal contamination from common sources such as zinc-coated roofs and brake linings from motor vehicles, and higher peak discharge rates are also correlated with urban growth.
- Extensive dredging is a development issue in Lyttelton Harbour and will continue to be so as ships continue to get larger.

6.12.3 Key Approaches

- > Acknowledging and embracing the intrinsic values of waterways and wetlands and recognising their unique recreational, aesthetic, cultural and environmental health values.
- > Protect natural values and aquatic ecosystems including the continued naturalisation of waterways and increasing connectivity and size of riparian habitats.
- > Provide incentive-based approaches including pricing and charging that reflect true environmental costs at the development stage.
- > Use water sensitive and low impact urban design in forward planning and implementation of a stormwater system.
- Preserve existing topographic and natural features, including watercourses and wetlands.
- Improve the community knowledge and understanding of water conservation and water management issues.
- Integrate public open space with stormwater drainage corridors to maximise public access, recreational activities and visual amenity.
- > Recognise the importance of kaimoana and nursery fishery stocks within Te Waihora and other areas supporting mahinga kai and sports fishing and ensure all are managed in a sustainable way.



Figure 21: Blue network map.

- Encourage landscaping and design, with locally sourced and drought resistant plants.
- > Improve the design of pavements and roads using pervious surfaces.
- Special consideration is needed for estuaries or waterways that are susceptible to increasing sediment loads.
- Managing coastal systems against the uncertainty of climate change/sea level rise, tsunami, storm surge and erosion.
- > Preserve natural character of the coastal environment and outstanding natural features through appropriate subdivisions and development controls.

6.12.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop integrated approaches to water resource management, considering water cycle: rainfall (and potential effects of climate change) aquifer and stream recharge, water supply, stormwater, wastewater and coastal effects.	ECan	WDC, SDC, CDHB, CCC	Internal	NRRP	CCC Water Strategy	TBC
(2) Develop a protocol for the integrated management of water through the system. The strategy would provide a vision for freshwater and coastal water management. Based on the principles of Low-Impact Urban Design and integrated catchment management.	CCC	CDHB, SDC, WDC, CCC	Internal	Urban Design, District Plans and Asset Management Practices	Water Strategy	TBC
(3) Prepare Integrated Catchment Management Plans to assist with coordinated decision-making in relation to surface water management.	CCC, SDC, WDC	ECan.	\$50,000 to \$500,000 per plan	ICMPs Joint Protocol, LTCCP	NRRP, All Water Strategies, AMPs	2010
(4) Develop guidelines for controlled discharge of sediment to air and water, through controls on earthworks, vegetation disturbance, and stream crossings, construction and the provision of adequate riparian margins.	CCC	ECan, WDC, SDC	Internal	AMP's, Education, Resources		TBC
(5) Naturalise waterways and connect riparian and terrestrial habitats.	CCC, WDC, SDC	ECan	High	LTCCP, AMP's, NRRP	6.11	TBC
(6) Educate and inform the community and the private sector about good land management practices to improve natural waterways and ultimately estuary and harbour health.	ECan	SDC, WDC, CCC	Internal	Education Resources	6.11	Ongoing
(7) Provide information on sustainable planting, stream care and drought-tolerant landscaping to increase the occurrence of planting consistent with biodiversity actions.	ECan (Living Streams)	CCC, WDC, SDC	Medium (grants sought)	LTCCP, DP's	Industry led protocols and programmes 6.11	ТВС
(8) Promote, collaborate, educate and encourage low impact urban design to provide for efficient water use and re-use and land use that is appropriate to the surrounding natural values.	ECan	All energy providers, CCC	Medium	LTCCP	Energy Strategy	TBC
(9) Provide incentives and mechanisms for efficient water use.	ECan	CCC, SDC, WDC, MFE	Internal	LTCCP, Education Resources	Water Strategy	ТВС
(10) Monitoring and adaptive management of aquatic ecosystems.	ECan	WDC, SDC, CCC	Grants (research partners)	LTCCP	NRRP, local strategies	TBC

6.13 Outstanding Landscapes

6.13.1 Explanation

Outstanding natural landscapes are generally those landforms and features which have unique characteristics. Greater Christchurch has two distinctively different landscape types. These are:

- Banks Peninsula, including the Port
 Hills, the coastline and Lyttelton
 Harbour basin and associated features;
 and
- > Canterbury Plains, including remnant outwash drainage features, remnant vegetation rivers (margins), tributary systems and springs and wetlands.

There are also specific coastal environments of significant character that include:

- > Pegasus Bay and its estuaries, dunes and former dune systems;
- > Port Hills headlands and bays; and
- > Lyttelton Harbour/Whakaraupo

Wetlands, lakes, rivers and river margins form part of natural character. The most significant of these are:

- > Lake Forsyth/Wairewa;
- > Lake Ellesmere/Te Waihora;
- > Avon Heathcote Estuary/Ihutai:
- > Waimakariri River; and
- > The Avon/Otakaro, Heathcote, Styx, Halswell and Ashley / Rakahuri Rivers and tributaries.

Significant indigenous vegetation and habitats also form part of outstanding landscapes. It is a matter of national and regional importance to protect outstanding natural features and landscapes and any future urban development must have respect for them.

During the development of the Strategy a significant amount of work was done to identify outstanding landscapes and areas where development should be avoided.

6.13.2 Growth Issues

- > Outstanding landscapes, landscapes generally and landscape features are valued differently at national, regional, sub regional, district and local levels, as well as by different sectors within communities, e.g. local and resident communities, developers, tourist operators etc.
- A consistent approach is needed to manage areas of contiguous landscapes.
- Outstanding landscapes can be vulnerable through changes in key land use, especially urban settlement.

6.13.3 Key Approaches

- The reviewed Regional Policy
 Statement adequately and comprehensively addresses landscape issues
- > Processes, including urban limits tools, for protecting and managing outstanding landscapes.
- Developing and maintaining effective partnership arrangements with Tangata Whenua to protect and manage values for outstanding landscapes.



6.13.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Identify regionally significant landscapes and develop landscape protection policy in the Regional Policy Statement.	ECan	CCC, SDC, WDC, DOC, NZHPT		RPS		RPS Review period
(2) Develop a Lyttelton Harbour/Whakaraupo Landscape Protection Programme.	CCC	Private partners		Purchase, covenants, management agreements, planning instruments etc		2009
(3) Establish a consistent cross boundary approach to protect and manage significant landscapes.	SDC, WDC, CCC	ECan, DoC		City/district plans and at operational levels		TBC
(4) Ensure Outline Development Plans address the protection of significant landscapes and where appropriate restore, natural/cultural/heritage landscape features.	SDC, WDC, CCC	ECan, DoC, NZHPT		City/district plans and at operational levels		ТВС
(5) Present to the NZ Coastal Policy Statement Review the relevant landscape issues at stake.	ECan	CCC, WDC, SDC, DoC		NZCPS		NZCPS Review period 2006/07



6.14 Air Quality

6.14.1 Explanation

Air quality is an issue of widespread concern in Christchurch, Rangiora and Kaiapoi, largely associated with poor wintertime air quality. Emissions from home heating are the major cause of wintertime air pollution (in Christchurch home heating contributes approximately 80% of particulate matter (PM10)8, while motor vehicle and industrial emissions contribute approximately 10% each) Geography and meteorology contribute to this through cold air being held under layers of warmer air, trapping air pollution near the ground. The economic impact for Christchurch alone is estimated at more than \$150 million per year and the impacts on health are estimated at \$118 million per year9.

National Environmental Air Standards have been set for particulate matter (PM10), carbon monoxide (CO), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), and ozone (O₂). Three airsheds¹⁰ in Greater Christchurch have been identified (Christchurch, Rangiora and Kaiapoi) and these communities will require assistance to meet the PM10 standard. In Christchurch this is partly being addressed by the Clean Heat Project, which provides financial support for households to install insulation and cleaner forms of heating. Industry will be affected by this standard for all future emissions.

Air quality will be addressed through changes to urban form, new housing and increased public passenger transport.

Implementation of the NRRP Chapter 3

– Air Plan, will address air quality issues in Greater Christchurch.

6.14.2 Growth Issues

- > Use of wood and coal as the primary source of home heating lead to poor wintertime air quality in much of the area
- New homes in Rangiora and Kaiapoi are permitted to install wood burners as the primary source of heat and this will continue to contribute to these towns' poor winter air quality.

6.14.3 Key Approaches

- > Develop and implement building codes that require clean and efficient heating systems and research options for centralised heating systems.
- > Central government legislation and funding to upgrade existing housing stock and make homes warmer.
- > Urban design standards require new developments are sited for energy efficiency and for optimal use of solar gain.
- Appropriate reliable energy supplies for use during adverse weather events.
- > Encourage insulation, double glazing and solar water heating on all homes.
- > Promote energy efficient incentives that provide better air quality, such as the Clean Heat Project.
- > Central, regional and local government work with the industrial sector to reduce emissions to air and improve air quality.

² Particulate matter is less than 10 microns in diameter.

³ Health and Air Pollution in New Zealand, 2005 p 59.

⁴ 'Airsheds' are specified areas set for National Environmental Standards for air quality.

6.14.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop Air Plan provisions for Kaiapoi	ECan	WDC	Internal	Air Plan	Air Plan	2007
and Rangiora.						
(2) Resolve and implement a Clean Heat	ECan	WDC	Significant	LTCCP	Air Plan	2008
Strategy for Kaiapoi and Rangiora.						
(3) Develop an industrial emissions	ECan	CECC, CMA	To be		Air Plan	2008
programme.			determined			



6.15 Natural Hazards and Climate Change

6.15.1 Explanation

The location and form of any development must take account of present and future natural hazards to avoid and minimise risks to health, property and the environment. Geological processes and climate change must be considered when taking a long-term view of urban development.

The management of natural hazards in Greater Christchurch is addressed through many of the programmes and policies of the councils. A level of uncertainty surrounds identification and management of longer-term risks. It is vital that planning and development processes ensure resilience for the community.

The most serious natural hazards associated with the study area in order of priority, based on likelihood and impact, are: fire, earthquake, drought, flooding, sea level rise, tsunami, strong winds and landslides. Reduced groundwater and water quality along with limited drinking water availability are potential threats as a result of climate change and farming intensification.



6.15.2 Growth Issues

- > Increasing extreme events e.g. coastal storm surges, storm flooding, drought.
- Impacts of climate change e.g. sea level rise and more extreme events.
- > Access to a sufficient flow and volume of water for fire fighting purposes.
- > Resilience of the built environment to natural hazards, e.g. earthquakes and liquefaction.

6.15.3 Key Approaches

- > Proactively identify, avoid and mitigate natural hazards and establish systems and procedures of response.
- > Educate the community about natural hazards and how to respond to them to increase community resilience.
- > Use national legislation, standards and codes of practice for appropriate design, construction and land development.
- > Take an adaptive approach to natural hazard management.
- > Link the growth projects of the Strategy with the CDEM plans.
- > Avoid development in areas subject to high likelihood of natural hazard/s.

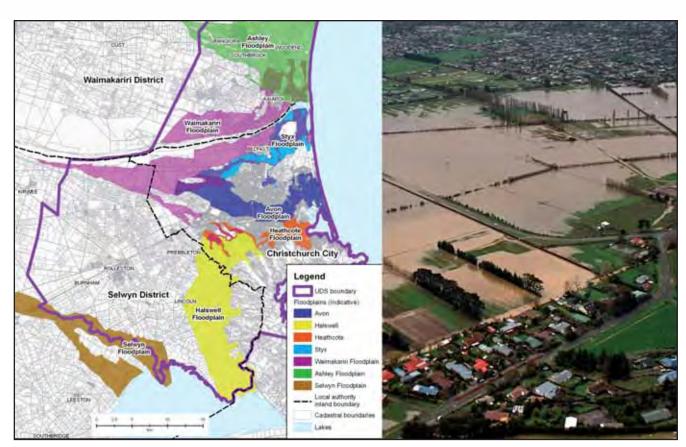


Figure 22: Map of floodplain and flooding.

6.15.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop an agreed scenario for Greater Christchurch of the scale, timing and effects of climate change as a basis for planning policy development.	UDSIC	ECan, CCC, WDC, SDC, MfE, MED	Internal	RPS	Sustainable Energy, Waste Minimisation, Water Supply CDEM	ТВС
(2) Advocate for and apply a national policy framework that will reduce greenhouse gas emissions.	UDSIC	ECan, CCC, WDC, SDC, MfE, MED	Internal	RPS	Sustainable Energy, Waste Minimisation, Water Supply CDEM	TBC
(3) Investigate options for managing existing and future development in areas at risk from coastal flooding, flooding and earthquake risk.	UDSIC	ссс	Internal	DP's	6.21	Ongoing
(4) Provide sufficient coastal buffer zones to allow for natural coastal processes and inland migration of coastal ecosystems.	UDSIC	ССС	High	DP's, LTCCP		Ongoing
(5) Upon adoption use this Strategy as a basis for Civil Defence Emergency Management planning.	CDEM Group	CCC, WDC, SDC, ECan	Internal		CDEM	2007

Encourage Prosperous Economies

6.16 Population and Labour Force

A prosperous economy is one that is dynamic and forward thinking for a sustainable future. It is an economy that strives to be self-reliant, resilient and resource efficient. To achieve this goal the Strategy addresses population and labour force, business land, activity centres and corridors and business infrastructure.

6.16.1 Explanation

A critical part of any successful growth management Strategy is anticipating change in labour force numbers and demand across business sectors.

Population growth projections suggest there will be growth in the labour force for approximately the next 20 years. Beyond this point labour force growth in most areas of New Zealand will be static. Targeting international immigration is one method of increasing the labour force.

There is a relationship between the age structure of the population and numbers of people looking for employment.

This is a significant matter that needs to be addressed during the first phases of the Strategy implementation.

6.16.2 Growth Issues

- Loss of specific skills sets within the labour force.
- > Changes in population age structure that result in more people retiring from, than coming of age to join, the work force.
- > Loss of young and skilled people from the area.
- > Changes in immigration policy.

6.16.3 Key Approaches

- > Promote /encourage Greater Christchurch as a great place to live, work and play.
- Maintain an adequate supply of labour with appropriate skills to underpin successful sub-regional economic development.
- Align education and skills to meet anticipated changes in the economy.
- > Advocate for incentives that encourage skilled workers to remain active in the labour force.
- Develop a good understanding between quality of life measures and the retention of a skilled labour force, especially the young.
- > Advocate for incentives to extend the working lives of those currently in the labour force.

6.16.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Undertake a skills gap analysis which anticipates changing labour force needs in the next ten years.	CCC	SDC, WDC, CDC, ENC, CECC	Internal		CREDS	TBC
(2) Develop in conjunction with Central Government an immigration policy which meets the future labour force needs of the South Island.	UDSIC	CDC, ENC, CECC, SDC, WDC, CCC	Internal (UDS Budgets)		CREDS	TBC
(3) Investigate and quantify the benefits of opportunities necessary to retain the 'youth' component of the labour force.	CDC, ENC	CCC, CECC SDC, WDC	Internal		CREDS	TBC

6.17 Business Land6.17.1 Explanation

Business land comprises a broad range of commercial, industrial, research and tourist activities. The commercial sector is made up of retailing, administration, office, finance, commerce and ancillary leisure and entertainment activities. Most commercial activity exists within the sub regions activity centres including the Christchurch central city. Industrial activities are typically grouped into six main sectors being manufacturing, transport and storage, construction, wholesale trade, agriculture, natural resources and utilities.

Greater Christchurch also contains a number and range of research centres and agricultural research farms located in close proximity to each other that are of strategic importance from a local and national perspective. Their retention and continued operation is of importance to the regional economy.

The central city is the primary focus of commercial activity and has the greatest diversity, scale and intensity of activities. Activity centres, such as Riccarton, Papanui - Northlands, Shirley - the Palms and Linwood - Eastgate, also provide a commercial activity, but are primarily focused on retailing.

Smaller activity centres, such as Rangiora, Rolleston, Kaiapoi, Lyttleton, Barrington and Hornby, provide less diverse commercial activities. Other activity centres, such as Edgeware, St Martins, Woolston, Lincoln, Addington and Hillmorton cater predominantly to the convenience-based needs of local residents.

The area has fourteen core industrial nodes being Belfast, Harewood, Bishopdale, Burnside, Bromley, Heathcote, Sydenham, Middleton, Christchurch International Airport, Sockburn, Islington, Rangiora, Kaiapoi, Rolleston and Lyttelton. Middleton and Sydenham are the dominant nodes, employing 34% of

the industrial sector workforce.

For the sub-region's economy to remain stable, local government and the business community need to understand and respond to long-term trends in the composition of trade, changing local and global demand for business activities, new and evolving business sectors and industrial employment. Work is needed on how these trends impact on the supply and demand for business land.

Based on an additional growth of \$1 billion per annum in retail sales in 2021 in comparison to the present level of spend, it has been estimated that an additional 33 hectares of retail land will be needed to satisfy growth demands. Existing commercial areas should



largely absorb much of this forecasted growth over the next 16 years, although the emergence of substantial areas of residential growth (infill and greenfield development) should be met with the provision of accessible commercial development. This will require revisiting the existing scale and distribution of activity centres supporting these growing neighbourhoods and promoting a wider range and diversity of employment, social and retail activities.

The sub-region has significant growth potential for commercial office space. Based on the existing 2005 employment structure in relation to the various 'new economy' business activities, and projected population growth of 63,700 (based on medium-high projections), recent analysis¹¹ indicates a demand for some 290,000 square metres in gross office floor space for 'new economy' activities. The term 'new economy' describes high-value business services that are developed through information, knowledge and innovation to increase their competitive advantage. New economy workers include computer technicians, architects, fashion designers, pharmaceutical researchers and policy analysts.

The total amount of industrial zoned land is nearly 2,400 hectares, of which an estimated 28% is vacant. Christchurch City has the largest amount of vacant land at 540 hectares. Nonetheless, recent analysis indicates that not all of this vacant land is available for immediate use and that further land release for particular industries will be appropriate.

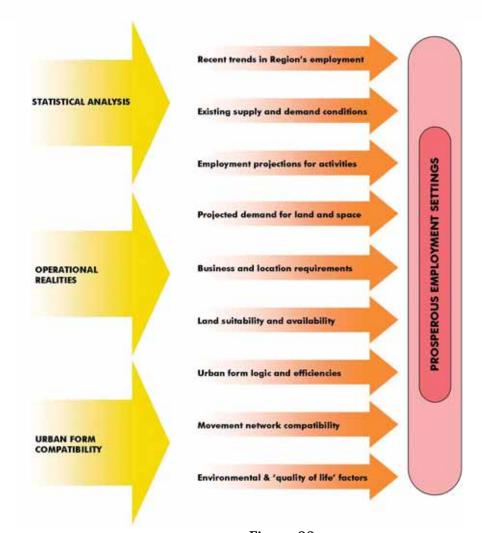


Figure 23: Conceptualisation of the key methodological aspects of determining a place-based business land need prediction.

¹¹Derek Kemp 'Prosperous Places' UDS Employment Report 2006.

6.17.2 Growth Issues

- The continued decentralisation of commercial activity impacting on the economic viability of the central city.
- Centres and large format retailing competing with the central city and town centres, causing the stagnation and/or decline in district activity centres.
- Impact of dispersed business activity on the efficiency of transport networks.
- Displacement of industrial activities by retail developments.
- Lack of land to meet the future needs of business, particularly to accommodate expected growth in 'new economy' business and key industrial sectors, such as freight and logistics operations.
- > Current local government policy acting as a barrier to the establishment of 'new economy' businesses.

6.17.3 Key Approaches

- > Revise council policies to:
- focus and intensify business activity (wherever possible along key passenger transport corridors)
- improve business areas to meet changing needs
- protect business activities from incompatible activities and
- actively facilitate an increase in affordable commercial floorspace
- > Provide business locations that:
- offer certainty for business functions and
- are located near to community services
- > Review the core function of existing commercial and industrial areas.
- Manage adverse effects on strategic nationally and regionally important research centres and farms.
- In the allocation of business land consider:
- Proximity to appropriate labour supply
- · Location of suppliers
- Infrastructure availability, capacity and quality
- · Land and property costs
- · Location of customers/target markets
- Room for expansion and growth and
- Access to major transport hubs and corridors
- · Effects on wider transport networks

- > Promote and facilitate the revised role and function of industrial nodes.
- > Assist relevant organisations in promoting the Greater Christchurch area nationally and internationally for business development.
- > Review of regulatory processes to control the establishment and operation of industrial activities. A key outcome of the review will be the identification of barriers in the regulatory process that unduly hamper businesses from entering and operating within the Greater Christchurch area.
- > Develop a staging programme for the release of industrial land based upon infrastructure constraints and achieving consolidation objectives.
- Anchor sufficient future industrial land to meet the needs between 2026 and 2041 as part of the proposed urban limits amendments to the regional policy statement.
- There will be continuing need for retail space to be developed as the area grows.

Action	Lead	Support	Cost	Implementation	Linked to	Timing
	Agency	Agencies	Implications	Tools	Strategy	
 (1) Develop Business Land Management Strategy for the sub region that includes strategic directions for: Commercial activity, with regard to the provision of adequate and appropriately located land for retailing, administration, office, finance, commerce and ancillary leisure and entertainment activities; Industrial activity, with regard to the provision of adequate and appropriately located land for manufacturing, transport and storage, construction, wholesale trade, agriculture, natural resources and utilities; and Employment, with regard to attracting and maintaining a skilled workforce. 	ccc	WDC SDC CDC	Internal	City and District Plans, LTCCP, Distribution Plans	Visitor Strategy, CREDS	2008
(2) Develop a central city commercial activity retention and facilitation programme targeting retail anchor activity, entertainment, leisure and tourist accommodation.	CCC	CDC	Partially funded	Stage II Central City Revitalisation Strategy		2006- 2009
(3) Develop an office distribution plan that supports the central city and provides direction to the location of all types of office activity, in particular, high quality large scale and 'new economy' office space.	ССС	SDC WDC CDC The Property Council	\$75,000 in 06/07 LTCCP budget. Additional funds may be needed	City and District Plans, Stage II Central City Revitalisation Strategy	LTCCP 2006-2016 Economic Development Strategy	2006- 2009
(4) Develop a retail distribution plan to provide direction to the location of additional retail floorspace, with a specific focus on population growth areas and activity centres.	CCC	WDC, SDC, TNZ, ECan, CDC, The Property Council	Medium	City and District Plans, LTCCP, Distributions Plans	LTCCP, Economic Development Strategy	2006- 2013
(5) Prepare plans for consolidation of activity centres to ensure new or expanded commercial areas are developed in an integrated manner.	CCC, SDC, WDC	TNZ, MED	High	City and District Plans, LTCCP	LTCCP, Economic Development Strategy	Ongoing

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(6) Investigate options for the downsizing, rezoning or promotion of mixed use activity for those activity centres no longer fulfilling a sustainable commercial economic role and function.	CCC	Agenties	Internal	City and District Plans, LTCCP	Economic Development Strategy	2006- 2013
(7) Define the role and function of existing and potential industrial nodes with regard to locational criteria, growth projections and environmental constraints.	SDC	CDC CCC WDC ECan TNZ	Internal	City and District Plans, LTCCP	Economic Development Strategy	TBC
(8) Develop an industrial distribution plan to provide direction to the location of new and/or expanded industrial nodes.	CCC	CDC, SDC, WDC, ECan, TNZ	Medium	City and District Plans	Economic Development Strategy	TBC
 (9) Prepare neighbourhood and/or area plans to ensure new, changing and/or expanded industrial areas are developed in an integrated manner. Priority areas are identified as being: South-West quadrant of Christchurch; Sydenham; Eastern fringe of the Central City; Belfast; Rolleston; Lincoln; and Rangiora 	CCC WDC SDC	TNZ, ECan	Medium (each plan)	City and District Plans, LTCCP	Economic Development Strategy	As Identified
(10) Promote and facilitate the revised role and function of industrial nodes.	CCC	CDC, SDC, WDC, ECan, TNZ	Internal	City and District Plans, LTCCP	Economic Development Strategy	Ongoing
(11) Assist relevant organisations in promoting the Greater Christchurch area nationally and internationally for business development.	CDC	CDC, SDC, WDC, ECan, TNZ	Internal	City and District Plans, LTCCP	Economic Development Strategy	2006- 2013
(12) Review regulatory processes that control the establishment and operation of industrial activities.	UDSIC	CCC, SDC, WDC, ECan, TNZ	internal	City and District Plans, LTCCP	Economic Development Strategy	At first review
(13) Develop a staging programme for the release of industrial land based upon infrastructure constraints and achieving consolidation objectives.	CCC	CDC, SDC, WDC, ECan, TNZ	Internal	City and District Plans, LTCCP	Economic Development Strategy	ТВС

6.18 Activity Centres and Corridors

6.18.1 Explanation

Activity centres are the commercial centres that provide the focus for services, employment and social interaction.

They are where people shop, work, meet, relax and often live. Usually well served by public passenger transport, activity centres range in size and intensity of activities, generically defined within a retail hierarchy. Not all activity centres are necessarily areas for intensification.

The central city is the main activity centre for both Christchurch City and subregion, followed by the activity centres of Riccarton, Papanui-Northlands, Shirley—the Palms and Linwood—Eastgate. District activity centres and town centres include Rangiora, Rolleston, Lincoln and Kaiapoi, as well as Barrington and Hornby within suburban Christchurch.

There is usually considerable investment in activity centres from both the private sector, in terms of buildings, and the public sector, in terms of public spaces, landscaping, transport infrastructure and artworks. Generally the level of investment is related to the scale of the activity centre. There is a considerable reduction in commercial and employment diversity outside of the central city.

Within Christchurch, the activity centres (Riccarton, Papanui-Northlands and Linwood-Eastgate) and the district activity centres (Halswell, Barrington, and Hornby) have been selected as consolidation focal points. These are activity centres located at strategic points along regional, area or district arterial roads. They are well served by public passenger transport and surrounded by higher (low-medium and medium) density living zoning. They accordingly serve as focal points for important public and private services facilities by providing for the efficient grouping of mixed business and community activities.

Consolidation focal points are complemented by corridors of medium to high housing density, the assumption being that concentrating housing density along the regional and local arterial road and rail networks increases public passenger transport catchments.

6.18.2 Growth Issues

- Maintaining and promoting self sufficient activity centres.
- Closing the gap between the existing activity centres and what is proposed.
- > How to provide certainty for existing activity centres to ensure sustainable investment and growth into the future.
- > Where and how to locate public and private services and facilities in activity centres.
- > How to ensure local centres enhance community character and identity.
- Providing effective multi-modal transport access to local activity centres.
- > Activity centres are designed and developed in a sensitive way to ensure they contribute to the surrounding environment.
- Providing for quality higher density housing.

6.18.3 Key Approaches

- > Initiate revitalisation programmes for activity centres.
- > An integrated planning framework.
- > Improve transport connections in existing activity centres.
- > Develop significant new activity centres around transport interchanges as the main anchor.
- > Co-location with and integration of public facilities into activity centres.
- > Develop private/public partnerships.
- > Integrate activity centre streets into the local street network.
- > Provide a well-connected road network with co-located access for all users.
- Design and plan street edges to enhance the pedestrian environment.
- > Provide generous, purposeful and welldefined public spaces.
- > Physically connect surrounding residential neighbourhoods to the activity centre.
- > Provide and reinforce a focus and sense of place or identity for the local community.
- > Minimise water consumption and stormwater runoff from new buildings.
- Minimise energy consumption of new buildings.
- > Intensify activities along street frontages.

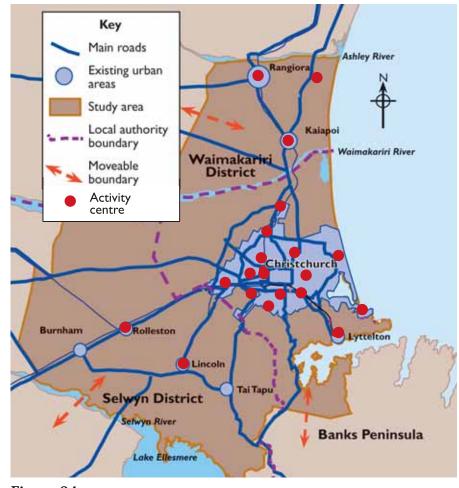


Figure 24: Map of Activity Centres

Stable socio-economic context

Figure 25: Stable socio-economic context.



6.18.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
1) Establish where and to what extent consumer demand exists in respect of existing activity centres and their public and private roles and functions.	CCC, WDC & SDC		Medium for consultant costs	District plans		ТВС
2) In the Christchurch City Plan, review existing activity centres and consolidation focal points and retain or remove as appropriate.	CCC		To be determined	City plan		TBC
3) In the city and district plans, identify and rezone as appropriate further activity centres and consolidation focal points.	CCC, WDC & SDC		To be determined	District plans		Ongoing
4) Identify and remove unnecessary impediments to business investment and growth.	CCC, WDC & SDC	CDC ENC	To be determined	District plans & LTCCPs DCPs		Ongoing
5) Defend appeals on Variation 86 to the Christchurch City Plan on retail distribution.	CCC		Internal			2009
6) Finalise and adopt the draft Commercial Strategy.	CCC		Internal			2007
7) Promote the area nationally and internationally for business and living.	CCC	CDC, ENC, WDC, SDC	To be determined		Visitor Strategy	Ongoing
8) Investigate the use of suburban railway stations and corridors to reinforce activity centres.	CCC	OnTrack, Toll New Zealand	To be determined	City plan & LTCCP		Ongoing

6.19 Business Infrastructure

6.19.1 Explanation

An innovative, high value economy requires good business infrastructure to support economic growth, facilitate diversity and encourage new businesses. Business infrastructure includes the transportation network, energy capacity, telecommunications and business environments, which provide a competitive advantage in a global economy.

The Strategy area is globally linked through the Lyttelton Port, Christchurch International Airport, a well serviced rail system and a modern, roading network. The capacity of these transport hubs and networks must be managed and developed in a timely manner to meet the changing and growing demands of business.

There is considerable opportunity in the Strategy area to support competitive advantage in high amenity business areas, which new economy businesses require.

Competitive advantage can also be provided through the capacity and reliability of electricity supply and improved digital capability and telecommunication infrastructure.

6.19.2 Growth Issues

- Accessible and efficient links between businesses to offset an increasing reliance on fuel and levels of congestion.
- > Demand for wireless technology and a highly advanced digital regional network for global connectedness through communications technology.
- On-going operation and expansion of Airport and Port services and functions.
- > Maintenance and enhancement of tourist infrastructure.
- > Resilience to change (environmental, technological, financial, social) and natural hazards.
- Efficient and cost effective growth in transport corridors, networks and links, and development of transport modes.
- Extensive lead times and planning delays in the installation of new infrastructure.
- > Certainty of electricity supply where national energy production capacity is currently at a level below demand growth.

6.19.3 Key Approaches

- > Partnerships with key infrastructure providers for:
- The sustainable provision of reliable, high quality infrastructure; and
- Ongoing development of key infrastructure nodes (the Christchurch International Airport and Lyttelton Port), infrastructure corridors (the transport and rail networks and electricity transmission corridors) and networks (digital communications).
- > Development of 'point of difference' infrastructure, including the facilitation of high amenity business and development areas.
- > Utilise political and private sector pressure for certainty of investment and efficiency of timescales.

Manage adverse effects on nationally and regionally important research centres and farms.



6.19.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Form a partnership to sustain pressure on network utility operators and central government to develop, improve and maintain modern, cost-competitive electricity infrastructure for surety of supply.	ECan, CECC	Transpower, Trustpower, Meridian Energy and Orion, CCC, WDC, SDC.	To be determined.	Mayoral Forum, Central Government intervention	CREDS RPS Business Land Infrastructure Transportation	ТВС
(2) Develop a co-ordinated plan for the provision of high functioning telecommunications infrastructure for equitable access across the sub- region.	CCC	ECan WDC SDC All telecommunications providers	To be determined	UDSIC LTCCPs	CREDS	TBC
(3) Co-ordinate an audit of current and planned sub regional infrastructure to highlight any issues of quality and resilience.	CCC	MED, CDC ENC, SDC, WDC, TNZ, Orion, Telecom, Transpower,	Internal		LTCCP 2006- 2016. RLTS	ТВС



Manage Growth

6.20 Integrated Land Use, Infrastructure and Funding

6.20.1 Explanation

A critical part of successful growth management is linking the demand for land with infrastructure planning and equitable funding, in a timely manner. To date this has been a significant challenge, in particular for Christchurch City.

As a result of shortages of unserviced greenfields land, a significant amount of development has spilled into existing settlements in both Waimakariri and Selwyn. This development, along with on-going rural residential development, is in addition to what may have occurred had there been zoned and serviced land available on the edge of Christchurch City.

While there is a challenge for water, wastewater and stormwater services, the biggest obstacle to be overcome is adequate transport infrastructure, in particular the Southern and Northern Motorways. Unless infrastructure is provided in a timely manner, there will be ongoing pressure on the existing smaller settlements beyond Christchurch City to accommodate a disproportionate share of growth. The situation may also give rise to a demand for additional new towns, such as Pegasus. However, in providing improved infrastructure, the Strategy will also need to manage the potential unintended consequences of a more efficient transport system causing dispersed growth.

6.20.2 Growth Issues

- Ensuring that there is an adequate supply of serviced land available to meet market needs.
- > Securing adequate funding to underpin the staged development of all land required for future urban growth.



6.20.3 Key Approaches

- > Zoning land that has the capacity to be serviced and funded in an equitable manner.
- > In order to avoid potential land shortages from 2009-13, ensuring that rezoning, infrastructure provision and funding come together in a timely manner.
- > Planning for infrastructure and its funding occurs in parallel with future land use planning.
- > Carry out investigations into the possibility of allowing, in some circumstances, limited amounts of future greenfields development in anticipation of full infrastructure services becoming available within 1-2 years.
- > Accepting the principle of growth paying for growth.

6.20.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Reflect within the LTCCPs the infrastructure costs required to support the long term subregional growth pattern, including staging and timing.	UDSIC	CCC, SDC, WDC, ECan	Internal	LTCCP		2010-2011
 (2) Ensure that development contribution policies, and in particular units of demand, reflect the infrastructure costs arising from development: Ensure that development contributions as far as practical fund the infrastructure costs arising from growth in accordance with the sub regional settlement pattern. 	CCC	SDC, WDC	Internal	LTCCP	Adopted development contributions policy	2010 2011
(3) Ensure central government, in particular LTNZ and Transit NZ, are aware of the critical timing for the transport funds necessary to underpin the key elements of the Strategy.	UDSIC	LTNZ SDC, WDC, ECan, TNZ	Internal	LTNZ and TNZ 10 year programmes	RLTS	2007

6.21 Stormwater

6.21.1 Explanation

Urban development significantly increases the volume of runoff to, and increases the intensity and volume of peak flows within, waterways. This increased runoff causes frequent local flooding, erodes streambeds and banks, and washes contaminants and sediments into waterways, wetlands, harbours and beaches.

Where land use changes from rural to urban the amount of impervious surfaces, such as roofs, sealed roads and paths, increases. This results in higher intensity flow events and greater risk of flood. Degradation of waterways can start at relatively low levels of imperviousness (10 – 20 %). Roads and backyards also contribute to an increase in the concentrations of heavy metal contamination, organic nutrients and sediments that end up in waterways. Roads contribute to sediment entering waterways particularly where roads have been cut into banks.

Stormwater is a significant constraint for growth in parts of Christchurch because of high winter water tables and the need to provide significant swales and retention basins.

6.21.2 Growth Issues

- > Urbanisation increases the volume and decreases the quality of stormwater runoff.
- > Urbanisation increases levels of organic nutrients in waterways that encourage weed growth and hydrocarbons, heavy metals, sediment and chemicals.
- > Erosion increases through the removal of earth during subdivision, construction, redevelopment, land filling and road works.
- > Erosion and sedimentation from poor stormwater management blocks drains and increases flooding, reduces water quality, damages aquatic ecosystems and degrades the integrity of riparian zones.
- Litter from surrounding land use blocks drains thus increasing maintenance and management needs.
- > An absence of water sensitive urban design and the intensification of development leads to increased stormwater run off.

6.21.3 Key Approaches

- Support land developers to implement innovative and effective stormwater management approaches.
- > Provide incentives to developers or development contribution off-sets for developments that meet low impact urban design subdivisional guidelines.
- Continue upgrading existing systems and naturalisation of waterways.
- Catchments of estuaries or waterways more susceptible to increasing sediment loads are managed to specifically reduce sediment loads from receiving waters.
- > Adopting water-sensitive urban design as part of broader low impact urban development and design principles.
- Minimising the amount of impervious surfaces in developments.
- Encouraging rainwater collection and reuse.
- > Using low impact technology for stormwater treatment and disposal.
- Introduce a region-wide litter approach that includes environmental education, at-source preventative measures and gross pollutant trapping.
- > Upgrade control of point source discharges to meet the water quality standards set by the NRRP.
- Introduce 'at-source' controls like water tanks, on-site retention and infiltration, and landscape measures.



Examples of 'conventional' responses to blue network issues at the local level. These often poorly relate with their settings, creating risks for flash flooding, lower property values and lowered safety levels.



Examples of blue network responses that focus on also improving local settings. These often result in increased levels of amenity and property value, greater surveillance and hence greater safety levels. Approaches that focus on slowing the movement of water also help reduce the risks of flash flooding and erosion/coastal degradation.

6.21.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Align stormwater discharges to land or water with the operative NRRP.	SDC, WDC, CCC	ECan	High	NRRP, LTCCP District Plans	CCC Surface Water Strategy, CCC Waterways and Wetlands AM Strategy, 6.12	Ongoing
(2) Prioritise and improve treatment of existing discharges to give effect to the operative NRRP.	SDC, WDC, CCC	ECan	High	Resource Consents AMPs	CCC Surface Water Strategy, CCC Waterways and Wetlands AM Strategy, 6.12	Staged starting 2007
(3) Ensure Christchurch International Airport has stormwater protection plans and programmes that protect the pristine water quality of groundwater recharge zone 1.	ECan	CCC	High	NRRP, LTCCP, City Plan	CCC Surface Water Strategy, CCC Waterways and Wetlands AM Strategy, 6.12	2008
(4) Upgrade Christchurch City's storm water treatment systems to provide for the consolidation anticipated by the Strategy.	CCC	ECan	High	NRRP, LTCCP, City Plan	CCC Surface Water Strategy, CCC Waterways and Wetlands AM Strategy, 6.12	Ongoing
(5) Appropriate provision for protection from potential flooding, allowing for high ground water zones, within identified growth areas.	ECan	SDC, WDC, CCC	High	NRRP, LTCCP, District Plan	CCC Surface Water Strategy 6.12	Ongoing

6.22 Wastewater

6.22.1 Explanation

Current methods and processes for the treatment and disposal of waste water have improved markedly from past approaches. There has been significant progress made over the last ten years with the development of ocean outfalls for sewage in Waimakariri District and Christchurch City. The majority of beaches are clean, sewer overflows are being reduced and nutrient removal rates are appropriate. On Banks Peninsula there are still problems with the disposal of wastewater and the condition of infrastructure.

To maintain and improve environmental and social gains it is essential to continue to work towards more sustainable outcomes. This includes:

- Upgrading our major coastal and river outfalls, ensuring reliability and clean beaches and waterways.
- A demand management program, continuing to reduce water demand.
- Develop a Water Supply Strategy to ensure the security and delivery of clean safe drinking water, and
- Continuing to reduce sewage overflows.

Future infrastructure provision, without thought for subsequent development intensity, is likely to lead to capacity constraint issues and demand for further zoning and potentially expensive upgrades.

Although there is some sharing of infrastructure between some of the partner councils, generally each council has sought to serve their communities with individually funded and located infrastructure. The Strategy encourages a collaborative approach to infrastructure provision and funding to facilitate predicted growth in Greater Christchurch.

With an increasing focus on sustainable building design, the Strategy will encourage more sustainable approaches to integrating land use and infrastructure.



6.22.2 Growth Issues

- > Tangata Whenua has a cultural objection to the discharge of wastewater to waterways and its potential impact on kai moana.
- Innovations in technology may arise in the future that may enable alternative methods of wastewater treatment and disposal.
- > A number of newly identified, significantly sized, growth pockets have no current wastewater infrastructure.
- Decentralised wastewater systems are not yet economically viable. We should continue to explore these options on a cost-benefit analysis taking full environmental costings into consideration.
- Independent provision of infrastructure does not capitalise on opportunities for efficiencies of scale.

6.22.3 Key Approaches

- > An integrated, sustainable approach to the three urban waters (water supply, wastewater and stormwater) so the use or discharge of one does not impact on the other.
- > Wastewater management is developed with protection of ecological values as a key outcome. Integrated systems to ensure the natural environment can assimilate waste without impacting on resources. Ultimately, design systems to work with the natural environment.
- > All future growth areas meet acceptable health, safety and environmental standards for wastewater treatment and disposal.
- There is a proactive and effective trade waste management regime including waste minimisation and clean technologies.
- > Consider long-term directions for wastewater treatment and disposal such as centralised or satellite plants, new technologies, and disposal options. Completion of modelling of current collection systems is a necessary prerequisite to this work.

6.22.4 Actions / Specific Projects

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Prepare a Wastewater Strategy for	CCC	SDC, ECan	Medium	LTCCP, District	6.12	TBC
growth areas using a collaborative, cross boundary approach.		С&РН		Plans		

6.23 Water Supply

6.23.1 Explanation

Water for Christchurch City is groundwater provided through the extensive aquifer system located below and to the west of the city. The Lyttelton Harbour basin is supplied via a pipe through the Lyttelton tunnel from wells in Heathcote. Kaiapoi is supplied by the coastal aquifer and Rangiora is to be supplied from the same source. Groundwater sources supply both Rolleston and Lincoln.



To maintain and improve environmental and social gains it is essential to continue to work towards more sustainable outcomes that including:

- A demand management programme, continuing to reduce water demand, and
- Developing a Water Supply Strategy to ensure the security and delivery of clean, safe drinking water.

Future infrastructure provision, without thought for subsequent development intensity, is likely to lead to capacity constraint issues and demand for further zoning and potentially expensive upgrades.

Although there is some sharing of infrastructure between some of the partner councils, generally each council has sought to serve their communities with individually funded and located infrastructure.

The Strategy encourages a collaborative approach to infrastructure provision and funding to facilitate predicted growth in the study area.

With an increasing focus on sustainable building design the Strategy will encourage more sustainable approaches to integrating land use and infrastructure.

Water supplies to meet the needs of the Waimakariri District growth areas are either identified or already reflected in the 2006-2016 LTCCP.

6.23.2 Growth Issues

- > Changing land use and climatic change increases demand for irrigation water and reduces recharge.
- > Current planning regimes making it difficult to ensure that development proceeds in a controlled manner, particularly where there are multiple land owners.
- > A number of newly identified, significantly sized, growth pockets have no current water supply infrastructure.
- > Balancing water supply and demand.
- Increasing importance for protection of the aquifer water resource.
- > Current drinking water supplies reaching capacity and future.Potential potable water supplies are being over allocated limiting their future availability in terms of quality and quantity. The Waimakariri River, as a future potable water source, may already be over allocated. Christchurch City's drinking water supply will reach capacity in the near future. Selwyn's water supply faces potential mid to long term impacts from intensive land use on the Central Plains.
- > There is increasing demand for the water resource from ongoing urban growth along with increased demand on systems for the treatment and disposal of wastewater. A sustainable water supply requires a long-term balance between the supply of water and the demand of users. Both reduction in water supply and potential increases in demand are affecting this balance.
- Independent provision of infrastructure does not capitalise on opportunities for efficiencies of scale.

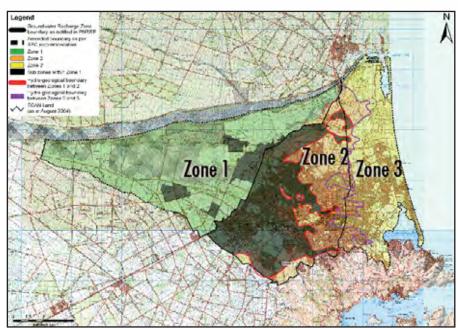
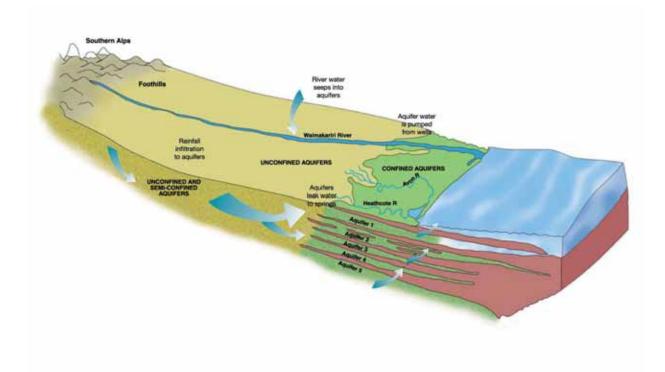


Figure 26: Ground water Recharge zones for Christchurch's water.



 $\label{lem:Figure27:Cross section through the Christchurch aquifer system.}$

6.23.3 Key Approaches

- > An integrated, sustainable approach to the three urban waters (water supply, wastewater and stormwater) so that the use or discharge of one does not impact on the other.
- > Water, wastewater and stormwater management is developed with protection of ecological values a key outcome. Integrated systems to be based on ensuring the natural environmental can assimilate waste without impacting on resources.

 Ultimately, design systems to work with the natural environment.
- > Closely monitor and research emerging issues. Preview the approach to drinking water management and distribution management in the context of emerging research findings. Implement adaptive and responsive management where environmental effects are likely or are occurring.

- Ensure land use does not impact on drinking water zones established in the NRRP and recharge zones in other districts.
- > Monitoring progress on agreed targets and performance standards.
- > Community engagement takes place to ensure the sustainable use of the water resource and the reduction of waste at its source. This should include greater emphasis on water conservation and efficient use.
- > Sufficient drinking water supply planning and investment to support intensified growth in a planned, rather than a reactive manner.

6.23.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop a Water Supply Strategy across the area.	ccc	SDC, ECan, C&PH	Internal	LTCCP	CCC Water Supply Strategy 6.12	2009
(2) Develop protocol for cross boundary water supply infrastructure management.	SDC	CCC		Protocol	6.12	TBC
 (3) Develop Terms of Reference for a technical group involving the partner councils that: Comprises officers from each council. Includes shared funding of joint projects. Shares information, and 	CCC	SDC, WDC, ECan		TOR	6.12	Within 6 months of WS Strategy
Has a shared funding regime where appropriate and cost effective to provide joint infrastructure.						

6.24 Waste Minimisation

6.24.1 Explanation

Population growth and economic activity create greater volumes of waste. More households and businesses consume, and therefore produce and dispose of more waste. There is also waste generated from the development and redevelopment of sites. Currently, the vast majority of resources extracted from the environment end up as solid, liquid or gaseous wastes. The goal of zero waste is to break the links between economic activity and waste generation and to shift social norms to view all by-products as useful resources.

At present, waste generation is closely linked to population growth and economic activity. More numerous and more affluent households and businesses consume and therefore produce and dispose of more waste. This wastefulness can result in environmental degradation and reduce opportunities for future generations.

The regional land fill at Kate Valley is a joint venture between local authorities and private industry. Transwaste Canterbury carries waste and operates the landfill on behalf of its shareholders.

6.24.2 Growth Issues

- Increasing pressure on recycling and waste, collection, processing and disposal facilities.
- > Ongoing pressure on landfill capacity.
- More development resulting in greater waste generation.
- > Wasteful use of resources reducing opportunities for future generations.

6.24.3 Key Approaches

- Integrate waste management that includes, in order of priority, redesign, reduce, reuse, recycle, recover and safe residual waste disposal.
- Promote accountability within communities and business sectors for waste generation.
- Meet and exceed appropriate environmental standards.
- > Work towards achieving zero waste targets.
- Ensure planning and development of new residential and commercial sites allows for the efficient storage and removal of waste.
- > Encourage the source separation of construction and demolition materials on new development sites.
- Attract businesses that result in greater value and less waste.

6.24.4 Actions / Specific Projects

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
 (1) All partner councils consult with communities on the goal of zero waste reduction targets in their waste management plans. • Implement solid waste management plans of the Districts 	All partner councils	ECan,	Internal	Building Code, Council Design Specifications	NZ Waste Strategy, Regional Hazardous Strategy Waste Plan	TBC
(3) Develop appropriate uses surrounding the existing Eco-Depots to protect against reverse sensitivity.	CCC	ECan, SDC, WDC	Internal	DPs	Waste Plan	TBC
(4) Consider options for requiring the recovery of resources from the waste stream, including construction and demolition materials.	CCC	ECan, SDC, WDC	Internal	LTCCP	Waste Plan	TBC
(5) All partner councils establish effective waste minimisation strategies to reduce the waste disposed at the regional landfill at Kate Valley.	CCC	SDC, WDC, MfE, CECC	Internal	Regional Waste Working Group	Waste Plan	High priority

6.25 Rural Residential

6.25.1 Explanation

One of the key outcomes of the Strategy consultation was a desire to maintain the contrast between the boundaries of Christchurch and the towns and townships in Selwyn and Waimakariri Districts, and the surrounding rural land. At the same time there is a strong demand for rural residential opportunities. For the purposes of the Strategy, rural residential lots are considered to be between 5,000 sqm and 1.5 ha, and are seen as providing a living environment of a different character from the rural areas generally.

In Selwyn District, lots up to 1 hectare are provided around some towns and historically rural residential lots have been created in the rural zone away from townships. Similarly in the Waimakariri District, some rural residential lots are adjacent to its main urban areas and small settlements, and others are in rural locations away from residential areas. However there is some evidence that the number of new lots being created in this size range is not meeting the market demand.

The minimum rural lot size for subdivision and dwellings in Waimakariri District, Christchurch City, and for most of Selwyn District within the sub-region area is 4 hectare. These lots are also popular for rural living. Around 200 new 4 hectare lots are created each year in the sub-region. There is evidence that at least some buyers of 4 hectare lots would prefer a smaller rural residential lot, but

are unable to purchase one because of the shortage in supply.

As with other parts of the land and housing market, the demand for rural living operates across local authority boundaries, making it important that the Strategy partners achieve a coordinated approach.

However rural living results in a very dispersed settlement pattern, increased traffic movements and a potential change in rural character as new houses and plantings alter the open vistas typical on the Canterbury Plains. It may also make it difficult to return the land to full agricultural production, should economic changes make this desirable in the future.

The existing approach to rural living could have the potential to undermine the consolidated approach to growth the community has chosen.



6.25.2 Growth Issues

- > The current trends in rural living in the rural zones in Selwyn and Waimakariri Districts if sustained are considered to present a moderate risk to achieving the UDS Strategy.
- > The nature of the landscape in the rural zone is changing as more 4 hectare rural lots are developed.
- > As land is developed for rural living, options for future productive agricultural use of the land are reduced, particularly where this occurs on versatile soils.
- > There is some evidence that the lack of available lots between 5,000 sqm and 1.5 hectare is encouraging people to buy 4 hectare lots for their rural living. This increases the amount of land people are taking up for rural living and leaves some purchasers with land they find difficult to manage or utilise.
- Constraints within the area could encourage inappropriate development in rural zones outside of the area.
- > Clustering rural residential lots of 5000 sqm to 1.5 hectare in identified locations adjacent to townships means that they are more easily serviced for water and sewage disposal and closer to community services like schools and shops.
- > Rural residential development on the outskirts of towns, if not well located and designed, can constrain future urban growth. Experience has shown that redeveloping rural residential areas for full urban development is problematic.

6.25.3 Key Approaches

- Retain the 4 hectare subdivision standard in the rural zones in Waimakariri and Selwyn Districts and Christchurch City, for the short to medium future.
- Monitor the number of new 4 hectare blocks being created within the area on a yearly basis, and assess the percentage of new development that is occurring in the rural zone.
- > If it proves necessary to achieve the Strategy, review the 4 hectare subdivision standard.
- > Develop a rural residential zoning policy and assessment criteria for use by all the Strategy partners, incorporating best-practice development of rural residential lots, for example clustering, and the use of design and landscape controls.
- > Provide further lots between 5,000 sqm and 1.5 hectare in size. Stage the release of these lots to ensure that while choices in lot size are maintained, an increased demand for rural living is not created.
- > Manage adverse effects on nationally and regionally important research centres and farms.

6.25.4 Actions

Action	Lead Agency	Support Agency	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop a rural residential zoning policy and assessment criteria for use by all the Strategy partners, incorporating best-practice development of rural residential lots, for example clustering, and the use of design and landscape controls.	SDC	WDC, CCC, ECan	Internal	RPS, District Plan		2007
(2) Reflect in the City and District Plans the locations for rural residential lots identified in the Strategy Settlement Pattern.	SDC, WDC, CCC	ECan	Internal	District and City Plans		2007/08
(3) Monitor the creation of new blocks for rural living, and the percentage of growth within the Strategy area, which is occurring in the rural zone.	SDC, WDC, CCC	Internal	Internal	Monitoring Programme	6.32	Ongoing but reported on at each review
(4) Review the effectiveness of this aspect of the Strategy at the first full review.	UDSIC	SDC, WDC, CCC, ECan	Internal	Monitoring Programme	6.32	2010
(5) At the first strategy review look at opportunities for rural residential to be provided within CCC boundaries	CCC		Internal	RPS	6.32	2010

6.26 Transport

6.26.1 Explanation

Transport includes all forms of movement and infrastructure to facilitate movement. Transport is the most significant area of infrastructure provision given its large public and private costs, contribution to economic performance of the region, influence on urban form, and other social and environmental effects.

Transport is fundamental to the quality of life in Greater Christchurch. It provides people with access to education, employment, services and recreational opportunities. It allows for the movement of freight, essential to economic wellbeing. How people travel and how often, affect the physical environment through emissions of pollutants, noise and greenhouse gases, congestion and community severance. It affects and is effected by where people live, work and the other places they spend their time.

Greater Christchurch's transport system is predominantly road-based. It is structured on a hierarchical basis with state highways and key arterial roads at the highest level, their function being to move large volumes of people and goods around the sub-region. Other roads lower in the hierarchy provide increasing emphasis on access rather than through movement functions. It is anticipated that road infrastructure will continue to be very important in the future, albeit there will be a change to better integrated development of corridors catering for all modes of travel.

One of the central tenets of this Strategy is the integration and parallel development of land use with the transport system. Analysis indicates that traffic volumes will increase by 40-50% by 2021 and congestion levels in Christchurch City will approximately triple. This can have serious impacts on safety, health through reduced air quality and less physically active communities, social isolation and delay costs for freight, business and private travel. Making travel slower, less reliable and less convenient, traffic congestion adds significant costs to the economy and makes it difficult to access important destinations such as the city centre, port and airport.

Lyttelton Port and Christchurch
International Airport are key import
and export hubs for the area, region
and the South Island. There is a need to
ensure that efficient transport access to,
from and between these two facilities
is maintained and enhanced if possible.
This includes both the roading and rail
networks and the links beyond, to and
from the sub region.

Threats to freight transport include network operational constraints; inadequate provision for freight access in some locations; maintaining and enhancing adequate road and rail network infrastructure; securing the future of services on the railway network and the need to maintain a viable and internationally competitive freight transport system.

Cyclists, pedestrians and the users of public passenger transport account for a significant number of trips in and between urban centres. These modes are healthy, cheap and environmentally sustainable. The networks for these modes need ongoing and significant improvement and integration throughout and between our communities. They also help reduce congestion and provide mobility for the significant proportion of society without access to a private motor vehicle or those who choose to travel by walking, cycling and public passenger transport.

Public passenger transport use should be encouraged through the provision of consistent, high quality infrastructure, excellent services and by ensuring easy, direct access through new and existing development and activity centres across the area. Policy requirements need to be developed to ensure public passenger transport routes are convenient and accessible for all passengers by travelling to the heart of activity centres and major trip generators. Priority measures should also be introduced to enable public passenger transport to avoid delays in traffic congestion so they offer reliable travel times and an attractive and sustainable alternative to private vehicle travel.

Transport planning at the area level is implemented by the Canterbury Regional Land Transport Strategy (RLTS). The RLTS is strongly influenced by the New Zealand Transport Strategy (NZTS) and the Land Transport Management Act 2003 (LTMA). The guiding objectives of the LTMA, as described in the NZTS, are to:

- > Assist economic development
- > Assist safety and personal security
- > Improve access and mobility
- Protect and promote public health, and
- > Ensure environmental sustainability. Objectives in this legislation must be met in order to obtain central government funding.

The transport objectives of the Strategy will be implemented through an amendment to the RLTS, this will include an increased focus on land use and transport integration, a greater level of project information (including staging and priority) and a funding package for the sub-region. This will include the timing and combinations of packages for the south-west and northern transport corridors.

Implementation increasingly requires a co-operative, integrated and collaborative approach between various organisations and the wider community.

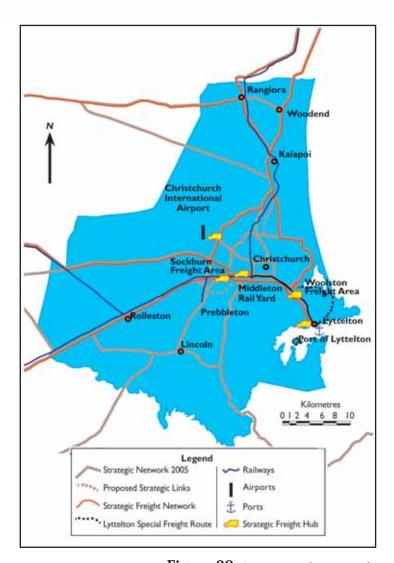


Figure 28: Strategic roading network.

6.26.2 Growth Issues

- Maintaining and developing key transport networks and corridors across Greater Christchurch to connect markets, transport hubs and communities, and provide a framework for the public passenger transport network to be developed.
- Development and management of the transport network in the area has not kept pace with the growing demand for travel. This has resulted in traffic congestion, a compromised public passenger transport system and walkers and cyclists.
- Dispersal of urban growth has increased the travel distances to participate in community activities, reduced walking, cycling, public passenger transport opportunities and increased the cost of transport infrastructure.
- > There are relatively low rates of use of alternative modes of travel, such as walking, cycling and public passenger transport.
- High traffic volumes make use of alternative modes less pleasant, safe and reliable.
- > The increased use of motor vehicles has consequences for the natural environment, through increased emissions and impacts on human health. It also causes community severance and safety issues.



- Vehicle emissions are the largest and fastest growing source of greenhouse gases in NZ, having increased by 43% over the past 10 years. Growth in vehicle use is outstripping technological efficiency gains.
- > There is a significant social cost resulting from road crashes.
- > Freight is increasingly being moved via the road network. This results in larger vehicles on the roads, increasing asset maintenance costs and reducing safety and confidence in the road network for more vulnerable users, as well as infrastructure efficiency and capacity issues
- > Global demand for oil is increasing, leading to uncertainty over the future energy supply and cost.
- > Funding for transport infrastructure has not kept pace with increased demand, and often lacks coordination as it is drawn from a number of sources and is difficult to secure.
- > Development encroaching on areas around the airport, port and key transport corridors raise issues of reverse sensitivity. Existing residential activities or future residential development or other activities, potentially sensitive to airport or port operations, can cause reverse sensitivity issues.
- > Convenience of private vehicle use, such as free parking that reduces the incentive to use other transport modes.

6.26.3 Key Approaches

- Align and maintain consistent outcomes between the Strategy and the RLTS through integrated land use and transport planning and funding through amendments to the RLTS and other planning documents.
- > Ensure the principles of sustainability, integration, safety, responsiveness and targeted investment underpin all activities in the transport system.
- > Decision-making for the transport system is forward-looking, collaborative, accountable, evidence-based, and progressively planned and implemented.
- Integrate future land-use development with transport planning to ensure the land transport system is provided for and protected (and reverse sensitivity issues are addressed).
- Locate and provide facilities to minimize the need to travel and support sustainable travel i.e. greater use of walking, cycling and public transport: Higher residential density is within walking distance of transport corridors and activity centres; and Development of modes is selected based on their ability to meet levels of demand and travel patterns in an affordable and sustainable manner. For example, there is no single best public passenger transport mode for cities.
- Ensure transport system funding processes are transparent, including financial contributions and development contributions.
- Source funding through negotiated cost sharing arrangements between private developers, local authorities and central government for transport infrastructure.

- Raise public awareness of road pricing options in the area
- > Protect and secure the future strategic transport corridors for the continued efficient operation of road and rail transport.
- > Develop and manage key inter and intra-regional corridors to manage the transport network.
- > Provide transport infrastructure and services to ensure a multi-modal transport system that enables a range of transport mode choices.
- > Use demand management initiatives to facilitate modal shift and reduce the relative need to travel.
- > Use district plans and other mechanisms, such as development plans etc to integrate public passenger transport routes and infrastructure, and walking and cycling infrastructure in all new developments.
- > Use protection measures, such as noise contours and setbacks, to ensure the continued efficient operation of strategic transport activity hubs.

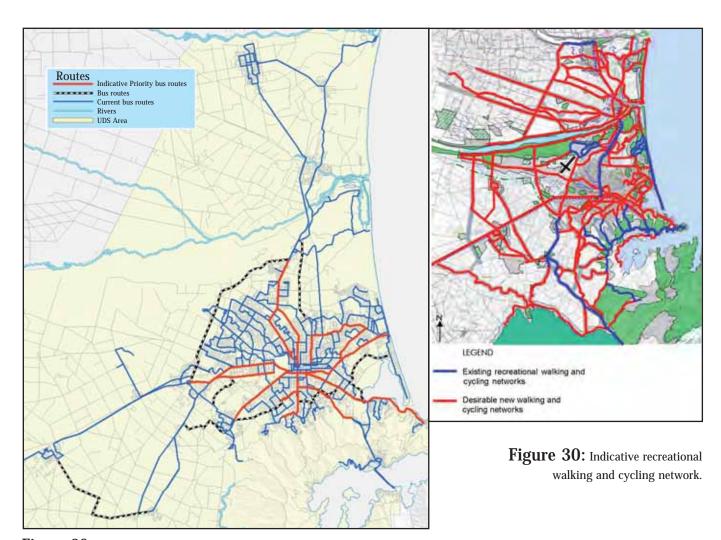


Figure 29: Indicative public transport network.

6.26.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Amend the 2005-2015 Canterbury RLTS to support the adopted Strategy.	ECan	RLTC, SDC, WDC, CCC, TNZ, OnTrack	Internal	RLTS	Strategy	2007
(2) Develop an implementation plan to give effect to the RLTS.	ECan	RLTC, TNZ, SDC, WDC, CCC	Internal	RLTS, LTCCP		2007
(3) Investigate and implement appropriate funding and cost sharing mechanisms for sub regional transport projects, such as: National Land Transport Fund (national and regional funding), government grants, rates and other council revenues, Toll New Zealand's, development contributions, public private partnerships (through negotiated agreements), and funding support from local authority investments.	ECan	MoT, ONTRACK, SDC, WDC, CCC, TNZ, LTNZ	Internal (Medium for consultants costs)	RLTS, LTCCP		2007
(4) Develop and implement a Travel Demand Management Strategy and Action Plan for Greater Christchurch.	ECan	SDC, WDC, CCC, TNZ	Internal (Medium for consultants costs)	RLTS, LTCCP		TBC
(5) Further develop and implement walking and cycling strategies while continuing to implement existing strategies.	CCC	SDC, WDC, TNZ, C&PH	Internal (Medium consultants costs)	RLTS, LTCCP	Cycling in Canterbury, 6.2, Council strategies	Ongoing
(6) Complete integrated land use and transport studies for the South-Western (CRETS) and Northern Corridors (Northern Links Study) to examine intra-regional linkages.	TNZ	ECan, LTNZ CCC, SDC, WDC,	High	RLTS	RLTS, DPs LTCCPs	2010

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(7) Set up a Strategy transport group of the	UDSIC	TNZ, SDC,	Cost sharing	RLTS MOU/	6.26, 5.4	2007
Urban Development Strategy Implementation	ODSIC	WDC.		Terms of	Appendix	2007
Committee (UDSIC) to coordinate transport		CCC, LTNZ	agreement	Reference	Appendix	
				Reference		
planning and funding including opportunities		ECan MoT,				
for park and ride, public passenger transport,		ONTRACK,				
commuter rail, cycle and walkways.		Treasury				
(8) Extending the public passenger transport	ECan	CCC, SDC,	Internal	RLTS, LTCCP	Public	TBC
strategy to encompass all of Greater		WDC, TNZ	(medium for		Passenger	
Christchurch.			consultants		Transport	
			costs)		Strategy	
(9) Develop a transport funding program to	UDSIC	TNZ, SDC,	Cost sharing	RLTS	6.26, 5.4	2007
implement strategic transport projects.		WDC, CCC,	agreement			
		LTNZ,				
		ECan, MoT,				
		Treasury				
(10) Negotiate a transport funding package	UDSIC	TNZ, SDC,	Cost sharing	RLTS	6.26, 5.4	TBC
between the region, local authorities and		WDC, CCC,	agreement			
central government.		LTNZ, MoT				
		ECan,				
(11) Reinforce reverse sensitivity boundaries	CCC	ECan, SDC,	Internal	City and		Ongoing
for the Christchurch International Airport,		WDC, Port		District Plans,		
Lyttelton Port and other strategic transport		CIAL, TNZ		RPS		
corridors.						

6.27 Energy and Telecommunications

6.27.1 Explanation

The communities in the area, and elsewhere in New Zealand, are using increasing amounts of energy and becoming more reliant on the delivery of high quality energy services. A secure and reliable electricity supply is essential for the area's economic wellbeing and for health and safety reasons. Electricity, petroleum and liquified petroleum gas (LPG) are the primary sources of reticulated energy for Greater Christchurch.

Affordable and sustainable energy solutions are required to meet the future energy needs of the area and address climate change issues.

The Strategy recognises that growth and development will increase the demand for energy and has identified several principles to encourage energy efficiency. These include promoting responsible land use practices, urban design, infrastructure and transportation policies to make the best use of existing energy resources.

Access to modern and reliable telecommunications systems is becoming increasingly important in terms of economic competitiveness, social cohesion and education. Compact forms of development and sequential, logical expansion promote more efficient provision of telecommunications infrastructure.

Telecommunication networks are not entirely dependent on physical urban growth. The wireless technologies can overcome many issues derived from location, terrestrial accessibility and planning (zoning).

Although the current level of network development is reasonably high, consolidation as an urban growth solution is obviously of great interest for suppliers, as it is reducing investment costs and increasing network efficiency.

The majority of electrical energy is produced from hydro-lakes and consumed in households. Transport relies on imported oil. The growing consumption of energy is an issue for urban development, particularly where there is reliance on non-renewal resources and non-sustainable practices.

6.27.2 Growth Issues

- > There is currently widespread concern in securing a reliable long-term energy supply especially as demand increases because of growth.
- The level of consumption and population growth outstrips investment in infrastructure at present.
- > The degree of remoteness of any urban development within the Greater Christchurch area, even under consolidation policy, will influence the speed of network investment.

- Current electricity supplies are transmitted down one continuous line and are subject to natural variance and interruption.
- > The cost of electricity and transport fuels continue to increase.
- There is uncertainty around changes to telecommunication regulations and their impact on future investment in the industry.



6.27.3 Key Approaches

- > Update asset management plans to provide and correlate measures for increasing demand for electricity and telecommunications infrastructure.
- > Co-operation between local authorities and service providers is required to enable the fast setting of services, network development and minimise effects over urban amenities and streetscape/landscape.
- Partners will advocate and support standards for the provision of on-site energy generation such as solar power.
- Periodically assess the network to provide information that helps in decision-making, prevent financial planning issues and assure network efficiency.
- Disseminate public information and education to increase awareness of issues and strategies.
- > Promote land use and transport planning that maximises energy efficiency.
- Encourage high capacity Internet facilities throughout Greater Christchurch, particularly in for energy and telecommunications facilities that support industrial, commercial, and high-density residential uses.
- > Attract low energy industrial consumers and/or high tech industries that contribute to sustainable energy solutions.
- > Promote partnerships with research and development organisations, industry players and local business.

6.27.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Develop and implement a sustainable energy strategy that promotes energy efficiency and renewable energy for domestic	ECan	Fed Farmers, CECC, CCC, SDC, WDC	Internal	LTCCPs	CCC, Energy Strategy,	Ongoing
and commercial users.		WDC			ECan policy	
(2) Lobby for infrastructure development that ensures security of electricity supply.	CCC	Orion, Main Power, Transpower, SDC, WDC, ECan	Low	LTCCPs, City and District Plans, AMPs	CCC Energy Strategy	ТВС
(3) Strategy partners adopt and advocate energy efficiency standards.	ECan	CCC, SDC, WDC	Internal	LTCCPs, City and District Plans, AMPs	6.4, CCC Energy Strategy, ECan Policy	ТВС
(4) Develop a coordinated plan for the provision of high functioning telecommunications infrastructure equitably across the sub-region.	CCC	ECan, WDC, SDC and all telco providers	To be determined	LTCCPs	CREDS	ТВС
(5) Provide, through the annual plan, what are the envisaged spatial directions for urban development and the main networks that will be upgraded/modernised/extended.	CCC, SDC, WDC		Internal	Annual plans		Ongoing

Effective Governance and Leadership

6.28 Governance, Collaboration, Partnership and Community Engagement

6.28.1 Explanation

The success of the Strategy is directly related to the quality of the working relationships between the agencies responsible for its implementation. The essential difference between the Strategy and earlier growth management initiatives is the long-term, formal commitment to collaboration between key agencies.

A voluntary, cooperative approach built on understanding, agreement and commitment has been put in place in preference to a mandatory model built on compliance and coercion. The governance model maintains a link to constituent communities through its broad membership and partner forums.

On-going engagement of the community is required to create awareness, understanding and a positive climate for participation.

Implementation of the Strategy is not the total responsibility of the partner councils. Non-government and government agencies, private sector and Tangata Whenua all have roles to play. Memoranda of agreement will be appropriate to support the respective roles where they are of critical significance to implementation.

6.28.2 Growth Issues

- > A formal governance structure that is sufficiently inclusive to ensure that the principles specified are credibly implemented and reviewed.
- > A governance structure that can anchor the continued implementation of the Strategy beyond the triennial election cycle, to ensure effective commitment and gaining of value from the Strategy development process.
- > Growth management issues are viewed in both a local, area, regional and national context.
- > The ability to adequately address growth issues requires a degree of awareness and understanding within the community. This provides the base from which initiatives to manage growth can be agreed and committed to.
- Community engagement will ensure that the growth needs of the community are understood and incorporated into the actions of growth management agencies.



6.28.3 Key Approaches

- The Strategy provides the primary strategic direction for Greater Christchurch and is used by all organisations within the community sector to co-operatively manage growth.
- Policies and actions of the Strategy partners have reinforced the agreed outcomes.
- Collaboration at the governance level continues so as to implement the Strategy and Action Plan.
- A voluntary cooperative and coordinated partnership to growth management and relevant community sector groups is continued and fostered.
- Memoranda of understanding and agreements provide a basis for action reached by the four partner councils and others, regarding the implementation of the Strategy, particularly beyond the Local Government triennium.
- Organisations which provide services, co-operate and co-ordinate their planning.

- > The governance body has sufficient powers of delegation to oversee the implementation of the Strategy, including advice to the councils and other implementation partners on the actions and initiatives required.
- > The Strategy and related documents are aligned with the Government's Sustainable Development for New Zealand Programme of Action (January 2003).
- Partnerships between Tangata Whenua, the Crown and local authorities provide for the practical exercise of kaitiakitanga.
- > The role and responsibility of Tangata Whenua in future governance is clearly defined.
- > Tangata Whenua participation in Strategy implementation.
- An environment is created that encourages community interaction on growth management issues.
- The community participates in key-decision making processes as a partnership.

- > Community engagement takes into account the need to promote awareness and understanding of growth management issues as a platform for achieving agreement and commitment to action.
- > Decision-making processes consider and determine the matters of significance that affect local communities.
- > The level of regulation reflects the level of effects being managed.
- > Key assumptions and growth triggers are anticipated and regularly monitored.
- Indicators of community health have been accepted as indicators of successful growth management.
- Review and monitoring responsibilities as defined by the agreed Strategy are delegated.
- Adequate resources are provided to enable implementation of Strategy priority actions.
- > Responsibilities beyond those of the partner councils are clearly defined and agreed upon prior to finalisation of the implementation plan. Those who have responsibility understand and agree with the defined implementation role.

6.28.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Establish a sub-regional joint committee (UDSIC), at a governance level involving partner councils, to operate to September 2010.	Mayors and Regional Chair	CCC, SDC, WDC, ECan, TNZ, Tangata Whenua	Costs shared proportionately across the partner councils	LTCCPs		April 2007
(2) Appoint an Independent Chair to the sub regional joint committee on the recommendation of the Mayors and Regional Chairman.	UDSIC	CCC, SDC, WDC, ECan, TNZ	Costs shared proportionately across the partner councils	LTCCPs, UDS, MOA		2007
(3) Ratify a Memorandum of Agreement (see Appendix v for terms of reference).	UDSIC	CCC, SDC, WDC, ECan, TNZ, Tangata Whenua	Costs shared proportionately across the partner councils	UDS, MOA	Appendix (v)	2007
(4) Define and agree on the programme and resources to implement the Strategy. Allocating adequate resources for successful implementation is fundamental to Strategy implementation.	UDSIC	CCC, SDC, WDC, ECan	Costs shared proportionately across the partner councils	LTCCPs	Appendix (iv and viii)	Annually but with 3 year horizon
(5) Adopt and implement a formal risk management Strategy for managing resourcing and conflict.	UDSIC	SDC, CCC, WDC, ECan	Costs shared proportionately across the partner councils			2008
(6) Develop a communications Strategy to maintain high levels of awareness of growth management issues in the community.	UDSIC	CCC, WDC, SDC, ECan, TNZ	Costs shared proportionately across the partner councils			2008
(7) Establish a Strategic Partner Forum for ongoing input to implementation	UDSIC	Strategic Partner Orgs	Costs shared proportionately across the partner councils			2007
(8) Partner councils ensure that Statements of Intent of council owned enterprises are aligned to reflect the strategic directions and outcomes of this Strategy.	UDSIC					ТВС
(9) Produce a Strategy Implementation Plan every three years as a basis for detailed growth management through agency plans (preceding the LTCCP).	UDSIC	Strategic Partner Orgs	Costs shared proportionately across the partner councils			Ongoing
(10) Develop a community engagement programme to take into account the principles of collaboration and to develop awareness and understanding of issues as a foundation for agreement, commitment and action.	UDSIC	Strategic Partner Orgs				2007

6.29 Central Government Engagement and Commitment

6.29.1 Explanation

Central government engagement is primarily about continuing the development and implementation of long term relationships with government to assist with the realisation of the Strategy. Councils and strategic partners will be unable to fully implement many policy and funding programmes of the Strategy without these relationships. This joint approach is also necessary to further community and social well-being, a key aspect of the LGA.

The identified strategy, policy and funding areas are primarily the responsibility of central government. They have, for example, a significant impact on the viability of sub-regional intensification that the Strategy seeks to implement. The partner Councils and strategic partners have little or no jurisdiction over those policy and funding areas. They lack the immediate power to bring about change in key areas, but have an ability to exert influence.

6.29.2 Growth Issues

- Continuing the development and implementation of long term relationships with central government and government agencies.
- Need to influence government policy and funding if required for successful Strategy implementation.

6.29.3 Key Approaches

- > Continue to demonstrate united leadership in Strategy implementation with focus on ongoing collaboration and partnership on behalf of the area.
- > Continue to undertake engagement and relationship building with Central Government at the senior ministerial and official level around Strategy implementation. They are part of the suite of ways to achieve influence and highlight the national policy and funding needs of the area.

- > Speak with a single sub-regional voice, particularly on the significant growth issues, to ensure the successful implementation of the Strategy.
- Ongoing briefings and updating of Government Agency Regional Managers based in Christchurch City on Strategy implementation issues and achievements.
- Coordinate approaches to conservation and recreation reflected in open space and recreation actions.

6.29.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Advocate to central government on behalf of Greater Christchurch to ensure national legislation meets local needs and provides a framework for local action.	UDSIC	CCC, WDC, SDC, ECan, TNZ	Costs shared proportionately across the partner councils	MOA	Appendix viii	Ongoing
(2) Ensure LTNZ and TNZ 10-year plans reflect the Strategy objectives.	UDSIC	TLAs TNZ, LTNZ, RLTC, ECan	Costs shared proportionately across the partner councils	RLTS	Appendix viii	Ongoing
(3) Develop and implement an annual briefing and engagement programme for central government including key Ministers and advisors.	Independent Chair and Implementation Adviser	UDSIC, Mayors and Regional Chair, CCC, WDC, SDC, ECan	Costs shared proportionately across the partner councils	MOA	Appendix viii	2007
(4) Brief Greater Christchurch MPs on implementation progress and issues of relevance	Implementation Adviser	All	Costs shared proportionately across the partner councils	MOA	Appendix viii	Ongoing

Integrate Implementation

6.30 Funding

6.30.1 Explanation

A key part of the Strategy is identifying the costs of growth and determining the main sources of funds, especially for infrastructure such as roading, water, wastewater, stormwater, recreation and cultural facilities. This will be done as part of the councils' LTCCP processes.

The current methods used by partner councils to fund growth-related infrastructure are property rates, development contributions, user charges and government funding. Costs of future developments are not likely to be financial contributions under the RMA, but more likely through development contributions under the LGA.

There is often a reluctance to identify and pay for the true costs of growth. Existing communities often do not want to fund new facilities where they will not receive a direct benefit. Also, developers feel that the amounts partner Councils charge to fund the impact of growth are too high and frequently apply pressure to have these reduced.

There are potential costs of taking no action. These may be long-term impacts and include the passing on of costs to future generations to carry out necessary remedial work.

As well as local government infrastructure costs, there are financial implications for other infrastructure providers, such as the gas, energy and communication companies that will benefit from the certainty of a formal growth strategy.

There are offset savings from more integrated planning frameworks.

These help avoid the 'cost' of not comprehensively planning and provide a more accurate picture on the timing gap between land supply and demand.

The approach to costing taken by the Strategy is one of gap analysis rather than identifying absolute costs. There is an emphasis on capital costs. Maintenance and depreciation are excluded. Actions have been included in the Strategy to focus on the additional sources of funding necessary to support on-going growth.

6.30,2 Growth Issues

- > Being able to fund the required infrastructure in a fair and timely manner.
- > Traditional funding sources are not adequate and alternatives are required to be developed and further implemented.
- Lack of government policy/ legislation to permit innovative funding arrangements.

6.30.3 Key Approaches

- Ensure key infrastructure, which underpins the location and timing of growth (such as transportation corridors), is funded in a fair and timely way.
- > Accept that rating, financial and development contributions will continue to be the main methods of funding the costs of growth, but that alternative methods also need to be pursued.
- Develop and implement a package approach in respect of funding resources (unlikely to be single source funding for major projects).
- > Ensure development contributions are supported by adequate investment in growth forecasting and services planning and that there is consistency in development contributions policy across the area.
- Ensure development contributions are appropriately applied to mitigate the fiscal effects of growth.
- > Ensure financial contributions are appropriately applied to mitigate effects of growth including the timing of infrastructure provision where required across boundaries.
- Rating will continue to fund the maintenance of growth-related infrastructure enabled by an increasing rating base.
- > Identify the costs of growth in a transparent manner.

- > Keep growth related issues in front of central government, to ensure timely budget funding for critical community infrastructure facilities particularly in the areas of health, education and transportation.
- > Support central government legislative and policy initiatives which result in wider funding opportunities, especially for telecommunications network infrastructure.
- > Use innovative funding and administrative methods to provide key infrastructure, such as areas of open space and community facilities.



6.30.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Establish the capital needed to support large scale sub-regional infrastructure. Identifying capital needs for the next decade and possible sources of funding as well as shortfalls is the key first step to determining larger scale growth-related costs.	UDSIC	SDC, WDC, CCC, ECan	Costs shared proportionately across the partner councils	LTCCPs, RLTS		2009
(2) Identify the costs of growth, in particular the secondary network infrastructure costs arising from consolidation at the neighbourhood level. The aim of this exercise is to obtain more detailed costs of growth as well as a comparison between the costs of consolidation and greenfields development.	CCC	SDC, WDC, TNZ, ECan, Treasury	Internal	LTCCP, RLTS		TBC
(3) Implement a financial/development contributions policy for growth related expenditure. This may also include a sub-regional development contribution policy for key infrastructure and also ensure alignment across the area partner councils. There is a need to mitigate the effects of on-going growth by recovering from developments costs which fall outside the area being developed and which impact on district-wide and sub-regional infrastructure.	CCC, SDC, WDC	ECan, TNZ	Internal	LTCCP		2010- 2011
(4) Develop a policy position in conjunction with the strategic Open Space Strategy on the use of targeted "green rate" for the purchase and protection of land for open space and the protection of ecological areas, heritage and significant landscapes. It is appropriate to plan, fund and recover a yet to be agreed level of costs incurred in providing sub-regional open space. A sub-regional funding approach may be appropriate as opposed to the wider region.	UDSIC	ECan, WDC, CCC, SDC	Internal	LTCCP		ТВС
(5) Engage with and seek formal commitment from central government to widen the existing funding base of local government where there are on-going growth related costs. Engaging with central government to seek a broadening of current approaches is critical.	UDSIC	WDC, SDC, CCC, TNZ, LTNZ, MoT	Internal	MOA		ТВС
(6) Investigate the potential use of sub-regional funds held by various agencies, for growth related infrastructure provision. Identify current wealth in the area that can be used as a source of funding for growth-related infrastructure and research.	UDSIC	WDC, SDC, CCC, TNZ, MED, Treasury, LTNZ	Internal	MOA		ТВС

6.31 Monitoring and Review

6.31.1 Explanation

Monitoring provides a mechanism to inform decision-making bodies about the consequences of actions, and changes in society and the environment, in order to determine effectiveness and the need for further action.

For monitoring to provide meaningful information for decision-making, it needs to have good quality, robust data and a well-conceived data management system. The aim of many monitoring programmes is to recognise 'cause and effect' relationships and linkages – what has changed, what are the trends and how does this relate to any policy or action.

Developing indicators helps to focus monitoring efforts. The CCC already has well-developed indicator programmes, which will be integrated with the partnership council's monitoring information for the Strategy. Once indicators are developed it is important to check that the information generated will be directly useful for measuring the outcomes desired.

6.31.2 Growth Issues

- Ensure indicators are kept relevant through indicator feedback. If a desired outcome is achieved, then monitoring efforts might be transferred to something else that requires attention.
- Need cooperation and ongoing communication between Environment Canterbury, Selwyn, Waimakariri and Christchurch Councils.

6.31.3 Key Approaches

- > The Strategy develops sound information on which to base growth management policy. It is important that the information used for growth management be kept up to date.
- > Commit to establishing an on-going implementation of a sub-regional state of the environment monitoring approach by combining regional and territorial authority monitoring and reporting approaches, including
- economic, social, health, cultural and environmental monitoring.
- > There is regional consistency in monitoring and integration of information.
- > There is continuous improvement in understanding the drivers of growth to ensure informed planning occurs.
- > Identify and manage risks effectively.
- > Develop Key Performance Indicator reporting processes, to be identified as part of implementation plans.



6.31.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
 (1) Monitor growth management drivers and trends in demographics, growth and development, including: Uptake rates and land availability. Migration to determine its relationship to growth rates and growth impact in the area. Housing affordability. Rural subdivision, and Community well-being at a sub-regional 	UDSIC	CCC, WDC, SDC, ECan, Statistics NZ	Internal	LTCCP		Ongoing
level. (2) Establish a joint research and shared information protocol between agencies playing a significant part in growth management.	ECan	WDC, SDC, CCC, TNZ	Internal	MOA		2008
(3) The outcomes of detailed investigations, central and local government policy decisions and Court decisions that may affect the assumptions underpinning the Strategy will be assessed on an annual basis and a decision made on the need for amendment to the Strategy.	UDSIC	WDC, SDC, CCC, ECan, TNZ	Internal			Ongoing
Maintaining the integrity of the plan can be achieved through regular review and updating.						
(4) The commencement review of the Strategy will occur in 2010 or at the discretion of the Strategy partners, when there is a substantial change affecting the assumptions that underlie the Strategy.	UDSIC	WDC, SDC, CCC, ECan, TNZ	To be determined			2010

6.32 Resourcing Implementation

6.32.1 Explanation

Governance and leadership on growth issues must be implemented through the management structures and systems of the partner agencies.

Each organisation has its own way of working and organisational culture. The aim is to provide for efficient, effective joint delivery of outcomes while maintaining the strength that diversity brings.

The Strategy leads change in a number of key areas. Shifts in resourcing will be needed to achieve these changes.

6.32.2 Growth Issues

- > Lack of resources.
- > Lack of effective coordination.

6.32.3 Key Approaches

- > Sufficient resource is directed to implementing Strategy actions.
- Sufficient cross council resources exist to implement, monitor and review Strategy outcomes.
- > There is collaborative and timely implementation of agreed policy.
- > Recognition that the councils are only one component of implementation and that there is a need to maintain on-going links with other lead or support agencies.

6.32.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Identify the specific actions and operation budgets necessary to implement the Strategy, specifically for the 2008-2010 financial years. Unless implementation is adequately resourced, recommended actions will not be implemented.	UDSIC	CCC, SDC, WDC, ECan, TNZ	Internal	LTCCPs		2008
(2) Agree an implementation funding formula between the Council partners.	UDSIC	CCC, SDC, WDC, ECan, TNZ	Internal	MOA		2007

6.33 Policy Instruments: Development and Integration of Plans and Policies

6.33.1 Explanation

The Strategy provides the framework and processes to ensure that integration is treated as a high priority from the very inception of policy formulation.

Opportunities for joint action need to be given serious consideration for any new policy initiatives.

The Strategy provides a single point of reference for the community to understand the approaches being taken to growth management across the area.

6.33.2 Growth Issues

- > There is consistency in planning documents to provide both certainty and development direction.
- Compliance costs can be controlled through avoidance of duplication and conflicting approaches to development management.
- > As growth occurs all councils have an obligation to align their strategies.
- > Iwi and hapu management plans developed across the area are recognised and taken into account by the local and regional authorities as useful planning tools.

6.33.3 Key Approaches

- > Common issues are addressed through joint plans or document alignment.
- > Preparation, notification, hearing and decision-making in respect of changes and amendments to policy and planning instruments to align the Strategy are carried out jointly between the partner councils where there are issues of sub-regional significance.
- Integration is achieved between the LTCCP, RPS, AMPs, RLTS, and regional and district plans.
- Integration is achieved between local government planning and plans of government and other agencies.
- > For areas subject to intensification, regulation must provide developer certainty, create good urban design and generate minimal compliance costs in gaining resource consents. Development incentives including bonuses and reduced impact fees are part of the regulatory approach



6.33.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy
(1) Integrate implementation policy instruments	UDSIC		internal		2007
(2) Prepare a Chapter 12A of the Regional Policy Statement. The RPS change will provide specific guidance on where growth and intensification will occur. Other mechanisms may be considered where the location or timing of urban areas cannot be as precisely determined. However, the Strategy partners will collectively work towards the identification of growth boundaries as a preferred management mechanism. The change will determine the overall extent of Greater Christchurch through setting metropolitan urban limits and working towards specific rather than indicative lines on the map: • Greenfield growth areas – where council processes have established a clear boundary these will be	ECan	CCC, SDC, WDC, TNZ	internal		2007
 included in the RPS change, otherwise indicative boundaries will be used Rural residential – a list of criteria for assessing the location and form will be included, and Intensification areas – the central city within the four avenues is the priority area. A clear boundary using the existing L2, L3 and L4 zones from Christchurch will be shown. A two year programme of work will establish these more specifically for future inclusion in the RPS. 					
(3) Develop consistent approaches to policy and plan preparation e.g. common review dates to facilitate alignment of Long Term Council Community Plans and Transit state highway funding.	UDSIC	CCC, SDC, WDC, ECan, TNZ	Internal	MOA	Ongoing
(4) When preparing or reviewing any strategy and planning document, consider alignment and consistency with the Strategy and its Implementation Plan.	CCC, SDC, WDC, ECan, TNZ	UDSIC	Internal		Ongoing
(5) Each partner Council to reference the adopted UDS as a strategic document in their respective LTCCPs, noting that adoption of policies or actions which are inconsistent with the Strategy will need to be negotiated with other Strategy partners in terms of the Memorandum of Agreement guiding strategy implementation (appendix iv).	SDC, WDC, CCC	UDSIC	Internal	MOA	2009 or earlier as appropriate

6.34 Resilience and Adaptation

6.34.1 Explanation

The Strategy is working toward a more sustainable urban form. There is a focus on more energy efficient transport systems with better access to walking and cycling, energy efficient housing, protection of the aquifer and local protection of versatile soils. All contribute to a more sustainable, resilient and adaptable community.

Long-term growth management is susceptible to changing circumstances. It is important that this Strategy is adaptable when things change significantly. This includes excessive growth rates, a slowing of the growth rate, cataclysmic world events and other global changes. The Strategy needs to be kept current and relevant.



Figure 31: Planning in the Face of Uncertainty.

6.34.2 Growth Issues

- > Data uncertainty, particularly when forecasting growth out to 2041.
- Infrastructure has a long lifespan but may not meet the changing needs of the area in the future.
- > There are many unpredictable factors that could affect the Strategy, such as climate change, stability of the global economy, energy security of energy supply and changes in the political environment.

6.34.3 Key Approaches

- $>\;$ Use the 'precautionary principle'.
- > Use risk assessments to identify the area's vulnerability to change.
- Monitor and review Strategy actions to account for change affecting the sub region.
- > Ensure risk management strategies are in place.

6.34.4 Actions

Action	Lead Agency	Support Agencies	Cost Implications	Implementation Tools	Linked to Strategy	Timing
(1) Assess the area's vulnerability to change factors, particularly climate change.	ECan	CCC, SDC, WDC	Medium	DPs, LTCCP	6.15	At review
(2) Undertake a risk assessment for the Strategy. This should be undertaken in year 2 of the Strategy's implementation. The assessment should cover mitigation, adaptation and resiliency where necessary.	UDSIC	CCC, SDC, WDC	Medium			2008-09

Implementation

Successfully anchoring the Strategy is a critical success factor if it is to effectively steer future growth in the Greater Christchurch area.

The key tools for implementation across the boundaries of the various local authorities have been identified as:

- > A new chapter in the Regional Policy Statement on urban growth, settlement patterns and infrastructure, covering the Greater Christchurch area.
- > Amendments to the RLTS to incorporate the strategic transport system for the area.
- > Amendments to LTCCP's.
- > City and District plan changes.
- Identifying priorities in the Land
 Transport New Zealand, and Transit
 New Zealand 10-year programmes, and
- Seeking a Crown grant for transportation funding gaps.

This chapter describes and assesses the application of each of these tools and identifies the roles of the Partners in implementation. Potential gaps in the legislative framework are also identified that, if resolved, could strengthen implementation.

Despite the limitations of existing legislation, it is possible to successfully manage growth under a non-statutory regime with the collective agreement of Strategy partners to voluntary mandate. Strategy effectiveness is partly a product of the quality of relationships at governance and executive levels. Legislative backing should be used to reinforce resources and sustain an agreed Strategy rather than coerce participation and compliance.

7.1 Strategy Implementation Principles

The following principles have been developed and agreed to underpin Strategy implementation.

Effective Strategy Governance and Management.

Dedicated governance and management arrangements are needed to maintain focus, commitment and momentum to growth strategies. Implementation needs to be led across and between agencies at all levels. These arrangements have been developed, tested and refined during the Strategy development.

The focus is on developing an organisational culture within and between each of the Strategy partners that recognises growth management as a core function with consideration as to the mandate for a regional level of leadership.

Co-ordinated Planning, Management and Resources

Part of the development of organisational culture is to recognise and promote synergies between Strategy partners wherever possible, and to introduce new and smarter ways of doing this. This could include preparing City and District plan changes in joint formats, undertaking combined processes and generally resourcing implementation mechanisms in a joint manner wherever practical and feasible.

An Integrated Sub-regional Approach to Address Both Rural and Urban Issues

The Strategy has focussed on subregional growth issues, recognising the interrelationships and dependencies between urban and rural areas. The strategies are not simply urban in focus.

Community Engagement

Community engagement and support is critical to the ongoing success of this strategy. The community will continue to be engaged through the Regional Policy Statement review, District Plan processes and other plans and strategies drafted under the Local Government Act and Land Transport Management Act.

Effective Tangata Whenua Engagement

Issues for Tangata Whenua include both protection and development of resources. Treaty relationships have been reflected in governance and management arrangements and are considered in the context of existing engagement arrangements.

Maori will see more pronounced demographic change than the general population in terms of growth and age structure. The Strategy recognises this. Protection mechanisms for Maori are least effective at site level with individual consents. Sub-regional approaches are the most effective as this is where the broad spatial allocation of development occurs and where the greatest opportunity for influence occurs.

Clear Action Specification

To be effective, actions have been developed beyond generalised statements of intent. This promotes more credible decision-making and agreement, and reduces the rework element at later stages of plan alignment and detailed implementation.

Explicit Spatial Framework for Growth

All strategies reviewed have an integrated spatial plan for the allocation of key uses and infrastructural requirements, including clearly defined urban limits, relating to long-term growth forecasts.

Spatial plans provide a tool for communicating key Strategy issues in a straightforward manner.

Robust Growth Targets

Growth strategies need to reflect a clear vision, good research and market reality. While it is tempting to have a desired growth target, the consequences of failure have significant negative consequences for integrated land-use, infrastructure and financial planning.

Estimates for allocations of growth over space and time are robust as they will be incorporated into a wide range of planning and policy documents. There is a large public expectation around getting this right, so a commitment has been made to monitoring.



Commitment to Monitoring Trends and Forecasts

Growth forecasts underpin the Strategy. They will flow through into services planning and funding. They will influence the local community and property market and how they respond to meeting changing needs, or supporting urban change programmes that have benefits that will only be enjoyed largely by future generations.

Forecasts are uncertain and warrant the highest priority for ongoing monitoring to ensure they are based on the best research and kept up to date. There is a pattern of high growth areas under-estimating growth and low growth areas over-estimating growth.

When the assumptions for growth become universally adopted by all planning and response agencies as a basis for long term decisions and investment, there is significant accountability back to the lead organisations. Accordingly the Strategy proposes properly resourced and timely monitoring and research.

Alignment of Planning and Policy Documents

The Strategy needs to be considered in the context of all linked documents. A starting point must be a common understanding and acceptance of growth forecasts and spatial and temporal allocation of development. Formal agreement to regional level principles is required. Document alignment is a formal action in the Strategy.

Common plan review dates can significantly improve the effectiveness of plan alignment.

Effective Central Government Engagement

Engagement with central government is essential given that both local and central government agencies must both respond to growth demands. An agreed position on planning assumptions and Strategy direction will provide a strong platform for effective implementation to occur. It is about leading with one vision and one voice on the key growth management issues.

Full Recognition and Involvement of Other Growth Managing Agencies

It is critical that non-council growth managing agencies (e.g. government departments, utilities and sector groups) have full recognition and participation in Strategy implementation. All agencies can benefit by having good planning information to work to and clarity on where development activity is likely to take place.

Cross-sectoral coordination groups assist in communications and aligning activities and mechanisms for establishing and maintaining these are provided for by Strategy actions.

Comprehensive Understanding of Transport and Land-use Relationships

The land use and transport relationship is a very significant determinant of Strategy costs and many physical outcomes. Testing the impacts of growth allocation decisions requires robust information and effective modelling tools.

Live, Work, Play Balance

A balanced approach has been proposed where there is provision for residential, business, open space and recreation land.

Greenfields vs Urban Renewal

The Strategy requires substantial encouragement for intensification in order for it to be realised (e.g. incentives, partnerships, local government investment). One of the barriers to urban intensification is cultural where there is a strong legacy of lower density living and a lack of awareness of alternative higher density design. Often the lack of awareness translates into resistance to higher density forms of housing. Approaches are advanced where shared common green space and low-rise buildings can be developed to make more efficient use of land, increase affordability and achieve the densities required to enable urban forms to be more sustainable.

7.2 Implementation Mechanisms

A range of mechanisms that will be utilised to implement the Strategy. These include tools underpinned by legislation, non-statutory agreements and local and central government initiatives. The key mechanisms are outlined as follows:

7.2.1 Legislative Mechanisms

Long-Term Council Community Plans

Local government must promote sustainable community well-being and make democratic local decisions on behalf of their communities. Within this framework, sections 11 and 12 of the LGA confer wide powers of general competence on regional councils and territorial authorities to give effect to this purpose.

The LGA requires the preparation of a plan that records the outcomes a community seeks and details how the activities of the council contribute towards achieving the community outcomes. This plan is the LTCCP. Coordination of responsibilities of local authorities is facilitated through triennial agreements.

The LTCCP can provide a useful framework for integrated sub-regional growth management, provided there is a high degree of cooperation and agreement between partner councils on the outcomes being sought and the actions to be taken.

The LGA provides the scope for raising revenue for growth related infrastructure and all the partner councils (with the exception of ECan which does not currently have the legal mandate) have developed a Development Contributions Policy. Key issues are the appropriate allocation of costs between new and existing communities. There are risks in funding programmes from development contributions as cash flows are determined by development activity. This risk is greatest in areas where development cycles have a wide swing.

The relationship between the activity and the development contribution needs to be clear, the introduction of large increases needs to take into account mitigation of potentially adverse social, health, cultural and financial/economic effects. Close attention needs to be given to the requirement to carry out consultation with affected parties.

End outputs for development contributions should be considered in the development of the Strategy. Tools that enable robust development contributions include good forecasts, allocation of growth both spatially and over time, and detailed asset management plans and services policies that define levels of service.

The process of Strategy formulation has had regard to the procedural requirements of the LGA Act so as to provide a robust Strategy.



Resource Management Plans

The area is subject to a range of district and regional plans, and regional strategies intended to promote sustainable management of natural and physical resources. Although there is no overt recognition of the need for strategic growth management, the inferences such as the need to protect resource availability for future generations have been used to justify urban planning initiatives to date.

The key principles of a sub-regional growth strategy and spatial frameworks are matters that require cross boundary consistency and cooperation. The Regional Policy Statement is an appropriate umbrella document for seeking this consistency. The rigours of the background analysis and process of consultation required under the RMA will ensure the RPS provides an effective empirical basis for Strategy implementation at a local level. A reasonable expectation can be formed that the intended outcomes of the Strategy will be achieved through such a planning process.

The RMA, however, does not provide a clear or complete framework for integrated sub-regional growth management. The efforts being made by larger (urban) parts of the country in growth management (Auckland, Bay of Plenty, Christchurch, and Nelson/Tasman) suggest some national level guidance may be warranted to enable consistency and reduce reinventing the wheel.

There are other deficiencies in the RMA, such as its ability to address urban issues (given a natural resource management bias), the nebulous mandate for regional bodies to show leadership in urban regional planning and the inability of the subdivision and land use consent process to deliver integrated urban areas. The RMA can work well on the basis that strategic planning has already been undertaken and the RMA plans and decision-making process is at the finer end of delivery.

As noted above, the LGA provides the most appropriate and responsive framework for raising revenue to address the financial impacts of growth. Plans under the RMA, however, have a crucial role in defining important factors that underpin the calculation of development contributions including the location and type of development, yields, levels of service and identification of benefits.

A draft change to the Regional Policy Statement is outlined in Appendix (i). The amendment will include:

- > Sub-regional growth limits.
- Sometimes of section is a section of the section
- > Infrastructure integration.
- > Land use and transportation corridors.
- > Sub-regional open space framework.
- > Key strategy elements and principles of live work and play.
- > Environmental limitations.
- > Methods of implementation, and
- > Anticipated environmental results.

Regional Land Transport Strategy (RLTS)

The Land Transport Act 1998 (LTA) requires a regional council to have a Land transport Strategy. The Land Transport Management Act 2003 (LTMA) addresses funding and integration between spheres of government engaged in the planning and funding of transport infrastructure.

Land transport outcomes must be identified as part of the Strategy to help achieve an integrated, safe, responsive and sustainable land transport system. Strategic options for achieving land transport outcomes must be identified. Requirements to engage interest groups in the policy process are set out.

To be effective, the RLTS must be informed by the Strategy. This means that it is very important to recognise the need for rigorous analysis of transport issues as part of Strategy development.

Although tools within this legislation will aid Strategy implementation, they are relatively new and have not been well tested. Nevertheless the legislation offers much. The purpose of the legislation is well aligned to achieving good strategic growth management with a range of flexible tools available, including the road user pricing. The effectiveness of outcomes will be determined by how well the tools are applied.

A scoping paper outlining the role of the RLTS in Strategy implementation and how the RLTS could be amended to anchor and reflect the Strategy can be found in Appendix (ii). It describes:

- > The links between the Strategy and transport, in particular the land use transport corridors approach, to ensure there are good linkages between activity patterns across local government boundaries.
- The key requirements of the LTMA 2003 including describing the Government's approaches to transportation funding through:
- The Land Transport New Zealand's national 10 year programme.
- Transit New Zealand's 10-year programme, and
- Crown grant approach to funding transport gaps.
- Details a process for changing the RLTS through an integrated land use strategic transport systems (including corridors) approach to meet the Government's requirements that key transport projects are supported by the RLTS.

Acquiring Land for Community Benefit

Implementation of the Strategy is unlikely to benefit much from the powers of land acquisition that councils have under the Public Works Act 1981 (PWA).

Two key issues identified for mixed-use urban consolidation programmes within a growth management strategy arise from the exclusion of such programmes from the definition of public work. These are the:

- Inability to apply compulsory acquisition provisions to commercial uses, and
- > Requirement to offer land back to the previous owner where it is not required for the public work it was acquired for.

Unless there are amendments to the legislation, it is not envisaged that implementation of the Strategy will include the compulsory acquisition of land under the PWA.



7.2.2. Non-statutory Mechanisms

Central government recognises that nonstatutory tools are an important contributor to promoting good growth management outcomes. It has been investigating whether current urban change mechanisms are sufficient. This has identified the need to have new tools in place at national, regional and local government level to implement transformational projects such as strategic regeneration sites and transport corridors that are vital to national freight and people movement.

Central government has also launched 'Sustainable Cities', one of the four priority issues identified in the Sustainable Development Programme of Action. The Sustainable Development Programme, set up in 2003, is developing operating principles for policy development in central government. The goal of the sustainable cities priority issues is that "our cities are healthy, safe and attractive places where business, social and cultural life can flourish".

An Urban Design Protocol has been initiated by the Ministry for the Environment to promote good urban design.

The Strategy has been developed with awareness of these activities occurring in central government, so as to promote alignment and foster a partnership approach between the area and central government.

Other non-statutory mechanisms may extend to:

- Economic instruments such as road pricing, or private public partnerships to promote specific development outcomes.
- Development implementation agencies.
- > Practice and design guidelines.
- > Accords and Heads of Agreement.
- > Joint ventures.
- > Demonstration projects, and
- > Education and advocacy.

7.2.3 Urban Change Tools and Mechanisms

The implementation of growth management strategies involves the use of a mix of regulatory and non-regulatory tools. For example, central city revitalisation and intensification is often better assisted through the use of proactive planning tools such as a development implementation agency rather than, for example, solely through the:

- Establishment of urban limits and associated measures in regional policy statements and district plans, and/or
- Introduction of lower rates/ development contributions in central city intensification areas.

Development implementation agencies, to assist in growth Strategy implementation, have been successful in Australia and the UK.



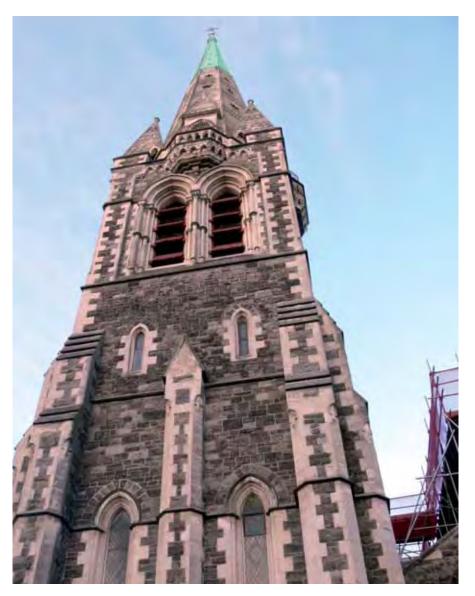
7.3 Strategy Partners in Implementation

- > Christchurch City Holdings Ltd.
- Ngai Tahu.
- > Land Transport New Zealand.
- > Transit New Zealand.
- > Canterbury District Health Board.
- > Others where appropriate.

7.4 Co-ordinated Planning, Management and Resourcing

7.4.1 Joint Hearings Committee

It is proposed that a Joint Hearings Committee will be formed to consider all submissions on the Strategy and make recommendations back to the partner councils. This Committee would comprise three representatives from each partner council together with an Independent Chair (non elected member).



7.4.2 Joint Implementation Committee

It is proposed that a Joint Implementation Committee be established comprising the four partner Councils to overview and drive the Strategy implementation.

The committee would be formally constituted under the provisions of the LGA 2002 and would be established for a 3 ½ year period until September 2010, see Appendix (viii).

7.4.3 Partner Council, Joint Hearings Panels

The partner Councils will consider the establishment of Joint Hearings Panels for matters to be considered under the Resource Management Act (district plan matters, plan changes, resource consents, notices of requirements), where there is likely to be a sub-regional issue on impact or the consideration on a sub-regional basis in relation to the Strategy is highly desirable.

Acknowledgements

8 Acknowledgements

The Urban Development Strategy has been developed on a collaborative and partnership basis. Thank you to Forum members and staff past and present from Christchurch City Council, Environment Canterbury, Selwyn District Council, Waimakariri District Council and Transit NZ who have worked on this project. Also thank you to staff from government, community and private organisations who have contributed their time, expertise and efforts.

8.1 Urban Development Strategy Forum (2006)

Elected Members

Forum Chair: Bob Parker

Waimakariri District Council – Councillors: Kath Adams and Kevin Felsted (Dan Gordon, Alternate)

Christchurch City Council – Councillors: Helen Broughton, Sally Buck, Bob Shearing and Sue Wells (Mayor Garry Moore, Alternate)

Selwyn District Council – Councillors: Debra Hasson and Annette Foster (Jens Christensen and Malcolm Lyall, alternates)

Environment Canterbury - Councillors: Richard Budd, Alec Neil (Ross Little, Alternate)

Key Stakeholders

Transit New Zealand	Colin Knaggs
Ministry of Education	
Palms Mall	Max Percaskey
Federated Farmers	Pam Richardson
Chamber of Commerce-	Peter Townsend/ Steve Collins
Canterbury District Health Board	Dr Mel Brieseman
University of Canterbury	Dr Simon Kingham
Ngai Tahu	David O'Connell, Craig Pauling
NZ Property Council	Rob Churcher
Parliamentary Commissioner for the Environment	Dr Morgan Williams

8.2 Chief Executives

Christchurch City Council	Tony Marryatt
Environment Canterbury	Dr Bryan Jenkins
Selwyn District Council	Paul Davey
Waimakariri District Council	Jim Palmer
Transit New Zealand	Rick van Barneveld

8.3 The Strategy Management Team

Chair – Project Leader TechnicalKen Tremaine
Project Leader Governance
UDS Forum Chair
Selwyn District Council
Waimakariri District Council
Christchurch City CouncilCarolyn Ingles, Karen Banwell, Sarona Iosefa
Environment Canterbury Laurie McCallum, Alice Ann Wetzel
Transit New Zealand
Communications Consultant Crant Manain



Accessibility	Access in simple terms, refers to the ability to reach a location or service within an acceptable amount of time, money or effort. Good accessibility depends upon a range of factors such as proximity to desired services or locations, travel alternatives available, speed of travel, cost of travel and so on. It does not equate to mobility, which refers to ease of movement.
Activity Centre	Key commercial/business centres identified as focal points for the transport network and suitable for more intensive mixed-use development.
Adaptive approach	An adaptive approach is one using a structured, iterative process of optimal decision-making using a system of monitoring with the aim to reduce uncertainty over time.
Adaptive Management	The integration of design, management, and monitoring to systematically test assumptions in order to adapt and learn.
Affordable Housing	Secure accommodation for the wider population whose measurement is linked to the household's ability to meet their housing costs, while leaving sufficient income to maintain an acceptable standard of living. The Royal Commission on Social Policy adopted a rental affordability threshold based on rents being between 25% to 30% of gross income.
Agricultural Land	Agricultural land includes four land cover/use categories from the National Resources Inventory (NRI): forestland, cropland, pastureland, and rangeland.
Amenity Value	Those natural or physical qualities and characteristics of an area that contribute to peoples' appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes. Amenity is important in both the public and private domain and includes the enjoyment of sunlight, privacy and quiet.
Biodiversity	The variety of life forms; the different plants, animals and micro organisms, the genes they contain and the ecosystems they form. It is usually considered at three levels; genetic diversity, species diversity and ecosystem diversity.
Brownfield Development	A piece of industrial or commercial property that is abandoned or underused and possibly environmentally contaminated, especially one considered as a potential site for redevelopment.
Business as Usual	Baseline scenario that examines the consequences of continuing current trends in population, economy, planning, technology and human behaviour.
Central City	The centre of Christchurch City bounded by Fitzgerald, Moorhouse, Bealey and Rolleston Avenues.
Central Business District (CBD)	The CBD or downtown is the central district of a city, usually characterised by a concentration of retail and commercial buildings. Although applicable to any city, both terms usually refer to larger cities.
City Centre	City Centre is similar to CBD or downtown in that both serve the same purpose for the city, and both are recognisable by a higher-than-usual urban density as well as the tallest buildings in a city.
Cluster Development	Concentrating development on smaller lots on a portion of a larger site to protect the integrity of the green infrastructure, and provide more efficient provision of services.
Community Outcomes	Identified goals of communities in relation to the present and the future for the social, economic, environmental and cultural well-being of the community.

Community Severance	What occurs when roads, rail corridors or poor accessibility create a barrier between parts of the community.
Concentration Option	A development Strategy that plans for more dense urban fabric starting from the Christchurch city centre, focal points, public spaces, and from there develop areas step by step. This approach sets a clear limit on development outside a demarcation line of the city's edge. It is designed to separate urban and suburban areas from rural and open space areas.
Congestion	Where travel time or delay is in excess of that normally incurred under light or free flow travel conditions. It occurs when travel demand approaches system capacity. Congestion has both a spatial and temporal component.
Consolidation Option	This development Strategy plans for future urban development to occur within existing built areas or with limited expansion of the existing cities and towns in the urban development study area.
Corridor	A geographical area usually defined by one or more motorways, roadways, waterways or other physical elements and the immediate surrounding area, including collector routes that have similar characteristics.
Cycleway	A portion of a roadway reserved for preferential or exclusive use by cyclists indicated by signage and pavement markings or an off road pathway constructed for cycle use.
Demand Management	Strategies to reduce the demand for a resource, such as water or road space, rather than supply more of the resource. Transportation demand management techniques include increasing transportation choices, adopting land-use patterns that encourage non-automobile forms of transportation, and trip reduction or carpooling programs. Water demand management techniques include water metering, on-site reuse water-efficient fixtures, and outdoor watering limits.
Density	The amount of residential, commercial or industrial development permitted on a parcel of land. It is usually measured in dwelling units per hectare or floor space/area ratio.
Dispersal Option	Development outside of compact urban and village centres along routes and in rural countryside in low-density development.
Districts	A territorial division (as of a nation, region or city) for administrative, judicial, electoral, or other purposes: as an administrative unit especially of a town or city established for the performance of a special governmental function.
Ecological sites	An area of land having a distinctive combination of soils, climatic, topographic and natural biotic (predominantly vegetation) features that may require special management.
Flood Plain	Low, flat, periodically flooded lands adjacent to rivers, lakes and oceans and subject to geomorphic (land-shaping) and hydrologic (water flow) processes.
Geographic Information System	GIS technology is used to develop overlay maps that depict resources or features such as soil types, population densities, land-uses, transportation corridors, waterways, etc.
Greenfield Development	Clean and undeveloped land on the urban periphery. A parcel of land not previously developed beyond that of agriculture or forestry use; virgin land.
Groundwater Recharge Zone	The area under which is shallow unprotected reserves of water that is the source Christchurch's pristine potable drinking water supplies.

Growth Area	An area of Greater Christchurch where residential growth will occur in the future.
High Density Residential	A high number of housing units per hectare. In the urban development Strategy area that is a range of 30-50 dwelling units. This leaves sufficient space for the development of roads, parks and other public facilities.
Housing Affordability	Broadly is defined as the mortgage affordability of housing in NZ. It is assessed by comparing the average weekly earnings with the median dwelling prices and mortgage interest rate.
Impervious Surface	Surfaces of land where water cannot infiltrate back into the ground such as roofs, driveways, streets and parking lots. Total imperviousness means the actual amount of surface taken up with impervious surfaces.
Industrial Development	Site or sites selected in order to locate and construct an industrial operation in facilities that accommodate its specific manufacturing, processing, or distribution needs and in accordance with a plan for its expansion, relocation, or start-up as a new venture.
Infill	Use of vacant property within a community to satisfy some of an area's development needs. In Christchurch in the 1990s infill occurred by subdividing single titles, often with less than desirable development and streetscape.
Infrastructure	The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices, and fire stations.
Inner City	This is the area of Christchurch that lies within the four avenues of Bealey, Moorhouse, Fitzgerald and Rolleston. This serves as the core of Christchurch City providing for commercial, industrial and residential activities.
Intensification areas	Redevelopment of existing neighbourhoods, corridors or commercial areas at higher densities.
Key Access Routes	Those roads identified as significantly linking regionally important destinations such as ports, airports and towns.
Live, work and play	A concept that seeks to provide opportunities for people to meet most of their daily needs within the local area that they live
Low Density Residential	The number of housing units per hectare. In the urban development Strategy area that is a range of 10 - 15 single-family homes. This leaves sufficient space for roads and other public facilities.
Medium Density Residential	The number of housing units per hectare. In the urban development Strategy area that is up to 30 dwelling units, this leaves sufficient space for the development of roads, parks and other public facilities.
Mixed Use Development	Areas where several uses are allowed in a pedestrian and public transport friendly design. These zones usually include retail, residential, commercial and civic uses.
Mode	A particular form of travel, including airplanes, automobiles, buses, carpools, cycling, rail, single occupant vehicles, walking and waterborne vessels.
Neighbourhood Commercial Districts	Provides convenience shopping for nearby residents (i.e., within less than 10 minutes drive of centre). Services reinforce the neighbourhood and community identity. May be associated with public facilities such as parks, schools and libraries to provide a focal point for community or neighbourhood.
New Economy	The New Economy describes the evolution from an industrial/ manufacturing based economy to a knowledge based economy

Nodal development	Concentrating new development into centres with existing infrastructure capacity and serviced by public transport.
Open Space	Open space is defined as protected lands and waters that are owned and managed by Banks Peninsula District Council, Christchurch City Council, Environment Canterbury, Selwyn and Waimakariri District Councils, Department of Conservation and any other Crown owned land, including non-profit land trusts. Open space consists of any parcel or area of land and water that is devoted to 1) the preservation of natural resources; 2) the managed production of resources (forest and farm land); 3) outdoor recreation; 4) preservation of historic and cultural property; 5) protection of scenic landscapes; and 6) protection of public health, safety and welfare.
Ponding Area	The process, occurring after a rainfall, when water gathers in low-lying areas throughout a watershed. This is true for areas at the base of the Port Hills in Christchurch.
Precautionary Principle	Where there is a lack of full scientific certainty a precautionary approach should be adopted towards proposed activities particularly where those whose effects are unknown or are not fully understood. See adaptive management.
Public Passenger Transport	Passenger transport service, including taxi services, for the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point to another.
Regional Commercial Centre	A business and shopping centre with more than 100 offices, stores, entertainment and dining facilities, anchored by one or more department and grocery stores, and having 3000 to 93,000 square metres of retail space.
River Catchments	The total area of land from which a single river collects ground water runoff.
Sedimentation	Sand and silt carried in and deposited by stream or rivers.
Stormwater Management	The management of runoff to provide controlled release rates to receiving systems, typically through the use of detention/ retention facilities such as ponding areas, swales and lakes.
Sustainable Development/ Management	Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while:
	• sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations.
	• safeguarding the life supporting capacity of air, water, soil and ecosystems, and
	• avoiding, remedying or mitigating any adverse effects of activities on the environment.
Traffic calming	Physical structures on roads used to reduce vehicle speeds, and restore a safe route for pedestrians and cyclists, including kerb extensions, centre islands, speed bumps and roundabouts.
Traffic volume	The number of vehicles on a motorway, roadway or any other transportation route in a given time period.
Transport Network	Roads, rail, ports, airports, park and ride sites, bus stop shelters, walkways, cycleways and other physical elements used for the movement of people and goods.
Unconfined growth or sprawl	Low-density development that unfolds from the edges of cities and towns. It is primarily residential in use containing houses on large sections thereby consuming land, car-oriented, and designed without regard to its surrounding.

Urban Design	Urban design is about the overall structure and function of a place, as well as how it looks and feels. The Ministry for the Environment describes urban design as being about making the connections between people and places, between public and private space, between the natural and built environment, between movement and urban form, and between the social and economic purposes for which urban space is used.
Urban Limit	Lines drawn on planning maps around developed areas showing where urban land ends and rural land begins.
Urban, Town and Rural Areas	Broadly, the main factors determining whether an area is considered urban, town or rural are absolute population size, space (land area), the ratio of population and economic and social organisation. Urban areas are characterised by relatively large, concentrated populations, which have access to elements of economic and social infrastructure. Towns are small to medium sized areas with smaller concentrations of populations that have a comparative amount of economic and social infrastructure. Rural areas tend to have smaller populations and greater land areas.
Versatile Soils	Versatile soils are soils of high quality (usually containing Class I and II soils) that have high value for intensive agricultural development, high energy use efficiency for production and high pollution buffering capacity.
Vision	A shared and aspirational statement and image of where we would like to be in the future.
Wastewater	Wastewater is the liquid product from a sewage treatment plant.
Wetland	Permanently or intermittently wet areas, shallow water and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.



Appendix (i)

Illustrative Draft Change:

Canterbury Regional Policy Statement (Greater Christchurch)

The intention of this Appendix is to illustrate the scope, direction and purpose of how the Regional Policy Statement could be changed to implement the Greater Christchurch Urban Development Strategy. The suggested change is designed to put in place the overall land use pattern of rural and urban activities for Greater Christchurch, the sequence by which urban development occurs and the overall manner in which it occurs. It sits within the existing generic policies of the Regional Policy Statement so as to provide a more detailed and directive geographic based set of policies for the urban development of Greater Christchurch.

The process for any change to the Regional Policy Statement will be in accordance with the statutory requirements of the Resource Management Act 1991 which includes formal submission, further submission, hearing and appeal processes. Following adoption of the Greater Christchurch Urban Development Strategy a proposed change to the Regional Policy Statement will be notified for submissions in July 2007.

Issues

The change would deal with the following issues:

- > The ability of the area to accommodate continued population growth and economic development for the foreseeable future.
- > Unconstrained greenfield development can adversely affect land production potential and associated industries, rural identity, character, and landscape, biodiversity, and existing communities of rural areas.
- > Development in inappropriate areas
- a) threaten the activities and viability of strategic infrastructure, such as Christchurch International Airport and the Lyttelton Port, undermine the physical resource investment made in urban centres such as the central business district of Christchurch and other key centres.
- b) increase the risk of contamination of Greater Christchurch's drinking water as a result of development over the unconfined aquifer.
- c) increase the risk to people and property from natural hazards such as flooding, coastal inundation, and coastal erosion.

- d) compromise the regionally outstanding landscape of the Port Hills, and adversely affect areas of significant indigenous biodiversity, and
- e) adversely affect the character and amenity of smaller settlements and rural areas.
- > Sporadic, unplanned, or piecemeal development can:
- a) Create an urban form that is more energy intensive and less sustainable than more integrated land-use patterns
- Result in untimely, or inefficient provision of supporting infrastructure, and create barriers to funding or provision of necessary infrastructure, and
- c) Limit the extent to which land use patterns can be integrated with transport infrastructure and services that provide for a number of modal options.
- > Development within Intensification Areas and Greenfield Areas, if poorly designed, can erode urban amenity including aesthetic quality, heritage, health and safety, access and liveability and result in communities with poor access to community, social and commercial facilities.

Objectives and Policies

The aim of the objectives would be to achieve built environments that had a sense of identity and character, a range of household densities and were environmentally sustainable, attractive and yet functionally efficient and economic. The location of urban growth and the manner in which it occurred would need to ensure the protection of strategic infrastructure and natural and physical resources. A key way to ensure the above would be for urban growth to be provided for and managed to achieve a compact, consolidated and sustainable urban form, which integrates with long-term planning, funding mechanisms, and the provision of strategic infrastructure.

To clearly define what is urban and what is rural in character, the change would set out urban limits within which residential and business subdivision and development occurred. These limits would be defined on a map along with the sequence by which new urban development would occur, tied particularly to the provision of infrastructure for transport, stormwater and sewer. The map would also show the areas of residential intensification within the central city and the existing key activity centres for commerce and employment. Some minor flexibility would need to be incorporated into the definition of the urban limits to acknowledge the 35 year life of the Strategy. Any major departure would be self defeating.

A key provision would be the achievement of urban growth densities. Minimum density standards are required to make the most sustainable use of available land to accommodate urban growth, and to create a compact city that supports existing urban and suburban and township centres and can be more efficiently served by strategic infrastructure.

Rural Residential subdivision and development would be provided for.

At the time land was zoned in District Plans in accord and with the map for Greater Christchurch, it would be done so in accord and with an Outline Development Plan showing how the layout of land uses and transport modes, infrastructure and staging of development would ensure the objectives above were achieved.

Provision would be made for the policies for Greater Christchurch to be reviewed where population or land use change occurred beyond the assumptions upon which the maps and sequencing were based.

It is envisaged that the existing provisions of the Regional Policy Statement would continue to apply to Greater Christchurch but only insofar as they did not conflict with the objectives and policies in the new Chapter. If there was any doubt, the new provisions would take precedence.

While the change will refer to transport and the key networks illustrated, the Regional Land Transport Strategy is the key implementation mechanism for transport. The provision of infrastructure by local authorities will be provided for in their LTCCPs.



Appendix (ii)

- (a) Scope of Changes required to anchor the Urban Development Strategy in the Canterbury Regional Land Transport Strategy
- (b) Preliminary Framework of the Greater Christchurch Transportation Implementation Plan

(a) Anchoring the Strategy in the Regional Land Transport Strategy

The Canterbury Regional Land Transport Strategy (RLTS) is a significant statutory document for the region. The RLTS has been identified as a key implementation tool for the Strategy because of the interrelationship between land use and transport.

The Role of the RLTS in Strategy Implementation

There is a critical synergy between the Strategy and the RLTS. The Strategy will establish a land use pattern for the Greater Christchurch area in two stages, with certainty to 2016 and 2026, as well as an indicative pattern out to 2041. Transport system infrastructure is a critical component for successfully implementing any longer term land use Strategy. The success of the Strategy will be reflected in the coordination of timing of land releases and transportation investment.

The Strategy has a strong focus on a consolidated footprint for urban development based on Christchurch City and the existing larger settlements of Waimakariri and Selwyn.

Part of the key to successfully implementing the Strategy is to take a more integrated approach in terms of planning land use and transport through a system of corridors. There are three logical corridors for integration of land use and transport. These are:

- Northern (Redwood/Marshland -Kaiapoi / Rangiora)
- > South-West (Hornby Rolleston)
- > Central (Christchurch City)

As part of the Inquiry by Design exercise a comprehensive list of works has been identified for each of these corridors. In order to meet the funding criteria of the Land Transport Management Act 2003 these works will need to be packaged together in line with the corridor approach, including the optimal provision and management of infrastructure to support an integrated, sustainable, safe and responsive transport system, and covering:

- > Roading
- Public passenger transport
- > Walking and cycling
- > Demand management

Sufficient material has been prepared to clearly outline in the Strategy the transportation challenges arising from growth, the potential levels of investment necessary to support the successful timing of land release and to significantly inform any potential changes to the RLTS.

Possible RLTS Amendments to Anchor and Reflect the Strategy

- > Reinforcing an integrated land-use / strategic transport system (including corridors) approach in order to meet the Government's requirements that key transport projects are supported by the RLTS and the Strategy.
- Expanding recognition of the key requirements of the Land Transport Management Act 2003 including describing the Government's approaches to transportation funding through:
- The Land Transport New Zealand 10 year National Land Transport Programme,
- Transit New Zealand's 10 year State Highway Forecast
- Crown Grant approach to funding transport gaps
- · Third party funding involvement
- Taking account of the Greater
 Christchurch Urban Development
 Strategy, particularly the sub-regional
 settlement pattern.
- Developing integrated transport packages for the region along with funding sources.
- Including key transport projects, with timing and costs in the RLTS.
- Developing work on Demand Management through a Demand Management Action Plan.
- > Recognising and actioning the clear signal in ONTRACK's Annual Report that if the Canterbury region is serious about passenger rail then this needs to be identified and costed in the RLTS¹².

- > Reviewing and incorporating as needed new policy of government agencies and organisations into the RLTS (e.g. the National Rail Strategy, the Ministry of Transport's Strategic Directions Document, the Surface Transport Costs and Charges Study, the Auckland Road Pricing Study, Transit NZ's Planning Policy Manual Supplement, Transit's review of their National State Highway Strategy, Land Transport NZ's Participation in Land Use and Transport Planning Document).
- > Incorporating intra and inter regional linkages into the RLTS.

One of the critical challenges in any RLTS amendment will be clearly identifying the projects as well as their costs, and reconciling these with the funding sources likely to be available in the region over the next 10 years. By doing this exercise it will be possible to see what the estimated funding shortfall is as well as what opportunities maybe available to close the gap.

A significant proportion of the funding will be on new infrastructure. A key challenge for the Strategy, however, will be the ability to maximise efficiencies from that infrastructure through innovative supply and demand management measures. The biggest challenge to the Strategy will be to not only complete key transport projects in a timely manner to meet the staged land development needs, but also better serve the future transport needs in a greater variety of ways than are available today.

Amendments to RLTS for the Strategy area will need to be accompanied by any additional expectations from the wider Canterbury region in order to achieve a more complete transport picture. The RLTS is next due for review in 2008. This process will be commenced in 2007. This new RLTS will be achieved through an Implementation Plan. The Plan will not just serve Greater Christchurch, but also the rest of the Canterbury Region, outside of the Strategy.

The projects to be included in the RLTS are listed in the table of key projects and programmes at the end of the following section.

The Government has indicated ECan's initiative is consistent with the objectives of the National Rail Strategy. Transport Minister Pete Hodgson says the Government would fund 60 percent of the costs of buying rolling stock and extending infrastructure if that was needed. However, he has said funding will only be approved if the proposals are incorporated into a Regional Land Transport Strategy." (ONTRACK Annual Report 2005 at page 17).

b) Preliminary Framework of the Greater Christchurch Transport Implementation Plan

1 Introduction and Background

Motor vehicles have changed our lives by giving us increased mobility. Travel for both people and goods is faster and more convenient today than ever before. Predictions, based on economic and demographic forecasts, suggest we can expect continuing traffic growth in most parts of Canterbury in the foreseeable future. Without major changes to the way we manage transport and land use, increasing travel demand and the associated effects (such as congestion) will erode the quality of life for future generations. More immediately, there are issues that need addressing such as the high costs resulting from road crash trauma.

This section of the Strategy forms its key transport element, and can be considered as a framework for the Greater Christchurch Transport Implementation Plan (GCTIP). The purpose of the GCTIP is to provide a transportation policy framework and action plan to enable achievement of our vision for the affordable, integrated, safe, responsive and sustainable movement of people and goods throughout the Strategy area over the next 35 years. This will assist where it is necessary for the contributing transport agencies to integrate and coordinate their responsibilities for the transport system in a collaborative manner. The GCTIP provides for all modes of land transport, including private and commercial vehicles, public transport (publicly and privately provided), rail, walking and cycling, as well as initiatives to reduce the demand for travel.

The GCTIP does not exist in isolation. It is integrated with the Strategy content, as well as aligned to wider national and regional land transport strategies and legislation. These latter include the New Zealand Transport Strategy, the LTMA 2003, the LGA 2002, and the Canterbury Regional Land Transport Strategy 2005-15. They have been used to inform this Strategy. The RLTS 2005-15 provides a definition of a sustainable land transport system as "an interconnected system to provide access for people and the transportation of goods without adversely affecting the economic, social and natural environments of present and future generations."

There is no single solution to resolve the transport challenges we face now and as we move into the future, especially in relation to growing travel demand and associated effects, such as congestion, road safety, air pollution and noise. The GCTIP will form a significant sub-regional component of the reviewed RLTS. For this reason, the RLTS is a key implementation tool for the Strategy.

The implementation of this Strategy will involve a co-operative, integrated and collaborative approach between various organisations and the wider community.

2 Networks

The transport system in Greater Christchurch is composed of a number of interlinking networks operated by a number of transport providers.

The State Highway network, managed by Transit New Zealand, provides connections to strategic infrastructure and between national centres. In Greater Christchurch, it provides important road access to nearby Lyttelton Port, the International Airport, the Middleton Rail Yard and the Woolston and Sockburn industrial/freight areas.

The rail network is operated by Toll Holdings and owned by ONTRACK. It primarily provides for freight traffic, and services the freight hubs at Woolston, Middleton and Sockburn. There are new opportunities developing to provide (inter-modal) service for new industrial areas at Islington, Rolleston and Southbrook, with other future possibilities potentially at Marsh/Shands and the Chaneys areas.

The public passenger transport network (the Metro system) is administered by Environment Canterbury and operated by a number of private operators. It is principally based on bus services, with one ferry service in addition. The Metro system covers the majority of the Greater Christchurch area currently with high quality bus services, with a very small number of exceptions in surrounding rural areas and townships (e.g. Tai Tapu).

The remainder of the road network is operated by the local councils (District

and City). These provide for a wide range of travel demand from high volume roads principally serving through movements to low volume roads principally providing access to private property, in an interconnected network of roads.

All roads (with the exception of Motorways) should recognise, and where needed provide for, all modes and all types of users.

3 Traffic Growth

Overall, traffic volumes in the Greater Christchurch area are projected to increase 40-50%, with over 1.8 million trips made by vehicles each day by 2021. The result of this increase in traffic will be more delays, congestion, pollution and noise.

Conditions on our city's roads are already very different to those of 20 years ago and the pace of change in terms of congestion and delay is set to increase dramatically over the next 20 years.

At certain times of the day and in many locations, there is little spare capacity in the road network, and there has been little overall real expansion of this network in the past 40 years.

There are a number of reasons for the increase in traffic. Factors include:

3.1 Demographics

The number of households is a major factor in private travel demand. There are a basic number of trips required to sustain each household regardless of how many people live there. The greater the vehicle availability, however, the higher the potential to make additional trips by private motor vehicle. Trends observed from census data reveal that the overall population is increasing but that the average number of people per household is decreasing. As a result, there is an increase in the overall number of households in Canterbury. This combined with an increasing trend in vehicle ownership has led to an increasing growth in vehicular traffic. The age distribution within Canterbury is also changing towards an older population. The effect of an aging population upon travel demand will need to be monitored over time.

3.2 Changing travel patterns

People travel for a number of different reasons. These include business-related travel, including the movement of goods, travel to work, school, shopping, personal business or recreation. Reliance on private motor vehicles for many of these activities along with "blunt" pricing signals (for example, user costs do not vary according to which road is used or time of day a trip is made) contributes to traffic congestion. Traffic congestion during peak periods now comprises not only journeys to work, but also motor vehicle trips associated with transporting students to/from schools and for other non-work-related activities.

3.3 Economic changes

Increases in real incomes and lower vehicle costs have made private motor vehicles more affordable. Average car ownership in Canterbury is now over one car per household. However, while the availability of motor vehicles has increased for many, around ten percent of households still do not have access to a motor vehicle. For these people, lack of access to private vehicles can create social exclusion. Strong economic growth is linked with an increased amount of freight being moved in the region. Growth in the dairy and forestry sectors in particular has resulted in increased heavy traffic on the rural network. Further increases in heavy vehicle traffic can result from factors such as the reduction in wide-bodied jets out of Christchurch airport, and changes to rail and coastal shipping services.

3.4 Land-use changes

The way cities and towns have developed over the last 50 years has contributed to traffic growth. Increasing mobility contributes to changes in where we live, work, play and shop. The mobility offered by motor vehicles supports the growth in low density housing around the periphery of towns and cities. Similarly, there is a dispersal of jobs and services from city and town centres to other locations. Other policies such as those relating to school location or zoning also influence travel patterns. These are all resulting in little need to live near a place of employment or school or places of recreation and social activity. Such changes are associated with increased use of motor vehicles and make it increasingly difficult for alternative modes to be a viable and first-choice option in meeting dispersed travel needs in urban areas.

Land use and the transport system impact on and contribute to each other. There is a need to manage land-use and transport relationships to achieve a successful city that achieves the vision and desired outcomes of the Strategy. This management is a key outcome of the Strategy.



4 Policy Direction

There is no room for complacency when it comes to the future of the transport system. Traffic in and around Greater Christchurch is increasing and there will be consequences if it continues. There is a clear need to act now if our city is to remain a great place to live, work and play.

Central Government's transport vision is expressed in the New Zealand Transport Strategy (2002), and given effect through the Land Transport Management Act 2003 and the Local Government Act 2002. In response to this vision, the planning emphasis for areas such as the Greater Christchurch area must now focus on achieving an integrated, safe, responsive and sustainable land transport system. Central Government funding for transport activities (primarily through subsidies from the National Land Transport Fund) in the area is dependent on these four principles being met. Consequently, transport planning at the sub-regional level has a much greater emphasis on public passenger transport, (bus and passenger rail) cycling and walking in addition to efficient road and car based transport.

Environment Canterbury (through the Regional Land Transport Committee), which has the overall responsibility for regional land transport policy in the Canterbury, is about to commence preparing a review of its Regional Land Transport Strategy (RLTS) to reflect and assist in giving effect to the directions and proposals of the Strategy /GCTIP, including travel demand management actions, increased levels of project information and priority detail and a funding package for the region.

5 Transport Challenges

It is clear that some key transport challenges present themselves for the future development of Greater Christchurch. Primary amongst them is dealing in a sustainable and acceptable fashion with the growth in travel demand associated with the growing population. This will be driven largely from travel growth following housing and job growth. However, in a reverse sense, it would be preferable if that growth could be channelled where spare transport capacity exists or where the effects can be mitigated most easily. The challenge must be overcome in a fashion to achieve safe, sustainable and efficient road space for all modes and users, not simply look to build more road space for vehicles to reduce congestion.

The other key challenge area lies in funding. Delivering the needed improvements and operation of the transport system will require substantial ongoing funding. As noted elsewhere, however, funding is at a premium and care is needed in determining the optimised use of the limited funds available. One avenue to address this challenge is to explore alternative funding mechanisms, such as developer contributions and public private partnerships. In exploring these alternatives, care is needed to not create perverse outcomes that may run counter to the overall objectives of the Strategy, such as significantly cheaper developer contribution requirements in locations where development is not promoted with more expensive levies in areas that are desirable.



6 Greater Christchurch Transportation Implementation Plan

The plan to deliver the GCTIP in support of the Strategy and RLTS is composed of the key policies, key projects and programmes, and key studies and research. It is vital to realise the GCTIP is not only about delivering infrastructure, but also about how it will be operated and educating the community in wise use of the transport system.

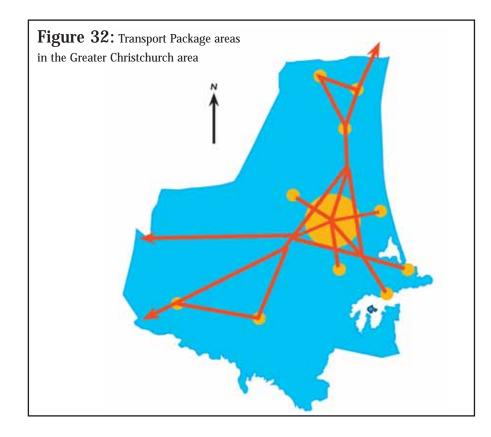
It is based on recognising a series of transport corridors across the Greater Christchurch area, and that within those corridors are staged packages of improvement works.

Two categories of corridor is identified: regional and district. Corridors relate to broad desire lines, and can cover several roads or paths along that desire line. The regional corridors would focus more on long distance or strategic travel between major centres or key nodes and would also connect the area with its ports and gateways. There is a strong correlation with the Strategic Road Network defined in the RLTS 2005-15.

They would consequently accommodate higher proportions of commercial traffic. More emphasis would be placed on ensuring satisfactory levels of service for the movement of people and goods along the district corridors. District corridors relate to strong movement patterns of people and goods within the Greater Christchurch area, and seek to provide excellent mode choices for users making trips in those corridors, and would not necessarily seek to provide capacity for vehicles at all times.

The packages of works will usually require the collaboration and cooperation of more than one agency to deliver, and hence partnership agreements for each package will be required to fully integrate and optimise the delivery and operation of each package.

The principal network corridors within Greater Christchurch (both regional and district) are represented in the diagram Figure 32.



The GCTIP includes a substantial investment and improvement in public passenger transport infrastructure and services to meet the Strategy vision and goals. These improvements have assumed growth occurs in a way that allows effective public passenger transport infrastructure and services to be provided that are attractive, practical alternatives to private motor vehicle travel and are cost effective to provide. The key assumptions in planning the public passenger transport elements of the GCTIP are:

- > 10,000 people are needed to support a half hourly bus route.
- > Urban growth will be focussed in pockets to achieve the threshold of 10,000 people for new PT routes.
- > Currently 15% of all trips are to the CBD, emphasising the need to supply high quality cross suburban public transport services.

The Packages of improvements works have been collected together generally according to geographic and/or catchment areas, as shown in figure 1 and nominally entitled:

- > Waimakariri
- > Western Corridor
- > North Western
- > Northern Access
- > North Eastern
- > South Eastern
- > South Western
- > Selwyn
- > Central City

6.1 Key Goals

The Regional Land Transport Strategy has a set of goals which were developed through an extensive community consultation process and a subsequent Strategy review process. These goals, on inspection, are appropriate to adopt for the purposes of the GCTIP, and are provided below.

Goal 1: Equitable access and improving mobility for all sectors of the community Goal 2: An efficient and sustainable land transport system that supports a thriving economy

Goal 3: A land transport system that promotes a social environment that is safe and supportive

Goal 4: A transport system that is consistent with and promotes public health and a healthy, pleasant and pollution-free environment

Goal 5: A land transport system which is safe

Goal 6: A land transport system that values and encourages community participation

Goal 7: Transport and land-use planning are an integrated part of a process that takes account of wider community processes

Goal 8: A land transport system that encourages innovation and is responsive to change

6.2 Key Performance Indicators

The Key Performance Indicators need to be linked to Goals, to enable an assessment of the level of attainment of the goals that is being achieved over time. Some indicators are provided below, which are derived from those in the RLTS 2005-15. These are only up until the year 2011, and were not developed in the light of the directions and desires of the Strategy, including related work on what is considered sustainable and a sustainable transport system in terms of the Strategy. Further work is required to review and develop indicators and associated targets specifically aligned to the Strategy, as well as identifying longer term targets, perhaps for 2026 and 2041.

Initial indicators for 2011:

Indicator	1996	2011
Transport generated carbon dioxide emissions		Less than 110% of 2001 levels
Deaths from road crashes		Six or less per 100,000 of population per year
Deaths plus total hospitalisations from road crashes		Less than 560 per year
Satisfaction among Canterbury's residents about their footpaths, pedestrian areas and overall walking environment		Progressively improving
Proportion of single occupant motor vehicles in peak periods		Progressively reducing
Traffic congestion within Christchurch City outside peak periods		None
Time to travel 10 km on Christchurch City urban (SH & local) roads		
Proportion of all trips (excluding walking trips) made by cycle	6%	12%
Proportion of all trips (excluding walking trips) made by public passenger transport	3%t	6%

6.3 Key Approaches

In seeking to govern, manage and develop the Greater Christchurch transport system by finding and implementing the best solutions for fixing identified issues, the GCTIP promotes an approach consistent with the NZTS, Strategy partners will be: forward-looking, collaborative, accountable, and evidence-based. They will also be staged or have a developing focus.

Forward-looking: A flexible and forward-looking approach to ensure policy and provision anticipate and respond to challenges and opportunities. Policy and funding of the Strategy partners will reflect the Strategy's strategic priorities and policy in areas such as economic and regional development, tourism, health, and climate change. The Strategy partners recognise that policy, management, development and funding decisions regarding transport infrastructure and other initiatives need to foster wider sustainable development.

Collaborative: Support the collaborative planning, management and development of transport infrastructure to foster an integrated sub-regional system.

Accountable: Promote public accountability and transparency in all transport matters. The Strategy partners will create opportunities for and encourage those who use transport and are affected by it to be involved in transport decision-making processes. System user costs to business, the community and government will be minimised.

Evidence-based: Foster capacity building to develop better transport solutions, both in terms of professional and technical skills and through education and involvement of citizens and communities. The Strategy partners will ensure feedback from evaluation of the efficiency and effectiveness of transport policy, planning, operations, maintenance, development and funding is incorporated into decision-making about, and management of, transport.

Staged: Recognise the community's capacity to accept and operate in changing policy and operating environments. Even with a change of direction towards increased investment and maximising incentives to a particular style of transport system, particularly for alternative modes of travel, analysis suggests that the vision still will not be attainable. Therefore an evolving (essentially) two-part approach is proposed for the implementation of the Strategy. Initially a focus is proposed that is primarily concerned with targeted investment aimed at incentive measures to provide attractive, viable and efficient alternatives to travel by car, such as fast bus services that go where people want, when they want. Latterly, this is supplemented with application of demand management measures or selected disincentives, such as parking restraints and road pricing, which will almost certainly be required to achieve the vision.

6.4 Key Policies

- > The transport system is underpinned by a sustainable development and management philosophy which leads to an integrated approach to all transport modes.
 - This includes seeking to optimise use of the existing networks and when improvements are required, undertaking targeted investment.
- > Congestion will be managed, not resolved.
 - High levels of accessibility and mobility, however, will be maintained in key areas to support regionally important economic activity and development.
- > Transport hierarchies and corridors will be established across the Strategy area.
 - Hierarchies will be developed for each mode and will be the basis of infrastructure planning. The mode hierarchies will be integrated with on another, so that no mode's hierarchy unilaterally dominates others. There is a need to express the hierarchies and policies through local transport policy making, supported by significant and consistent commitment to implementing them.
- > Support the maintenance and targeted development of the strategic road network (as defined in the RLTS) in the Greater Christchurch area in line with an agreed funding plan.
- Support the maintenance and targeted enhancement of non-strategic local roads.

- > Provide for the effective movement of freight in ways that are efficient, safe and sustainable.
- > Locate and provide facilities to minimise the need to travel and support sustainable travel. Provide for people with special transport needs. At a neighbourhood planning level recognise and provide for the use of mobility scooters, walkers and wheelchairs.
- Support rail as an integral part of Canterbury's strategic land transport system.
 - Rail generally provides improved environmental benefits and gives an opportunity to reduce the impact of heavy vehicle transport on some regional arterial roads. Coastal shipping offers similar benefits. Future increases in the use of rail to carry people and products will be determined largely by the cost and level of service relative to other
- > Progressively reduce the number and severity of crashes in Canterbury.
- Ensure adverse environmental impacts from transport are monitored and national and regional standards are met.
- Undertake travel behaviour change programmes, and education and promotion measures to reduce the use of private motor vehicles, especially in areas of traffic congestion.

- Encourage use of parking controls to manage travel in and around urban areas.
- Parking charges also have a role to play in ensuring availability of space, e.g. encouraging turnover of valued onstreet spaces near shops, reducing car travel. They can be used as a demand management tool and a fund-raiser.
- Enhance understanding of methods and outcomes of road pricing measures.
 - Road pricing has the most potential to give sustainable signals for land development, manage traffic growth and create a more equitable and sustainable transport-funding regime. It is being seriously considered in Auckland and Wellington and is a technique which should be considered in Christchurch the future. However at the current time it would require legislation changes from central Government.

The demand management measures, such as road pricing, are envisioned to commence in around 10 years time. It is anticipated that by then legislation changes will have been implemented, and concerns with equity, privacy and technology issues resolved. It should be noted that in Auckland demand management measures are being recognised as key components to solving their traffic congestion situation.

There is the possibility that the demand management measures will also have the potential to raise significant funds for transport, which could offset or replace funds raised from general rates for roading and transport.

- > Developer contributions will be coordinated between agencies collecting them to support the overall delivery of transport system improvements.
- Support greater use of walking, cycling and public passenger transport.
- Protect and improve Public passenger transport service speed and reliability where appropriate with priority facilities.
 Such approaches are proven to make Public Passenger Transport as convenient as the private car and are the most effective means to achieve greater Public Transport uptake. This also allows for a greater investment in service frequency, which is also a key driver for greater Public Transport uptake.
- Provide an integrated Greater Christchurch Park and Ride System. The success of park and ride schemes in reducing downstream congestion is dependant upon the location of the facility, the quality of the passenger facilities, the quality of the Public passenger transport services and the presence and effect of supportive demand management policies.

- > Public passenger transport demand on major corridors will be regularly assessed and appropriate modes provided in line with that demand and affordability.
 - Land use density and the resulting intensity of travel demand is the key determinant of Public Transpor mode. Land use and transport planning must allow for a graduated evolution from bus based Public Transpor to higher order modes such as articulated bus and light rail to meet demand with capacity.
- > Promote the location of housing, jobs, shopping, leisure, education and community facilities and services to support sustainable transport choices and reduce the need to travel, especially by private motor vehicle. Highest levels of land use density must be within the walking catchments (generally 400m) of bus stops on Public passenger transport corridors and within development nodes. Mixed land use along corridors and within nodes to support multiple trip purposes and maximize utilization of public passenger transport services.

- Design and programme developments and related infrastructure to support sustainable transport choices, improve interchange between modes and to reduce the need to travel, especially by private motor vehicle.
 - Public transport services must go into the heart of activity centres. Integrate passenger facilities within the fabric of commercial development, not to the edge of it.
 - Significant traffic generating developments should mitigate the impact of their activity on the transport network (requirement for travel plans). Planning documents (e.g. district plans) can help encourage these and other sustainable outcomes by requiring maximum parking provision instead of a minimum To encourage and promote passenger interchange at key nodes, fully integrated high quality passenger facilities are required, supported by frequent, fast and reliable services that minimize the time spent changing services.



- Ensure land-use, transportation
 planning and transport provision are
 mutually supportive and priorities are
 closely linked.
 Opportunities to live work and play
 - Opportunities to live work and play in local areas are actively promoted. Where possible, internalise trips within local areas or between neighbouring activity centres (e.g. Rolleston /Lincoln/Prebbleton/ Hornby). This is more efficient for public passenger transport as it reduces the demand for longer trips where people are more inclined to use private vehicles.

Provide a public passenger transport level of service ahead of the completion of development sufficient to provide modal choice and influence travel patterns in favour of public passenger transport use.

- Provide highly permeable, walkable environments that provide convenient access onto adjacent public passenger transport corridors. Within new developments provide good direct pedestrian links to access public passenger transport streets.
- Ensure a high level of accessibility to key business destinations, including ports, airports, city and town centres, agricultural, tourist and industrial areas.

Key Projects and Programmes

(Indicative funding, timing and subject to testing through the amendment to the RLTS)

Key:

Cost (Millions):			Time
\$0 - \$50		2006 – 16	
\$50 - \$100		2017 – 26	
> \$100	999	Post 2026	O O

Package	Projects	Lead Agency	Approximate Cost	Approximate Time	Funded?
Public transport System	 Upgrades of existing services Upgrade Strategic infrastructure capacity	ECan		Ongoing	а
	To provide for public transport strategic infrastructure	CCC		Ongoing	а
	Strategic demand management and public transport improvement	TNZ			а
1 Waimakariri	 Strategic Link Improvements Improved public transport capacity Park and Ride (Both Kaiapoi and Rangiora) Old Waimakariri Bridge widening (as alternative route) Rangiora roading improvements Improved strategic road capacity 	WDC			Rangiora roading Only)
	State Highway Improvements • Northern motorway 4 laning to Pineacres • Woodend bypass • Lineside Road improvements	TNZ			
2 Western	Strategic State Highway upgrades Improvements along SH1 between Johns Road and Waterloo Road Yaldhurst Road 4 laning and intersection upgrades (including Pound Rd)	TNZ			

Package	Projects	Lead Agency	Approximate Cost	Approximate Time	Funded?
3 North West	Level of service capacity • Memorial 4 laning – Clyde to Greers • Carlton Mill/Rossall/ Strowan 4 laning	CCC		F F	
	Orbital capacity • Clarence St 4 laning - Blenheim to Riccarton	CCC		O O	
	Ring Road capacity Improve Ring Road capacity along Northcote Road, Greers Road, Waimakariri Road and Peer St	CCC			
	Strategic State Highway upgrades • Improvements along SH1 between Johns Road and Waterloo Road • Yaldhurst Road 4 laning and intersection upgrades (including Pound Rd)	ccc			
4 Northern Access	Northern arterial linkages • 4 laning Cranford Street and Hills Road • Construction of Hills Rd extension • Marshland Road intersection improvements	ccc			а
	Northern arterial rural Northern arterial from motorway to QEII Drive and 4-laning of QEII Dr to Marshlands Rd Western bypass of Belfast	TNZ			(Investiga- tion Only)

Package	Projects	Lead Agency	Approximate Cost	Approximate Time	Funded?
5 North Eastern	Provide for capacity growth to New Brighton • Pages Road: Baffin – Avon River 4-laning	CCC			
	State Highway eastern corridor capacity to Port • Marshland/ QEII Dr • QEII 4-laning • Travis Rd 4 Laning • Travis Rd/ Burwood intersection Improvement	TNZ			
6 South Eastern	Capacity to Ferrymead and Eastern Suburbs • 4-laning of Ferry Rd and Moorhouse Ave, Widening Ferrymead Bridge • Continue 4-laning Linwood Ave	ccc			(Ferry Rd: city end)
	South Eastern Corridor Capacity to Port Brougham grade separation Garlands/ Opawa Rd expressway 4-laning	TNZ		E	
7 South Western	Southern motorway package Parallel arterial upgrade connecting City to Halswell/ Lincoln, 4-laning of Lincoln Road to provide for public transport, Sabys realignment, Southern motorway cycleway	ccc			а
	 Southern Motorway package Extension from Curletts Rd to Springs Rd Halswell 4-laning for public transport Dunbars Rd intersection upgrade 	TNZ			(Except Halswell 4 Laning)

8 Selwyn	Shands Road 4-laning	CCC		
	Rolleston Connectivity between township and industrial park Park and Ride Shands arterial capacity	SDC		
	Lincoln to PrebbletonArterial road package linking Lincoln, Rolleston and Prebbleton	SDC		
	State Highway capacity upgrade • 4-laning of SH1, minor intersection improvements • Southern motorway extension	TNZ		
9 Central City	Improvements to provide capacity into and within central business district	CCC	Ongoing	а

Appendix (iii)

Statutory Compliance

Resource Management Act	Local Government Act	Land Transport Management Act	
1991	2002	2003	
Outcomes and Planning	Outcomes and Planning	Outcomes and Planning	
Section 5: "The purpose of this Act is to promote the sustainable management of natural and physical resources." Section 6: Matters of national importance Section 7: Other matters Section 8: Treaty of Waitangi	Section 4: Treaty of Waitangi Section 10: Purpose of local governmentenabling democratic decision makingpromoting social, economic environmental and economic well-being of communities in the present and for the future. Section 91(2): Process for identifying community outcomes "allow communities to discuss the relative importance and priorities of identified outcomes to the present and future social, economic, environmental and cultural well-being of the community" Section 91(3): Identify other organisations and groups and if practicable, secure their agreement to the process. Section 15: Triennial Agreement. Section 273: Transitional provision. Section 93: Long-Term Council Community Plan (LTCCP).	Section 3(1): Purpose "to contribute to the aim of achieving an integrated, safe, responsive and sustainable land transport system". Section 12: Land transport programmes " a land transport programme (must) take into account how each activity a) assists economic development; and b) assists safety and personal security; and c) improves access and mobility; and d) protects and promotes public health; and e) ensures environmental sustainability Schedule 6: Consequential amendments Section 175 (2): Land Transport Act 1998 " (l) identify land transport outcomes sought by the region and the strategic options for achieving these outcomes". Section 4: Treaty of Waitangi	
Decision-Making and	Decision-Making and Community Views	Decision-Making and Community Views	
Community Views	Decision-making and community views	Decision-making and community views	
Section 32: Duties to consider alternatives assess benefits and costs.	Section 14(1)(h): Principles relating to local authorities: sustainable development - take into account social, economic and cultural well-being; quality of the environment and the foreseeable needs of future generations. Section 77(1)(b)(i): Benefits and costs of each option in relation to a decision. Section 81 (1), (a), (b), and (c): Contributions to decision making by Maori Section 82(1): Principles of consultation. Section 83: Special consultative procedure.	Section 175 (2) of the Land Transport Act 1998: " (i) take into account the need to encourage persons and organisations preparing regional land transport strategies to provide early and full opportunities for persons and organisations listed in Section 179 (1) to contribute to the development of those regional land transport strategies."	
Implementation	Implementation	Implementation	
Section 31: Duty to gather information, and monitor and keep records. Section 79: Review of policy statements and plans - not later than 10 years after the statement or plan becomes operative.	Section 91(1): Identify community outcomes every six years. Section 92: Obligation to report against community outcomes. Section 93: Review of Long-Term Council Community Plan	Section 175 (2) Land Transport Act 1998 Content of a Strategy	

Memorandum of Agreement –

Urban Development Strategy Implementation

MEMORANDUM OF AGREEMENT

Establishing principles and approach to the implementation of the Greater Christchurch Urban Development Strategy (Environment Canterbury)

Section 1 Objective

The objective of this Agreement is to:

Establish the principles and approach to implementation, monitoring and review between the parties in order to facilitate co-operation, collaboration and co-ordination of growth management responsibilities in the Greater Christchurch area.

Section 2 General Principles

The parties to this Agreement:

2.1 SUPPORT

The aim of the Strategy to provide a comprehensive sub-regional framework for growth management to address a wide range of key sub-regional issues relative to economic, social, health, cultural, environmental and developmental objectives for the region.

2.2 RECOGNISE AND SUPPORT

The established voluntary, co-operative and co-ordinated approach to growth management in the area and that such an approach between regional and local government and relevant community sector groups be continued and fostered.

2.3 ENDORSE

The use the Strategy as the primary sustainable Strategy for the area and to be used by regional and local government and community sectors to co-operatively manage growth in the area. The Strategy is also to be promoted to central government and agencies as the basis for engagement and action in respect of the area.

2.4 RECOGNISE

That the Strategy provides a policy and planning framework which will guide growth management in the area over the next 35 years but within the context of a 50-year period.

2.5 COMMITMENT

To the implementation of approaches to the funding of growth related infrastructure that will utilise a number of funding mechanisms together with appropriate area and local funding mechanisms.

The parties to the Agreement also acknowledge:

2.6

The benefits of growth management planning and the need to share responsibility for such planning between the parties in consultation with key sector groups and in consultation with the community.

2.7

The Strategy Implementation Committee has been established to ensure that the approved recommendations and associated actions are taken up by each party both on an individual and collective basis as defined by the Strategy.

2.8

The Strategy plan provides for more effective strategic planning on a regional and sub-regional basis and will facilitate co-ordination between the parties in terms of infrastructure and service provision, public works, policy development, environmental management and general planning activities.

2.9

The matters contained in this agreement may be appropriately included in the 2007 Triennial agreement.

section 3 Urban Development Strategy Approach

3.1

The parties to this Agreement will continue to support the implementation, monitoring and review of the Strategy.

3.2

All parties have a responsibility both collectively and individually to:

- Acknowledge the agreed outcomes of the Strategy process in the development and application of policy and programmes as they affect the area and commit to the implementation of outcomes as appropriate through statutory planning instruments and policy processes as well as capital works and service delivery programmes.
- Have regard to the objectives and principles contained in the Strategy in undertaking programmes and activities.
- Undertake co-operative and coordinated delivery of programmes
- Adopt a "no surprises approach" to implementing the Strategy.
- Act in accordance with the collaborative approach and contribute to the implementation of agreed Strategy outcomes.
- Promote a co-ordinated approach to growth management consistent with the agreed outcomes of the Strategy.
- Integrate social, health, economic, cultural and environmental management of their areas within a sub-regional context.
- Develop a sub-regional decision-making process amongst the parties to deal with matters of sub-regional significance which affect local communities.

Section 4 Implementation, Monitoring and Review

The parties to this agreement have:

- Endorsed the Strategy as the primary growth management Strategy for the area and each agency will have regard to in its planning, budgetary and programme activities, and infrastructure provision.
- Endorsed the Strategy as the basis for collaborative management of growth in the area by all local government in the area, Tangata Whenua, relevant community sector groups and government agencies.
- Committed to participate in the implementation, monitoring and review of the Strategy in accordance with the arrangements outlined in the approved Strategy.
- Initiated action to enable the implementation of the agreed principles and priority actions contained in the Strategy and associated implementation plan.
- Committed to not adopting policies or actions which are inconsistent with the outcomes sought by the Strategy, without them being first negotiated with the other partners.

The parties acknowledge the need for a mechanism to resolve conflicting points of view that may arise during the initial three year implementation period and a mechanism by which any member(s) of the UDS Implementation Committee may request its use to ensure that any matter or issue is given fair and reasonable consideration prior to formal consideration by the Committee.

For the purposes of conflict resolution the following procedures should apply:

- > Any member(s) of the UDSIC may feel that further discussion, evaluation or consideration is required prior to moving forward on a particular matter.
- > It is proposed that in such situations, any member(s) may request the referral of such matters for further review. It is noted that this mechanism is not for the purposes of creating any delay but solely to ensure matters have been given adequate consideration.
- > If any matter is referred for review, the review is to be undertaken by the UDS Implementation Adviser in conjunction with the Chairman and two UDSIC members. The review group is to include the member or at least one of the members, who requested that a matter be reviewed.
 The Chairman shall select the two
 - The Chairman shall select the two members of the UDSIC who will participate in the review group having regard to the nature of the matter being reviewed. After consideration of the matter, the review group will report back to the UDSIC on the outcome.
- > Requests for reviews shall be made at any meeting of the UDSIC. The Chairman shall be the final arbiter of what matters are to be referred for review. Review requests must be accompanied by reasons.

> Review requests are to be made without other committee members criticising the request. The ability to make such a request in a nonthreatening environment is part of "this is the way we do our business" approach

Section 6 Interpretation

- Local government means the Canterbury Regional Council,
 Christchurch City Council, Selwyn District Council and Waimakariri District Council.
- > Greater Christchurch area means that land within the administrative areas of the city and the districts (defined as the area) and includes that part of the administrative area of the Canterbury Regional Council as it relates to the city and districts.

Any questions of interpretation of this agreement are to be raised with the parties to the agreement and collectively resolved.

Section 5 Resolution of Conflicting Views in the UDS Implementation Committee

The parties agree to act in good faith in respect of implementing this agreement.

This agreement will run until the first review of the Strategy.

This agreement takes effect on the date it is signed by all parties.

Terms of Reference: Governance, Management and Technical Arrangements

- 1. Implementation Committee
- 2. Independent Chair
- 3. Chief Executives Advisory Group
- 4. Implementation Management Group
- 5. Implementation Advisor
- 6. Strategic Partners Forum
- 7. Communications Team
- 8. Transportation Project Team

1 Urban Development Strategy - Implementation Committee (UDSIC)

1.1 Terms of Reference

A joint committee of the Christchurch City Council, Waimakariri District Council, Selwyn District Council, Canterbury Regional Council and Tangata Whenua be established to implement the Greater Christchurch Urban Development Strategy and Action Plan.

The joint Strategy Implementation Committee be delegated authority to implement the Strategy Action Plan in accordance with the following functions:

- > Growth management leadership
- > Overseeing the implementation of the Strategy
- Ensuring organisation systems and resources support the Strategy implementation

- Taking responsibility for progressing those actions specifically allocated to the Strategy Implementation Committee in the Strategy and ensuring implementation occurs
- Monitoring and reporting progress against milestones
- > Over viewing the management of the risks identified in implementation
- > Reviewing and recommending adjustments to the Strategy
- Identifying and resolving any consultation inconsistencies between the Strategy and subsequent public consultation processes of the partner councils
- > Facilitating consultation with the community
- > Establishing the Strategic Partners Forum

- Selecting and appointing an Independent Chairman, appointing a Strategy Implementation Advisor after considering recommendations from the Chief Executives Advisory Group
- Implementing a Memorandum of Understanding as adopted by the Committee to provide a basis for developing working relationships and the resolution of any conflict

1.2 Membership

- > That representation be comprised of three representatives as appointed by the contributing authorities, including the Mayors and Regional Council Chairman, and a Tangata Whenua representative.
- > That an Independent Chairman (non elected member), to be appointed by the Committee, chair the Committee on the recommendation of the Mayors and Regional Chair.
- > That the standing membership be limited to 14 members (including Independent Chair), but with the power to co-opt up to a maximum of two additional non-voting members from the Strategic Partner Forum where required to ensure effective UDS implementation.

1.3 Purpose

The role of the Strategy Implementation Committee is to:

- Ensure that the statements of intent of council owned companies are aligned to reflect the strategic directions and outcomes of the Strategy.
- > Oversee the implementation of the Strategy, in particular the actions for the next 3 years.
- > Take responsibility for progressing those actions specifically allocated to the "UDS Implementation Committee" in the Strategy and making sure the implementation does occur. The challenges here should not be under estimated. It involves in many situations, a different way of working and not just doing one's own thing.
- > Monitor progress against milestones.

- > Review and adjust the Strategy if circumstances change.
- > Identify and resolve any consultation inconsistencies between the Strategy and subsequent public consultation processes of the partner councils.
- > Implement actions through partner council policy instruments such as the proposed changes to the Regional Policy Statement (Area), Regional and District Plans, LTCCPs, Triennial agreements, the RLTS Review (area) and partnerships between local government and other bodies such as health and education service providers.
- > Co-ordinate actions across the implementation agencies as needed to avoid inconsistencies. Partner councils should align with the Strategy, unless aspects are re-negotiated and agreed through the UDSIC.

1.4 Committee Characteristics

- Monthly meetings for 18 months then bimonthly
- Serviced by a partner Council to be recommended by Chief Executives Advisory Group
- Formal committee under Local Government Act 2002, (Section 30 Schedule 7).

1.5 Focus and Approaches

- > Update the UDS Implementation Plan every third year as a basis for detailed growth management through agency plans (preceding the LTCCP).
- Inevitably there will be changes in the operating climate for growth management. This could include changed partner Council priorities or government policy changes.
- > For the implementation of all actions, develop appropriate methods and processes for community engagement that take into account the principles of collaboration, and of developing awareness and understanding of issues as a foundation for agreement, commitment and action.
- > Translate into each action the continuing high levels of community awareness of growth management issues generated from the Strategy. This reflects the importance of community engagement in Strategy implementation. It helps enable the needs of special interest groups, such as elders and disabled, to be taken into account in Actions.

- > Establish protocols to ensure that implementation of Strategy actions are consistent with the agreed Communications Strategy.
- Individual actions should all contribute to the wider aims of the Strategy and not detract from key principles of communication and collaboration e.g. consistent use of branding.
- > As sufficient powers of delegation to facilitate the Strategy, provide advice to the partner councils and other implementation agencies, sponsor a monitoring and review framework and focus on implementation within a wider Greater Christchurch settlement pattern.
- The UDSIC has to have sufficient powers and vision to operate in a growth management leadership and advocacy role.

2 Urban Development Strategy-Independent Chair

2.1 Terms of Reference

The Independent Chair should perform the role in a manner that ensures full participation by all implementation committee members and others (Implementation Advisor and Partner Council staff) so to achieve implementation of the Strategy.

Role

The role of Chairman is one of facilitation, leadership and advocacy with an emphasis on consensus decision making and anchoring Strategy implementation effectively through the partner Councils.

- > Chair meetings of the UDSIC
- > Provide key advice on courses of action to progress the committee in its deliberations and outcomes
- Manage public communication processes in relation to implementation strategies that are related to governance matters
- Other responsibilities as may be decided by the UDSIC
- Coordination of joint approaches to Central Government in relation to growth management issues
- Manage meeting agendas in conjunction with UDS Advisor
- Provide a facilitative style of Chairmanship that enables quality participation and outcomes
- Ensure timeframes/targets set by the Committee are achievable and achieved

Liaison with UDS Implementation Advisor to include:

- > Information sharing.
- > Development of time lines for specific tasks.
- > Development of agendas.
- Management of issues as they arise, and
- Communication with interested persons including public and stakeholder groups.

Liaison with other people or groups as is appropriate

- In conjunction with UDS
 Implementation Advisor, liaise with staff.
- > Facilitate the provision of additional specific information and expert advice to the Committee if required.
- > Chair the Strategic Partners Forum;
- > Maintain effective working relationships with the appropriate Maori groups.
- Provide key advice on matters to enable progress of the Committee in its deliberations and outcomes.

- Provide specific advice to the Committee as is appropriate to facilitate successful implementation of the Strategy.
- Manage public communication processes in relation to strategies being developed.
- Prime responsibility for all public communication in relation to the governance aspects of implementation.
- Special liaison with partner Council Mayors and Regional Chair in relation to specific issues that may arise.
- Operate in a manner that recognises political sensitivities and the communication of issues to the public,
- Liaise with the UDS Advisor in relation to development of documents for public information.

2.2 Skills

- > Ability to run meetings.
- > Knowledge of Greater Christchurch and issues.
- > Knowledge of Council process(es).
- > Interpersonal skills.
- > Possess a "presence".
- Skilled at co-ordinating view points of meeting attendees.
- > Sufficient meeting experience to achieve decision making.
- Media skills.

2.3 Attributes

- > Interpersonal Skills Has an ability to develop relationships quickly with other people at all levels and from diverse backgrounds.
- > Teamwork Has a strong team orientation. Can build and facilitate teamwork and has a consultative style.
- > Lateral Thinking Good probing mind.
- Assertiveness Can diplomatically assert views where required.
 Appropriately self-confident.
- > Leadership Style A balance between clear directions and consultation with others. Is a proven leader.
- > Personal Organisation A wellorganised and natural forward planner
- Innovation Can look at new and different solutions to issues/problems.
 A creative thinker.
- > Change Orientation Receptive and positive attitude towards change.
- Decisiveness Can weigh things up quickly and come to an appropriate decision and provide positive and balance direction.
- Communication Skills Excellent oral and written communication skills
 clear and concise style.
- Stability Has a stable disposition and measured approach in all types of situations – including crises.

3 Urban Development Strategy-Chief Executives Advisory Group (CEAG)

3.1 Terms of Reference

- > Promote the Strategy within the culture of each of their organisations.
- > Assess the impact on their organisations of requests for internal resources.
- > Support the setting aside of sufficient funding to complete the Strategy.
- > Review achievement of action milestones.
- > Focus on inter-organisation process and document alignment.
- > Advise the UDSIC where necessary.
- > Assist with effective and consistent internal communication.
- > Recommend the appointment of the UDS Implementation Advisor to the UDSIC.

3.2 Membership

- > UDS Independent Chair (to chair CEAG).
- > All partner Chief Executives.
- > UDS Implementation Advisor.
- > Other implementation agency Chief Executives may be invited to become members as considered appropriate.

3.3 Meeting Frequency

> Bi-monthly.

4 Urban Development Strategy-Implementation Management Group (UDSIMG)

4.1 Terms of Reference

- > Select and recommend the appointment of the UDS Implementation Advisor to the Chief Executives Advisory Group
- > Oversee the Implementation Plan in particular the action milestones with the UDSIC
- > Receive regular reports from the UDSIC
- > Undertake and report on action monitoring and risk management issues via the UDSIC to the UDS
- > Maintain close links between UDS and any other related strategies for implementation to help achieve a broadly based sustainable development outcome
- > Review all action outputs prior to UDS Implementation Committee presentation
- > Ensure that systems and resources are functioning effectively
- > Ensure that any related studies and investigations are drawn to the attention of the UDSIC in order to avoid duplication of effort
- Liaise with the Chief Executives to ensure good understanding and ownership of the project within each of the participating organisations

4.2 Membership

- > UDS Implementation Advisor (Chair)
- > UDS Independent Chair
- Two senior representatives (Chief Executive delegate) from each partner Council
- One representative from Land
 Transport New Zealand and one from
 Transit New Zealand.
- One representative from each of the Transport and Communications Project Teams
- Others as co-opted from time to time by the Implementation Management Group

4.3 Meeting Frequency

Monthly

5 Urban Development Strategy - Implementation Advisor

5.1 Terms of Reference

- > Leading and planning the implementation of the Strategy and managing the resources that are employed to achieve the agreed objectives.
- Day to day project management, including planning, organising and control of the physical and financial resources provided by the three principal partners for the implementation of the Strategy.
- > Prepare tender briefs and provide the UDSIC with a detailed evaluation and recommendation on all proposals received.
- Convene meetings of the UDS implementation management.
- Manage the budget for the Strategy, with accounting assistance from the appointed partner Council.
- > Report to the UDSIC on key issues arising from actions and on the risk profile.
- > Provide input in to the community engagement Strategy.
- Liaise between Strategic Partners Forum (SPF), the UDSIC and the UDSIMG.
- > Convene and provide support to the SPF.
- > Request meetings of the Chief Executives Advisory Group as appropriate
- Liaise as and when necessary with the Chairperson and members of the UDSIC.

- Brief partner councils, Strategic
 Partners Forum, and other agencies on implementation progress on at least an annual basis.
- Facilitate forums and encourage community participation
- > Promote the aims of this study within the context of sustainable development outcomes.
- > Establish and maintain administrative and information support systems and resources.
- Make submissions on central and local government and other agencies policies and plans to promote alignment with the UDS.
- Manage the communication plan and lead communication on issues as they arise.
- > Support the Independent Chair on governance issues.

Responsible to:

> Chief Executive's Advisory Group.

Reports to:

 Chair UDS Implementation Committee on behalf of the Chief Executive's Advisory Group.

5.2 Purpose

> To co-ordinate and support the activities and objectives of the Strategy, assist in the management of and overseeing Strategy implementation and ensuring it becomes anchored in the partner organisations.

5.3 Qualifications and Experience

- > Hold a relevant tertiary qualification in commerce/ management/planning or similar.
- Proficient financial management skills and high level of computer literacy.

5.4 Skills and Attributes

- > Have an understanding of the nature and processes of growth management.
- > Have effective communication and relationship building skills, including ability to present confidently to audiences. Need to engage with range of groups and individuals.
- > Show commercial awareness and sound judgement and have excellent operational and administrative skills.
- > Have strong planning and organisational skills.



6 Urban Development Strategy-Strategic Partners Forum (SPF)

6.1 Terms of Reference

- Provision of information and input to the UDS Implementation Committee to enable sound decision making. Work collaboratively with the UDSIC to utilise respective agency skills and knowledge or if required collective knowledge of SPF to identify solutions to issues related to UDS implementation.
- Monitor, by acting in a community audit role in respect of the implementation of UDS, against milestones.
- Raise issues for discussion within the SPF meetings to be taken to the UDSIC.
- Develop issues/recommendations that have not been solicited by the UDSIC and present these to the committee.
- Provide feedback and or recommend actions to the UDSIC including all of the
 opinions and positions of the SPF participants. SPF participants will be able to
 present, in person, their differing views to the UDSIC to ensure their position is
 appropriately articulated.

Communication

- > Communication between the SPF and the USDIC will be both formal written report and by personal representation.
- > A major focus of the communication between the two groups will be on building relationships, trust and honest interaction.
- > Open invitation for members of both the SPF and the UDSIC attend each others meetings.

6.2 Membership

- > UDSIC Independent Chair (Chairman)
- Canterbury Employers Chamber of Commerce
- · Canterbury District Health Board
- · University of Canterbury
- Te Runanga o Ngai Tahu
- Maori
- · Social agencies
- · Environmental agencies

- Transit NZ
- Land Transport New Zealand (LTNZ)
- Christchurch Polytechnic Institute of Technology
- · Lincoln University
- Ministry of Education
- Representative of the development community
- > Others as appropriate
- Proxy representation is permitted. Proxies must come prepared for meetings and may not propose different organisational agendas to those already raised by the usual representative.
- One representative from each organisation.

6.3 Meeting Frequency

> Bi-monthly

7 Urban Development Strategy - Communications Team

7.1 Terms of Reference

The communications team will maintain high levels of awareness of growth management issues in the community, including maintenance of the value of the UDS brand. The team will also be responsible for the effective sharing of information on development trends and policy development with community organisations.

7.2 Reporting Arrangements to UDS Management Group

7.3 Meeting Frequency

• Monthly

8 Urban Development Strategy Transportation Team

8.1 Terms of Reference

-To be determined

8.2 Reporting Arrangement to UDS Management Group

8.3 Meeting Frequency

- To be determined

Existing Planning Framework

Local Government Act 2002 (LGA)

The purpose of this Act is to provide for democratic and effective local government that recognises the diversity of New Zealand communities. The Act states the powers of local government, promotes the accountability of local authorities to their communities, and provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.

Resource Management Act 1991 (RMA)

The Act is concerned with the sustainable management of natural and physical resources. This means managing these resources to provide for the community's social, economic, and cultural wellbeing, and for their health and safety, whilst ensuring the needs of future generations and the life-supporting capacity of air, water, soil and ecosystems are not compromised. The Act also requires adverse effects on the environment to be avoided, remedied or mitigated.

Regional Policy Statement (RPS)

The Regional Policy Statement provides an overview of the resource management issues in the region. It sets out how natural and physical resources are to be managed in an integrated way to promote sustainable management. The four parts outline the context within which resource management is developing in New Zealand, identify issues and how they are to be solved and sets out the processes needed for achieving a coordinated and integrated approach to resource management by regional and district councils.

Regional Land Transport Strategy (RLTS)

The RLTS identifies Canterbury's future land transport needs, the roles of all modes of transport and provides a direction for the development of the land transport system for the next 10 years. It balances economic, social and environmental considerations to provide direction for the provision of transport for the movement of people and freight. It stresses that roads are for a variety of modes and purposes and that active transport modes, public passenger transport and freight activities all have a key role to play in future transport provision. The RLTS also recognises that land-use planning and transport must be closely integrated in order to achieve the environmental, social and economic outcomes sought by the people of Canterbury.

Long Term Council Community Plans (LTCCP)

LTCCPs are based on accountability to the community. They describe the activities of the Council, set out the community outcomes planned for the district or city to which they relate, and provide a long term focus for Council decisions and activities.

The plans also provide integrated decision-making and co-ordination of resources of the Council, and give the public the opportunity to participate in decision-making.

City and District Plans

City and District Plans are concerned with the sustainable management of the resources in the district or city to which they relate. They also set out the manner in which Councils intend to deal with their functions under the RMA. Matters included in the plans relate to land-use, consideration of future population changes, avoidance of natural hazards, energy and waste management, the effects of housing, business and rural activities, neighbourhoods and communities, recreation and open spaces, transportation and utility services, design and heritage and growth and subdivision.



Foundation Reports and information used to develop the Strategy.

Document	Purpose	Date
Urban Development Strategy: Scenario development	Initial investigation to identify and assess previous scenario work and assemble information on relative costs and benefits of broad patterns of development.	March 2004
Urban Development Strategy: Development of Scenarios for Strategy – Assumptions and Criteria	Sets out the key assumptions and criteria for the development and assessment of scenarios for the Strategy.	March 2004
Summary of Council/District Approaches to Growth and Development	Summary of each Council's approach to growth, highlighting particular growth areas and zoning provisions.	April 2004
Industrial Activities – Issues Paper	Outlines the legislation, issues, and trends in relation to industrial activity within the metropolitan area.	April 2004
Summary of previous consultation for the Strategy	Evaluate community views on issues for the metropolitan area based on previous studies and consultation within the districts and city.	May 2004
Existing Urban Growth Directions For Metropolitan Christchurch	Summary of the current direction of urban growth for district and regions covering Strategy area.	May 2004
Christchurch's Future Population Prospects: Some Reflections on Projections Methodology and Changing Dynamics	Overview of the dynamics of population growth in the Greater Christchurch Area.	June 2004
Technical Report on Assessment of Urban Form Scenarios	Results of an assessment of alternative forms of urban development for Greater Christchurch.	June 2004
Assessment of Residential Development Trends and Opportunities – Future Residential Land Needs	Indicates the likely nature of long term residential need and associated land requirements for the Strategy area.	June 2004 (Addendum August)
Community Facilities Issues Paper	Overview of Issues in the metropolitan area for community facilities.	June July 2004
Issues Paper on Rural Land	The report provides a summary of the resources of and issues for rural land within the Strategy area.	June 2004
Open Space – Issues & Challenges	To identify issues of open space for the Greater Urban Area.	June 2004
Issue Paper on Commercial Activity	Describes the main trends concerning commercial activity.	June 2004
Transport – Issues Paper	Identification of transport issues.	June 2004

Document	Purpose	Date
Urban Development Strategy Assessment Criteria – Indicators	Draft Set of Indicators.	August 2004
UDS Report #1 (August 2004) – Report on Draft Assessment Criteria (and Indicators)	Draft a set of assessment criteria (and indicators) to be developed for the assessment of UDS options.	August 2004
UDS Report #2 (August 2004) – Information Maps and Constraints	Maps concerning various geographic information layers influencing current and future development in the UDS area.	August 2004
UDS Report #3 (August 2004) – Report on Key Issues	A draft list of key issues identified by staff for the Strategy.	August 2004
Natural Environmental and Resources Issues and Trends Summary	Key natural environmental and resource issues.	August 2004
UDS Report #1 (September 2004) – Report on Revised Assessment Criteria (and Indicators)	Revised list of assessment criteria recommended for adoption by the Forum to be used in the assessment of options	September 2004
UDS Report #2 (September 2004) – Draft Options for the UDS	Outlines the broad concepts of the draft options	September 2004
UDS Report #1 – Report on Final Draft Assessment Criteria (and Indicators)	A final draft list of assessment criteria recommended for adoption by the Forum to be used in the assessment of options	September 2004
Urban Development Strategy: Assessment of Concept Options Criteria 16: impacts on strategic infrastructure	Summary of results of an assessment of the concept options in terms of criteria 16: Impacts on Strategic Infrastructure	October 2004
Assessment of Concept Options – Criteria 15: Impacts on Land – Landbank "cushion"	Sets out the land requirements by census area unit for the assessment of concept options. The land areas relate to residential development only.	November 2004
Concept Options: Household/Job Projections and Land Requirements	Projection of the number of households and consequent land requirements by geographic division for the concept options.	November 2004
Assessment of Concept Options – Criteria 1: Future Economy and Distribution	Summary of the results of an assessment of the concept options in terms of Criteria 1: Future Economy and Distribution. Based on the projected job distribution by Tim Heath 10 November 2004.	November 2004
Urban Development Strategy Growth Scenario Assessment – Cost of Infrastructure Required to Serve Growth	Prepared to assist with the assessment of four growth options for metropolitan Christchurch – estimates of the infrastructure costs of new residential development for four infrastructure types; water, waste, land drainage and solid waste, recycling and disposal.	December 2004

Document	Purpose	Date
UDS Report Item #1 – Draft Assessment of Options	Provides the draft assessment of options for Forum review, and to consider these options and the comparison of results for use during the public consultation.	December 2004
Draft UDS Area Industrial Strategy	Supporting document to assist in the development of the Urban Development Strategy as well as being integrated into other Strategies.	December 2004
Urban Development Strategy Assessment of Concept Options – Variations on the Consolidation Concept Option	Two variations on the consolidation urban form option (requested by the Forum in December 2004).	January 2005
Urban Development Strategy Variations on the Consolidation Concept Option – Technical report (UDS Concept Options: Variants of consolidation option – technical report 31/1/05	Technical Weighting Assessment.	January 2005
Analysis of Built Form Changes	Assess changes in built form occurred in Greater Christchurch (house sizes and units built).	January 2005
UDS Report Item #2 – Assessment of Additional Consolidation Options	Provides the assessment results of two additional consolidation options requested by the UDS Forum, and to indicate whether these should be included in the consultation on options scheduled for April-May 2005.	February 2005
Christchurch Urban Development Strategy - Introduction to Issues	Public consultation document on issues for the Greater Christchurch area.	February 2005
Urban Development Strategy: Strategy Preparation - Roading and Network Utility Service Capacities	Identifies the number of people / households that can be served by existing and committed roading and network utility services.	March 2005
Greater Christchurch Urban Development Strategy – Options Booklet	Public consultation booklet summarising issues and presenting the urban form options for the Greater Christchurch.	April 2005
Urban Development Strategy: Work Programme and Resource Needs Land Use and Settlement	Identifies the work that needs to be done in the next stage of the Urban Development Strategy.	April 2005
Overview of Consultation Options	Review of the communication and consultation undertaken for promoting and receiving feedback on the options for the UDS.	June 2005
Interim Summary of Submissions on the UDS Options	Provides an interim summary and analysis of results from the public consultation of options – "So many options which one will you choose".	July 2005

Document	Purpose	Date
Formal Review of Amended Project Plan	Formal review of the amended project plan for the Greater metropolitan Christchurch Urban Development Strategy.	November 2005
Amended Project Plan – Greater Christchurch Urban Development Strategy – Phase II	Changes to, Scope; Governance and Management Structure, Mandates; Work stream & Deliverables, Consultation and Implementation.	November 2005
Literature Review of Housing Preferences	Review of housing preference research to identify key determinants and social change aspects which affect housing preferences.	January 2006
A Review of Housing Affordability	Provides a preliminary view on housing affordability in the context of the Greater Christchurch Urban Development Strategy.	January 2006
Community Charter	Guiding principles and directions for Greater Christchurch.	March 2006
Health Impact Assessment of UDS Options	Predicting the potential effects of policies on the health and wellbeing of the affected populations.	April 2006
Residential Development Capacity Analysis	Undertaking an analysis of residential development capacity within the study area.	June 2006
Growth Area Assessment	The purpose of the work is to allocate and identify metropolitan growth, analyse urban form methods to achieve intensification or managed urban extensions of the Metropolitan area, then based on this analysis develop criteria for the evaluation of growth options.	June 2006
Inquiry by Design Technical Report	The record of the spatial planning undertaken to deliver the preferred UDS option for growth management.	January 2007

Acronyms used in the Strategy

AMPs	Asset Management Plans
CCC	
CCHL	
CDC	Canterbury Development Corporation
CDEM	Civil Defence Emergency Management
CDHB	Canterbury District Health Board
CEAG	Chief Executives Advisory Group
CECC	Canterbury Employers Chamber of Commerce
CIAL	Christchurch International Airport Ltd
CMA	Canterbury Manufacturers Assn
CPTED	Crime Prevention Through Environmental Design
CREDS	Canterbury Regional Economic
	Development Strategy
CRETS	Christchurch, Rolleston And Environs
	Transport Study
DIA	Department of Internal Affairs
DCP	Development Contributions Policy
DoC	Department of Conservation
ECan	Environment Canterbury
ECE	Early Childhood Education
ENC	Enterprise North Canterbury
GCTIP	Greater Christchurch Transportation
	Implementation Plan
GCTS	Greater Christchurch Transport Statement
HIA	Health Impact Assessment
	Health Needs Assessment
HPT	Historic Places Trust
ICOMOS	International Committee on Monuments and Sites
LA	Local Authority
LGA	Local Government Act
	Long-Term Council Community Plan
LTA	Land Transport Act
LTMA	Land Transport Management Act

LTNZ	Land Transport New Zealand
MCH	Ministry for Culture and Heritage
MEM	Ministry Emergency Management
MfE	Ministry for the Environment
MoE	Ministry of Education
МоН	Ministry of Health
MoT	Ministry of Transport
MSD	Ministry of Social Development
NGOs	Non Government Organisations
NRRP	Natural Resources Regional Plan
NZCSS	
NZCPS	NZ Coastal Policy Statement
NZTS	NZ Transport Strategy
PHAC	Public Health Advisory Committee
PPPs	Private Public Partnerships
QoL	Quality of Living
RLTS	Regional Land Transport Strategy
RMA	Resource Management Act
RPS	Regional Policy Statement
SDC	Selwyn District Council
SoE	State owned enterprises
SPARC	Sport and Recreation New Zealand
SPF	Strategic Partners Forum
TAs	Territorial Authorities
TLAs	Territorial Local Authorities
TNZ	Transit New Zealand
TRONT	Te Runanga o Ngai Tahu
UDS	Urban Development Strategy
UDSIC	Urban Development Strategy
	Implementation Committee
UDSIMG	Urban Development Strategy
	Implementation Management Group
WINZ	Work and Income New Zealand
WDC	Waimakariri District Council

