



DUNEDIN CITY  
COUNCIL

Kaunihera a rohe o Ōtepoti

DUNEDIN TOWARDS 2050

# a spatial plan for dunedin

He māhere Wāhi ki Otepoti

SEPTEMBER 2012

Nā tō rourou, nā taku rou rou ka ora ai te iwi

with your contribution and my contribution, our community will flourish

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# Foreword



Dave Cull Mayor of Dunedin

Dunedin is our space. It's where we live, work and play. It's where we raise our children and plan our futures. There is room here for us to expand our horizons, to innovate and create, to find places of energy, beauty and serenity, and to live as we enjoy living.

The Spatial Plan provides the Council with the building blocks it needs to ensure that, over the next 30-40 years, the city develops in the direction in which you have told us you want it to develop, about where things will be located, their design and their overall effect, and to future-proof the city against the inevitable challenges it will face, such as climate change and peak oil.

We incorporated the more than 4,000 responses to the 'Your City Our Future' consultation into the first iteration of the Spatial Plan and then we asked you, "Here's what we think you told us. Did we get it right? Have we missed anything?"

We had more than 200 responses to those questions and they were positive and played a valuable part in the refinement of the Plan and in our deliberations about it.

The responses influenced the vision, the policy framework, and how we will implement it and we are very confident that we have a robust plan for our future.

We are ready now to implement the vision for Dunedin outlined in the Spatial Plan, and we are on a course for a vibrant, prosperous city as one of the world's great small cities. We will have a city that is attractive and provides a great quality of life, where our families choose to stay and work, and a place where others from throughout New Zealand – and overseas – will also want to make their home. The city will be resilient and adaptive to changes in the future.

The development of the Spatial Plan involved hours of voluntary input from community groups, business leaders, and social, cultural and recreational workers, both young and not so young, who contributed their collective wisdom and their hopes and aspirations for Dunedin's future.

I thank them for their invaluable contributions, and I thank you for yours.

# Spatial Plan Structure

Dunedin Towards 2050 – a spatial plan for Dunedin (the Spatial Plan) is organised into four parts.

**Part 1** provides an introduction to the Spatial Plan, its strategic context, and an overview of how the plan will be used.

**Part 2** establishes six strategic directions that combine to provide the vision and strategic policy framework for the Spatial Plan by outlining ‘what kind of city we want to have’. Each strategic direction begins by explaining how city planning can contribute to achieving the strategic direction, and what evidence indicates are the major urban planning and design principles which must be followed in order to achieve the strategic direction. There is then a series of objectives, policies and linked implementation mechanisms and actions for each strategic direction. The strategic framework also includes the overall urban form objective, to have a compact city with resilient townships, and a series of policies to achieve that objective.

**Part 3** contains the action plan that will be used to implement the Spatial Plan and outlines highlights of key actions required to achieve a compact city with resilient townships. The action plan is divided into three sections: District Plan implementation, strategic integration, and other implementation actions.

**Part 4** provides a broad overview of the people, economy and environments of Dunedin city. It is a high level summary of some of the background research that was undertaken as part of the development of the Spatial Plan. It looks at some of the local and global challenges that we face and the implications of these for spatial planning in Dunedin. The strategic framework in Part 2 was developed to respond to these key issues.

# Glossary

**Active edges** – refers to the design of buildings lining the edges of streets and other public spaces in a way that contributes towards the character, quality and attractiveness of the street or public space for pedestrians. Active edges are established by having good visual and physical connections along the façade, primarily at ground floor level, and by avoiding blank walls.

**Accessibility** – is the time, money, discomfort and risk needed to reach essential services<sup>1</sup>. Low levels of accessibility mean that people will generally spend more of their household budget on transport costs. Accessibility is affected by both the quality of the transportation network and by the distribution of land-uses.

**Areas of significant conservation value (ASCV)** – are areas of significant indigenous vegetation and significant habitats of indigenous fauna identified in the District Plan.

**Bulky goods retail** – is the retailing of bulky goods, which include furniture, white goods, and large electronic goods. To be included in this, at least 75% of products sold in a single store must fall into this category.

**Central city** – the area contained within the delineated boundary as shown in Map 1.

**Communications infrastructure** - refers to the physical networks necessary for the functioning of the city and includes radio, cell, telephone, television and Internet technologies.

**Council** – means the elected members of the Dunedin City Council.

**Crime Prevention Through Environmental Design (CPTED)** – is a set of principles that can be applied to the design and development of buildings and other public areas. It seeks to use effective design to reduce the incidence and fear of crime. CPTED provides a framework for incorporating crime prevention into quality urban designs. It focuses on reducing the opportunity to commit crime and reducing the motivation to offend, while fostering positive interactions among legitimate users of a space.

**Development Contributions** – are charges paid by property developers to meet the increased demand that new properties add to services such as water and wastewater, roads, reserves and community facilities. Development Contributions are charged and collected under the Local Government Act 2002.

**Distributed energy** – is electricity generated from small-scale systems and used on-site or nearby. It can be used to generate electricity for homes, farms, businesses and industries.

**DCC** – is the Dunedin City Council.

**Dunedin Port** – refers to the wharves and adjoining area bound by Mason Street, Jutland Street and Wickliffe Street in the Dunedin harbourside area used for port activities by Port Otago Ltd.

**Ecosystem services** – are the functions performed by ecosystems that ensure natural cycles (e.g. water, carbon, oxygen, and nitrogen), processes and energy flows continue to provide an environment that supports life, including human life. Ecosystem services such as fresh water from catchments and wastewater assimilation by wetlands represent the benefits that people derive, directly or indirectly, from ecosystem functions.

**Embodied energy** – is the quantity of energy required by all the activities associated with a production process.

**George Street Retail Precinct** – is the main retail area delineated by the boundary as shown in Map 1.

**Greenfield** – refers to sites that have not been previously developed for urban purposes (e.g. residential, commercial, industrial).

**High Class Soils** – refers to soils with versatility to support a range of crops and other plants with high productivity.

**Infill** – refers to development occurring on properties containing existing dwellings, where the property is large enough to sustain additional development within the permitted density provisions.

**Infrastructure** - refers to the physical networks necessary for the functioning of the city and includes transportation, energy, water and solid waste management systems.

**Liveability** – generally means how comfortable and safe a place is to live and how much a city supports a high quality of life.

**Larger format retail** – refers to retail activities that have a large floor area. These typically include department stores, and many bulky good retail, supermarkets, sporting goods, and home improvement/trade related retail activities.

**Long-Term Plan** – is the Council's ten-year plan adopted under the Local Government Act 2002. The Long-Term Plan describes the Council's activities, community outcomes, financial strategy and accountabilities. It was previously referred to as the Long-term Council Community Plan.

**Low-impact design** – also referred to as low-impact development traditionally means development which uses an alternative approach to stormwater management which relies on natural drainage rather than piped solutions to mitigate the effects of rain water run-off and contaminants, which modify and pollute rivers, streams, harbours and coast. More recently, low-impact design has also been used to refer to other design features which can reduce the environmental impact of buildings during construction and throughout their operating life.

**Outlying settlements** – are the existing residential settlements outside of urban Dunedin and its townships.

**Passive solar design** – is design that seeks to reduce energy use for heating by using the sun to warm buildings through the orientation of the house, window design and placement, use of appropriate building materials and adequate levels of insulation.

**Public realm** – means all those parts of the built and natural environment where the public has free and unrestricted access. It encompasses all the streets, squares and other rights of way, the open spaces and parks and the ‘public/private’ spaces where public access is unrestricted.

**Resilience** – means the ability to recover quickly from disturbances or setbacks and react to potential crises. Resilience is often used to describe the ability of governments or organisations to identify, assess and respond to a potentially disruptive situation in order to prevent it from becoming a crisis.

**Reverse sensitivity** - refers to the vulnerability of an established activity to complaints from new sensitive activities introduced into the environment.

**Road user hierarchy** – refers to a hierarchy that is used to plan and design the transport network to ensure the needs of the most vulnerable road users are considered early in the design phase.

**Rural character areas** – are areas of the rural environment based upon landscape type that share ecological, cultural, heritage, social and economic values, resulting in a distinctive character.

**Rural-residential development** – also referred to as lifestyle development, means property where most rural activities are provided for but where the primary purpose of the land is residential living in the countryside rather than commercial farming.

**Second Generation District Plan** – is the second district plan to be produced under the Resource Management Act 1991. The current Dunedin City District Plan (2006) is the first generation plan.

**Significant landscape features** – refers to identified natural landforms, landmarks or features of high aesthetic or cultural value.

**Special character areas** – are geographic areas identified as having specific values worthy of protection and enhancement, such as consistency in design, built form or heritage values. Areas may include all or part of the townscape and heritage precincts currently identified in the District Plan.

**Streetscape** – the visual elements of a street, including the road, adjoining buildings, street furniture, trees and open spaces etc, that combine to form the street's character.

**Supermarket** - refers to a retail shop primarily selling a wide range of fresh produce, meat, packaged food, beverages and other foodstuffs and a range of non-food grocery items and household consumables.

**Tertiary-Medical Precinct** – is the area that includes the University of Otago campus, the Otago Polytechnic campus, the Dunedin College of Education campus, the Dunedin Public Hospital and the surrounding student residential area as delineated in Map 2.

**Townships** – are the outlying residential settlements that have a centre and a range of community facilities and services. Townships include Mosgiel, Waikouaiti, Port Chalmers, Waitati, Middlemarch, Outram, Brighton, and Portobello.

**Trade-related/home improvement retail** - is the retailing of hardware, building and trade supplies (electrical, plumbing, painting and decorating, carpets), automotive, marine, farming, hire equipment.

**Urban Dunedin** – is the area contained within the delineated boundary as shown in Map 3.

**Urban form** – refers to the spatial arrangement of a city, in other words, the shape of a city as seen from the air including the overall pattern of development, activities, and infrastructure.

**Urban planning** – refers to the practice of determining the physical arrangement and condition of land uses and activities.

**Urban/rural boundary** – means the boundary between the urban zones and the rural zone (including rural residential).

**Warehouse Precinct** – the area bound by Rattray Street, Cumberland Street, Police Street and Bond Street. The area is shown in Map 1.

**Yard-based retail** - includes car, caravan and boat yards, timber yards, and garden centres.

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<sup>1</sup> *This broader planning definition of ‘accessibility’ is different to the notion of ‘accessible’ in relation to mobility impairments, such as avoiding stairs which are a barrier to accessibility.*



Map 1 – Central city precincts and quarters

Map 2 Tertiary –  
Medical Precinct





**Map 3 – Extent of “urban Dunedin” and boundaries of community board areas**

# Part 1: Introduction

## The Spatial Plan

'Dunedin Towards 2050 – a Spatial Plan for Dunedin' (the Spatial Plan), sets the strategic direction for Dunedin's growth and development for the next 30+ years. It outlines a broad set of principles, strategic directions, policies, and actions and visually illustrates how the city may develop in the future. It will be used to guide land-use planning in the city as well as influencing how future infrastructure and services may be provided or limited.

The Spatial Plan is primarily, but not solely, concerned with Dunedin's urban form and design. Urban form and design refer to the spatial arrangement of a city, in other words, the shape of a city as seen from the air including the overall pattern of development, activities, and infrastructure as well as the design or 'look and feel' of the city and how it functions. Urban form and design have a significant impact on the sustainability, liveability and economic performance of cities. The Spatial Plan covers objectives for Dunedin as a whole as well as more detailed objectives and policies for the main urban area of Dunedin city (referred to as urban Dunedin, Map 3, p.8) and Dunedin's townships.

At its heart, the Spatial Plan also considers the importance of protecting Dunedin's extensive rural and natural areas from inappropriate development. It also identifies other ways of supporting the productive values and ecosystem services provided by these areas.

The Spatial Plan addresses Dunedin's urban and rural spaces and places in an integrated way, considering how land-use, transportation planning, and infrastructure and services provision must be co-ordinated to contribute to a

prosperous, liveable, memorable, vibrant and sustainable city. The Spatial Plan will be used to guide and manage change and development in Dunedin.

While Dunedin has low population growth, it is always changing and developing. Often these changes are of a small scale, but gradually, these changes can either erode or improve the things that we love about Dunedin. We need to cater for changing needs and preferences within the wider context of the challenges that the city faces, while maintaining the things that we love about Dunedin.

The Spatial Plan draws on the principles of good urban planning and design and also reflects the varied aspirations of the different communities of Dunedin and the strengths, weaknesses, opportunities and threats identified for Dunedin.

The Spatial Plan is designed to link strongly to the vision and community outcomes identified in the Long-Term Plan (LTP). The LTP focuses on the Dunedin City Council's (DCC) activities and its contributions to achieving the vision and future priorities for the city.

The Spatial Plan complements the LTP by focusing on how the city's vision and objectives can be achieved through managing urban form and design including:

- the management of the location of activities (e.g. residential, commercial, industrial activities);
- infrastructure development (e.g. transportation, water and waste infrastructure);
- the provision of community facilities and services (e.g. parks and open spaces); and
- the design of public and private spaces.

## Why do we need a spatial plan?

The preparation of a spatial plan is not currently required by legislation except in Auckland. Nevertheless, most cities in New Zealand have prepared development or growth strategies (spatial plans) under the broad provisions of the Local Government Act 2002, in order to have a vision to guide and integrate land-use planning with infrastructure and services planning.

Dunedin's Spatial Plan will be used to ensure there is a clear and shared vision about what type of city we want in the future, with a focus on what that means in terms of the 'look and feel' of the city and how it functions. This vision will guide land-use planning, infrastructure provision, and facilities and services provision. Currently, Dunedin does not have a stand-alone document that provides this collective vision.

As a result of the Spatial Plan, there will be improved integration and co-ordination of the DCC's role as a regulator, service provider, advocate and leader in the city.

## How will the Spatial Plan be used?

The Spatial Plan will move us toward our vision for the city by providing:

- a platform for strategy integration by building on as well as informing other DCC policies and strategic decisions; and
- a framework of objectives and policies by which initiatives of DCC and external parties can be evaluated.

The Spatial Plan is a high level, non-regulatory strategy. The individual policies and actions of the Spatial Plan will need to be implemented through the DCC's existing and future strategies and plans, and can be subject to change and refinement through the processes used to develop those documents.

For example, through the DCC's role as regulator, the Spatial Plan will form a vital part of the direction for the review of the District Plan and the justification for future changes in the preparation of the Second Generation District Plan. The Spatial Plan has been consulted on and developed under the Local Government Act 2002. Information obtained from consultation on:

- a. the overall urban form objective (compact city with resilient townships);
- b. the objectives; and
- c. the policies

is intended to be considered and applied by the DCC in relation to any future review of the District Plan under the Resource Management Act 1991.

Prior to the adoption of the Second Generation District Plan, land owners may seek to establish activities that may not be supported by the provisions of the current District Plan. In these situations, the DCC may look to the Spatial Plan as a guide to determine whether such proposals are aligned with the strategic thinking for the city into the future.

Through its role as a service provider, the DCC will look to the Spatial Plan when developing or evaluating new policies or projects for inclusion in the LTP, Transportation

Strategy, Parks and Reserves Strategy, the Central City Plan, suburban centre plans, and other projects and initiatives.

The Spatial Plan will be used to provide direction to other national and regional authorities, private developers, other infrastructure providers and the community sector. It will provide a clear framework and level playing field for development in the city. It is expected that, once adopted, all significant developments will be assessed against the Spatial Plan. Some features of the Spatial Plan may be implemented by the Otago Regional Council (ORC), central government, or the private or community sectors. In these cases, the DCC's role is to act as an advocate for the city to influence these processes.

The Spatial Plan also provides guidance to the private and community sectors on the agreed long-term vision for the city. Businesses and organisations will have the greatest influence on the future form and function of the city. In addition to its role as a regulator, the DCC has a role as a leader to work actively to support, collaborate with, and provide guidance to these groups to achieve the vision for the city.

Figure 1 shows some of the key relationships the Spatial Plan has to other strategies, plans and projects. The implementation methods and mechanisms are explored in more detail in part 3.

## **Where does the Spatial Plan fit with other key strategies and plans?**

The Spatial Plan is part of an integrated policy framework which guides the overall direction in land-use and infrastructure planning for Dunedin and is informed by and provides guidance to regional strategies and plans.

The Spatial Plan is also guided by central government strategies, policies and plans, for example the National Infrastructure Plan 2011 and the National Policy Statement for Renewable Electricity Generation.

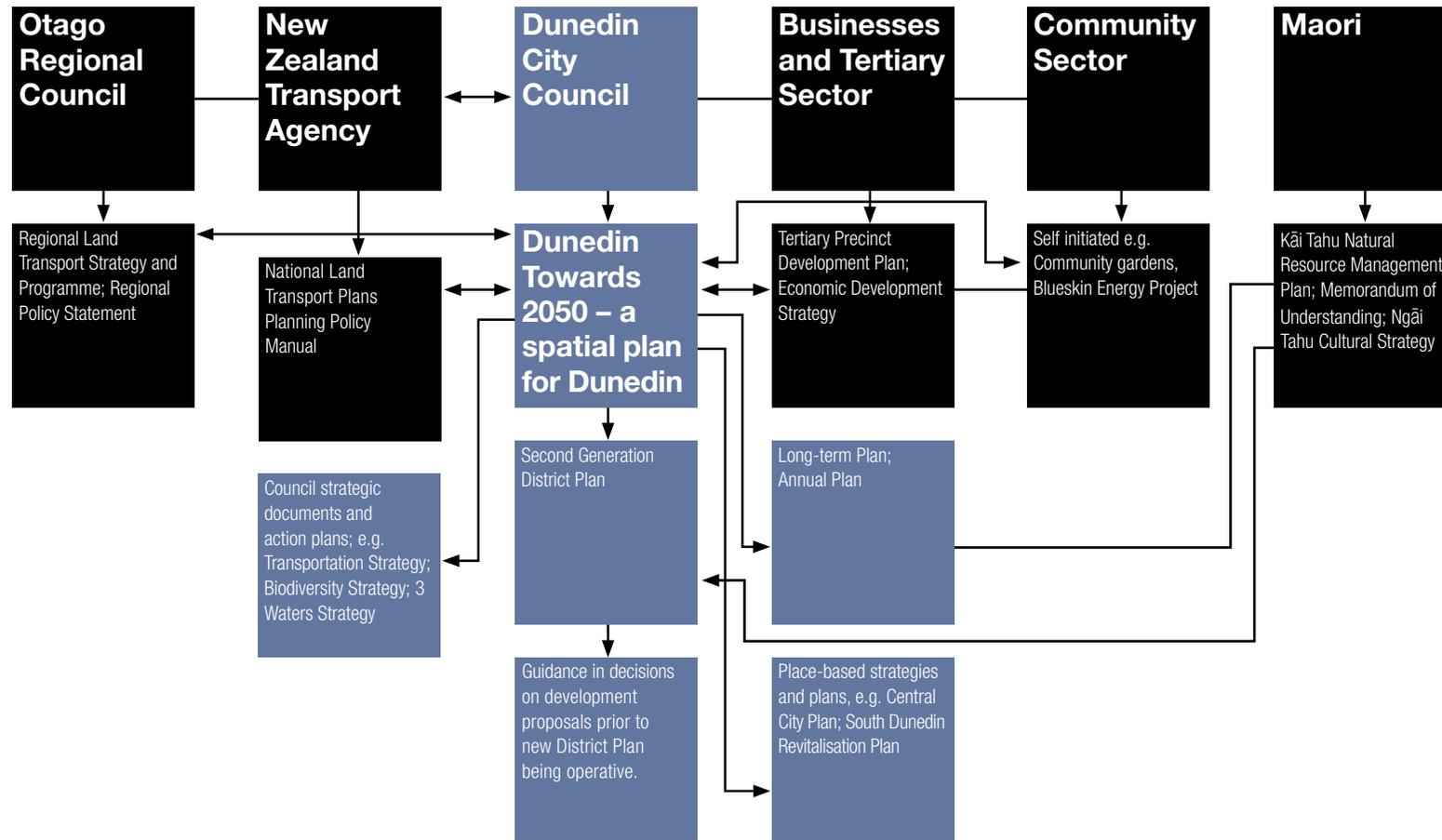
Dunedin's role in the region is also an important component of the Spatial Plan, and therefore consideration has been given to cross-boundary issues and the plans and strategies of other local authorities in the region.

## **How has the Spatial Plan been developed?**

The Spatial Plan has been developed as a cross-departmental DCC project, managed by the City Development team, City Planning and led by a Councillor Working Party. It draws on the principles of good urban planning and design and also reflects the aspirations of the various communities of Dunedin and the strengths, weaknesses, opportunities and threats identified for Dunedin. The development of the Spatial Plan relied heavily on the findings from Your City Our Future and other DCC consultation exercises (Appendix 1) along with findings from a broad range of research projects completed over the last two years (Appendix 2).

The Spatial Plan will be reviewed every six years, or sooner if the research informing the Spatial Plan has changed or the DCC has new information. The review is timed to provide input into the LTP process. The first review will build on and expand the collaboration with central government, ORC, tangata whenua, and community organisations that occurred in the preparation of the Spatial Plan.

Figure 1. How the Spatial Plan relates to other key strategies, plans and projects





## Principles for the DCC's role in managing urban development

In order to implement the Spatial Plan successfully, the DCC will make decisions according to the following underlying principles, which provide guidance on its role in managing urban development. In making decisions guided by the principles, the DCC will always strive to look for innovation in solutions, opportunities and technologies.

### Principle 1. Demonstrate leadership and good governance through collaboration and engagement

The DCC has a governance role and responsibility for ensuring the social, economic, cultural and environmental wellbeing of the community. Good governance will require decision-makers to be accountable to those affected by their decisions, including future generations.

The DCC recognises that achieving the objectives for the city outlined in the Spatial Plan requires leadership at all levels within the city and also requires it to work collaboratively with other organisations, authorities, and the private, community, and business sectors toward a shared vision for the city. The effective way to achieve this is to undertake decision-making in a collaborative manner with informed decisions and robust processes that engage all members, groups and stakeholders in the community.

In achieving this principle, the DCC will:

- ensure our relationship with Kāi Tahu is visible and is built into the core of our vision; and
- ensure effective community engagement practices in policy formation and key decisions to enable the community to participate easily and meaningfully;
- actively engage with businesses, developers, and community organisations to identify ways that the DCC can support development, innovation, investment, and activities in the city which contribute to the objectives identified in the Spatial Plan;

- ensure market forces have a fair and clear framework to work within;
- identify and use positive means of achieving objectives such as encouragement, guidance, partnership, and incentives, with land-use controls focused on issues where other methods on their own are considered inadequate;
- work collaboratively with the community and health services sector to ensure that urban planning contributes to social and cultural wellbeing;
- support and encourage co-ordinated planning with the ORC, central government, community organisations and the tertiary sector; and
- ensure continuous action, including both small and large changes, to move towards the vision for the city.

### Principle 2. Commitment to Te Tiriti o Waitangi/Treaty of Waitangi principles

The Dunedin City Council values its relationship with Te Rūnanga o Ōtākou and Kati Hūirapa Runaka ki Puketeraki.

In planning for the long-term growth, development and sustainability of Dunedin, the Dunedin City Council acknowledges the partnership with Kāi Tahu and inclusion of Te Tiriti o Waitangi/Treaty of Waitangi principles are essential to the successful implementation of the Spatial Plan. The Dunedin City Council is committed to upholding Te Tiriti o Waitangi/Treaty of Waitangi. This commitment has taken the form of developing Te Tiriti o Waitangi/Treaty of Waitangi relationships with Kāi Tahu and other Māori in Dunedin, and establishing organisational processes to meet Te Tiriti/Treaty based responsibilities.

The Dunedin City Council is committed to honouring its Te Tiriti/Treaty and statutory obligations under the Resource Management Act 1991 and the Local Government Act 2002. This commitment, and the integration of a Kāi Tahu approach to planning for a sustainable future, will be reflected in all Dunedin City Council Plans and Strategies. This commitment is further reflected in the Council relationship agreements with the manawhenua of the city, the establishment of the Māori Participation Working Party and the adoption of a formal protocol.

### Principle 3. Champion good urban design

There is a large body of evidence on the links between urban design (the 'look and feel' of the city and how it functions) and a number of outcomes including:

- health and wellbeing;
- residents' assessments of city 'liveability' and their quality of life;
- environmental performance;
- increase in visitor numbers; and
- success in attracting and retaining a skilled workforce and economic investment.

Cities around the world are actively working to protect or enhance their strengths and capitalise on opportunities to become desirable locations to live and do business. However, creating great cities requires local authorities to strive actively for good urban design outcomes in their own activities and to champion urban design to the private sector.

The New Zealand Urban Design Protocol<sup>1</sup>, to which the DCC is a signatory, outlines seven principles of good urban design which reflect an understanding of the form, function and feel of places:

- **context** – seeing that buildings, places and spaces are part of the whole town or city
- **character** – reflecting and enhancing the distinctive character, heritage and identity of our 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.

These seven principles broadly reflect Kāi Tahu values for quality urban design but are more specifically outlined in the Kāi Tahu ki Otago Natural Resource Management Plan 2005:

- **Matauranga** - Knowledge and understanding  
Reflecting understanding and awareness of local history through design.
- **Whakapapa** - Relationships and connection  
Relationships between people and people and the environment are important for quality urban design.
- **Kāitiakitanga** – Guardianship and protection  
Important features should be protected for the enjoyment of the current and future generations.
- **Whanaungatanga** – Relationships and belonging  
Quality design should encourage the coming together of communities; places, services and resources are accessible to all.
- **Rangatiratanga** - Recognition and acknowledgement, of the relationship of Kāi Tahu to resources and sites of importance.
- **Tikanga** - Sustainable use and management  
Managing the use, development, and protection of natural and physical resources.

The DCC will apply these principles at varying scales from a city-wide to a street level to contribute to creating a liveable city with a high quality environment where each community has a strong sense of place and identity.

The objectives for the city outlined in Part 2 reflect what these high-level urban design principles mean in Dunedin, based on Dunedin's strengths, weaknesses, opportunities and threats and the aspirations of the different communities that make up Dunedin.

#### **Principle 4. Ensure integration and co-ordination**

The different parts of the city, through its networks, systems and places, are often connected and have close inter-relationships that need to be considered and managed when undertaking improvements or development. Decisions and actions in one area may have flow-on effects to other areas or networks. It is important to have an awareness of the wider environment and the effects decisions may have on the broader vision for the city as outlined in the Spatial Plan. Integration and co-ordination require that all social, economic, environmental and cultural issues are considered in an holistic manner.

In achieving this principle, the DCC will:

- ensure the Spatial Plan is integrated with other strategies within and outside the DCC;
- co-ordinate and integrate its resource management functions with its functions as a provider of infrastructure and facilities in a way which supports the Spatial Plan;
- ensure asset management plans support the strategic directions and are aligned with the LTP, District Plan and funding policies;
- ensure opportunities are taken for co-ordination of matters that jointly affect the Dunedin City Council and neighbouring territorial local authorities, particularly where integrated policies are needed for matters that cross shared boundaries; and
- work with the Otago Regional Council to co-ordinate and integrate decisions and actions on matters where responsibilities are shared.

#### **Principle 5. Ensure outcomes are affordable and equitable**

A guiding principle for the DCC's role in managing urban development is to maximise intragenerational and intergenerational equity and economic sustainability for future ratepayers. The concept of intergenerational equity considers whether the current generation is making investments into public assets and paying for them now, with future generations reaping the benefits of the investments, or conversely, if the current generation is taking out loans to purchase public goods and services that benefit it now but that will be paid for by future generations.

The concept of intragenerational equity (or cross-subsidy) considers the distribution of costs vs. benefits within a community, for example, when the costs of an investment are spread across the whole community but only a small percentage of people directly benefit from the development.

To achieve this principle the true costs of development, who benefits from the development, and the potential positive and negative economic flow-on effects of development must be identified and considered.

In achieving this principle, the DCC will:

- ensure the costs of infrastructure associated with urban expansion are borne by those who directly benefit wherever practicable and fair;
- limit cost increases for water and waste infrastructure to current affordability where practical;
- contain and limit areas allocated for development to ensure efficient provision of services and infrastructure and to limit further land fragmentation; and
- consider the value of ecosystems when making decisions about development and infrastructure services (e.g. recognising the value of native bush and grasslands in providing the city with clean water and air).

#### **Principle 6. Show leadership in addressing global challenges that face the city**

The DCC has a leadership role in ensuring Dunedin is prepared for, and successfully adapts to, global challenges such as the effects of Peak Oil, climate change, the global economic recession, and population changes. A guiding principle for the Spatial Plan is to identify both the global challenges facing the city and potential responses to those challenges.

In achieving this principle, the DCC will:

- keep up-to-date with, and consider, climate change predictions and Peak Oil forecasts;
- undertake research to better understand the potential effects of climate change on some of our most vulnerable areas and identify appropriate land-use planning and infrastructure planning responses;
- ensure detailed risk assessments of the most vulnerable areas and assets are undertaken, along with appropriate adaptation responses; and
- plan for the potential effects of Peak Oil on the costs of travel and the costs of goods and services within the city.

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<sup>1</sup> *The New Zealand Urban Design Protocol, March 2005.*

# Part 2: Strategic directions and overall urban form objective

This section sets out the vision and strategic framework for the Spatial Plan by defining 'what kind of city we want to have' and what we need to do to make that a reality. The strategic framework forms a platform for policy integration across the DCC's various implementation mechanisms that will be used to give effect to the Spatial Plan.

The Spatial Plan is based on six key strategic directions, as shown in figure 2.

*A liveable city and*

*An environmentally sustainable and resilient city*

are supported by four strategic directions:

*A memorable and distinctive city;*

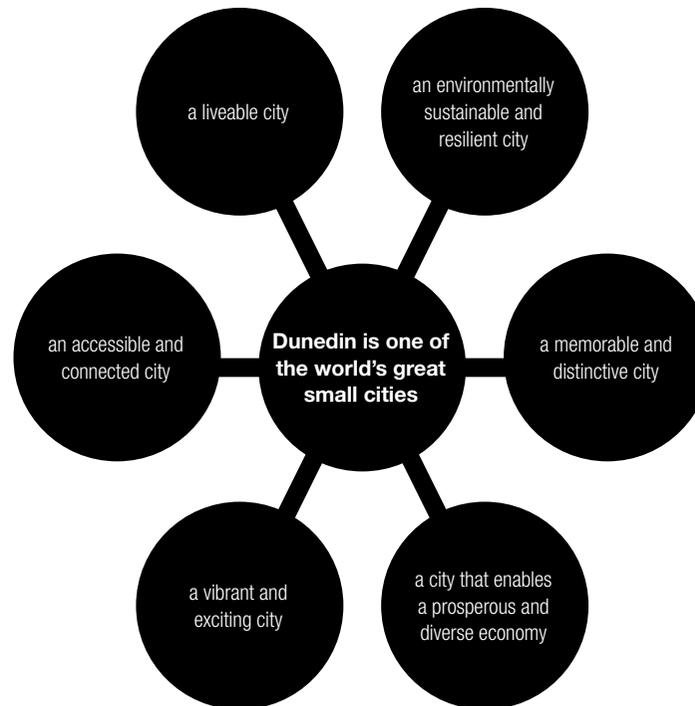
*A vibrant and exciting city;*

*An accessible and connected city; and*

*A city that enables a prosperous and diverse economy.*

The strategic directions are mutually dependent, working together in an integrated manner to achieve the visions.

**Figure 2 – Strategic directions**



Each strategic direction begins by explaining how urban form and design can contribute to achieving the strategic direction, and what evidence indicates are the major urban planning and design principles which must be followed in order to achieve the strategic direction. Then a series of objectives, policies and linked implementation mechanisms and actions are outlined in a table. The implementations and actions are linked to Part 3 Implementation firstly by the mechanism and then by a coded number that links to the specific action for that mechanism. Part 3 should be referred to for the full detail of each action.

The links between the strategic direction policies and other DCC plans and strategies can also be found in Part 3, where each plan or strategy has been linked to the relevant policies in the strategic directions.

The preferred future development option that best meets these strategic directions is discussed at the end of the section.



## A liveable city

### Explanation

Liveability is one of the two high level strategic directions for the Spatial Plan and is often used as a guiding principle for urban planning. Liveability generally refers to how comfortable and safe a place is to live and how much a city supports a high quality of life. Liveability has been benchmarked in several international surveys<sup>1</sup> as many cities compete to be considered the most liveable in the world. A city's liveability is not only important for the quality of life for existing residents, it is also vital for the attraction of a skilled workforce and new businesses.

Urban form and design and other aspects of spatial planning, resource management, and infrastructure provision contribute to several aspects of liveability. For example, controlling the performance standards of polluting activities can influence environmental conditions and public health. Urban planning can also influence the standards of housing and their affordability by influencing the price of land.

The design of urban spaces can influence personal safety. Well-designed and connected public spaces

that encourage residents to engage in social activity in their neighbourhood contribute to community identity. Aspects of urban design can also be used to reinforce and celebrate cultural identity, a topic covered further in 'a vibrant and exciting city.'

Spatial planning influences where, and how easily, different activities (education, recreation, healthcare, leisure and arts) can take place in the city. An important way to increase liveability is by encouraging new residential development in areas close to where there are existing community support, recreation/leisure and employment opportunities and for these activities to concentrate into activity centres, both of which contribute to improving accessibility. 'A vibrant and exciting city' explains more about the importance of having a hierarchy of centres in relation to city vibrancy, and the importance of accessibility is covered in more detail under 'an accessible and connected city.'

### Where we want to be

In 2050, Dunedin is made up of a strong network of accessible, connected rural and urban communities and neighbourhoods that are socially connected, and designed to promote physical and psychological wellbeing. All

citizens have a wide choice of affordable housing types that are warm and energy-efficient. The city and settlements have safe and pleasant public spaces that are designed for people and provide a strong community identity where social interaction and civic pride is valued.

Dunedin is renowned for its local and regional recreational and sporting opportunities built around the Otago Harbour, coast, track networks and high quality facilities. There is enhanced access to the Harbour with many people regularly walking or cycling around its edge, using harbourside recreation areas, or engaged in activities on the water. The sea and Harbour are unpolluted and safe to swim in and the city has clean air and a safe and secure water supply.

Dunedin has maintained and enhanced its reputation for having an exceptional selection of quality schools and respected tertiary education institutions. Dunedin is considered one of the 'world's great small cities', with the full range of 'large city' cultural, leisure, educational, health and employment opportunities in a small, friendly city that is easy to get around.

<sup>1</sup> For example, Economist's Intelligence Unit's World's Most Liveable Cities and Mercer's Quality of Living Survey

## What we will do

Objectives	Policies	Implementation mechanisms and actions
LIV 1. Dunedin has a resilient and safe water supply	(a). Continue the planned programme of water upgrades and, once completed, maintain drinking water quality at those levels  (b). Protect and manage water catchments, including wetlands and tussock grasslands, to provide high water quality <i>Related objectives and policies: ESR 2(b)</i>	Water and waste services projects – <b>WWP1</b>  Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC13</b> Second Generation District Plan – <b>DP8, DP13</b> Property development and public-private partnerships – <b>PROP1</b>
LIV 2. Dunedin is a city where it is safe to swim and collect food from fresh water and marine recreation areas.	(a). Discourage activities that might threaten the quality of the marine or fresh water recreation areas	Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC13</b>
LIV 3. Dunedin has high levels of air quality	(a). Encourage use of clean energy for heating and burning, and vehicles that improve air quality	Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC6</b>
LIV 4. Dunedin is a place where people are safe in their homes, work and public spaces	(a.) Promote and apply CPTED principles in the design of public spaces and new developments <i>Related objectives and policies: MEM 2(a)</i>	Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC12</b> Information, education, guidelines and recognition initiatives – <b>INFO4, INFO7</b>

Objectives	Policies	Implementation mechanisms and actions
LIV 5. Dunedin has strong community identity and pride, neighbourliness and social connectedness	(a). Create a network of public spaces that encourage people to connect with one another and participate in social, cultural and recreational activities <i>Related objectives and policies: VIB 2</i>	Second Generation District Plan – <b>DP18</b> Urban amenity improvement projects – <b>UA4, UA5, UA6</b>
LIV 6. Dunedin citizens have access to, and actively participate, in sporting, recreational and leisure activities throughout the city	(a). Locate major community and recreation facilities (pools, libraries) close to existing population centres, within walking distance of residential areas, and along high frequency public transport routes (b). Ensure existing residential areas have equitable access to good quality open space and basic recreational facilities, such as playgrounds (c). Encourage new residential development to locate in areas of high accessibility to good quality open space and recreational facilities (d). Ensure the provision of reserves in new development maximises active use of space  (e). Dunedin's key open and recreational spaces, including the Town Belt and the Otago Harbour, are protected and enhanced to create a broad range of multi-purpose spaces for cultural, social, recreation and leisure activities (f). Support the development of an integrated track network for walking, cycling and other forms of recreation	Second Generation District Plan – <b>DP27</b>  Second Generation District Plan – <b>DP27</b>  Second Generation District Plan – <b>DP4, DP11</b>  Parks, reserves and open space management – <b>Parks4</b> Standards and bylaws – <b>REG4</b> Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC19</b> Funding source – <b>FS6</b> Information, education, guidelines and recognition initiatives – <b>INFO14</b> Parks, reserves and open space management – <b>Parks2, Parks5</b>  Parks, reserves and open space management – <b>Parks3, Parks8</b> Transportation projects – <b>TP13</b>
LIV 7. All Dunedin citizens have quality, lifelong, learning opportunities to realise their full potential	(a). Encourage the retention of primary and secondary education facilities near to where people live  (b). Support the maintenance and expansion of community learning facilities in key locations across the city	Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC4</b> Second Generation District Plan – <b>DP27, DP28</b> Research and monitoring – <b>RM8</b>  Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC3</b> Second Generation District Plan – <b>DP27</b> Property development and public-private partnerships – <b>PROP1</b>
LIV 8. Dunedin has a range of quality healthcare and social support facilities	(a). Support the location of community health and support services (doctors, pharmacies, Plunket clinics etc) near to where people live (b). Encourage and support the development and retention of publicly funded primary health and hospital facilities and services in Dunedin	Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC14</b> Second Generation District Plan – <b>DP2, DP27, DP28</b>  Second Generation District Plan – <b>DP27</b>
LIV 9. Dunedin offers a range of quality housing options to provide for different lifestyle choices, life stages, cultures and household sizes, including adequate provision of affordable housing options and opportunities for 'aging in place'	(a). Enable and encourage a wide variety of housing that meets the diverse needs of the population, including a broad range of dwelling types, sizes and locations <i>Related objectives and policies: VIB 2(a), ACCESS 4(b), ACCESS 7(b)</i> (b). Encourage the design of new housing and redevelopment of existing housing stock to take into account lifetime design principals	Second Generation District Plan – <b>DP11</b> Information, education, guidelines and recognition initiatives – <b>INFO19</b>  Information, education, guidelines and recognition initiatives – <b>INFO19</b>
LIV 10. All Dunedin's housing stock is warm, and inexpensive to heat	(a). Ensure new housing is well insulated, and incorporates passive solar building design, ventilation and uses energy-efficient forms of heating  (b). Retrofit and redevelop existing housing where desirable, to ensure that all existing housing is warm and energy-efficient and results in comfortable and healthy homes <i>Related objectives and policies: ESR 7(a), ESR 8(a)</i>	Information, education, guidelines and recognition initiatives – <b>INFO5</b> Standards and bylaws – <b>REG1, REG4, REG5</b> Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC17</b>  Financial incentives – <b>FUND6, FUND7</b> Funding sources – <b>FS8, FS9</b> Information, education, guidelines and recognition initiatives – <b>INFO5</b> Standards and bylaws – <b>REG5</b> Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC17</b>



## An environmentally sustainable and resilient city

### Explanation

Environmental sustainability is the major underlying principle of most planning today and can be defined as managing cities in a way that meets the current population's needs without compromising the ability of future generations to meet their own needs. Linked to sustainability is the idea of resilience, which means the ability to:

- recover quickly from disturbances or setbacks; and
- react to potential crisis – the ability of governments or organisations to identify, assess and respond to a potentially disruptive situation in order to prevent it from becoming a crisis.

Resilience is an important concept for both communities and the ecosystems they rely on. An important aspect of resilience is the ability to adapt to and recover from the threats posed by natural hazards and by future scenarios such as Peak Oil and climate change.

How accessibility and our transportation network contribute to environmental sustainability is covered in 'an accessible and connected city'. Other aspects of sustainability, including economic, social and cultural sustainability are also covered under the other objectives.

The natural environment is the foundation of society, from which all economic, social and environmental benefits are derived. People are dependent on the rural and productive environment for provision of food, fuel, and construction materials. The natural environment also provides ecosystem services such as clean air, water, flood attenuation and other services. Ecosystems have limits and it is important to work within these limits. For example, there are limits to the rate at which land can be used to produce food, wood, or other renewable resources. Likewise, in terms of non-productive ecosystem services such as clean air and water or flood attenuation, there are limits to the disturbance that natural areas can absorb before their ability to sustain themselves

and provide these services (the resilience of an ecosystem) is compromised. Biodiversity is one of the key determinants of an ecosystem's resilience.

Urban form and design are key contributors to being an environmentally sustainable and resilient city. Firstly, having a city with a clear urban boundary and a consolidated urban form that avoids loss of, or fragmentation of, rural land or natural areas can protect and maintain biodiversity and the natural resources that are required to meet the needs of communities. Secondly, urban form contributes to resilience by controlling the location of development to avoid natural hazards and potential future hazards posed by climate change.

The protection of rural land from urban development enables its retention for food production and other productive purposes. Having land available for food production in close proximity to an urban area reduces the length and cost of supply chains and creates local markets for produce. This builds resilience for the community in terms of food and the ability to access food in the face of future scenarios such as Peak Oil and climate change. The urban environment also provides opportunities for food production through the development of community gardens, roof top gardens, encouraging developments to provide open space useable for gardens and planting of edible tree species in parks and along road corridors.

The protection and management of indigenous vegetation, through control of pests and minimising disturbance, as well as linking vegetation remnants through corridors and restoration, can further enhance biodiversity. Maximising planting within urban environments can improve air quality, increase biodiversity, and support and contribute to local food sources. Biodiversity and green space is also important within urban areas, providing opportunities for people to experience the natural environment and increase their awareness and appreciation of biodiversity and the importance of conservation.

On a smaller scale, building and urban design can ensure buildings are designed to minimise the impact of natural

hazards such as earthquakes and contribute to sustainability through the use of low-impact design features. For example, neighbourhoods and individual buildings can be designed to improve energy-efficiency such as through passive solar design; providing on-site water and waste infrastructure that works with nature and reduces the need for expensive and material-intensive reticulated infrastructure; or using recycled or eco-friendly building materials. Older buildings can be retro-fitted to make them more efficient and reduce their demand for water and energy. Re-use also reduces the environmental impacts of development through reduced construction waste and the loss of embodied energy. Local energy generation, both heat and electricity (from renewable resources), not only contributes to reduced carbon emissions but also assists in creating greater community energy awareness and an ability to respond faster to energy challenges and constraints, while maintaining local productive capacity.

The environmental performance and efficiency of a city's reticulated water and waste infrastructure and waste management systems are also important contributors to the city's sustainability. Environmental performance of waste management systems can be enhanced by seeking new opportunities for material re-use, recovery and recycling, and incentivising waste minimisation practices in the community. It is important to manage the impacts of wastewater discharges to the environment through appropriate treatment and monitoring. It is also important to educate the community about storm water runoff and management, and to explore incentives for sustainable urban design and new developments that minimise wastewater and storm water contributions. Equally, improving the efficiency of potable water treatment techniques and reducing network leakage, while encouraging smart usage, contributes to environmental performance. Using existing infrastructure efficiently is important as the creation of new infrastructure is both costly and has a large environmental impact.

**Where we want to be**

In 2050, Dunedin is an eco-city where sustainability and resilience is integral to all development and actions. The character, identity and social fabric of rural communities are maintained and productive lands have been protected and are providing for local food markets, as well as contributing to the city's economy. The natural character of the coastal environment is preserved and development along the coast protects or enhances the natural environment. We have a network of conservation areas that are resilient and regenerative.

A network of green corridors and restored waterways extend throughout Dunedin city, providing habitats, linking areas of indigenous vegetation and connecting the city to the countryside. Dunedin leads in best practice for conservation planning and sustainable environmental management at a landscape scale.

Dunedin has embraced sustainable energy production, which provides the primary heating requirements of homes and businesses in the city.

Dunedin is a resilient city, where new urban development has avoided areas of known hazards including coastal and

low-lying areas most at risk from sea level rise and areas that are subject to flooding. Existing development is managed to reduce these risks.

All new development is designed and constructed using low-impact design, so that buildings are warm, energy-efficient, and minimise water consumption and waste production. A large proportion of existing buildings have been retro-fitted to the same standard. New development maximises the use of local goods and materials. Building and landscape design maximises opportunities to enhance biodiversity and provide for local food production. Adaptive re-use and restoration, including earthquake-

strengthening and improving environmental performance sensitively, improves the sustainability and resilience of our heritage building stock.

The city's infrastructure is utilised to an appropriate capacity and maintained to a standard that meets the needs of the community and minimises environmental impacts. Future growth is accommodated by existing infrastructure where practicable and infrastructure investments are financially sustainable. Dunedin supports sustainable transportation by having an accessible and connected city that supports all modes of travel.

**What we will do**

Objectives	Policies	Implementation mechanisms and actions
<p>ESR 1. The productive and ecosystem services provided by the rural environment are maintained or enhanced</p>	<p>(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary</p> <p>(b) Strongly discourage rural-residential living outside of areas identified for rural residential activity, especially on high class soils</p>	<p>Second Generation District Plan – <b>DP4</b></p> <p>Second Generation District Plan – <b>DP7</b></p> <p>Second Generation District Plan – <b>DP14</b></p>
<p>ESR 2. Ecosystem resilience is maintained and enhanced</p>	<p>(a). Encourage good land management that utilises a catchment perspective to enhance productive capacity and protects or restores the natural environment</p> <p>(b). Prevent development which might threaten areas of high biodiversity or ecological value</p> <p>(c). Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna</p> <p>(d). Encourage and support environmental restoration through restoration planting, corridor planting, riparian planting and fencing of waterways</p> <p><i>Related objectives and policies: LIV 1(b)</i></p>	<p>Funding incentives – <b>FUND5</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO12, INFO17</b></p> <p>Second Generation District Plan – <b>DP7</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO12</b></p> <p>Second Generation District Plan – <b>DP7, DP8</b></p> <p>Financial incentives – <b>FUND5, FUND9</b></p> <p>Funding sources – <b>FS6</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO17</b></p> <p>Second Generation District Plan – <b>DP7, DP8</b></p> <p>Second Generation District Plan – <b>DP7, DP19</b></p> <p>Financial incentives – <b>FUND5, FUND9</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO17</b></p>

Objectives	Policies	Implementation mechanisms and actions
<p>ESR 3. A network of green and blue corridors runs throughout urban and rural Dunedin, connecting the diverse ecosystems, including the coast and Harbour, and contributes to biodiversity enhancement and restoration of natural ecosystems across the city</p>	<p>(a). Encourage and support the development of networks of open space, including green and blue networks, which connect vegetation remnants, protect waterways, and regenerate the natural environment</p> <p>(b). Improve the water quality of waterways through restoration measures such as riparian planting and improving the quality of stormwater discharges where required</p> <p>(c). Work with developers to identify opportunities for open space in new subdivisions to be used as part of creating a network of existing and potential green and blue corridors <i>Related objectives and policies: LIV 1, LIV 2</i></p>	<p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC2</b> Funding sources – <b>FS6</b> Financial incentives – <b>FUND9</b> Information, education, guidelines and recognition initiatives – <b>INFO1</b> Parks, reserves and open space management – <b>Parks2, Parks4, Parks7</b> Urban amenity improvement projects – <b>UA2</b></p> <p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC2, ACC7, ACC13</b> Parks, reserves and open space management – <b>Parks1</b> Water and waste services projects – <b>WWP3</b></p> <p>Parks, reserves and open space management – <b>Parks4</b></p>
<p>ESR 4. Dunedin's rural productive capacity is supplemented by a thriving network of urban food production</p>	<p>(a). Protect, recognise and provide for urban food production through initiatives such as: site design which allows for small gardens, community and market gardens, roof-top gardens, and use of edible species in city landscaping</p> <p>(b). Encourage local food processing, distribution and markets</p>	<p>Funding sources – <b>FS10</b> Parks, recreation and open space management – <b>Parks6, Parks9</b> Second Generation District Plan – <b>DP16</b> Information, education, guidelines and recognition initiatives – <b>INFO9</b> Research and monitoring – <b>RM13</b></p> <p>Funding sources – <b>FS10</b> Second Generation District Plan – <b>DP16</b> Research and monitoring – <b>RM10</b></p>
<p>ESR 5. The threats posed by natural disasters and climate change are reduced</p>	<p>(a). Discourage development in areas subject to, or potentially subject to, instability, severe flooding or tidal inundation in future</p> <p>(b). Prevent development in areas subject to increased coastal erosion and encourage natural dune processes to occur where appropriate</p>	<p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC5</b> Information, education, guidelines and recognition initiatives – <b>INFO6</b> Research and monitoring – <b>RM3, RM6</b> Second Generation District Plan – <b>DP15</b></p> <p>Second Generation District Plan – <b>DP15</b> Financial incentives – <b>FUND3</b> Research and monitoring – <b>RM3</b></p>
<p>ESR 6. All buildings with heritage and townscape value are earthquake-strengthened.</p>	<p>(a). Support on-going earthquake-strengthening of heritage buildings <i>Related objectives and policies: MEM 5</i></p>	<p>Financial incentives – <b>FUND1, FUND3, FUND8</b> Information, education, guidelines and recognition initiatives – <b>INFO2, INFO3</b></p>
<p>ESR 7. Our reliance on non-renewable energy sources and oil-based products is reduced</p>	<p>(a). Promote more local sources of renewable energy including distributed generation (e.g. on-site power generation/micro-generation) and waste and biomass energy production, where balanced with other important values <i>Related objectives and policies: MEM 1</i></p> <p>(b). Manage the location of development in the rural environment to maintain future access to renewable energy resources</p>	<p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC9, ACC10</b> Information, education, guidelines and recognition initiatives – <b>INFO11</b> Second Generation District Plan – <b>DP20</b> Standards and bylaws – <b>REG4</b> Water and waste services projects – <b>WWP2</b></p> <p>Second Generation District Plan – <b>DP20</b></p>

Objectives	Policies	Implementation mechanisms and actions
ESR 8. Development in the city results in a low or positive impact on the natural environment	(a). Encourage all new and retrofitted buildings to utilise low-impact design techniques and practices, for example, through incorporating design features that minimise energy, waste and water consumption (such as passive solar building design) across the whole life cycle <i>Related objectives and policies: LIV 10(a)(b)</i>	Customer Service – <b>CS1, CS2</b> Financial incentives – <b>FUND6, FUND7</b> Information, education, guidelines and recognition initiatives – <b>INFO5, INFO9, INFO11, INFO13</b> Standards and bylaws – <b>REG4</b>
ESR 9. Systems of wastewater and storm water treatment and disposal are delivered in a cost effective manner with a positive environmental impact	(a). Discourage development in areas where there are major infrastructure constraints (e.g. where existing systems are at or over capacity and engineering solutions would be prohibitively expensive to implement) (b). Require appropriate storm water collection and disposal and wastewater treatment in greenfield subdivision and on non-reticulated sites, including low-impact design and community-owned systems, where appropriate (c). Encourage new development in appropriately zoned existing urban areas, near to existing services and where there is infrastructure capacity (d). Enforce clear policies for connections and extensions to the DCC's water and waste infrastructure (e). Encourage new development in existing urban areas to minimise impervious surfaces	Funding sources – <b>FS1</b> Second Generation District Plan – <b>DP4, DP15</b>  Research and monitoring – <b>RM4</b> Standards and bylaws – <b>REG4</b>  Funding sources – <b>FS1, FS7</b> Second Generation District Plan – <b>DP4</b> Standards and bylaws – <b>REG2</b>  Research and monitoring – <b>RM13</b> Second Generation District Plan – <b>DP29</b>
ESR 10. Dunedin consistently achieves best practice environmental standards in waste management, for example, by increased resource recovery and decreasing the production of waste in Dunedin	(a). Ensure an integrated and holistic approach to dealing with our waste and resources <i>Related objectives and policies: LIV 2(a)</i>	Resource Recovery and Waste Minimisation Strategy
ESR 11. Dunedin's outlying settlements and townships have reasonable self-sufficiency and resilience to rising fuel prices	(a). Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations) <i>Related objectives and policies: LIV, 7(a)(b), LIV 8(a) ACCESS 4(b)</i>  (b). Support and encourage the establishment and retention of local community-based initiatives (e.g. community gardens, local farmers markets, local resource re-use and recovery facilities, local events)	Second Generation District Plan – <b>DP1, DP26</b> Advocacy, collaboration and contribution to other authorities' and organisations' planning – <b>ACC1, ACC4, ACC8, ACC9</b> Information, education, guidelines and recognition initiatives – <b>INFO18</b>  Information, education, guidelines and recognition initiatives – <b>INFO18</b>



## A memorable and distinctive city

### **Explanation**

A city is more than a physical collection of buildings, streets and open spaces. The design and quality (or 'look and feel') of places, urban, rural and natural, are what define a city's character and identity and make cities memorable and distinctive. The built form reflects and embodies the city's history and development and its people, past and present. In many parts of the world, globalisation has been blamed for stripping the individual identity of places and making cities anonymous, characterless and ultimately unattractive, unappealing places to live, visit or do business. On the other hand, cities that maintain, enhance and celebrate their character, identity, culture and history have been shown to enhance the quality of life for their residents by strengthening the sense of identity, belonging and pride in the community. These cities are also more likely to thrive in a globally competitive world by attracting skilled people, employers, and visitors.

Spatial planning and urban design are integral to creating a memorable and distinctive city. The management of the overall urban form of a city, including how the natural and built environments of a city interrelate, complement and define each other, is a key aspect of maintaining and enhancing a city's character and identity. Management of the location and design of buildings, structures and activities (such as forestry) in rural and natural areas with important landscape values is essential to preserving the character of these spaces.

Within the urban environment, urban planning and design are responsible for the protection and management of built and cultural heritage and the management of design and character of the built environment. Urban design controls the interface between public and private spaces and the look and feel of our streets and public spaces. Creating a memorable and distinctive city also involves encouraging quality design and innovation. The amenity of the urban environment, in turn influences the vibrancy of spaces, which is discussed in 'a vibrant and exciting city.'

### **Where we want to be**

In 2050, Dunedin's character and identity is protected and enhanced, including the character and role of the central city, the distinct rural and coastal communities, the Harbour, and the range of outstanding landscapes that make up Dunedin.

Dunedin is nationally, and internationally, renowned for its contemporary and heritage architecture and design. Dunedin's distinctive collection of built heritage is well maintained, earthquake-strengthened, and fully utilised with a variety of adaptive re-uses. Dunedin is recognised as a leader in heritage protection, re-use and earthquake-strengthening.

Kāi Tahu cultural heritage is visible within the city, celebrated through events and integrated appropriately into public spaces and the design of buildings.

The identity of the rural and coastal communities throughout the city is enhanced with well designed new developments and amenity improvements that respect the character of the local community and its surrounding landscapes.

The city has clearly defined commercial and social-cultural precincts and centres, and an integrated network of inspiring public spaces, streets and places that connect people and enable ease of movement, and which facilitate expression of culture and identity. The central city is the heart of the network with strong connections to the Harbour, coast, the Tertiary-Medical Precinct, and the hills. All development in the central city and commercial centres applies principles of good urban design integrating and enhancing adjoining public spaces and buildings, and making a positive contribution to the distinctive character of the city. Public art and recognition of our culture and heritage is integrated into public spaces.

## What we will do

Objectives	Policies	Implementation mechanisms and actions
MEM 1. The diverse character of Dunedin's rural and coastal environment is maintained and enhanced	<p>(a). Manage the location and design of development in the coastal environment to protect the natural character and landscape values of the coastal environment</p> <p>(b). Protect the character and identity of the distinct rural and coastal communities by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)</p> <p>(c). Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment</p> <p><i>Related objectives and policies: ESR 1, ESR 3a, ESR 7a</i></p>	<p>Information, education, guidelines and recognition initiatives – <b>INFO12</b> Second Generation District Plan – <b>DP1</b> Second Generation District Plan – <b>DP1, DP4</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO12</b> Second Generation District Plan – <b>DP1, DP13, DP25</b> Research and monitoring – <b>RM7, RM9</b></p>
MEM 2. Dunedin is recognised as a beautiful place, enhanced by quality architectural, urban and landscape design	<p>(a). Apply best practice design principles to the management of all development in the central city and other centres to ensure a good public-private interface (e.g. to the location and design of parking, verandahs and façades)</p> <p>(b). Manage the demolition of buildings in centres to ensure that demolition does not result in inappropriate gaps in the streetscape</p> <p>(c). Manage the location and design of prominent buildings and large stand-alone retail buildings to ensure the visual impact of these buildings and any associated car parking does not detract from the overall amenity of the city</p> <p>(d). Protect significant view corridors from key vantage points to key heritage buildings, the Harbour and hills</p> <p>(e). Manage the potential visual, amenity and environmental impact of medium-density and infill housing development</p> <p>(f). Identify the causes and solutions to the problem of 'demolition by neglect' and the impacts on city amenity from inadequate building maintenance</p> <p>(g). Promote innovative high quality design and future-proofing of new development through lifetime design principles and low-impact design</p> <p><i>Related objectives and policies: VIB 2</i></p>	<p>Information, education, guidelines and recognition initiatives – <b>INFO1, INFO2, INFO7, INFO13</b> Second Generation District Plan – <b>DP9</b></p> <p>Customer service – <b>CS2</b> Funding sources – <b>FS5</b> Information, education, guidelines and recognition initiatives – <b>INFO7</b> Second Generation District Plan – <b>DP12</b></p> <p>Customer service – <b>CS2</b> Information, education, guidelines and recognition initiatives – <b>INFO7, INFO13</b> Second Generation District Plan – <b>DP10</b> Second Generation District Plan – <b>DP1</b> Research and monitoring – <b>RM11</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO9</b> Second Generation District Plan – <b>DP9, DP10</b></p> <p>Financial incentives – <b>FUND1</b> Funding sources – <b>FS4</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO20</b></p>
MEM 3. The identity, character, and history of the diverse communities that make up Dunedin are protected and celebrated	<p>(a). Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity</p> <p>(b). Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments</p> <p>(c). Manage the activities, design and location of development within the Tertiary-Medical Precinct to enhance quality, amenity, and character</p> <p>(d). Ensure areas with significant heritage values are recognised and protected as 'special character' areas</p>	<p>Second Generation District Plan – <b>DP1, DP9, DP30</b> Information, education, guidelines and recognition initiatives – <b>INFO1, INFO7, INFO12, INFO14</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO7</b></p> <p>Customer service – <b>CS2</b> Second Generation District Plan – <b>DP9, DP24, DP30</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO15</b> Second Generation District Plan – <b>DP12</b></p>

Objectives	Policies	Implementation mechanisms and actions
MEM 4. Dunedin is known for its memorable and engaging public art	<p>(a). Integrate public art into the design of public spaces, streets, open space, infrastructure and major developments in the city</p> <p>(b). Promote the integration of Kāi Tahu values in public art, where appropriate <i>Related objectives and policies: VIB 1</i></p>	<p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC16, ACC18</b> Funding sources – <b>FS3</b> Urban amenity improvement projects – <b>UA7</b></p> <p>Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC16</b> Urban amenity improvement projects – <b>UA7</b></p>
MEM 5. Dunedin's built heritage is valued as a resource and successful re-use of heritage buildings contributes to the economic prosperity of the city	<p>(a). Identify and protect Dunedin's heritage buildings and integrated heritage streetscapes</p> <p>(b). Promote the economic re-use of heritage buildings in the city</p> <p>(c). Establish DCC community facilities within heritage buildings wherever practicable and encourage other central and local government agencies to do the same</p> <p>(d). Take an integrated approach to address barriers to investment in areas targeted for revitalisation <i>Related objectives and policies: ESR 6(a)</i></p>	<p>Advocacy collaboration and contribution to other authorities' and organisations' planning – <b>ACC18</b> Financial incentives – <b>FUND1</b> Funding sources – <b>FS5</b> Research and monitoring – <b>RM12</b> Second Generation District Plan – <b>DP3</b></p> <p>Customer Service – <b>CS1</b> Financial incentives – <b>FUND1, FUND2, FUND4, FUND10</b> Funding sources – <b>FS5</b> Information, education, guidelines and recognition initiatives – <b>INFO2, INFO3, INFO8</b> Property development and public-private partnerships – <b>PROP3, PROP4</b> Research and monitoring – <b>RM12</b> Second Generation District Plan – <b>DP6</b></p> <p>Property development and public-private partnerships – <b>PROP1</b></p> <p>Funding sources – <b>FS4, FS5</b> Property development and public-private partnerships – <b>PROP2, PROP3, PROP4</b></p>
MEM 6. Dunedin is a city that actively acknowledges and celebrates its tangata whenua and New Zealand European culture and heritage	<p>(a). Support the protection and management of cultural areas and sites, including archaeological sites, historic areas, trees, and cultural landscapes</p> <p>(b). Integrate Kāi Tahu values into urban design principles</p> <p>(c). Integrate and promote the inclusion of Kāi Tahu values, kaitiakitanga, arts, language and history into the design and interpretation of public spaces, public buildings and signage</p>	<p>Second Generation District Plan – <b>DP3</b> Research and monitoring – <b>RM9</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO9, INFO12</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO1</b></p>



## A vibrant and exciting city

### **Explanation**

Along with being sustainable and liveable, another common descriptor used for successful cities, is 'vibrant'. Vibrancy refers to a city that is perceived to be lively and full of activity, often on the basis of the high level of pedestrian activity in the central city and major suburban centres, and by the number of activities occurring in these places. Key qualities that contribute to the vibrancy of centres are that people must want to go there (attractions), be able to get there (accessibility), and it must be a comfortable and safe place to socialise (amenity).

Like sustainability and liveability, a city's vibrancy depends on having an urban form that clusters activities into walkable centres, and urban design that supports pedestrian activity. The opposite of this is cities where most activities are designed around cars, such as strip malls or indoor shopping malls, where pedestrian activity is obstructed or hidden.

Up until the post-war period, New Zealand town and city centres were vibrant hubs of economic and social life for communities, whether it was the role of the city centre for urban communities or the role of the small rural centres for rural communities. Centres usually provided for a range of functions, including shopping, employment, public transportation hubs, townhouse living, social and community support services, recreation and leisure activities, and informal social contact and exchange. Centres also often had a role in defining community identity.

The move to a car-centred transportation system fundamentally changed the urban form of many cities by changing how commercial activities were distributed in a city, often affecting the central social and economic role of centres.

Today, a centre's role and function is usually a product of its location, proximity to strategic transport infrastructure, population catchment, size, historical development, and the range of activities in the centre as well as its design features.

## Where we want to be

In 2050, Dunedin is an incubator city and arts capital that builds on its reputation for being an ideas factory. The role of the central city as the heart of the city's economic and social life is maintained and strengthened through increased and appropriate use of the under-utilised spaces at the southern end of the central city. The central city has a network of attractive pedestrian routes connecting the main retail, entertainment, visitor accommodation, and arts and cultural precincts. This network extends to the Tertiary-Medical Precinct to the north, the Warehouse Precinct to the south and the Harbour to the east, and is buzzing with people and activity.

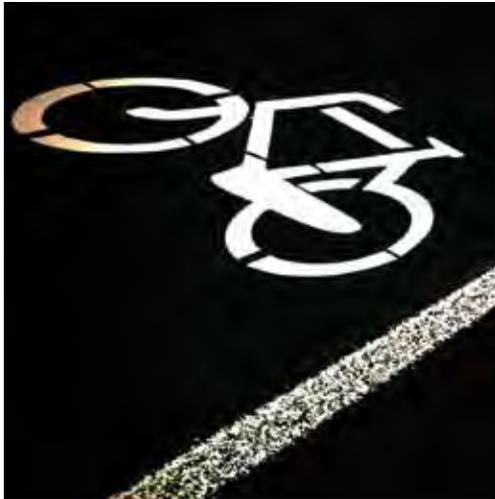
The revitalisation of under-utilised parts of the central city and suburban and rural centres has been supported through the provision of high quality public spaces, investment in existing building infrastructure and the encouragement of development that enhances the attractiveness and desirability of these centres.

Dunedin has maintained and strengthened its current hierarchy of existing suburban, neighbourhood and rural centres. These centres have a growing role in providing for people's social and cultural needs, providing a location for formal and informal meeting places, as well as for day-to-day shopping needs, and some small specialised shops. Dunedin has successfully avoided shopping centres located outside the established hierarchy of centres and managed the location of retail in a way which has allowed the central city and existing centres to thrive.

Our centres are the focus for a range of activities with public spaces and facilities that meet the needs of young and old. The public spaces in the central city, suburban centres and settlements are often filled with people engaged in recreation, leisure and social activity. The focus of our central city and suburban centres as people places is supported by appropriate streetscape design.

## What we will do

Objectives	Policies	Implementation mechanisms and actions
<p>VIB 1. Dunedin is nationally and internationally well known for its diverse and vibrant arts and culture scene, facilities and activities, which are accessible to all</p>	<p>(a). Support and encourage the location of high quality arts and culture infrastructure in the city, including second tier institutions such as community halls and small venues, in appropriate locations</p> <p>(b). Ensure arts and cultural facilities are located in centres, on good transportation routes or within walking distance of residential areas</p> <p>(c). Create a network of well-designed public spaces that support participation in arts and cultural events</p> <p>(d). Support the recognition of marae as cultural precincts</p> <p><i>Related objectives and policies: MEM 4(a) (b)</i></p>	<p>Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC15</b></p> <p>Second Generation District Plan – <b>DP27</b></p> <p>Second Generation District Plan – <b>DP21</b> Urban amenity improvement projects – <b>UA4</b></p> <p>Second Generation District Plan – <b>DP1</b></p>
<p>VIB 2. The central city remains a vibrant centre for activity and the focal point for urban life in the city, supported by a hierarchy of successful suburban and rural centres that are social and economic hubs for local communities with a range of community facilities, spaces and activities and shops that provide for day-to-day needs and some specialised shopping</p>	<p>(a). Promote the central city and other centres as locations for commercial activity and strongly discourage and limit commercial development outside of identified centres with the exception of trade-related/home improvement retail</p> <p>(b). Restrict the type of commercial development that can locate outside of the central city</p> <p>(c). Restrict bulky goods retailing and large supermarkets outside of existing centres only to developments that cannot be accommodated within centres and will not have any adverse effects on the vibrancy and vitality of the central city</p> <p><i>Related objectives and policies: LIV 7(b), MEM 2, MEM 5(a)-(d), ACCESS 6(d), ACCESS 7(a)(d)(f)</i></p> <p>(d). Provide for trade-related/home improvement retail in a limited number of identified locations outside of centres</p> <p>(e). Encourage higher density residential activities and mixed use development in appropriate locations in and around the central city and suburban centres</p> <p>(f). Provide a high quality public realm designed for people in the central city and suburban and rural centres</p> <p>(g). Encourage the use of alleyways within the central city to provide informal public space, informal event space and walkway connections</p> <p>(h). Manage the location and design of retail activities to have positive impacts or negligible negative impact on the viability and vibrancy of the central city and existing centres</p> <p>(i). Encourage and support revitalisation of existing centres which are under-utilised or run-down, through improvements to the public realm</p> <p>(j). Manage residential and non-commercial development in and around the central city, principal suburban and suburban centres to provide for the future expansion of these centres if required. Avoid reverse-sensitivity issues or negative impacts on the amenity of centres or associated movement corridors</p> <p>k). Encourage the development and recognition of vibrant arts, culture, and creative precincts in the city</p> <p><i>Related objectives and policies: LIV 7(b), MEM 2, MEM 5(a)-(d), ACCESS 6(d), ACCESS 7(a)(d)(f)</i></p>	<p>Second Generation District Plan – <b>DP2</b></p> <p>Second Generation District Plan – <b>DP2</b> Second Generation District Plan – <b>DP10</b></p> <p>Second Generation District Plan – <b>DP10</b></p> <p>Information, education, guidelines and recognition initiatives – <b>INFO10</b> Second Generation District Plan – <b>DP5, DP6, DP11</b></p> <p>Research and monitoring – <b>RM1</b> Transportation projects – <b>TP12, TP15, TP20</b> Urban amenity improvement projects – <b>UA3, UA4, UA6</b></p> <p>Second Generation District – <b>DP21</b> Urban amenity improvement projects – <b>UA4, UA6</b></p> <p>Second Generation District Plan – <b>DP9, DP10</b> Information, education, guidelines and recognition initiatives – <b>INFO16</b></p> <p>Roading and parking management – <b>RPM2</b> Urban amenity improvement projects – <b>UA3, UA6</b></p> <p>Second Generation District Plan – <b>DP2, DP11</b></p> <p>Second Generation District Plan – <b>DP6</b> Urban amenity improvement projects – <b>UA4, UA5</b></p>



## An accessible and connected city

### Explanation

An accessible city is one where all people can easily reach key destinations, such as health care, education, employment, supermarkets and leisure and recreation services. Accessibility is judged by understanding the time, money, discomfort and risk needed to reach these essential services<sup>2</sup>. Low levels of accessibility mean that people will generally spend more of their household budget on transport costs and experience fewer opportunities for education, employment and recreation. The overall level of accessibility in a city affects property values and the types of business and economic development that occur in an area<sup>3</sup>. Accessibility is affected by both the quality of the transportation network and by the distribution of land-uses.

The transportation network includes state highways and local roads, cycleways and footpaths on and off these roads and public transport routes and stops. Accessibility is determined by the number of transportation options provided by the network, including walking, cycling, ride-sharing, public transport, taxi, delivery services, mobile services (e.g. Library Book Bus) and telecommunications. Accessibility is also affected by the quality of those options, such as their availability, speed, frequency, convenience, comfort, safety, price and prestige. Important aspects of the quality of the transportation network include the level of connectivity (directness of links and the density of connections in a transportation network) as well as the capacity in the network to meet variable levels of demand across all modes. The design and maintenance of the transportation network also affects accessibility, including the quality of materials, the design of features such as footpaths, cycleways, kerbs, verandahs and pedestrian crossings and the maintenance of these features. Navigation of these

features requires good signage, careful design and planning to ensure routes are direct, safe and intuitive to use. These finer-grained features are particularly important to more vulnerable people such as cyclists, children, the elderly and those with mobility or other impairments.

The distribution of land-uses also determines accessibility as it affects the distances that people or goods must travel to reach their destination. Urban planning is often used to influence the distribution of land-uses in order to maximise accessibility, for example, by encouraging or requiring new residential development to be within a certain distance of jobs, schools, parks, shops, and by encouraging the clustering of activities into centres, where the density and mix of activities can be maximised. Centres also provide ideal locations for high frequency public transport nodes.

A connected city is a city which is well connected to the rest of the region, country and the world in terms of the movement of freight and people, and telecommunications infrastructure.

### Where we want to be

In 2050, Dunedin's residential and business communities are connected by a highly efficient transportation network which allows all residents to access the goods and services they need to maintain their quality of life.

The majority of Dunedin's urban residents live within a ten-minute, safe and pleasant walk of a suburban or town centre that provides for most of their day-to-day shopping needs and a range of community services and facilities. These centres are connected to the central city and each other by a frequent and fast public transport service. It is safe to cycle to the local centre, and from the local centre to other local centres and the central city. Vehicular traffic is slowed in all local centres, many of which operate as shared spaces with a high amenity value.

Within the central city, most people move around on foot, by bicycle or by public transport. These travel modes are well

provided for, and many central city streets have been transformed into attractive boulevards and avenues. The State Highway network has been redesigned to provide a high quality amenity experience, with excellent pedestrian connectivity, so it is easy and safe to walk or cycle around the city, and between the central city, the Tertiary-Medical Precinct and the Harbourside area in particular.

The city's public transport service is fully accessible, affordable, reliable, pleasant and well-utilised, with most people in urban Dunedin living on a public transport route. Accident rates are far lower because there are fewer cars on the roads and more people use active modes and public transport. The transport network supports healthy lifestyles with more people using active modes. A high proportion of vehicles are small, lightweight and more efficient.

Dunedin's townships are large enough to support a limited range of local services, such as schools, libraries, community centres, healthcare facilities, and food shopping, to minimise people's dependence on coming into the central city. Rural communities are linked to the central city by a mixture of ride-share, local private transport arrangements and a public transportation service, accessible and useable by wheelchair users and mobility impaired people, which connects the towns in the region.

Dunedin is an important hub in an efficient regional and national freight network based around a successful international port and Dunedin International Airport with strong air and rail links to the rest of the country. A large proportion of the freight sent to Port Otago at Port Chalmers is transported by rail. The road links to Dunedin International Airport and to the wider region are to a similar high standard both for efficiency and safety.

<sup>2</sup> This broader planning definition of 'accessibility' is different from the notion of 'accessible' in relation to mobility impairments, such as avoiding stairs which are a barrier to accessibility.

<sup>3</sup> Victoria Transport Policy Institute, <http://www.vtpi.org>

## What we will do

Objectives	Policies	Implementation Mechanisms and Actions
ACCESS 1. Dunedin has an affordable, responsive, effective and safe road network	(a). Prioritise road safety improvements, to ensure key problem areas and vulnerable groups are targeted (eg. pedestrians and cyclists) (b). Monitor the road network for congestion and other problems and consult with users to ensure effectiveness	Transportation projects – <b>TP3</b>  Research and monitoring – <b>RM2</b>
ACCESS 2. Dunedin has affordable and convenient public transport	(a). Encourage improvements to public transportation and ensure good connections to the central city, suburban centres and Tertiary-Medical Precinct (b). Encourage and support greater use of passenger rail	Advocacy, collaboration and contributions to other authorities' or organisations' planning – <b>ACC1, ACC21</b> Transportation projects – <b>TP3, TP4, TP7, TP10, TP20</b> Transportation projects – <b>TP22</b>
ACCESS 3. Dunedin is well connected for business and freight including excellent connections to key gateways	(a). Promote and support the role of Port Chalmers, Dunedin Port and Dunedin International Airport as transportation hubs for the city and the region by maintaining and enhancing strategic roading corridors and ensuring an efficient transportation network to key city gateways (b). Encourage and support increased use of rail for freight, and protect potential freight hubs and rail infrastructure and prioritise use of rail for freight transport into the future <i>Related objectives and policies: PDE 8(b)</i>	Advocacy, collaboration, and contributions to other authorities' and organisations' planning – <b>ACC11</b> Transportation projects – <b>TP9, TP17</b>  Transportation projects – <b>TP9</b>
ACCESS 4. Dunedin's transportation system provides a platform for sustainable transport choices and our dependence on oil for transport is reduced	(a). Ensure transport solutions are integrated within, and between modes, by improving connections between public transport, walking, cycle, and road networks (b). Encourage residential living in areas where a choice of transport modes exists or could be affordably and effectively provided (e.g. within walking distance of a public transport node) (c). Carefully manage the price and supply of public car parking in areas with good transport alternatives, to support travel by other modes (d). Manage car parking requirements in private developments to support travel by other modes, for example by reducing car parking requirements in areas with good transport alternatives <i>Related objectives and policies: VIB 2 (a)(f)</i>	Funding sources – <b>FS2</b> Transportation projects – <b>TP5, TP7, TP20, TP21</b>  Second Generation District Plan – <b>DP11</b> Research and monitoring – <b>RM8</b>  Funding sources – <b>FS2</b> Roading and parking management – <b>RPM1</b>  Second Generation District Plan – <b>DP17</b>
ACCESS 5. Dunedin's transportation network provides for the efficient movement of vehicles and freight	(a). Establish clear routes for freight that addresses the needs of the community	Transportation projects – <b>TP9, TP14</b>

Objectives	Policies	Implementation Mechanisms and Actions
<p>ACCESS 6. Dunedin's urban form and design creates high levels of accessibility to key destinations such as healthcare, education, recreation and employment</p>	<p>(a). Ensure land-use and transportation planning is integrated and operationally co-ordinated</p> <p>(b). The location and design of high trip generators is managed to ensure consideration of:</p> <ul style="list-style-type: none"> <li>(i) the potential benefits of improving access to services and facilities (education, health, food retail, and employment) by locating them in centres, and</li> <li>(ii) the potential negative effects on pedestrian amenity and safety, and road capacity in centres of high levels of vehicle movements that are generated by activities that are, by nature, motor vehicle-orientated such as drive-through restaurants. In particular, in centres, high-trip generators should not put pressure on greater road space allocation to vehicle movements at the expense of other forms of transport</li> </ul> <p>(c). Encourage new and intensified residential development into areas with high levels of accessibility, such as close to larger centres and on well-serviced public transport routes</p> <p>(d). Manage public car parking provision (location and connections, design, cost and amount) to support the desirability and viability of the central city and other centres as the prime locations for commercial activities</p> <p>(e). Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas</p> <p><i>Related objectives and policies: VIB 2, ESR 1(a)</i></p>	<p>Second Generation District Plan – <b>DP23</b> Transportation projects – <b>TP16</b></p> <p>Second Generation District Plan – <b>DP2</b> Transportation projects – <b>TP2</b></p> <p>Second Generation District Plan – <b>DP11</b></p> <p>Funding sources – <b>FS2</b> Roading and parking management – <b>RPM1</b></p> <p>Advocacy, collaboration and contribution to other authorities' or organisations' planning – <b>ACC1</b> Transportation projects – <b>TP1</b></p>
<p>ACCESS 7. Dunedin is a safe and pleasant place to walk and cycle</p>	<p>(a) Improve pedestrian and cyclist comfort and safety particularly on main pedestrian and cycling routes, around and connecting to schools, centres and the Tertiary-Medical Precinct, through dedicated cycleways/walkways, road space allocation, management of traffic speeds and volumes</p> <p>(b) Ensure that all new greenfield residential development is designed for, and provides, infrastructure to support cyclists, pedestrians and other non-motorised travel modes, and maximises connectivity for these modes to local services</p> <p>(c) Establish clear pedestrian routes for visitors</p> <p>(d) Manage development in centres to ensure active edges through well designed building frontages and to prevent car parks bordering main pedestrian routes</p> <p>(e) Manage the effects of heavy vehicle movements on the safety and comfort of pedestrians and cyclists</p> <p>(f) Manage public car parking provision (location, connections, design) in centres to provide high pedestrian amenity</p> <p><i>Related objectives and policies: VIB 2</i></p> <p>(g). Adopt a road user hierarchy for use in road layout redesign and the design of new roads, which considers the needs of pedestrians first, followed by cyclists, public transport, ridesharers and finally motor vehicles</p>	<p>Information, education, guidelines and recognition initiatives – <b>INFO1, INFO7</b> Parks, reserves and open space management – <b>Parks3</b> Transportation projects – <b>TP1, TP6, TP10, TP11, TP12, TP16, TP18, TP20</b> Urban amenity improvement projects – <b>UA1</b></p> <p>Second Generation District Plan – <b>DP17</b> Standards and bylaws – <b>REG4</b></p> <p>Urban amenity improvement projects – <b>UA1</b> Information, education, guidelines and recognition initiatives – <b>INFO7</b> Second Generation District Plan – <b>DP2, DP12</b> Transportation projects – <b>TP15, TP16, TP17</b></p> <p>Second Generation District Plan – <b>DP9, DP10</b> Urban amenity improvement projects – <b>UA1</b></p> <p>Second Generation District Plan – <b>DP23</b></p>



## A city that enables a prosperous and diverse economy

### Explanation

Cities globally are becoming more aware of the fact that quality urban design that leads to liveable communities with a strong local identity and sense of place can result in attracting and retaining people and investment, and therefore economic prosperity. The personal motivations to come to, or stay in, Dunedin may seem separate to choosing Dunedin as a career or business move. However, these are inextricably linked, especially in a small city like Dunedin. The vision for Dunedin's Economic Development Strategy (2012) is "that Dunedin will be one of the world's great small cities. It will be known as a confident, competitive knowledge centre where enterprise and creativity support a productive and sustainable city." The desirability of the city to prospective or current residents can have a profound influence on the ability of businesses to attract and retain key staff. This is especially so in sectors such as education and health where specialist staff often have international choices about where to continue their careers.

The growing evidence indicating the links between quality urban design and the economic success and global competitiveness of cities is reflected in some of the international liveability indices such as the Economist's Most Liveable Cities Index<sup>4</sup>. It is also reflected in the efforts by cities to market themselves nationally, and even internationally, to attract economic investment and visitors. A liveable city covers the objectives, policies and implementation mechanisms related to this topic.

Urban planning and design can also contribute to creating a prosperous and diverse economy by:

- ensuring there is an adequate supply of well-located land to keep the price of commercial and industrial land competitive and minimise transportation costs;

- enabling and supporting the clustering of business activities to support communication and innovation, encourage partnerships and lower transportation costs;
- ensuring transportation and information communications technology (ICT) infrastructure meets the needs of business users; and
- ensuring effects-generating activities, such as heavy industry, are protected from encroachment of incompatible activities which can result in reverse-sensitivity.

However, while strategic land-use planning can help support business investment by providing greater certainty to help guide the investment decisions of business and developers, this planning must also be flexible and respond to changing circumstances.

### Where we want to be

In 2050, Dunedin is an incubator city and arts capital that builds on its reputation for being an ideas factory. Dunedin is a leader in education services. Interaction between students, academic staff and the rest of the community prompts innovation, retention of talent in the city and life-long learning.

Entrepreneurs, skilled staff, students, migrants, scientific researchers, visitors and returning alumni are aware of, and drawn to, our wilderness, heritage, arts and cultural offerings, hospitality, passion for education and knowledge and our respect for the environment. They bring an international vibrancy to the city. Businesses and organisations benefit from the opportunities for connecting to markets and clients through high quality transport links and digital networks.

Diverse commercial and industrial activities occur in strategic locations across the city, providing a range of local employment opportunities. Business collaboration is enhanced by the clustering of similar businesses in attractive and visible locations in the city and the ease with which people can connect in person, or through use of digital technology. Key clusters in the city include:

research and innovation industries, particularly science-related, around the Tertiary-Medical Precinct; high value engineering businesses around the Harbourside; and technology and business service industries around the Warehouse Precinct near Vogel Street.

Dunedin values its rural and natural environments. It maintains a thriving rural sector that contributes to local and export markets. These offer business opportunities that contribute to a prosperous and diverse economy which benefits all residents. Dunedin supports the economic wellbeing of the Otago region in terms of providing suitable locations for processing and manufacturing and distribution of products from the region, and good commercial transportation networks.

<sup>4</sup> The Economist Intelligence Unit [www.eiu.com](http://www.eiu.com)

Objectives	Policies	Implementation mechanisms and actions
PDE 1. Dunedin is a centre for creative and sustainable industries	(a) Enhance the visibility of creative and technology businesses within the city (b) Support the development and establishment of green industry and clean industry in suitable locations (c) Support collaboration and networking in the creative industries by ensuring opportunities for co-location in an identified creative precinct	Urban amenity improvement projects – <b>UA5</b> Second Generation District Plan – <b>DP22</b> Second Generation District Plan – <b>DP6</b>
PDE 2. Dunedin supports and benefits from the University of Otago and Otago Polytechnic	(a) Work with the University of Otago and Otago Polytechnic to ensure the maintenance and enhancement of an attractive and vibrant Tertiary-Medical Precinct with high amenity (b) Ensure there is adequate land for research and development industries to locate close to the Tertiary-Medical Precinct (c) Allow for well designed Residential Colleges and higher density residential development in or near the University where appropriate	Second Generation District Plan – <b>DP24</b> Second Generation District Plan – <b>DP24</b> Second Generation District Plan – <b>DP24</b>
PDE 3. Dunedin maintains and grows a strong rural economy based on locally produced value added products	(a) Provide adequate and appropriately located land to support value-adding rural products processing industries (b) Identify suitable locations for the development of wood-based products businesses, including biomass energy and products <i>Related objectives and policies: ESR 1, ESR 4</i>	Second Generation District Plan – <b>DP22</b> Advocacy, collaboration, and contribution to other authorities' or organisations' planning – <b>ACC20</b> Second Generation District Plan – <b>DP22</b> Advocacy, collaboration, and contribution to other authorities' or organisations' planning – <b>ACC20</b>
PDE 4. Dunedin has world class digital communications capacity	(a) Support the extension of fibre networks across the city (b) Ensure new developments provide for digital communications ducting (c) Ensure all infrastructure projects co-ordinate with each other and with private ICT providers <i>Related objectives and policies: see policies related to a liveable city</i>	Standards and bylaws – <b>REG4</b> Advocacy, collaboration, and contribution to other authorities' or organisations' planning – <b>ACC8</b>
PDE 5. Dunedin has a competitive local work force based on skill and capability	(a) Support and encourage tertiary and adult education opportunities to locate across the city, particularly in areas of social need <i>Related objectives and policies: LIV 7(b)</i>	Advocacy, collaboration, and contribution to other authorities' or organisations' planning – <b>ACC3</b> Second Generation District Plan – <b>DP2</b>
PDE 6. Dunedin attracts and retains ambitious internationally focussed entrepreneurs and staff	<i>Related objectives and policies: See policies related to 'A liveable city' and 'A vibrant and exciting city'</i>	
PDE 7. Dunedin maintains and grows an industrial base with a focus on specialised and niche markets	(a) Ensure industrial lands are protected from incompatible land-uses and, where practical, an adequate buffer allows for expansion opportunities and avoidance of reverse sensitivity issues (b) Ensure choice and location of industrial land is provided to enable appropriate clustering of activities, growth in industrial activities, and ensure nationally competitive land prices with adequate and appropriate infrastructure	Second Generation District Plan – <b>DP22</b> Second Generation District Plan – <b>DP22</b>
PDE 8. Dunedin's infrastructure meets the needs of all users	(a) Ensure the water and wastewater requirements of any new business are met where they can be accommodated within the strategic objectives <i>Related objectives and policies: ESR 7, ESR 9</i> (b) Ensure transportation infrastructure in the city meets the needs of all users <i>Related objectives and policies: ACCESS 3(a)(b), ACCESS 5(a)</i> (c) Ensure communications infrastructure in the city meets the need of all users	Standards and bylaws – <b>REG3</b> Second Generation District Plan – <b>DP1, DP11</b> Transportation projects – <b>TP9, TP17</b> Second Generation District Plan – <b>DP1, DP11</b> Standards and bylaws – <b>REG4</b> Advocacy, collaboration, and contribution to other authorities' or organisations' planning – <b>ACC3</b>

## Overall Urban Form objective -

The overall objective for urban form and future development for Dunedin is to have a Compact City with Resilient Townships.

### Explanation

Strengthening Dunedin's compact urban form centred on the main urban area of Dunedin (Urban Dunedin), while maintaining resilient surrounding townships will best meet the strategic directions and related objectives and policies.

This pattern of development will be achieved through urban consolidation, which includes prioritising the use of existing capacity in land already urban in nature (urban land), prior to consideration being given to the expansion of urban limits as defined by the urban-rural boundary.

Over the next 30 years, the majority of new housing demand will be catered for through development within the existing urban-rural boundary in the main urban area of Dunedin (Urban Dunedin), as well as using the existing capacity in our townships.

Further expansion of the urban-rural boundary in townships will only be provided for:

- once existing capacity and additional capacity created through urban consolidation is inadequate;
- only in situations where the potential benefits of population growth in terms of increasing the self-sufficiency and, therefore, resilience of these communities, significantly outweighs the negative effects of peri-urban development, such as increased demand on the transportation network, the potential loss of productive rural land or open space, the costs of infrastructure expansion, and demand for new ratepayer funded facilities; and
- only if the results of a city-wide strategic assessment show this would be an appropriate area for development.

In general, this will only occur where population growth can make significant improvements, or forestall significant declines, in the sustainability and resilience of outlying communities, for example by maintaining or increasing accessibility to local employment, services and facilities (schools, shops, medical and social services and public transport services).

Policies	Implementation mechanisms and actions
<p><b>Urban Form (a)</b> Establish an urban-rural boundary that sets the limit of urban development. The boundary will be determined based on the following criteria:</p> <ul style="list-style-type: none"> <li>- ensure efficient use of available land and infrastructure capacity in existing urban areas;</li> <li>- avoid pressure for unplanned expansion of services and infrastructure;</li> <li>- avoid the creation of new isolated urban areas;</li> <li>- avoid areas of high rural productivity (including high class soils), significant natural values or hazards;</li> <li>- avoid the fragmentation of rural land or loss of productive soils; and</li> <li>- avoid conflicts over water resources.</li> </ul> <p><i>Linked objectives and policies: ESR9(a)-(c)</i></p>	Second Generation District Plan – <b>DP4, DP15, DP26</b>
<p><b>Urban Form (b)</b> Prioritise the use of existing capacity in land already urban in nature, prior to consideration being given to the expansion of urban limits as defined by the urban-rural boundary.</p>	Second Generation District Plan – <b>DP4, DP11, DP26</b>
<p><b>Urban Form (c)</b> Promote urban consolidation by identifying opportunities to use existing urban land more efficiently, including through promotion of more mixed-use residential development in the central city and suburban centres and provision of intensification of residential activity in appropriate locations. <i>Linked objectives and policies: ACCESS6(c) , VIB2(e)</i></p>	Second Generation District Plan – <b>DP4, DP26</b>
<p><b>Urban Form (d)</b> Ensure there is an adequate supply of land to support the urban form objective by regularly reviewing the levels of unconstrained capacity compared to potential demand in urban Dunedin, or townships where population growth is determined to be beneficial on balance.</p>	Researching and monitoring – <b>RM14</b> Second Generation District Plan – <b>DP4, DP26</b>
<p><b>Urban Form (e)</b> Only consider expansion of the boundary when current urban land capacity is inadequate and options for urban consolidation are deemed inappropriate or unachievable.</p>	Second Generation District Plan – <b>DP4, DP26</b>
<p><b>Urban Form (f)</b> Manage urban expansion to ensure it occurs in suitable locations and un-coordinated urban expansion is avoided. Suitable locations shall be identified through a city-wide strategic assessment of the best locations for future development, following the premise that most growth should be accommodated in the main urban area of Dunedin, and in a way that best meets the objectives and policies of the Spatial Plan.</p>	Second Generation District Plan – <b>DP4, DP15, DP26</b>
<p><b>Urban Form (g)</b> Discourage private plan changes for urban expansion that do not align with this objective and related policies</p>	Second Generation District Plan – <b>DP4, DP26</b>
<p><b>Urban Form (h)</b> Where urban expansion occurs, ensure the subdivision design and housing types best meet the relevant objectives and policies outlined in the strategic directions and uses land as efficiently as practical.</p>	Second Generation District Plan – <b>DP4, DP26</b>



# Part 3: Implementation

This section outlines how the Spatial Plan will be used and the actions that will be used to implement the Spatial Plan.

## How will the Spatial Plan be used?

The Spatial Plan will move us toward our vision for the city by providing:

- a platform for strategy integration by building on, as well as informing, other DCC policies and strategic decisions; and
- a framework of objectives and policies, as outlined in the Strategic Directions, by which initiatives of DCC and external parties can be evaluated.

The Spatial Plan is a high level, non-regulatory strategy. The individual policies and actions of the Spatial Plan will need to be implemented through the DCC's existing and future strategies and plans, and can be subject to change and refinement through the processes used to develop those documents.

For example, through the DCC's role as regulator, the Spatial Plan will form a vital part of the direction for the review of the District Plan and the justification for future changes in the preparation of the Second Generation District Plan. The Spatial Plan has been consulted on and developed under the Local Government Act 2002. Information obtained from consultation on:

- a. the preferred development option (compact city with resilient townships);
- b. the objectives; and
- c. the policies

is intended to be considered and applied by the DCC in relation to any future review of the District Plan under the Resource Management Act 1991.

Prior to the adoption of the Second Generation District Plan, land owners may seek to establish activities that may not be supported by the provisions of the current District Plan. In these situations, the DCC may look to the Spatial Plan as a guide to determine whether such proposals are aligned with the strategic thinking for the city into the future.

Through its role as a service provider, the DCC will look to the Spatial Plan when developing or evaluating new policies or projects for inclusion in the LTP, Transportation Strategy, Parks and Reserves Strategy, the Central City Plan, suburban centre plans, and other projects and initiatives.

The Spatial Plan will be used to provide direction to other national and regional authorities, private developers, other infrastructure providers and the community sector. It will provide a clear framework and level playing field for development in the city. It is expected that, once adopted, all significant developments will be assessed against the Spatial Plan. Some features of the Spatial Plan may be implemented by the Otago Regional Council (ORC), central government, or the private or community sectors. In these cases, the DCC's role is to act as an advocate for the city to influence these processes.

The Spatial Plan also provides guidance to the private and community sectors on the agreed long-term vision for development in the city. Businesses and organisations will have the greatest influence on the future form and function of the city. In addition to its role as a regulator, the DCC has a role as a leader to work actively to support, collaborate with, and provide guidance to these groups to achieve the vision for the city.

Figure 1 (p.11) shows some of the key relationships the Spatial Plan has with other strategies, plans and projects. The implementation mechanisms and methods are explored in more detail in this section.

## Highlights of key actions

The highlights of the key actions that will be required to achieve the strategic directions of the Spatial Plan and the overall urban form objective, including key changes to the management approach that will be considered in the upcoming review of the District Plan, are summarised below and illustrated on maps 5-20.

### Residential environment – the highlights

- Establish an urban-rural boundary that sets the limit of urban development. The boundary will be determined based on the following objectives:
  - encourage efficient use of available land and infrastructure capacity in existing urban areas;
  - avoid pressure for unplanned expansion of services and infrastructure;
  - avoid areas of high rural productivity (including high class soils), significant natural values or hazards;
  - avoid the fragmentation of rural land or loss of productive soils; and
  - avoid conflicts over water resources.
- Provide for broader housing choice and support 'aging in place'. This will primarily be by providing for well-designed residential intensification, including multi-unit or infill development, in more areas of the city with good access to employment, schools and facilities, or in townships if this will likely result in a net gain in terms of accessibility for that community.
- Better control the design of multi-unit or infill development to encourage quality development. Quality development means how well the development contributes to the quality of life for residents, sustainability (for example through energy efficient design), and the amenity and character of the immediate area and overall street.
- Protect residential areas that have a highly valued character, often due to heritage related characteristics, as special character areas and use controls on design to encourage development that retains or is sympathetic to the special characteristics.

- Better align District Plan rules with existing residential character, where character is to be maintained, by using a finer-grained approach to residential zoning.
- Avoid new and intensified residential development in areas that are low-lying and subject to increased flooding in future.
- Discourage intensification of residential development in areas that have unresolved infrastructure constraints.
- Do not enable future greenfield development until current capacity and the additional capacity created through intensification of existing urban environments is inadequate.
- Identify areas where future greenfield development should go once current capacity and additional capacity created through intensification of existing urban environments is inadequate. Protect these areas from subdivision or development that may reduce their potential for meeting the needs of growth in the future.

### Rural environment – the highlights

- Recognise the different character and values of Dunedin's rural environment by identifying rural character areas which reflect the social, cultural, economic and environmental values in each identified area. Manage development, particularly the level, design and location of residential development, to protect these values and to achieve the broader strategic directions of the Spatial Plan. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.
- Protect high-class soils from residential and rural residential development
- Do not create any new rural-residential zoned areas apart from recognising a few small areas of existing rural-residential development that are currently zoned rural. Review the boundaries of existing rural-residential areas based on landscape values and hazards.

- Consider better controls on the design and siting of large houses in rural-residential areas to manage visual and environmental impacts.
- Encourage the protection and enhancement of biodiversity and development of green and blue corridors, using both public and private land where appropriate.
- Identify significant landscape features and ridgelines and control development in these areas to manage visual impacts.
- Recognise the changing demands for water in the rural environment including the need to retain waterways for rural productive use, potentially greater need for water storage and protection of ground water areas.

### Tertiary-Medical Precinct – the Highlights

- Support residential development and redevelopment within the Tertiary-Medical Precinct that protects or enhances heritage values and special character areas, and is designed to create good public and private amenity outcomes. This includes expansion of existing residential colleges where appropriate.
- Recognise the medical facilities of Dunedin Public Hospital and its supporting facilities, and enable expansion where appropriate
- Provide for better walking, cycling and visual connections between the Tertiary-Medical Precinct and the surrounding areas.

### Commercial activities and centres – the highlights

- Establish a clear hierarchy of centres, which includes the Central city at the highest level. Manage the range of commercial activities and community facilities in each centre in relation to the role and function of each centre within the hierarchy.
- Strictly control out-of-centre commercial development.
- Create a clear hierarchy of preferences for the location of retail activities to support the centres hierarchy. As a first preference, all retail, regardless of scale,

must locate into the retail areas of the Central city or appropriate centres. Where this cannot be achieved, a second preference of well integrated extensions to centres might be considered appropriate.

Bulky goods retail and supermarket developments that have shown that they genuinely cannot locate into an existing centre, or integrated extension to a centre, will be allowed as a third preference into the areas that have already developed as larger format retailing in the city, which will be reviewed and the retail categories provided for consolidated. The review of the District Plan will consider how to incorporate this hierarchy of preferences (see Action DP10 and Map 4 and 5).

- The only exception to this hierarchy of preferences is trade-related/home improvement retail which will be provided for in a limited number of locations outside of centres.
- Much of the area directly adjacent to Andersons Bay Road between Hillside Road/Orari Street and Macandrew Road/Midland Street, as well as the north side of Hillside Road between Andersons Bay Road and King Edward Street has been developed for larger format retail activities. Review the zoning in this area to provide only for the trade-related/home improvement retail activities that have developed here but create a stronger policy framework to prevent the expansion of this trade retail area beyond the land immediately adjacent to Andersons Bay Road/Hillside Road, and prevent the further expansion of other retail categories in this area. Continue to enable the industrial activities and yard-based (car yards, garden centres, timber yards) retail activities already permitted in the area.
- Review the existing Large Scale Retail zone at the southern end of Crawford Street and Cumberland Street to provide for trade-related/home improvement retail and existing light industry along with larger format bulky goods retail activities that have shown they genuinely cannot locate into an existing centre or integrated extension to a centre. Create a strong policy framework to prevent the location of other types of general retail into this area.

- Better control the design of large retail buildings and their associated car parking areas to manage the effects on the public realm.
- Create a mixed-use environment with vibrant and attractive places to visit, live and work with public open spaces along the waterfront. The mix of activities includes cafes, restaurants, residential, visitor accommodation, tourist and entertainment activities and industrial activities. Strongly control the design of development based on good urban design principles.

### *Central city*

- As part of the centres hierarchy, identify clear precincts within the Central city based on their appropriate role and function. Define the appropriate range of activities for each precinct, with particular attention to the spatial distribution of retail activities to support the George Street area as the retail heart of the city, and the development of mixed-use areas that support inner-city living.
- Reinforce the George Street Retail Precinct as the principal retail area in Dunedin and retain its character through recognition as a special character area. Control the type of activities at ground level and the design of shop-fronts to reinforce active edges and character. Use improvements to the public realm to support the economic and social success of the central city.
- Provide a new mixed-use environment in the Warehouse Precinct (Vogel Street) based on inner-city living, live-work development, commercial office and some limited retail to support these activities.
- Promote the Warehouse Precinct as part of a larger Creative Precinct with improved connections to the Octagon. Use improvements to the public realm to support this transition.
- Recognise the existing built form in the north Princes Street area, which includes multi-storey newer buildings along with heritage buildings.
- Encourage more inner-city living throughout the central city especially in the south Princes Street area to support local retail.

- Strongly protect the existing heritage buildings in the central city and tightly control the design of new development to provide for an area of very high amenity.
- Enable redevelopment and intensification along parts of Filleul Street and Great King Street to create mixed-use areas, including residential above ground floor level.
- Control the design of development to create a quality public realm in the central city.
- Encourage re-use of heritage buildings within the central city along with earthquake-strengthening.

### *Other centres*

- Recognise the existing zoned centres at Mosgiel, Green Island, Port Chalmers and South Dunedin as principal suburban centres. Review the boundaries of these centres to recognise existing activities or provide for future development that will reinforce each centre. Use improvements to the public realm to support the social and economic role of centres.
- Recognise the existing zoned centres at Caversham, Gardens, Mornington, North Dunedin and Roslyn as suburban centres. Review the boundary of these centres to recognise existing activities or provide for future development that will reinforce each centre. Use improvements to the public realm to support the social and economic role of centres.
- Recognise and zone the existing activities at North Dunedin as a suburban centre.
- Recognise the existing zoned centres at Mosgiel South, North Dunedin, Wakari, Kaikorai North, Brockville, Larnach Road, Kaikorai South, Forbury, Maori Hill, Andersons Bay Terminus, Musselburgh and Corstorphine as neighbourhood centres.
- Provide for a new neighbourhood centre at Brighton.
- Zone Portobello and St Clair as destination centres with minor extensions to recognise existing activities appropriate in centres or to provide for future development that will reinforce the centres.
- Zone the centres at Middlemarch, Waikouaiti and Outram as rural centres. Include minor boundary

adjustments to recognise existing activities appropriate in centres or provide for future development that will reinforce the centres.

- Zone the existing activities at Waitati and Karitane as new rural centres.
- Discourage or control new residential development at ground level within centres to ensure buildings can be adapted to provide for future commercial uses.
- Control the design of residential development on the edges of suburban centres to promote buildings that can be adapted to provide for future commercial use if centres need to expand.
- Encourage good design and active edges in all centres through the use of design guidelines.

### **Industrial development – the highlights**

- Support the expansion of the Kaikorai Valley/Burnside industrial area where appropriate. Provide a buffer around the industrial area to protect from future sensitive activities, where appropriate.
- Support the development and growth, if needed, of the Mosgiel industrial areas by providing for a buffer around the industrial areas to protect them from future sensitive activities, where appropriate.
- Provide for high-tech industry or cottage industries that do not have any negative effects within mixed use environments, such as centres or creative precincts, or close to the Tertiary-Medical Precinct.
- Promote the northern side of the Steamer Basin as an industrial heritage precinct in recognition of the industries within the area and the heritage buildings.
- Protect the areas around the Dunedin Port for any future growth needs of industries that require a port location, including any services that may be required to support the energy industry.
- Protect transportation infrastructure, transport hubs and existing freight corridors to ensure that they continue to provide efficient routes to and from the Port and airport and connections for the city.

### **Maps**

Where appropriate, key actions are visually illustrated on maps (maps 5-20). These include changes to the management approach or where values are to be maintained and enhanced to achieve the strategic directions and the overall urban form objective of the Spatial Plan. In some cases, the maps only illustrate the need to better recognise the existing pattern of development, rather than potential future change to the pattern of development. All proposed changes are subject to the District Plan review and plan change process.

Due to the extensive nature of the city, the maps have been divided into Community Board areas to illustrate the rural parts of the city and urban Dunedin and Mosgiel to illustrate the urban area.

## Key actions – Central city, Tertiary-Medical Precinct and surrounds on Map 5

### Some of the key policies directing the future management and development of area

- LIV 9(a) Enable and encourage a wide variety of housing that meets the diverse needs of the population, including a broad range and mix of dwelling types, sizes and locations
- ESR 9(a) Discourage development in areas where there are major infrastructure constraints (e.g. where existing systems are at or over capacity and engineering solutions would be prohibitively expensive to implement)
- MEM 2(a) Apply best practice design principles to the management of all development in the central city and other centres to ensure a good public-private interface (e.g. to the location and design of parking, verandahs and facades)
- MEM 2(c) Manage the location and design of prominent buildings and large stand-alone retail buildings to ensure the visual impact of these buildings and any associated car parking does not detract from the overall amenity of the city
- MEM 3(c) Manage the activities, design and location of development within the Tertiary-Medical Precinct to enhance quality, amenity, and character
- MEM 5(a) Identify and protect Dunedin's heritage buildings and integrated heritage streetscapes
- VIB 2(e) Encourage higher density residential activities and mixed use development in appropriate locations in and around the central city and suburban centres
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage and limit commercial development outside of identified centres with the exception of trade-related/home improvement retail
- VIB 2(h) Manage the location and design of retail activities to have positive impacts or have negligible negative impact on the viability and vibrancy of the central city and existing centres
- VIB 2(c) Restrict bulky goods retailing and large supermarkets outside of existing centres only to developments that cannot be accommodated within centres and will not have any adverse effects on the vibrancy and vitality of the central city
- ACCESS 7(a) Improve pedestrian and cyclist comfort and safety, particularly on main pedestrian and cycling routes, around and connecting to schools, centres, the Tertiary-Medical Precinct through dedicated cycleways/walkways, road space allocation, management of traffic speeds and volumes
- PDE 7(b) Ensure choice and location of industrial land is provided to enable appropriate clustering of activities, growth in industrial activities, and ensure nationally competitive land prices with adequate and appropriate infrastructure

### Potential improvements to the public realm

- A** Improve Queens Gardens with better pedestrian connections, enhanced safety and amenity to provide a welcoming inner city green space with improved recreation and events opportunities
- B** Expand pedestrian space in lower Rattray Street and improve connections with Queens Gardens.
- C** Remove the one-way system south of the Leviathan Hotel. Redesign Crawford Street as a two-way street to provide an attractive environment for the mixed uses in the buildings along it, balancing the needs of pedestrians, cyclists and cars. Relocate both directions of the State Highway to Cumberland Street without compromising the State Highway.
- D** Improve amenity in Vogel and Bond Streets, reducing the impact of vehicles and creating shared space
- environments to support creative industries in the Warehouse Precinct
- E** Staged improvements to the Octagon to provide greater space for pedestrians, enhance the quality of public open space, and improve the prominence of historic buildings
- F** Implement improvements along Princes and George Streets to improve the pedestrian environment
- G** Develop pocket parks and micro spaces throughout the central city to increase the amount and quality of public open space
- H** Develop a safe, permanent connection for pedestrians and cyclists between the central city and the Steamer Basin
- I** Implement amenity improvements to provide a better sense of place and identity for the different quarters within the central city

## Management Approach

### Housing development

	<b>Residential colleges</b>	Allow for expansion of existing residential colleges in key locations where appropriate, including Toroa, Cumberland and Hayward, Studholme, Knox, Aquinas and Salmond.
	<b>Industrial 2 area around Harrow Street</b>	Support evolution of area into higher density residential with strong design controls to ensure high amenity and good design.
	<b>Tertiary-Medical Precinct</b>	Encourage development and redevelopment that protects areas of special character and creates high levels of public and private amenity. Control development through design guides.

### Commercial and industrial development

	<b>North Princes Street</b>	Better recognise and provide for the existing built form. Protect heritage buildings and strongly control the design of buildings to create attractive and active street edges. Further improve access to, and pedestrian amenity and safety, in the area.
	<b>South Princes Street</b>	Encourage more inner city living to support local retail. Protect heritage buildings and strongly control the design of buildings to create attractive and active street edges. Further improve access to, and pedestrian amenity and safety, in the area.
	<b>George Street Retail Precinct</b>	Protect existing heritage character. Retain as principal retail area. Further improve access to, and pedestrian amenity and safety, in the area.
	<b>Retail Precinct edges</b>	Encourage redevelopment and intensification into a mixed-use area with active street edges and stepped back design to allow for increased height where appropriate. Adjust boundary of Central Activity Zone to take in the end of Filleul Street on the corner of London Street.
	<b>Harbourside Precinct</b>	Create a mixed-use environment with vibrant and attractive place to visit, live and work with public open spaces along the waterfront. The mix of uses includes cafes, restaurants, residential, visitor accommodation, tourist and industrial activities. Strongly control the design of development based on good urban design principles.
	<b>Warehouse Precinct</b>	Encourage a new mixed-use environment based on inner city living, live/work development, commercial spaces for creative industries, and some retail (small scale independent retail and not anchor tenants). Encourage retention of historic buildings and strongly control the design of new development to achieve the highest levels urban amenity based on good urban design principles and buildings of architectural merit. Improve access to, pedestrian amenity, and provision of public open space in the area to support this change.
	<b>Southern end of Crawford and Cumberland Streets</b>	Review the existing Large Scale Retail Zone at the southern end of Crawford Street and Cumberland Street to provide for trade-related/home improvement retail and existing light industry along with larger format bulky goods retail activities that have shown they genuinely cannot locate into an existing centre or integrated extension to a centre. Create a strong policy framework to prevent the location of other types of general retail into this area.
	<b>Industrial 1 area around Castle Street and Anzac Avenue</b>	Review the current zoning
	<b>Dunedin Public Hospital</b>	Recognise the Dunedin Public Hospital and associated medical facilities and provide for future development where appropriate.

### Key improvements

	<b>Campus connections</b>	Improve pedestrian connections to and from the University and surrounding recreational areas
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Map 5 – Key actions –  
Central city, Tertiary-  
Medical Precinct and  
surrounds



## Key actions – Urban Dunedin, Mosgiel and centres on Maps 6 – 10

### Key policies

- LIV 9(a) Enable and encourage a wide variety of housing that meets the diverse needs of the population, including a broad range and mix of dwelling types, sizes and locations
- ESR 9(a) Discourage development in areas where there are major infrastructure constraints (e.g. where existing systems are at or over capacity and engineering solutions would be prohibitively expensive to implement)
- MEM 2(a) Apply best practice urban design principles to the management of all development in the central city and other centres to ensure a good public-private interface (e.g. to the location and design of parking, verandahs and facades)
- MEM 2(c) Manage the location and design of prominent buildings and large stand-alone retail buildings to ensure the visual impact of these buildings and any associated car parking does not detract from the overall amenity of the city
- MEM 3(c) Manage the activities, design and location of development within the Tertiary-Medical Precinct to enhance quality, amenity, and character
- MEM 5(a) Identify and protect Dunedin's heritage buildings and integrated heritage streetscapes
- VIB 2(e) Encourage higher density residential activities and mixed use development in appropriate locations in and around the central city and suburban centres
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- VIB 2(h) Manage the location and design of retail activities to have positive impacts or have negligible negative impact on the viability and vibrancy of the central city and existing centres
- VIB 2(c) Restrict bulky goods retailing and large supermarkets outside of existing centres only to developments that cannot be accommodated within centres and will not have any adverse effects on the vibrancy and vitality of the central city
- ACCESS 7(a) Improve pedestrian and cyclist comfort and safety, particularly on main pedestrian and cycling routes, around and connecting to schools, centres, the Tertiary-Medical Precinct through dedicated cycleways/walkways, road space allocation, management of traffic speeds and volumes
- PDE 7(b) Ensure choice and location of industrial land is provided to enable appropriate clustering of activities, growth in industrial activities, and ensure nationally competitive land prices with adequate and appropriate infrastructure

### Management Approach

#### Greenfield housing development



**Mosgiel, Abbotsford**

Encourage development in existing greenfield zoned areas with a variety of dwelling types and sizes.

#### Recognise existing pattern of development



**Cleghorn Street, Clifton Street, Corsall Street, Wingatui Road, Chain Hills Road and Halfway Bush Road**

Recognise existing pattern of development by rezoning to rural-residential.



**Wingatui Road**

Recognise existing pattern of redevelopment by rezoning to residential.

#### Recognise hierarchy of centres



**Green Island, South Dunedin, Mosgiel, Port Chalmers (map 7)**

Zone as a principal suburban centre. Extend boundaries to incorporate existing activities beyond the current zone boundary or remove areas of non commercial if not required for growth.



**North Dunedin, Gardens, Roslyn, Mornington, Caversham (map 8)**

Zone as a suburban centre.



**St Clair, Portobello (map 10)**

Zone as a destination centre.



**Brockville, Terminus, Forbury, Maori Hill, Larnach Road, Kaikorai North, Hillside, Wakari, Kaikorai South, Corstorphine, Brighton, Musselburgh, Macandrew Bay (map 9 and 10)**

Zone as a neighbourhood centre.

#### Other commercial areas



**Area adjoining Andersons Bay Road**

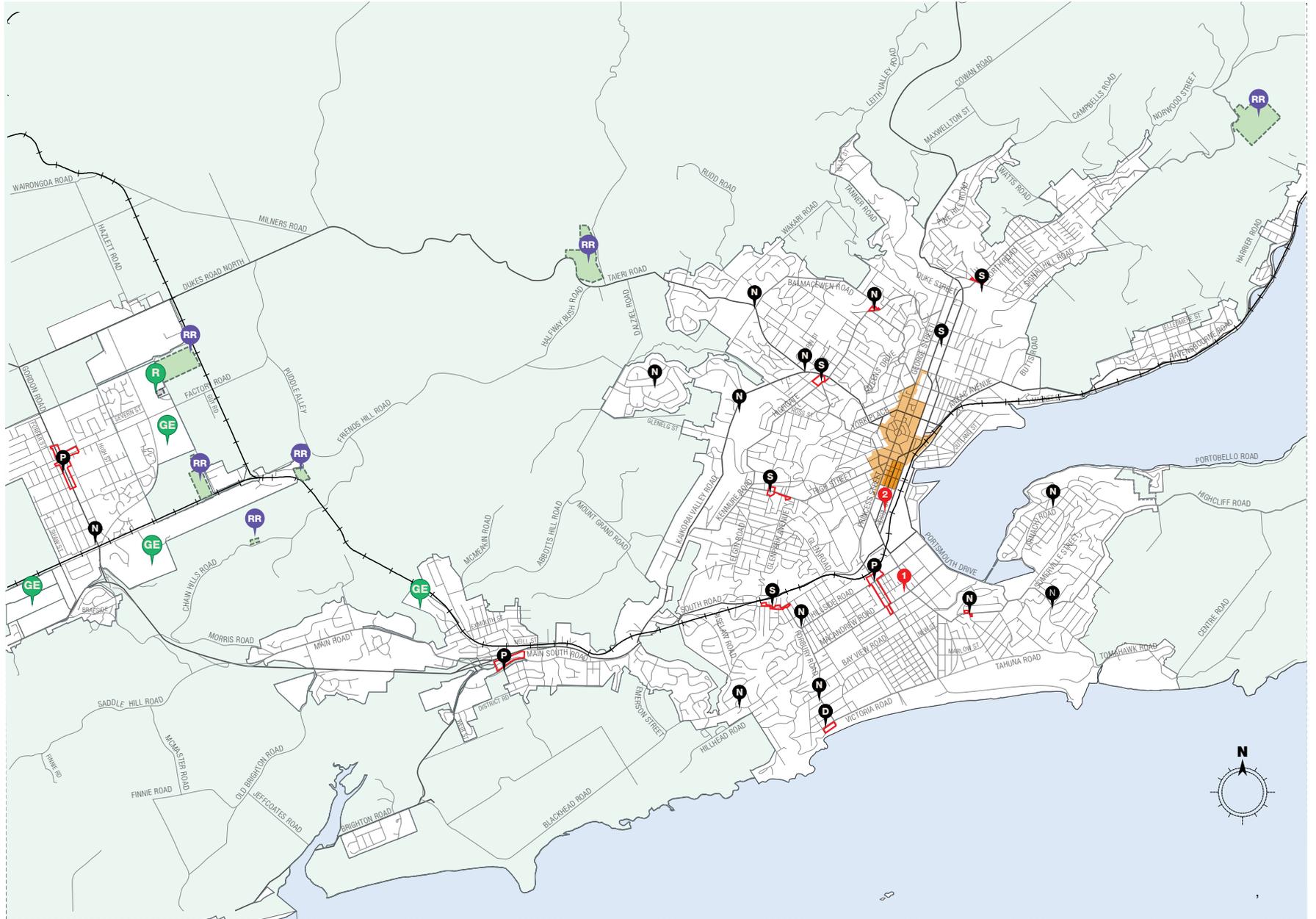
Review the zoning in this area to provide for the trade-related/home improvement activities along with yard-based retail that have developed in the area directly adjacent to Andersons Bay Road between Hillside Road/Orari Street and Macandrew Road/Midland Street, as well as the north side of Hillside Road between Andersons Bay Road and King Edward Street. Prevent the expansion of this type of retail beyond the land immediately adjacent to Andersons Bay Road/Hillside Road. Restrict the area to these types of retail activities, with, in some cases, a few other positive exceptions for very high trip generators (such as drive-through fast food restaurants) that genuinely cannot or should not locate into the existing centres hierarchy.

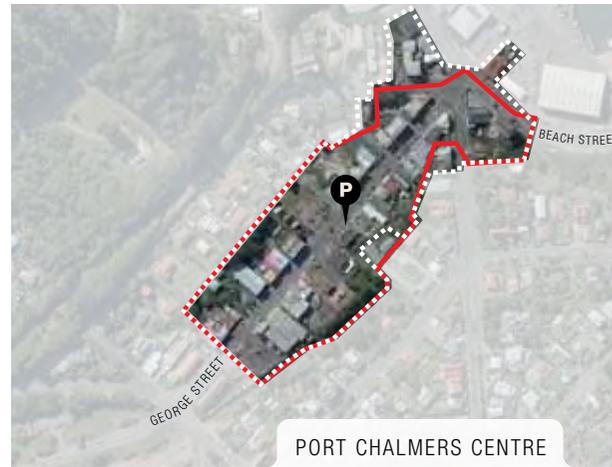


**Southern end of Crawford and Cumberland Streets**

Review the existing Large Scale Retail Zone at the southern end of Crawford Street and Cumberland Street to provide for trade-related/home improvement retail and existing light industry along with larger format bulky goods retail activities that have shown they genuinely cannot locate into an existing centre or integrated extension to a centre. Create a strong policy framework to prevent the location of other types of general retail into this area.

**Map 6 – Key actions  
– Urban Dunedin and  
Mosgiel**

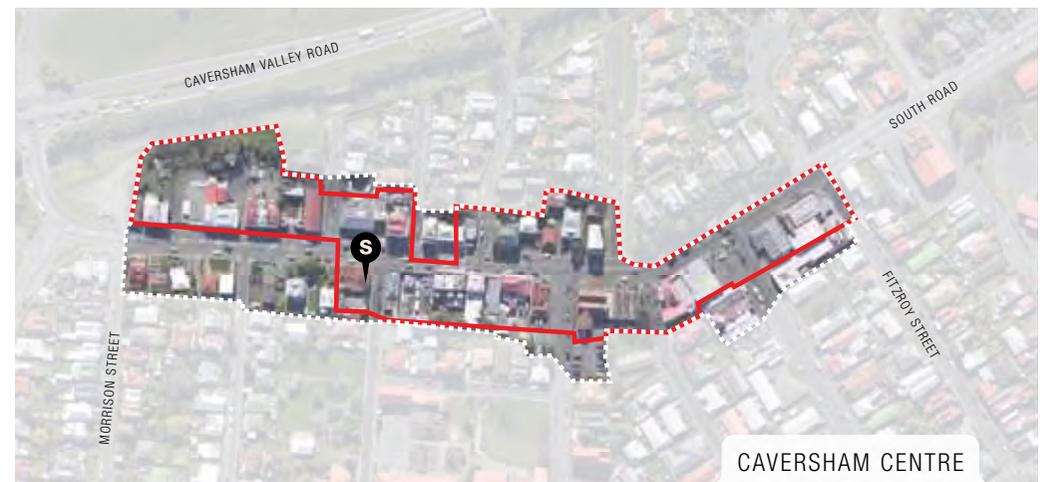
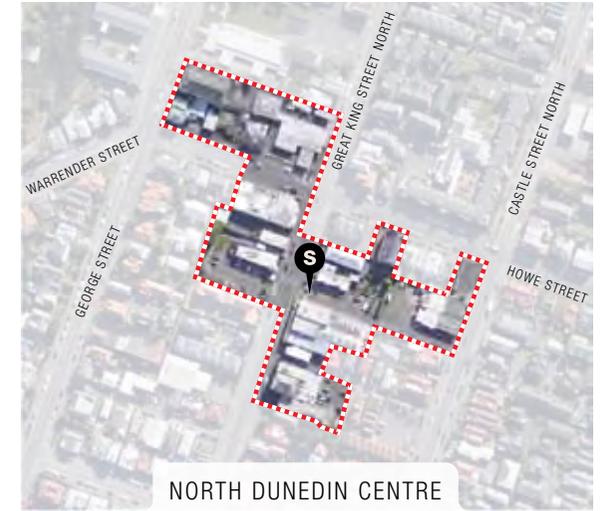




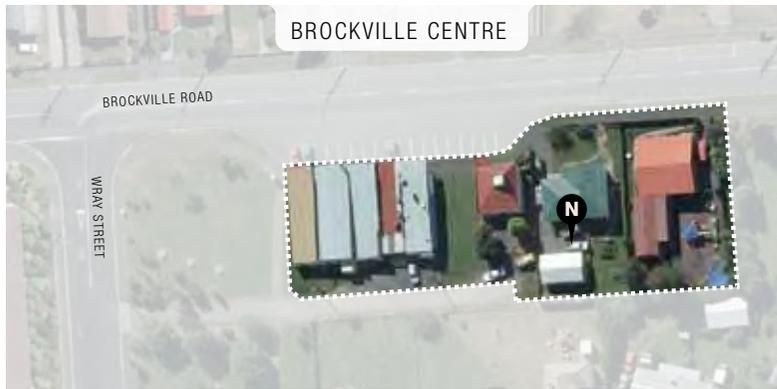
-  red line = existing centre boundary
-  white broken line = proposed new centre boundary

Map 7 – Principal suburban centres

Map 8 – Suburban centres



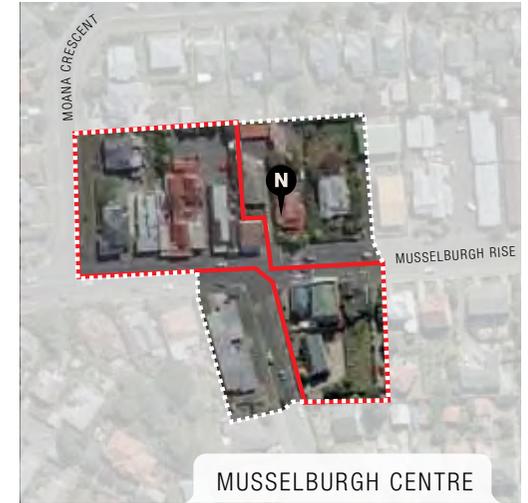
-  red line = existing centre boundary
-  white broken line = proposed new centre boundary



white broken line = proposed new centre boundary

**Map 9 – Neighbourhood centres**

Map 10 –  
Neighbourhood and  
destination centres



-  red line = existing centre boundary
-  white broken line = proposed new centre boundary

## Key actions – Industrial areas in Urban Dunedin and Mosgiel on Map 11

### Some of the key policies directing future management and development of the area

- PDE 1(a) Enhance the visibility of creative and technology businesses within the city
- PDE 1(b) Support the development and establishment of green industry and clean industry in suitable locations
- PDE 1(c) Support collaboration and networking in the creative industries by ensuring opportunities for co-location in an identified creative precinct.
- PDE 7(a) Ensure industrial lands are protected from incompatible land-uses and, where practical, an adequate buffer allows for expansion opportunities and avoidance of reverse sensitivity issues
- PDE 7(b) Ensure choice and location of industrial land is provided to enable appropriate clustering of activities, growth in industrial activities, and ensure nationally competitive land prices with adequate and appropriate infrastructure

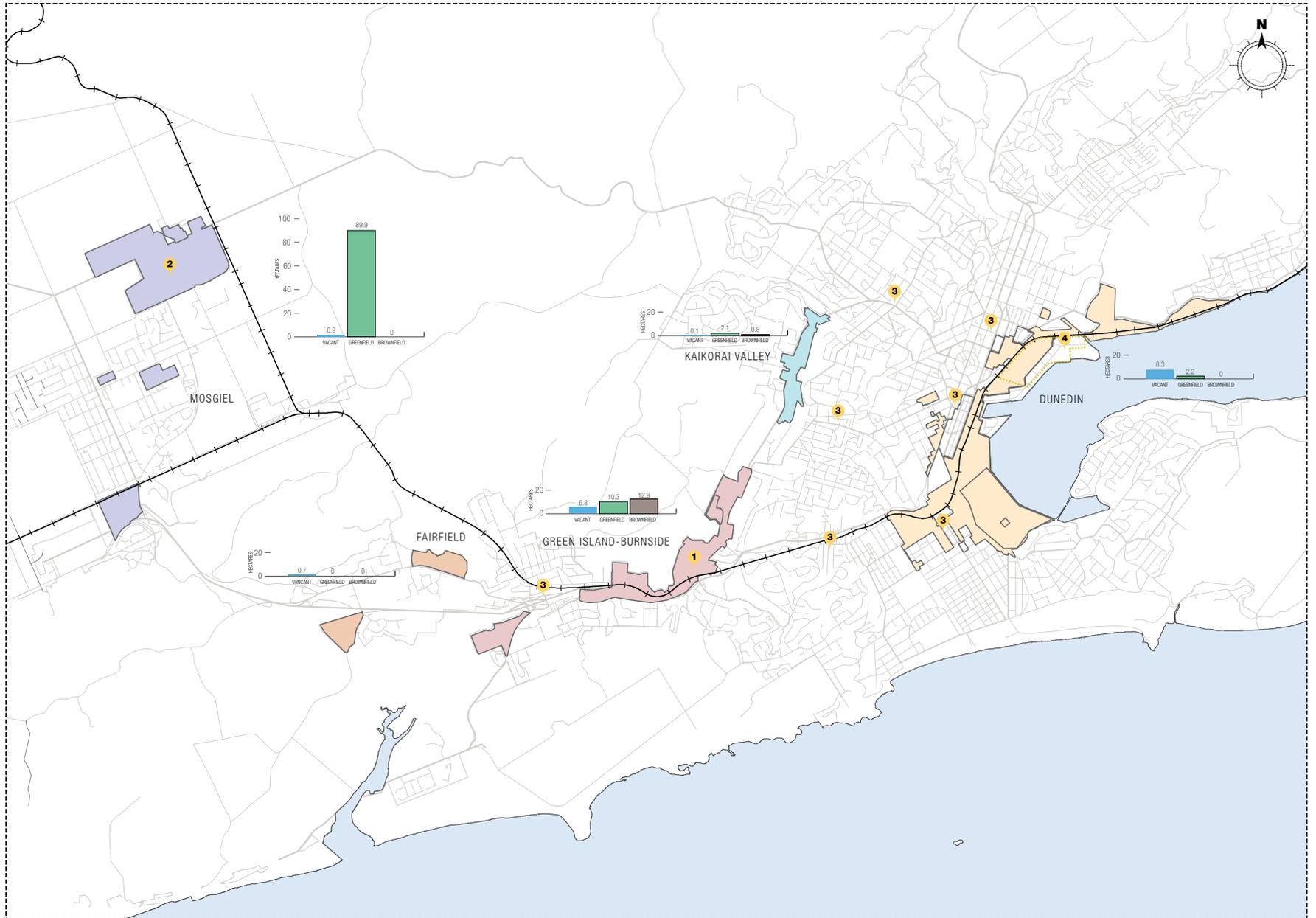
### Industrial Land

The availability of vacant, greenfield and brownfield industrial land within each industrial area in Dunedin-Mosgiel is shown on map 10. This is based on data from the Industrial Land Study 2009 (DCC).

### Management Approach

	<b>Kaikorai Valley/ Burnside</b>	Support the redevelopment of the West Burnside area and the retention of the Kaikorai Valley/ Burnside area as a well utilised industrial area, restrict other uses on sites to those which could support industrial activities. Expand zone extent where appropriate and include a buffer to sensitive activities where possible.
	<b>Mosgiel industrial areas</b>	Support growth of industrial activities. Provide for the future expansion of industrial activities in this area by providing an adequate buffer from sensitive activities e.g. residential activities.
	<b>Centres, creative precincts or close to the Tertiary-Medical Precinct</b>	Provide for high-tech industry or cottage industries that do not have any negative effects within mixed-use environment such as centres or creative precincts, or close to the Tertiary-Medical Precinct.
	<b>Dunedin Port</b>	Protect the areas around the Dunedin Port for any future growth needs of industries that require a port location, including any services that may be required to support the energy industry.

Map 11 – Industrial areas in Urban Dunedin and Mosgiel



## Areas to maintain and enhance existing values – heritage (Central city, South Dunedin, North Dunedin) on Map 12

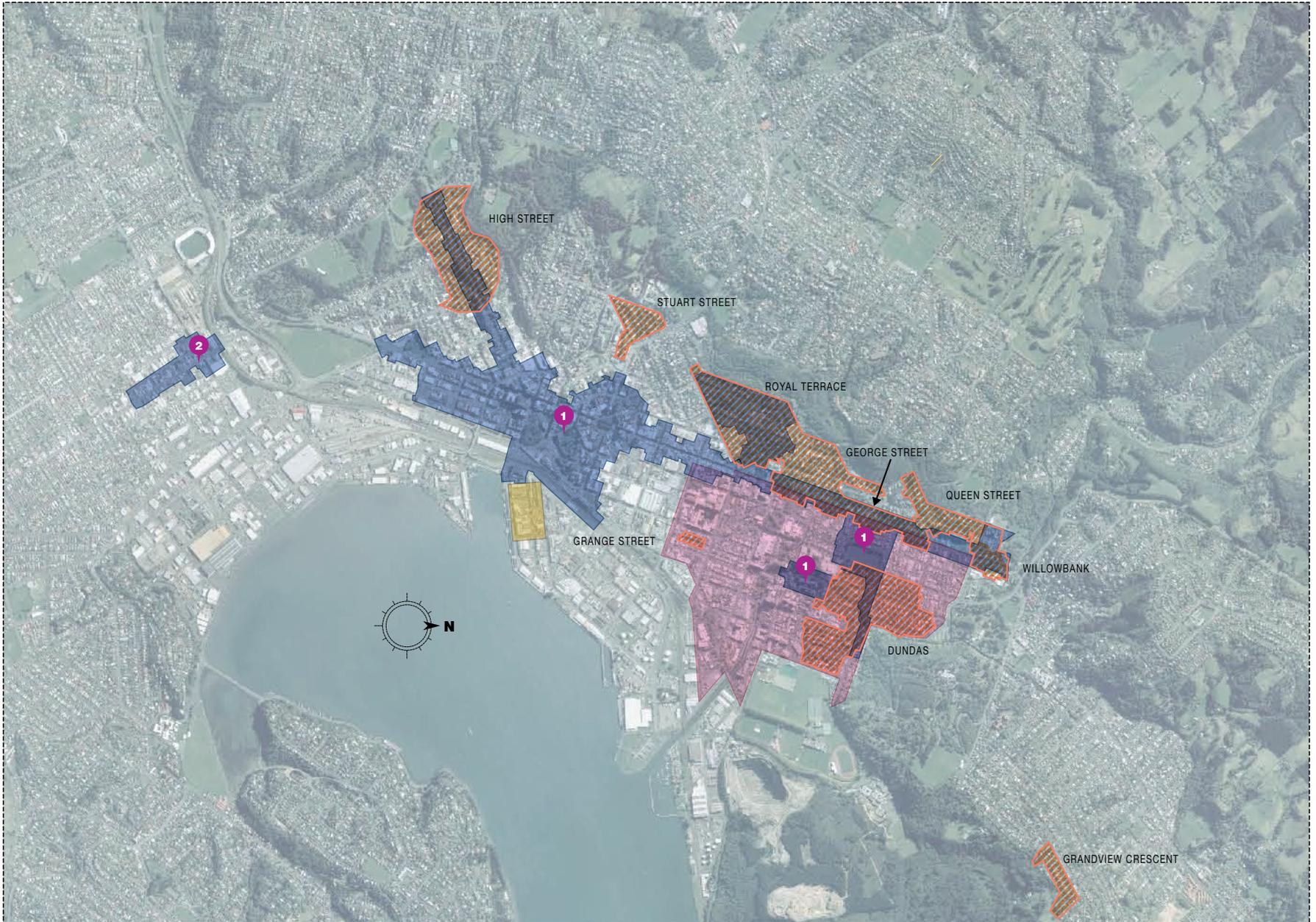
### Some of the key policies directing the protection of values

- ESR 6(a) Support on-going earthquake-strengthening of heritage buildings
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- MEM 3(c) Manage the activities, design and location of development within the Tertiary-Medical Precinct to enhance quality, amenity, and character
- MEM 3(d) Ensure areas with significant heritage values are recognised and protected as ‘special character’ areas
- MEM 5(a) Identify and protect Dunedin’s heritage buildings and integrated heritage streetscapes
- MEM 5(b) Promote the economic re-use of heritage buildings in the city
- MEM 5(c) Establish DCC community facilities within heritage buildings wherever practicable and encourage other national and local government agencies to do the same
- MEM 6(a) Support the protection and management of cultural areas and sites, including archaeological sites, historic areas, trees, and cultural landscapes

### Management Approach

	<b>Heritage and townscape precincts</b>	Review the current heritage and townscape precinct boundaries and type of protection. Control development through design guides to retain heritage values.
	<b>South Dunedin</b>	Reconsider extent of heritage protections in South Dunedin.
	<b>Special character areas</b>	Protect residential areas that have particular character, particularly heritage related characteristics, as special character areas and use controls on design to encourage development that retains the special characteristics.
	<b>Buildings and structures of heritage value</b>	Protect structures of heritage value through a number of mechanisms. Regularly update the schedules of protected structures and buildings, encourage retention and economic re-use of structures. Work with building owners.
	<b>Tertiary-Medical Precinct</b>	Encourage development and redevelopment that retain the heritage values and the residential character of the area. Control development through design guides.
	<b>Northern side of Steamer Basin</b>	Promote the northern side of the Steamer Basin as an industrial heritage precinct in recognition of the industries within the area and the heritage buildings.

Map 12 – Areas to maintain and enhance values–heritage (Central city, South Dunedin, North Dunedin)



## Areas to maintain and enhance existing values – biodiversity (Dunedin, Mosgiel) on Map 13

### Some of the key policies directing the protection of values

- LIV 6(e) Dunedin's key open and recreational spaces, including the Town Belt and the Otago Harbour, are protected and enhanced to create a broad range of multi-purpose spaces for cultural, social, recreation and leisure activities
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 3(a) Encourage and support the development of networks of open space, including green and blue networks, which connect vegetation remnants, protect waterways, and regenerate the natural environment
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments

## Management Approach

### Ecological and landscape values

	<p><b>Ecological restoration plan</b> Establishing habitat types across the city will provide a basis for a restoration plan for the city. The restoration plan will present a vision of restoration of indigenous vegetation and habitat on both public and private land to work towards. Restoration planting would be encouraged through planting guides and working with landowners. The restoration plan can provide a visual identity for different areas of the city when considering activity centre improvements and street tree planting.</p>
	<p><b>Areas of Significant Conservation Value</b> Work with landowners to identify areas of significant conservation value, including public land, private land and areas formally protected. (ie. QEII Covenants) The retention and management of these areas for their biodiversity values will be encouraged along with opportunities to enhance areas or create corridors to connect protected areas.</p>
	<p><b>Blue networks (waterways)</b> Identify key blue networks throughout the city, including areas where esplanade reserves may be required. Encourage fencing and riparian planting of blue networks. Develop networks of tracks using the blue networks where appropriate. Where possible, encourage connection of blue networks with green corridors utilising areas of existing indigenous vegetation or encouraging planting to create connections.</p>
	<p><b>Green corridors to improve ecological and biodiversity connections</b> Identify opportunities to link areas of existing indigenous vegetation to develop green corridors utilising public and private land, including reserves and the Dunedin Town Belt. Connection of these areas can help create quality habitats between which birds and other species can travel. A 500m buffer around areas of existing indigenous vegetation provides a method to identify where there is potential to develop linkages to connect areas.</p> <p>Opportunities for improved linkages to connect areas have been identified on map 13 where there is greater than 1000 metres between areas of indigenous vegetation. Not all potential linkages are shown on the map. Within these areas, as well as more generally, restoration planting of indigenous vegetation or enhancement of existing vegetation will be encouraged.</p> <p>The design of subdivision and development will be encouraged to retain existing areas of vegetation and set aside areas for revegetation that can connect to surrounding areas. This would contribute towards the vision for ecological restoration of the city.</p> <p>There are opportunities for biodiversity connections to be concentrated with planting within existing school grounds, parks, along streams, and transport corridors. Key opportunities exist to enhance the connectivity along existing waterways, across the Harbour and from the Town Belt through the central city to the Harbour.</p>
	<p><b>Public open space and reserves</b> Recognise and protect the landscape and open space values of public open spaces and reserves. Control the design and location of development to be consistent with these values. Encourage retention of existing vegetation or encourage planting to create green corridors that connect to public open space.</p>

Map 13 – Areas to maintain and enhance existing values – biodiversity (Dunedin, Mosgiel)

-  Indigenous vegetation
-  500m buffer around indigenous vegetation
-  Water catchment
-  Areas of Significant Conservation Value
-  Town Belt



## Areas to maintain and enhance existing values – biodiversity (city wide) on Map 14

### Some of the key policies directing the protection of values

- LIV 6(e) Dunedin's key open and recreational spaces, including the Town Belt and the Otago Harbour, are protected and enhanced to create a broad range of multi-purpose spaces for cultural, social, recreation and leisure activities
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 3(a) Encourage and support the development of networks of open space, including green and blue networks, which connect vegetation remnants, protect waterways, and regenerate the natural environment
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments

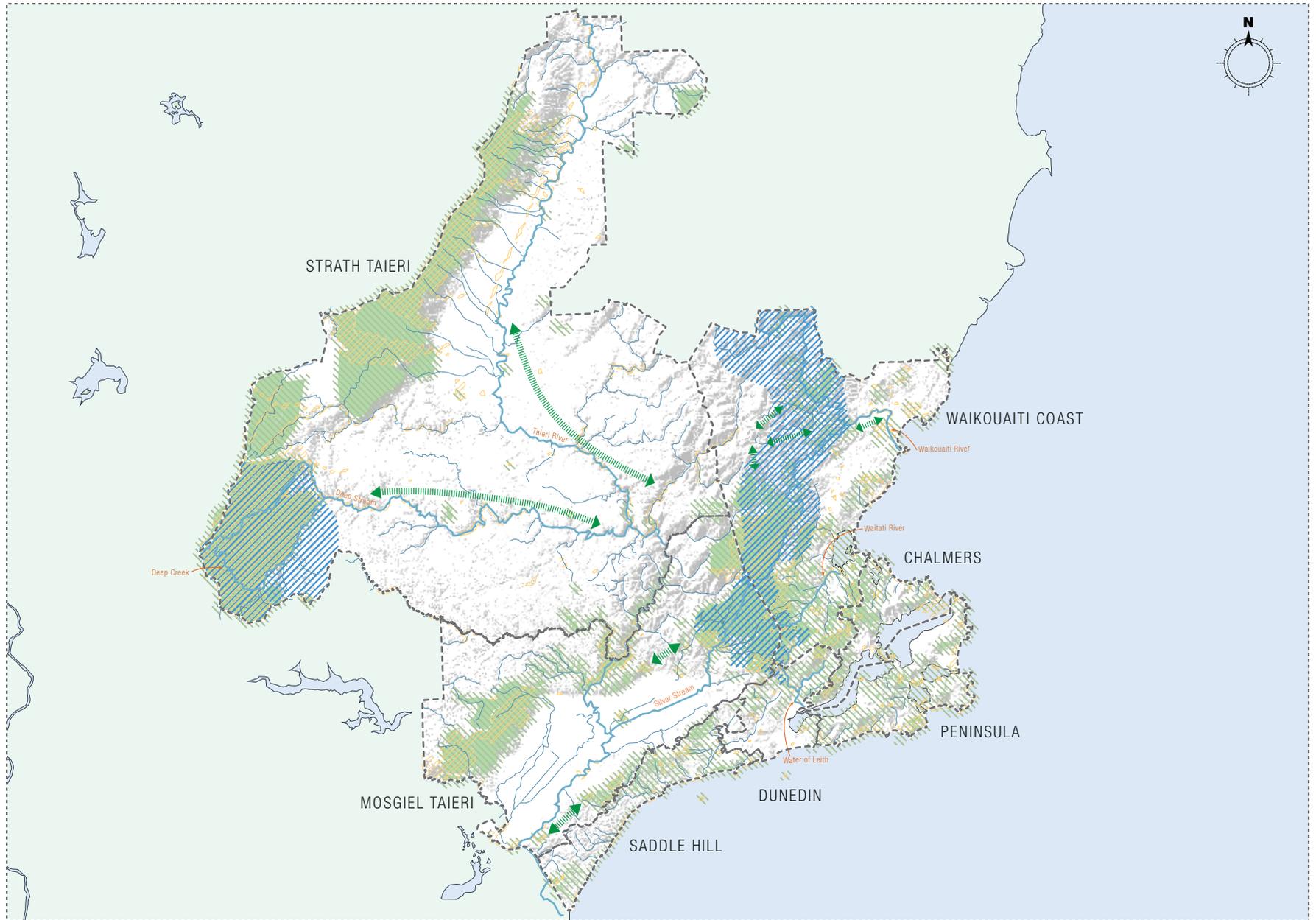
### Management Approach

#### Ecological and landscape values

<b>Ecological restoration plan</b>	Establishing habitat types across the city will provide a basis for a restoration plan for the city. The restoration plan will present a vision of restoration of indigenous vegetation and habitat on both public and private land to work towards. Restoration planting would be encouraged through planting guides and working with landowners. The restoration plan can provide a visual identity for different areas of the city when considering activity centre improvements and street tree planting.
 <b>Areas of Significant Conservation Value</b>	Work with landowners to identify areas of significant conservation value, including public land, private land and areas formally protected. (ie. QEII Covenants) The retention and management of these areas for their biodiversity values will be encouraged along with opportunities to enhance areas or create corridors to connect protected areas.
 <b>Blue networks (waterways)</b>	Identify key blue networks throughout the city, including areas where esplanade reserves may be required. Encourage fencing and riparian planting of blue networks. Develop networks of tracks using the blue networks where appropriate. Where possible, encourage connection of blue networks with green corridors utilising areas of existing indigenous vegetation or encouraging planting to create connections.
 <b>Green corridors to improve ecological and biodiversity connections</b>	<p>Identify opportunities to link areas of existing indigenous vegetation to develop green corridors utilising public and private land, including reserves and the Dunedin Town Belt. Connection of these areas can help create quality habitats between which birds and other species can travel. A 500m buffer around areas of existing indigenous vegetation provides a method to identify where there is potential to develop linkages to connect areas.</p> <p>Opportunities for improved linkages to connect areas have been identified on map 14 where there is greater than 1000 metres between areas of indigenous vegetation. Not all potential linkages are shown on the map. Within these areas, as well as more generally, restoration planting of indigenous vegetation or enhancement of existing vegetation will be encouraged.</p> <p>The design of subdivision and development will be encouraged to retain existing areas of vegetation and set aside areas for revegetation that can connect to surrounding areas. This would contribute towards the vision for ecological restoration of the city. The design of subdivision and development can be encouraged to retain existing areas of vegetation and set aside areas for revegetation that can connect to surrounding areas. This would contribute towards the vision for ecological restoration of the city.</p> <p>There are opportunities for biodiversity connections to be concentrated with planting within existing school grounds, parks, along streams, and transport corridors. Key opportunities exist to enhance the connectivity along existing waterways.</p>
<b>Public open space and reserves</b>	Recognise and protect the landscape and open space values of public open spaces and reserves. Control the design and location of development to be consistent with these values. Encourage retention of existing vegetation or encourage planting to create green corridors that connect to public open space.

Map 14 – Areas to maintain and enhance existing values – biodiversity (city wide)

- Indigenous vegetation
- 500m buffer around indigenous vegetation
- Water catchment
- Areas of Significant Conservation Value



## Chalmers Community Board on Map 15

### Vision for Chalmers Community Board

Chalmers in 2050 celebrates being self-sufficient, with local food production and renewable energy sources. Areas beyond our Chalmers community are accessible to all through our walking and cycling tracks, and safe and affordable public transport system. Goods are delivered to our thriving port by rail. Our valued restored heritage buildings are fully occupied, providing needed accommodation and employment.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to, or potentially subject to, instability, flooding or tidal inundation in future
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas

### Ecological and landscape values to protect



#### Significant Landscape Features

Manage activities and structures to protect significant landscape features.



#### Areas of Significant Conservation Value

Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential areas maintain current management approach

1

#### Osborne, Purakaunui, Deborah Bay, Sawyers Bay, Ravensbourne

Retain existing levels of development. Encourage development consistent with character values and good design.

### Residential areas change current management approach

2

#### Aramoana, Long Beach

Discourage development in low lying areas

3

#### Roseneath

Consider allowing some expansion of residential development in suitable areas

4

#### Careys Bay, Port Chalmers

Allow for redevelopment and intensification on a site by site basis. Encourage upgrade of noise insulation.

5

#### Kohi Place

Recognise existing residential development by rezoning to residential.

### Centres

— Existing centre

--- Proposed centre



#### Port Chalmers

Zone as a principal suburban centre. Review the extent of the boundaries of the centre to consider including existing commercial activities or exclude non commercial activities.

### Rural areas change current management approach

#### Rural Character Area



#### Otago Harbourside Rural Character Area, Flagstaff and Mt Cargill, Waikouaiti Coast and Hills Rural Character Area

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.

#### Rural-Residential

6

#### Blanket Bay, Sawyers Bay, St Leonards Rural-Residential

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the minimum lot size and consider alternative mechanisms to allow for different forms of residential development where appropriate. Review the rural-residential zone to better protect productive areas and steep areas with high visibility.

RR

#### Roseneath, St Leonards

Recognise existing pattern of development by rezoning to rural-residential.

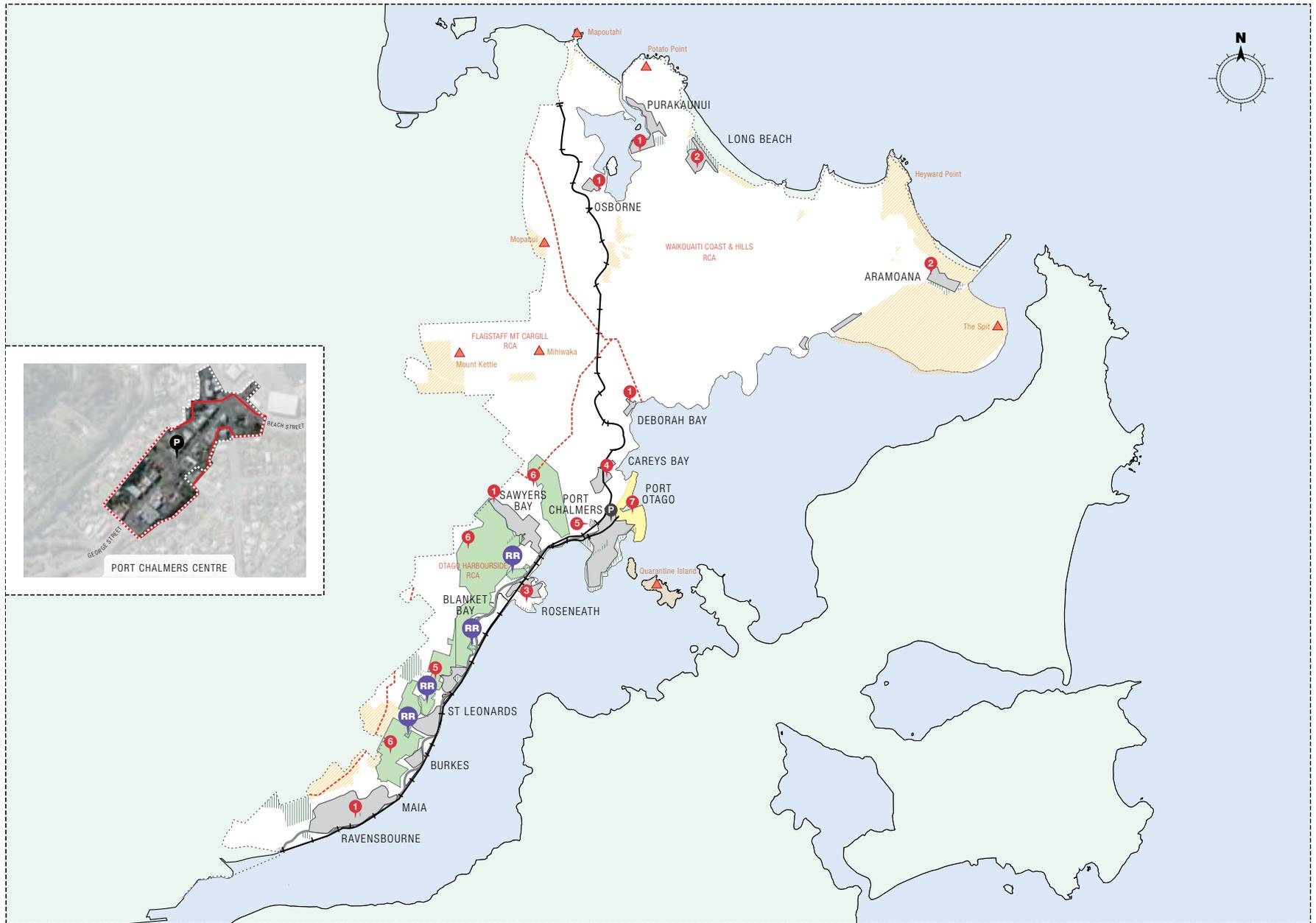
### Key Infrastructure

7

#### Port Otago

Recognise the Port Otago Limited operations at Port Chalmers as key strategic infrastructure that contributes to the economy of the city.

Map 15 – Chalmers Community Board



## Otago Peninsula Community Board on Map 16

### Vision for Otago Peninsula Community Board

Otago Peninsula in 2050 consists of a number of thriving communities that are connected by efficient public transport routes and safe cycling lanes and serviced by excellent infrastructure. Locally produced food is sold at the local market. The population is sufficient to sustain local schools, good community facilities and opportunities for employment locally. The network of walking and cycling tracks across the Peninsula thread through the community owned Hereweka property and are well used by locals and visitors to the Peninsula. All new development enhances the character and contributes positively to the environment. The outstanding wildlife and landscape attracts tourists who respect the environment and enjoy their stay on the Peninsula. The biodiversity of the Peninsula is protected and enhanced with re-vegetated and regenerated areas that are flourishing from the pest free status of the Peninsula.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to or potentially subject to instability, flooding or tidal inundation
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas

### Ecological and landscape values to protect

	<b>Significant Landscape Features</b>	Manage activities and structures to protect significant landscape features.
	<b>Areas of Significant Conservation Value</b>	Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential areas maintain current management approach

	<b>Portobello, Pukehiki, Broad Bay</b>	Retain existing levels of development. Encourage development consistent with character values and good design.
	<b>Macandrew Bay</b>	Encourage residential development subject to infrastructure capacity issues. Encourage development consistent with character values and good design.

### Residential areas change current management approach

	<b>Harwood, Harington Point</b>	Review the residential zone to discourage new development on low lying areas or areas subject to inundation.
	<b>St Ronans Road, Rosehill Road</b>	Rezone from Rural to Residential to recognise existing residential development
	<b>Otakou</b>	Consider whether there are additional areas in the vicinity to enable relocation of development from low lying areas in future

### Centres Existing centre Proposed centre

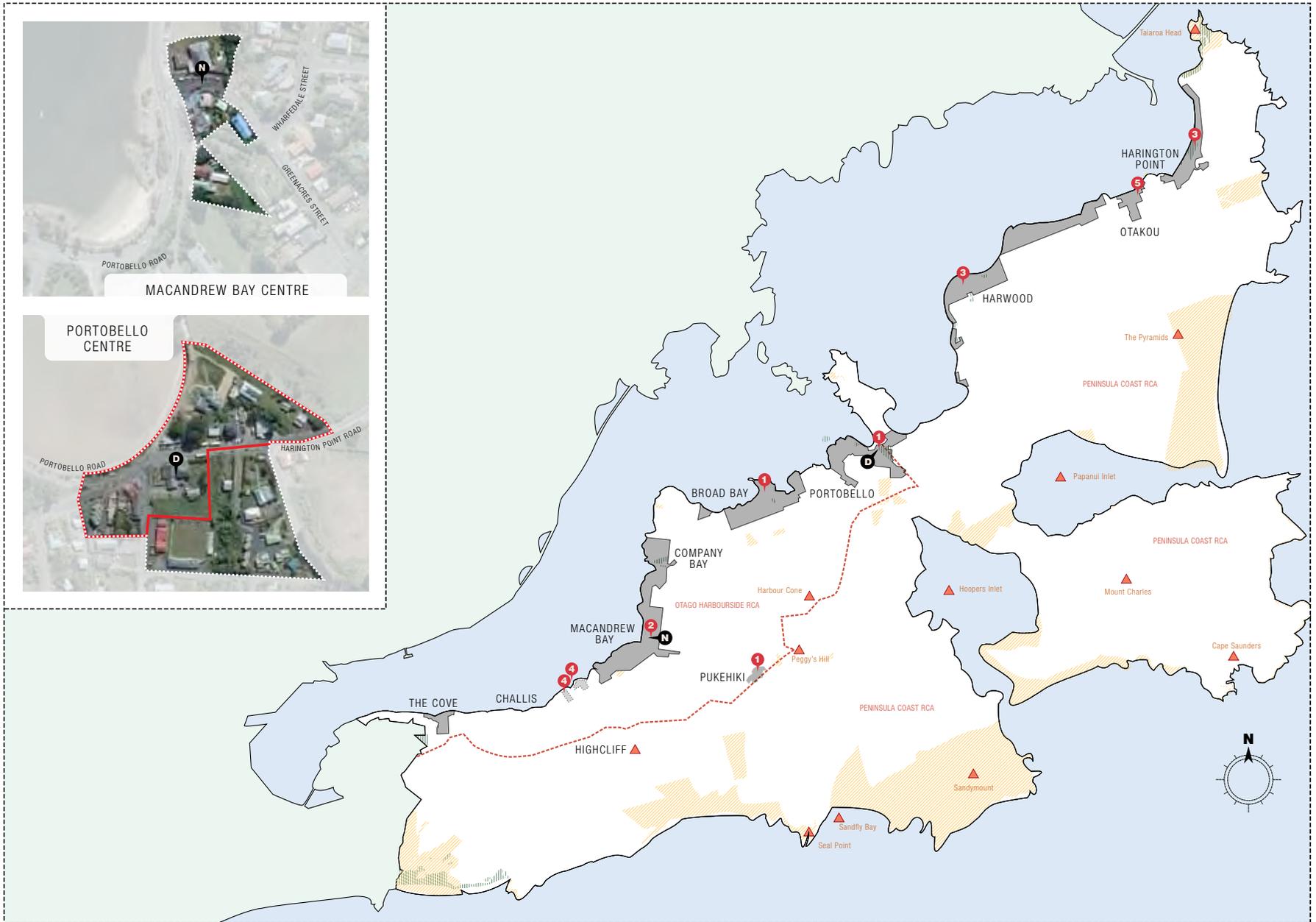
	<b>Portobello</b>	Zone as a destination centre. Review the extent of the boundaries of the centre to consider including existing commercial activities or exclude non-commercial activities.
	<b>Macandrew Bay</b>	Rezone as a neighbourhood centre

### Rural areas change current management approach

#### Rural Character Area

	<b>Peninsula Coast Outstanding and Otago Harbourside Rural Character Area</b>	Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.
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**Map 16 – Otago Peninsula Community Board**



Residential

Rural-Residential

## Mosgiel-Taieri Community Board on Map 17

### Vision for Mosgiel-Taieri Community Board

Mosgiel-Taieri in 2050 has a thriving industrial area, with an inland port, which provides employment opportunities for the community and economic support for the city. Harvesting storm water and wind power contributes to the community's environmental sustainability. A quality public transport system and roading network facilitates excellent travel behaviour. Our community has a range of accessible recreation amenities and facilities which meet our residents' needs.

Mosgiel has a modern country character supported through appropriate development which complements the identity of our community. Our rural land and natural environment are preserved, with local food, fibre and timber production contributing to the economy.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to, or potentially subject to, instability, flooding or tidal inundation
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 2(b) Encourage and support greater use of passenger rail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas
- PDE 7(a) Ensure industrial lands are protected from incompatible land-uses and, where practical, an adequate buffer allows for expansion opportunities and avoidance of reverse sensitivity issues

### Ecological and landscape values to protect

	<b>Significant Landscape Features</b>	Manage activities and structures to protect significant landscape features.
	<b>Areas of Significant Conservation Value</b>	Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential areas maintain current management approach

	<b>Mosgiel, Allanton, Outram</b>	Retain existing levels of development. Encourage development consistent with character values and good design.
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### Centres — Existing centre   Proposed centre

	<b>Mosgiel</b>	Zone as principle suburban centre. Review the extent of the boundaries of the centre to consider including existing commercial activities or exclude non-commercial activities. Manage the form of residential development on zone boundaries to enable flexibility of the built form for future expansion of centre.
	<b>Outram</b>	Zone as a rural centre. Review the extent of the boundaries of the centre to consider including existing commercial activities or exclude non-commercial activities.
	<b>Southern end of Gordon Road</b>	Consider the need to zone a neighbourhood centre to service the southern part of Mosgiel.

### Rural areas change current management approach

#### Rural Character Area

	<b>Taieri Plains, Taieri Slopes, South Taieri Coast, Taieri Valley and Waipori Gorge, Lee Downs, Silverpeaks Rural Character Area</b>	Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.
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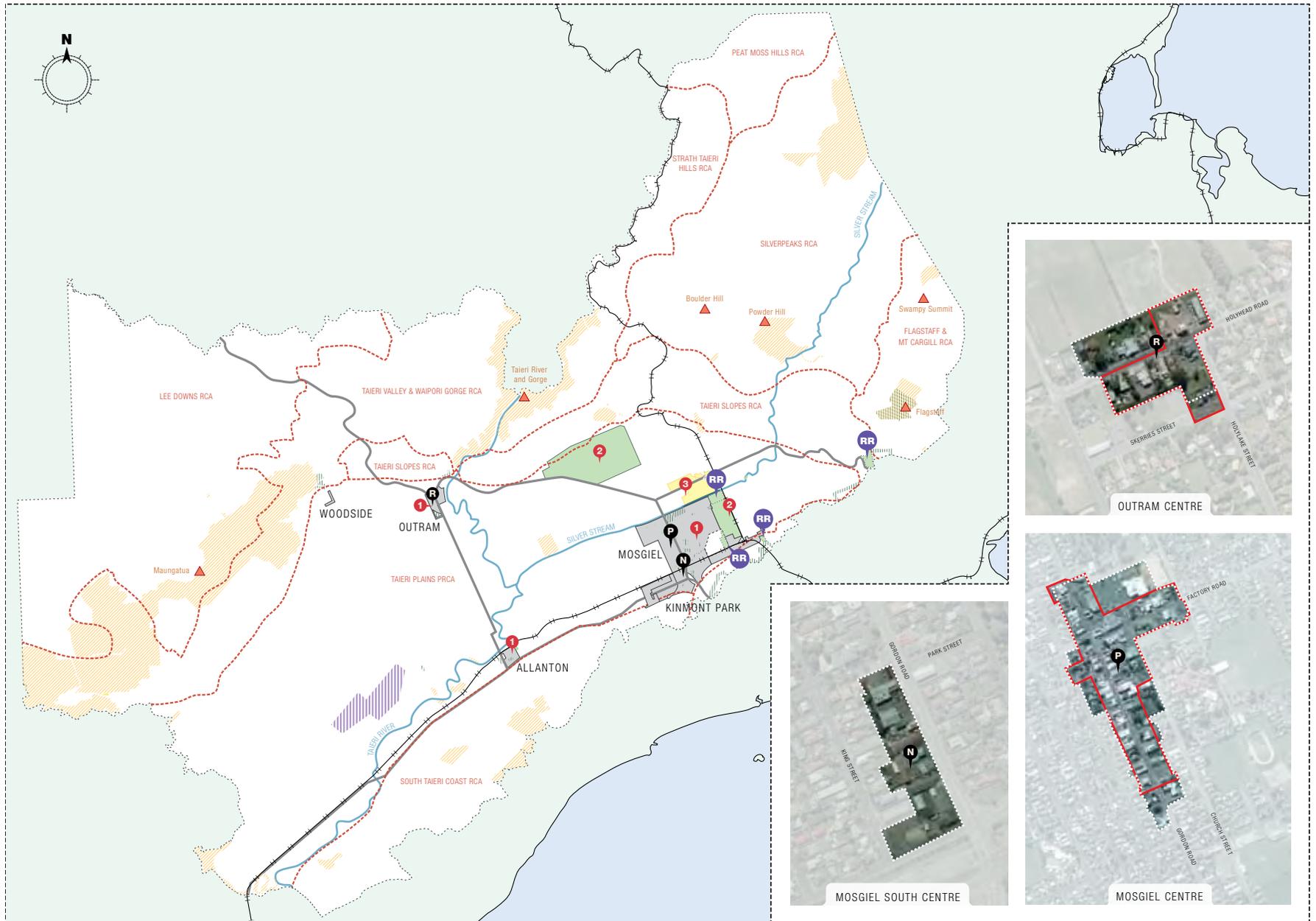
#### Rural-Residential

	<b>Wingatui and Tirohanga Road Rural-Residential</b>	Review the minimum lot size and consider alternative mechanisms to allow for lifestyle development and encourage productive capacity of useable land. Control the design and location of new development consistent with rural character.
	<b>Chain Hills, Saddle Hill Rural-Residential</b>	Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the minimum lot size and consider alternative mechanisms to manage different forms of residential development where appropriate.
	<b>Rutherford Road, Wingatui Road, Three Mile Hill Road</b>	Recognise existing pattern of development by rezoning to rural-residential.

### Industrial areas

	<b>Support the growth of industrial activities near Mosgiel</b>	Provide for the future expansion of industrial activities in this area by providing an adequate buffer from sensitive activities eg. residential activities.
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Map 17 – Mosgiel-Taieri Community Board



## Strath Taieri Community Board on Map 18

### Vision for Strath Taieri Community Board

The Strath Taieri in 2050 benefits from sustained population growth supporting a rural centre with facilities that meet the needs of the community. Young people choose to live in the district and there are a range of activities (cycle, heritage and ecological trails) to attract younger visitors. The outstanding natural character of the Strath Taieri is protected, enhanced and promoted. Rural activities and new development enhances the rural character and contributes positively to the environment. Heritage items are protected and maintained. The Strath Taieri is self sufficient in terms of energy and water supply. Locally produced high quality products are sold at local markets throughout Dunedin.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to, or potentially subject to, instability, flooding or tidal inundation in future
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas

### Ecological and Landscape Values to protect



#### Significant Landscape Features

Manage activities and structures to protect significant landscape features.



#### Areas of Significant Conservation Value

Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential Areas Maintain Current Management Approach



#### Middlemarch, Hyde

Retain existing levels of development. Encourage development consistent with character values and good design.

### Centres

— Existing centre

- - - Proposed centre



#### Middlemarch

Zone as a rural centre. Consider connecting existing facilities and activities to create an integrated village through zoning and/or amenity improvements.

### Rural Areas Change Current Management Approach

#### Rural Character Area



#### Middlemarch Basin, Lammermoor Range, Rock and Pillar Range, Taieri Ridge, Peat Moss Hills and Strath Taieri Outstanding Rural Character Areas

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.

#### Rural-Residential

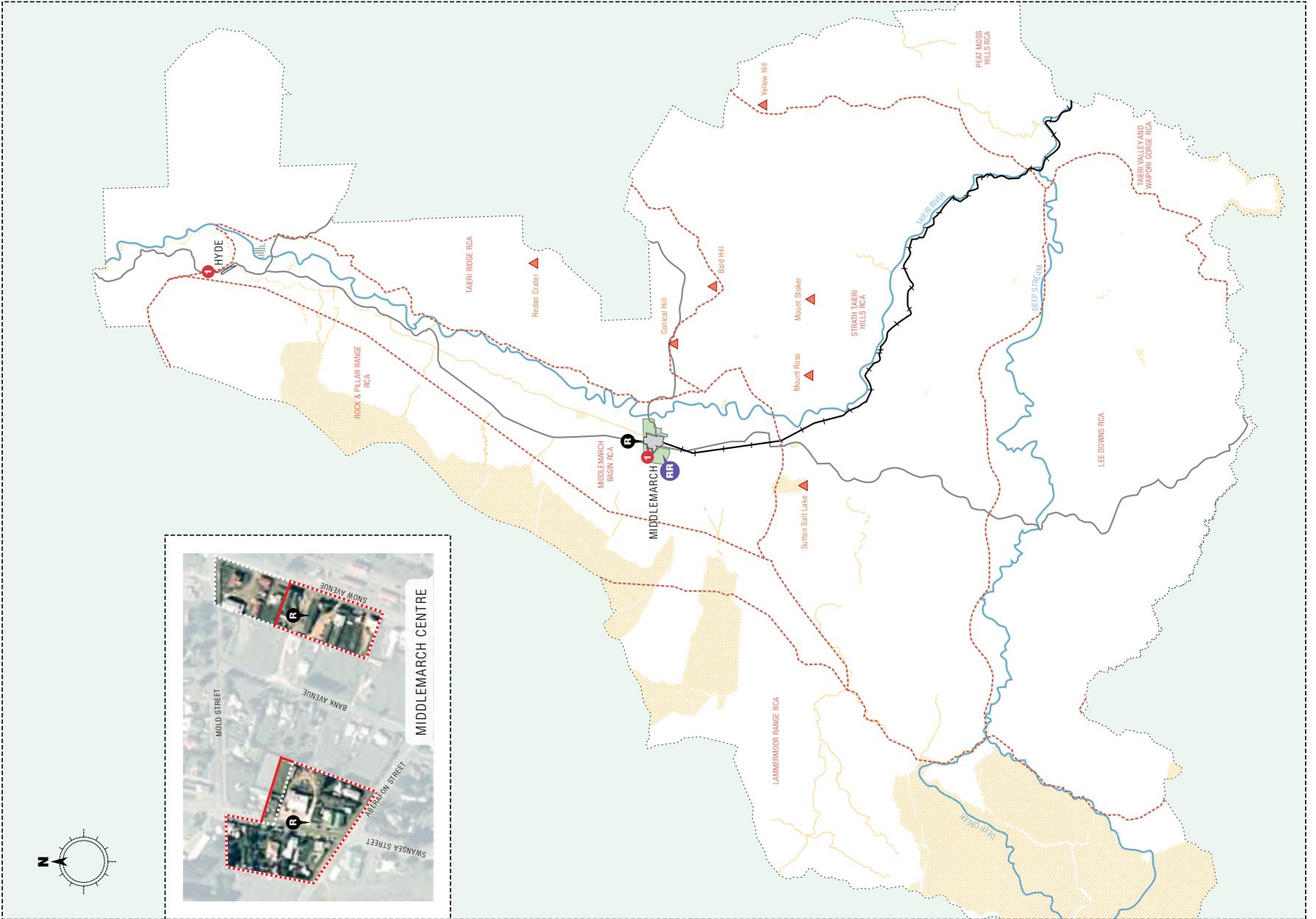


#### Middlemarch Rural-Residential

Review the extent of the zone. Manage development to protect rural character, productive capacity and protection of water catchments.

Map 18 – Strath Taieri  
Community Board

- Residential
- Rural-Residential



## Saddle Hill Community Board on Map 19

### Vision for Saddle Hill Community Board

The Saddle Hill community in 2050 celebrates the open space along the Brighton coastline. The values of the coastline and the rural landscape are protected. The Green Island suburban centre is vibrant and thriving. Residential development is well designed and provides connectivity to an excellent public transport system. Public transport caters to the particular needs of the community (especially school children) and has reduced the community's reliance on private means of transport.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to, or potentially subject to, instability, flooding or tidal inundation in future
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas

### Ecological and landscape values to protect



#### Significant Landscape Features

Manage activities and structures to protect significant landscape features.



#### Areas of Significant Conservation Value

Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential areas maintain current management approach

1

#### Waldronville

Retain existing levels of development. Encourage development consistent with character values and good design.

2

#### Brighton

Allow some expansion in suitable areas.



#### Brighton

Recognise existing residential development by rezoning to residential.

### Centres

— Existing centre

--- Proposed centre



#### Brighton

Consider the need for a neighbourhood centre.

### Rural areas change current management approach

#### Rural Character Area



#### South Taieri Coast and Taieri Slopes Rural Character Area

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.

#### Rural-Residential

3

#### Blackhead and Scroggs Hill Rural-Residential

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the minimum lot size and consider alternative mechanisms to allow for different forms of residential development where appropriate. Review the zone to better protect landscape values.

4

#### Brighton, Chain Hills, Saddle Hill Rural-Residential

Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the minimum lot size and consider alternative mechanisms to allow for different forms of residential development where appropriate.



#### Chain Hills, Highland Road

Recognise existing pattern of development by rezoning to rural-residential.

Map 19 – Saddle Hill  
Community Board



## Waikouaiti Coast Community Board on Map 20

### Vision for Waikouaiti Coast Community Board

Waikouaiti in 2050 is made up of a number of thriving communities each with their own identity and access to community renewable energy generation. The natural landscape is protected and all new development contributes positively to the environment. Waikouaiti is a leader in ecological restoration with its show pieces of Orokonui, Hikaroroa and Silverpeaks attracting visitors and local eco-tourism operators. Rivers have been restored through riparian planting with high water quality for recreational fishing leading into a restored estuary. Local visitors enjoy their stay along the coast.

### Some of the key policies directing future management and development of the area

- ESR 1(a) Ensure any development or subdivision on rural land provides for the continued use and effective management of that land for productive purposes or ecosystem services. Strongly discourage any residential development or subdivision on rural land that undermines these functions or the objectives of the urban-rural boundary
- ESR 2(c) Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna
- ESR 5(a) Discourage development in areas subject to, or potentially subject to, instability, flooding or tidal inundation in future
- ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)
- MEM 1(b) Protect the character and identity of the distinct rural and coastal communities in the city by preventing urban development in defined inter-urban breaks (rural or natural areas between settlements)
- MEM 1(c) Manage the location and design of development in the rural environment to protect character and landscape values of the rural environment
- MEM 3(a) Ensure all new development respects and enhances the distinct built and natural environmental context in which it is located, including land form, natural features, local character and identity
- MEM 3(b) Recognise and celebrate local identity, character, and history in the public realm and encourage the same in private developments
- VIB 2(a) Promote the central city and other centres as locations for commercial activity and strongly discourage commercial development outside of identified centres with the exception of trade-related/home improvement retail
- ACCESS 2(b) Encourage and support greater use of passenger rail
- ACCESS 6(e) Provide good multi-modal connections (including public transportation) between the central city, other centres, the Tertiary-Medical Precinct and key recreation areas

### Ecological and landscape values to protect

	<b>Significant Landscape Features</b>	Manage activities and structures to protect significant landscape features.
	<b>Areas of Significant Conservation Value</b>	Encourage protection and management of areas of significant conservation value and identification of other areas of biodiversity value.

### Residential areas change current management approach

	<b>Waikouaiti</b>	When and if wastewater constraints are addressed, allow for broad range of site sizes in existing urban extent. Avoid development in low lying areas. Allow for large lot residential (with on site or private reticulation) on suitable sites.
	<b>Doctors Point/Waitati</b>	Allow some expansion in suitable areas
	<b>Hawksbury</b>	Encourage redevelopment and mixed use environment.
	<b>Warrington, Karitane, Seacliff</b>	Retain existing levels of development and avoid low lying areas. Encourage development consistent with character values and good design.

### Centres — Existing centre   Proposed centre

	<b>Waikouaiti and Waitati</b>	Zone as a rural centre.
	<b>Karitane</b>	Zone as a neighbourhood centre.

### Rural Areas Change Current Management Approach

#### Rural Character Area

	<b>Waikouaiti Valley, Flagstaff Mt Cargill, Silverpeaks, Peat Moss Hills and Waikouaiti Coast and Hills Rural Character Area</b>	Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the current approaches to the management of residential development in the District Plan and consider more holistic approaches that improve outcomes in relation to biodiversity restoration and enhancement, land management practices, and protection of rural productivity, amongst others.
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#### Rural-Residential

	<b>Waitati Rural-Residential</b>	Protect the important landscape and rural character values from inappropriate development by strongly controlling the design and location of new development. Review the minimum lot size and consider alternative mechanisms to allow for different forms of residential development where appropriate. Review the zone to better protect landscape values.
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## The Action Plan

This section contains an action plan for implementation of the Spatial Plan over the next ten years, divided into different implementation mechanisms. The overall implementation method for actions with financial implications is through the DCC's Long Term Plan. This Action Plan does not form part of the policy framework of the Spatial Plan and is subject to change as a result of the development of those plans and strategies.

The Action Plan is divided into three parts. The first part summarises the District Plan actions. The second part looks at strategy integration across other DCC strategies and plans. The third part summarises other actions that have been identified as important to investigate or carry out to implement the Spatial Plan. The keys for the tables used in the action plan are set out below.

### Key for implementation methods

ACC	Advocacy, collaboration, and contributions to other authorities' or organisations' planning
CS	Customer service
DP	District Plan (Regulatory methods)
FUND	Financial incentives (grants, rates relief, consent fee relief)
FS	Funding sources (including rates, financial and Development Contributions)
INFO	Information, education, guidelines and recognition initiatives
Parks	Parks, reserves and open space management
PROP	Property development and public-private partnerships
RM	Research and monitoring
RPM	Roading and parking management
REG	Standards and bylaws
TP	Transportation projects
UA	Urban amenity improvement projects
WWP	Water and waste services projects

### Key for status

**In progress** – means the action has been completed, is in progress or is on-going

**Investigate** – means the action will be investigated or is new

### Key to policies referred to in actions

LIV – A liveable city page 15-16

ESR – An environmentally sustainable and resilient city page 18-20

MEM – A memorable and distinctive city page 22-23

VIB – A vibrant and exciting city page 25

ACCESS – An accessible and connected city page 27-28

PDE – A city that enables a prosperous and diverse economy page 30

## A. District Plan (regulatory methods) Implementation Actions

### How the Spatial Plan will be used to provide direction for the review of the District Plan

The strategic directions and the overall urban form objective and policies outlined in Part 2 will be considered in the upcoming review of the District Plan. The actions related to this are outlined in this section. These are actions that have been identified as potentially necessary in the short-term to implement the strategic directions and achieve the urban form for Dunedin. The District Plan is designed to look ten years into the future. The actions do not cover those actions that may be required in future reviews of the District Plan. These actions will be further refined and may change as part of the detailed review of the District Plan.

Until the review of the District Plan is completed, it is expected that all significant developments will be assessed against the strategic directions and the overall urban form objective and policies of the Spatial Plan as part of the resource consent process under the Resource Management Act 1991.

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In Progress	DP1	Develop a Second Generation District Plan which places a greater emphasis on outcome-oriented, place-focused, and finer-grained planning that ensures zoning, objectives, policies and rules reflect the desired protection or creation of character and values for different environments.	City Development		MEM 1(a) (b)(c), 2(d), 3(a) VIB 1(d)
	DP2	Adopt a hierarchy of activity centres. Develop mechanisms to manage the type and design of activities in centres based on the role and function of each centre. Use these mechanisms to assist the DCC investment programmes in each centre. Strongly discourage commercial development outside of centres.	City Development		LIV 8(a) VIB 2(a)(b)(c)(j) ACCESS 6(b)(c), 7(a) PDE 5(a) Maps 25 and 26 – Centres hierarchy Maps 5 - 10 Key actions
	DP3	Update the Heritage Register and Schedule of heritage items in the District Plan.	City Development	New Zealand Historic Places Trust	MEM 5(a), 6(a)
	DP4	Define a clear urban rural boundary and trigger points where new urban expansion will be supported. Identify areas where future greenfield development should go when current capacity and additional capacity created through intensification is inadequate. Consider staging of expansion and links to infrastructure where appropriate.	City Development		LIV 6(c) ESR 9(a)(c) MEM 1(b) Urban Form (a)-(h) Map 6 – Key actions
	DP5	Rezone a proportion of the harbourside area to create a mixed use environment.	City Development		VIB 2(e) Map 6 – Key actions
	DP6	Review the Large Scale Retail zone around Vogel Street (Warehouse Precinct) and rezone to support the creation of a mixed-use environment in this area based on inner-city living, live-work development, commercial office and some limited retail to support these activities.	City Development	Economic Development Unit Transportation Planning New Zealand Transport Agency	MEM 5(b), VIB 2(e)(k) PDE 1(c) Maps 5 and 6 – Key actions
	DP7	Review management approach for rural land to better control subdivision and residential development to ensure on-going good land management and protection of a variety of values including food production, rural character, biodiversity and landscape values and to prevent the unplanned spread of rural-residential activities in the rural zone.  Investigate encouragement of Whole of Property Management Plans for subdivision/development proposals for large rural properties.	City Development		ESR 1(a), 2(a)(b)(c)(d)
	DP8	Identify and actively promote protection of significant conservation areas as Areas of Significant Conservation Value and/or QEII covenants.	City Development	Department of Conservation	ESR 2(b)(c)
	DP9	Incorporate or link design guidance in the District Plan.	City Development		MEM 2 (a)(e), 3(a)(c) VIB 2(h) ACCESS 7(f)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In progress	DP10	Review the provisions for retail management across the city and create a stronger policy framework to manage both the design of buildings and the distribution of activities, in particular the location and design of bulky goods retail, trade-related/ home Improvement retail and supermarkets across the city. The framework in the District Plan will reflect the strategic framework of the Spatial Plan.	City Development		VIB 2(c)(d)(h) MEM 2(c) ACCESS 7(f) Maps 5 and 6 – Key actions
	DP11	Develop mechanisms to encourage well-designed residential intensification in good locations, including multi-unit or infill development. Well-designed refers to how well the development contributes to the quality of life for residents, sustainability (for example through energy-efficient design), and the amenity and character of the immediate area and overall street. Good locations include areas that have good accessibility to public transport, services and facilities, have good positive features (e.g. sunlight, ability to provide quality amenity open space), and do not have major constraints (hazards, heritage etc.).	City Development	Water and Waste Services Transportation Planning Events and Community Development Parks and Recreation Services	LIV 9(a), MEM 2(e), VIB 2(e)(j), ACCESS 4(b) Urban Form (c)
	DP12	Identify areas of special character (commercial and residential) within the urban area of the city and develop mechanisms to protect that character.	City Development		MEM 2(b), 3(d) LIV 6(c) ACCESS 7(d) Map 12– Areas to maintain and enhance existing values
	DP13	Identify rural character areas based on characteristics and values of areas in the rural environment (including landscape and productive values) and develop mechanisms to manage the multiple values and retain the character for each area.	City Development		MEM 1(c) Maps 15-20 – Community Boards
	DP14	Review rural-residential zones and requirements to develop mechanisms to protect character, encourage good development, and intensify where appropriate.	City Development		ESR 1(b)
	DP15	Identify areas with constraints to development and redevelopment from hazards, climate change, sea-level rise and develop mechanisms to manage or avoid development in such areas.  These mechanisms could include managing floor level heights, requiring relocatable buildings, or not enabling new or intensified development.	City Development	Corporate Policy	ESR 5(a)(b), 9(a) Urban Form (f)(a) Map 15 – Chalmers Community Board Map 16 – Otago Peninsula Community Board
	DP16	Investigate methods to encourage local food production, processing, distribution and markets.	City Development		ESR 4(a)(b)
	DP17	Review parking and transportation provisions associated with activities and develop mechanisms to promote sustainable transportation and manage amenity through mechanisms such as maximum parking, minimum bike parking, use of financial contributions and controls on where parking is located on sites to enhance amenity outcomes.	City Development Transportation Planning	Transportation Operations Otago Regional Council University of Otago New Zealand Transport Agency	ACCESS 4(d), ACCESS 7(b)
	DP18	Identify public open spaces (parks and reserves) and zone as open space, where appropriate, and develop mechanisms to manage development in identified areas.	City Development Parks and Recreation Services		LIV 5(a)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
<b>In Progress</b>	DP19	Review provision for esplanade reserves and strengthen purpose and requirements.	City Development Parks and Recreation Services	Department of Conservation	ESR 2(d)
	DP20	Investigate and implement mechanisms to promote establishment of micro-energy generation distributed generation options and other renewable energy generation, where appropriate.	City Development	Energy Manager Corporate Policy	ESR 7(a)(b)
	DP21	Develop mechanisms to provide for temporary events in public spaces.	City Development	Events and Community Development	VIB 1(c), 2(k)
	DP22	Review provisions for industrial activities including developing mechanisms that provide buffers around existing industrial areas to enable expansion of industry or separation from nearby sensitive activities.	City Development		PDE 1(b), 3(a)(b), 7(a)(b)
	DP23	Review the roading hierarchy and develop mechanisms for different order roads that relate to the functioning of those roads e.g. local roads to have lower speed limits and provide network for active modes, freight routes to protect the efficient movement of vehicles and freight while taking into account other users.	Transportation Planning	City Development Otago Regional Council New Zealand Transport Authority	ACCESS 6(a) ACCESS 7(g)
	DP24	Work with the University of Otago and Otago Polytechnic to reflect future development aspirations in the District Plan where appropriate	City Development	University of Otago Otago Polytechnic	MEM 3(c) PDE 2(a)(b)(c)
	DP25	Identify outstanding landscapes, landscape features and ridgelines and protect them from inappropriate development.	City Development		MEM 1(c)
<b>Investigate</b>	DP26	Investigate the need for District Plan changes to provide for appropriate residential development in townships where required to reach a critical mass to retain or gain essential services and facilities (schools, public transport, doctors) and where in accordance with the urban form objective and policies.	City Development	Transportation Planning	ESR 11(a) Urban Form (a)-(h)
	DP27	Investigate the need for additional mechanisms to support the development of key health and community facilities and services in accessible and strategic locations across the city.	City Development	Events and Community Development Parks and Recreation Services Public Health South Southern District Health Board Health and Community Support Providers City Property	LIV 6(a)(b), 7(a)(b), 8(b)
	DP28	Review the provisions for hospitals and schools and develop mechanisms to ensure they are recognised along with provision for future development where appropriate.	City Development	Southern District Health Board	LIV 7(a), 8(a)
<b>In progress</b>	DP29	Review the provisions for site coverage and impervious surfaces and develop mechanisms that encourage minimal impervious surfaces in new development.	City Development	Water and Waste Services	ESR 9(e)
	DP30	Better align District Plan rules with existing residential character, where character is to be maintained, by using a finer-grained approach to residential zoning and by recognising some areas that have developed as rural-residential living areas.	City Development		ESR 1(b) MEM 3(a)(c)

## B: Strategic Integration

This section outlines the links between other DCC strategies and plans and the strategic directions of the Spatial Plan.

Status	Strategies and Plans	Strategic Directions						Actions
		Liveable City	Environmentally Sustainable and Resilient City	Memorable and Distinctive	Vibrant and Exciting	Accessible and Connected	Prosperous and Diverse	
In Progress	<p>Develop a Central City Plan, which identifies issues and opportunities related to urban design and transportation in order to strengthen the contribution of the central city to people's social, cultural, environmental and economic wellbeing.</p> <p>DCC lead department: City Development</p> <p>Who else has a role:</p> <p>DCC: Water and Waste Services, Transportation Planning, Events and Community Development, Parks and Recreation Services</p> <p>Other: Otago Regional Council, New Zealand Transport Agency, land and building owners, other commercial interests</p>	LIV 4(a) LIV 5(a)			VIB 2(a)(d)(e) (l)(k)	ACCESS 6(a) ACCESS 7 (a)(c)(h)	PDE 1(a)(c)	TP11 TP15 UA5
	<p>Develop place-based plans for each of Dunedin's principal suburban and suburban centres which identify issues and opportunities related to urban design and transportation in order to strengthen the contribution of the centre to people's social, cultural, environmental and economic wellbeing.</p> <p>DCC lead department: City Development</p> <p>Who else has a role:</p> <p>DCC: Transportation Planning, Transportation Operations, Events and Community Development, Water and Waste Services</p> <p>Other: Otago Regional Council, New Zealand Transport Agency, land and building owners, other commercial interests</p>	LIV 4(a) LIV 5(a)			VIB 1(b) VIB 2(d)(e)(g)	ACCESS 6(a)		RM1
	<p>Review progress in the implementation of the Heritage Strategy and adjust actions and timeframes, prepare an updated Heritage Action Plan by 2012.</p> <p>DCC lead department: City Development</p> <p>Who else has a role: New Zealand Historic Places Trust</p>		ESR 6(a)	MEM 3(b) MEM 5 (a)(b)(c)				CS1 FUND1 FUND2 FUND3 FUND4 FUND8 FS9 INFO2 INFO3 INFO8 DP3
	<p>Review progress in the implementation of the Biodiversity Strategy and adjust actions and timeframes, prepare a Biodiversity Action Plan by 2015.</p> <p>DCC lead department: City Development</p> <p>Who else has a role: Parks and Recreation Services, Corporate Policy, Otago Regional Council, Department of Conservation</p>		ESR 2 (a)(d) ESR 3 (a) (b)(c)					FUND5 FUND9 Parks1 Parks2 Parks4 DP8 DP19 WWP3

Status	Strategies and Plans	Strategic Directions						Actions
		Liveable City	Environmentally Sustainable and Resilient City	Memorable and Distinctive	Vibrant and Exciting	Accessible and Connected	Prosperous and Diverse	
In Progress	Develop an Integrated Transportation Strategy which incorporates a review of the Cycling Strategy, Pedestrian Strategy, Tracks Policy, Parking Strategy and Transport Strategy and includes Peak Oil responses. DCC lead department: Transportation Planning Who else has a role: City Development, Transportation Operations, Events and Community Development, Parks and Recreation Services, New Zealand Transport Agency, Otago Regional Council, Port Otago, Corporate Policy	LIV 6(f)	ESR 7 (a)			ACCESS 3(a)(c) ACCESS 4(c) ACCESS 6(d) ACCESS 7(a)(f)(h)	PDE 8(b)	ACC1 DP17 DP23 RM2 RM8 TP5 TP7 TP8 TP9 TP12 TP13 TP17 TP20
	Review progress on the implementation of the Physical Activity Strategy and adjust actions as required, revise strategy to develop a Physical Activity Implementation Plan. DCC lead department: Parks and Recreation Services Who else has a role: DCC Transportation Planning	LIV 6(e)						Parks3 Parks5
	Implement 3 Waters Strategic Directions Statement, reviewed every three years. Next review due 2013. DCC lead department: Water and Waste Services	LIV 1(a)(b)	ESR 9 (a) (b) (e)				PDE 8(a)	FS7 DP4 WWP1
	Implement the Dunedin Digital Strategy. DCC lead department: Economic Development Unit						PDE 4(a)(c)	REG4
	Develop a Heritage Buildings Economic Re-use Action Plan. DCC lead department: City Development		ESR 6(a)	MEM 2 (f) MEM 5(b)(c)				FS5 INFO2 INFO3
	Implement actions from the Integrated Catchment Management Plans and Water Catchment Management Plans. DCC lead department: Water and Waste Services	LIV 1(b)						
	Develop a Parks and Reserves Strategy. DCC lead department: Parks and Recreation Services	LIV 5(a), 6(b)(d) (e)(f)(h)	ESR 3(a)(b) (c), ESR 4(a), ESR 5(b)			VIB 1(c)		INFO1 Parks2 Parks3 Parks4 Parks6 Parks7 DP18

Status	Strategies and Plans	Strategic Directions						Actions
		Liveable City	Environmentally Sustainable and Resilient City	Memorable and Distinctive	Vibrant and Exciting	Accessible and Connected	Prosperous and Diverse	
In Progress	Review and implement the Waste Management and Minimisation Plan DCC lead department: Water and Waste Services Who else may have a role: Events and Community Development	LIV 2(a)	ESR 10(a)					
	Develop and implement a Climate Change Adaptation Plan. The programme will commence with South Dunedin as a pilot which will be followed by other communities across Dunedin. DCC lead department: Corporate Policy Who else may have a role: Transportation Planning, Water and Waste Services, City Development, Events and Community Development, Otago Regional Council		ESR 5(a)					RM6
	Implement the Tertiary Precinct Development Plan and schedule a review of its objectives and action plan to co-incide with the Second Generation District Plan. DCC lead departments: Corporate Policy, City Development Who else may have a role: Transportation Planning, Customer Advocate, Otago Regional Council, Southern Health Board, University of Otago, Otago Polytechnic, New Zealand Transport Agency			MEM 3(c)		ACCESS 4(c), 7(a)	PDE 2 (a)(b)(c)	ACC2 INFO5 INFO9 INFO15 DP24 TP6 UA2
	Implement the Earthquake-Prone Buildings Policy (including provisions for dangerous and insanitary buildings). DCC lead departments: City Development, Building Control		ESR 6(a)	MEM 5(b)				FUND1 FUND2 FUND3 FUND8
	Implement the North Dunedin Neighbourhood Accessibility Plan, which aims to provide safe access to all ages of active and shared transport users. The plan covers the area north east of the central city and includes major trip generators such as the University, Polytechnic and Botanic Garden. DCC lead department: Transportation Operations Who else may have a role: University of Otago					ACCESS 7(a)		

Status	Strategies and Plans	Strategic Directions						Actions	
		Liveable City	Environmentally Sustainable and Resilient City	Memorable and Distinctive	Vibrant and Exciting	Accessible and Connected	Prosperous and Diverse		
In Progress	Develop the DCC Aquatic Services Strategy. DCC lead department: Aquatic Services	LIV 6(a)							
	Implement the Parking Strategy. DCC lead department: Transportation Planning, Citipark					ACCESS 7(a) ACCESS 4(c) ACCESS 6(d)		RPM1	
	Implement the Social Housing Strategy. DCC lead department: Events and Community Development	LIV 9(a)							
	Implement Dunedin's Economic Development Strategy. DCC lead department: Economic Development Unit Who else may have a role: Events and Community Development, City Planning, Transportation Planning, Otago Chamber of Commerce, University of Otago, Otago Polytechnic, Otago Southland Employers Association, Ngāi Tahu						PDE 1(b)		
	Develop the Otago Harbour Plan with a vision for access to and across the Otago Harbour. To commence in 2012. DCC lead department: Corporate Policy Who else may have a role: Otago Regional Council	LIV 6(e)					ACCESS 7(a)		
	Develop an Energy Plan. To commence in 2012 DCC lead department: Energy Manager, Corporate Policy Who else may have a role: University of Otago, Otago Polytechnic, Economic Development Strategy partners, Community Resilience Forum		ESR 7(a)						WWP2
	Implement the University of Otago Campus Master Plan 2010. Not yet formally adopted by the University of Otago. DCC lead department: Corporate Policy Who else may have a role: University of Otago (lead)				MEM 2(d)(e), MEM 3(c),	VIB 1(c)	ACCESS 4(c), ACCESS 7(a)		TP19
	Implement the University Parking Protocol. To be reviewed in 2012. DCC lead department: Transportation Planning Who else may have a role: University of Otago, Otago Polytechnic						ACCESS 4(c)		DP17

Status	Strategies and Plans	Strategic Directions						Actions
		Liveable City	Environmentally Sustainable and Resilient City	Memorable and Distinctive	Vibrant and Exciting	Accessible and Connected	Prosperous and Diverse	
In progress	Implement the Draft Campus Travel Plan which contains a series of strategies for improvement to the walking, cycling, ridesharing and public transport options, and better management of on-site parking on campus. Not yet formally adopted by the University of Otago. DCC lead department: Transportation Planning Who else may have a role: University of Otago (lead)					ACCESS 4(a)(c)		
	Implement the University of Otago Landscape Development Plan. Who else may have a role: University of Otago (lead)				VIB 1(c)	ACCESS 7(a)		UA2 UA3 UA6
	Implement the Regional Land Transport Strategy Who else may have a role: Otago Regional Council (lead), New Zealand Transport Agency					ACCESS 1(a), 2(a), 3(a)(c)		TP4
	Implement the Otago Regional Policy Statement Who else may have a role: Otago Regional Council (lead)		ESR 1(a)					
	Implement the Regional Passenger Transport Plan Who else may have a role: Otago Regional Council (lead)					ACCESS 2(a)		
	Develop a Social Well-being Strategy DCC lead department: Events and Community Development	LIV 5(a)						
Investigate	Develop an Ecological Restoration Plan for the city that provides a vision for biodiversity across the city DCC lead department: City Development Who else may have a role: Department of Conservation, Parks and Recreation Services, Otago Regional Council		ESR 2(a)(c)(d), ESR 3(a)(b)					INFO14 DP8 DP19 Parks1 Parks4
	Develop a unified Arts and Culture Strategy for Dunedin DCC lead department: Events and Community Development			MEM 4(a)(b)	VIB 1(a)(b)(c)			ACC15 ACC16 FS3 UA4
	Investigate the need for development of an Environmental Strategy DCC lead department: Corporate Policy		ESR 1–11					

## C: Other implementation actions

This section outlines all other actions that are not related to the review of the District Plan.

### Advocacy, collaboration, and contribution to other authorities' or organisations' planning

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	ACC1	Advocate for improvements to public transportation services including appropriate pricing, routes, scheduling and marketing through regular meetings with the Otago Regional Council and submissions on the ORC draft Regional Passenger Transport Plan.	Transportation Planning	University of Otago New Zealand Transport Agency Otago Polytechnic Otago Regional Council	ACCESS2(a)
	ACC2	Work with the Otago Regional Council on natural and landscaped solutions for flood protection infrastructure as part of the development of blue corridors.	Corporate Policy Water and Waste Services	Tertiary Precinct Planning Group Tertiary Planning and Townscape Group University of Otago Otago Regional Council Otago Polytechnic	ESR 3(a)(b)
	ACC3	Work with the University of Otago, Otago Polytechnic, and other education providers to encourage the maintenance and extension of appropriate tertiary and adult education opportunities in the city and examine potential locations for facilities possibly in conjunction with libraries, community halls, and other public buildings.	Corporate Policy	Tertiary Precinct Planning Group Tertiary Sector Steering Group University of Otago Otago Polytechnic	LIV7(b) PDE5(a), 8(c) VIB2(g)
	ACC4	Advocate to, and work with, the Ministry of Education to identify opportunities for disused schools for new community facilities and the need for new schools.	Corporate Policy	Events and Community Development Parks and Recreation Services	LIV7(a)
	ACC5	Work with the Otago Regional Council to identify areas of potential flooding hazard.	City Development	Otago Regional Council	ESR 5(a)
	ACC6	Work with the Otago Regional Council to seek monitoring and enforcement of air quality standards for activities and processes.	Environmental Health City Planning	Otago Regional Council	LIV 3(a)
	ACC7	Work with the Otago Regional Council to identify areas for riparian planting that will improve water quality of urban waterways.	Water and Waste Services	City Development Otago Regional Council	ESR 3(b)
	ACC8	Work with infrastructure providers and private ICT providers to co-ordinate projects.	Business Information Services		PDE 4(c)
	ACC9	Work with local communities, line providers and power generators to identify appropriate locations for micro-generation, distributed generation options and other renewable energy generation.	Energy Manager	Corporate Policy City Development Energy companies University of Otago	ESR 7(a), 12(a)
	ACC10	Work with City Forests and other forestry companies in the city to produce energy from biomass.	Energy Manager	University of Otago City Forests	ESR 7(b)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	ACC11	Advocate for improvements to the State Highway network including main safety hotspots and connectivity issues through regular meetings and communications with New Zealand Transport Agency.	Transportation Planning	New Zealand Transport Agency	ACCESS 3(a)
	ACC12	Work with relevant stakeholders to undertake CPTED analysis of public and open spaces.	Customer Advocate	City Development Events and Community Development Parks and Recreation Services	LIV 4(a)
	ACC13	Work with the Otago Regional Council, or provide comments on resource consent applications for activities that have impacts on water quality or DCC water catchments and reviews of the water plan.	Resource Consents Water and Waste Services	Otago Regional Council	LIV 1(b),2(a), ESR 3(b)
Investigate	ACC14	Support community health and support providers by participating in health needs analysis for location of services near to where the need is.	Events and Community Development	Customer Advocate	LIV 8(a)
	ACC15	Establish an Arts and Culture Leadership Group to encourage co-ordination in planning and delivery of arts and cultural facilities and events across the city.	Events and Community Development		VIB 1(a)
	ACC16	Encourage developers to provide public art in large developments.	City Planning Events and Community Development		MEM 3(b), 4(a)(b)
	ACC17	Work with the Southern District Health Board to advocate for improvements to the standard of Dunedin's housing stock.	City Planning Events and Community Development		LIV 10(a)(b)
	ACC18	Work with infrastructure providers to encourage developers to integrate infrastructure design into the design of developments.	City Planning Water and Waste Services Events and Community Development	Infrastructure providers	MEM 4(a) 5(a)
	ACC19	Work with stakeholders to investigate options relating to biodiversity enhancement and amenity values in Otago Harbour.	City Planning	Otago Regional Council Department of Conservation	LIV 6(e)
	ACC20	Work with New Zealand Federated Farmers, Ministry of Agriculture and Forestry, Otago Regional Council and other key stakeholders to undertake research to determine an approach, and appropriate actions, to recognise the value and challenges facing the rural economy and communities in Otago.	City Planning	New Zealand Federated Farmers Ministry of Agriculture and Forestry Otago Regional Council	PDE 3
	ACC21	Investigate the possibility of transferring operations of bus services to Dunedin City Council.	Corporate Policy Transportation Planning		ACCESS 2(a)

## Customer Service

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
Investigate	CS1	Investigate the streamlining of regulations and customer service enhancements to create a sustainable design friendly and heritage friendly regulatory environment.	City Development Building Control	Customer Services Agency	ESR 8(a) MEM 5(b)
	CS2	Investigate the use of an Urban Design Panel to assist developers to identify good design solutions.	City Development		MEM2(c), 3(c)

## Financial incentives (grants, rates relief, consent fee relief)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	FUND1	Use the Heritage Fund to support economic re-use of heritage buildings, maintenance of the city's heritage urban landscapes and conservation of significant built heritage. Report on need to increase amount allocated to fund.	City Development	Historic Places Trust	ESR6(a), MEM 2(f), 5(a)(b)
	FUND2	Use rates relief to support heritage restoration or heritage building economic re-use projects	City Development	Economic Development Unit	MEM 5(b)
	FUND3	Implement a targeted rates scheme for earthquake-strengthening	City Development	Finance	ESR 5(b), 6(a)
	FUND4	Waive consent fees or issue blanket consents for heritage restoration or heritage building economic re-use projects	City Development	Resource Consents	MEM 5(b)
	FUND5	Use the Dunedin Biodiversity Fund to support landowners in maintaining and restoring ASCVs and other areas of biodiversity. Review fund criteria to ensure they achieve the purpose of the fund.	City Development		ESR 2(a), 2(c), 2(d)
	FUND6	Promote the Healthy Homes Insulation Grant Scheme.	Events and Community Development	Central Government Otago Regional Council	LIV 10(b)
	FUND7	Establish and implement an Eco-Housing Retrofit Scheme to facilitate the upgrading of homes for clean heat and insulation.	Corporate Policy	Energy Manager	LIV 10(b) ESR 8(a)
Investigate	FUND8	Investigate a parapet and façade strengthening incentive scheme for high pedestrian areas	City Development	Building Control	ESR 6(a)
	FUND9	Use Rates Relief for Areas of Significant Conservation Value	City Development	Events and Community Development	ESR2(c)
	FUND10	Investigate the use of rates relief and other re-use incentives to encourage arts and creative industries and practitioners to locate in heritage buildings	City Development	Finance Events and Community Development	MEM5(b)

## Funding sources (including rates, financial and Development Contributions)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In progress	FS1	Use Development Contributions to influence the location of development by ensuring the true costs of urban greenfield expansion are determined and charged.	Corporate Policy		ESR 9(a) (c)
	FS2	Explore different financing options to improve the transport network.	Transportation Planning	Otago Regional Council	ACCESS 4(c), 6(d)
Investigate	FS3	Investigate different funding options for public art.	Events and Community Development	Corporate Policy	MEM 4(a)
	FS4	Investigate use of targeted rates and rates reductions to encourage or discourage different types of development.	City Development		MEM 2(f), 5(d)
	FS5	Explore the use of targeted rates and linked rates reductions to ensure maintenance of heritage buildings in character commercial precincts.	City Development	Rates and Funding Working Party	MEM 2(b), 5(a)(b)
	FS6	Investigate the use of alternative funding sources for the purchase and development of parks, open spaces, and green corridors (e.g. targeted rates, development contributions policy).	Parks and Recreation Services	Corporate Policy	LIV 6(e) ESR 2(c), 3(a)
	FS7	Investigate the use of variable costs for service connections to discourage urban expansion and encourage redevelopment and infill in targeted areas of the city.	Water and Waste Services	Building Control	ESR 9(c)
	FS8	Investigate targeted rates for improving energy efficiency of residential buildings.	Energy Manager		LIV 10(b)
	FS9	Investigate targeted rates for retrofitting heritage buildings for energy efficiency.	Energy Manager	City Development	LIV 10(b)
	FS10	Investigate the feasibility of establishing rates relief for local growers producing for direct sale in local markets.	Corporate Policy	Rates and Funding Working Party Finance	ESR 4

## Information, education, guidelines and recognition initiatives

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In progress	INFO1	Develop Streetscape Design Guidelines which provide guidance on street trees, paving, street furniture and other hard and soft landscaping	City Development	Parks and Recreation Services Events and Community Development Transportation Operations	ESR 3(a) ACCESS 7(a) MEM 2(a), 3(a), 6(c)
	INFO2	Develop and maintain a portfolio of best practice examples of re-use of heritage buildings.	City Development		ESR 6(a) MEM 5(b)
	INFO3	Promote the Heritage Buildings Re-use Awards.	City Development		ESR 6(a) MEM 5(b)
	INFO4	Implement DCC CPTED education and training programme.	City Safety Programme Customer Advocate	City Development	LIV 4(a)
	INFO5	Promotion of Green Building Standards such as Green Star, Home Energy Rating Scheme (HERS) and Homestar.	Building Control City Development	Energy Manager Corporate Policy	ESR 8(a) LIV 10(a)(b)
	INFO6	Continue to provide advice on areas of instability, severe flooding and tidal inundation through Land Information Memorandum (LIMs) and Project Information Memorandum (PIMs). Ensure advice is continually reviewed and up to date.	Building Control Information Solutions		ESR 5(a)
Investigate	INFO7	Investigate the need for a Design Guide for Development in Centres focused on improving the pedestrian environment, safety, environmental performance and overall amenity. Guidelines should cover local character, connectivity, scale, location, CPTED and sustainable design principles.	City Development		LIV 4(a)(b) MEM 2(c) ACCESS 7(a)(d)
	INFO8	Develop Guidelines for Re-use of Heritage Buildings.	City Development		MEM 5(b)
	INFO9	Develop a Design Guide for Medium Density Housing which promotes better environmental performance and enhancement of residential amenity (private amenity and public-private interface) including: low-impact design (for example through minimisation of impervious surfaces), areas for food production, and design which reflects Dunedin's architectural traditions and character.	City Development		ESR 4(a), 8(a) MEM 2(e), 3(c), 6(b)
	INFO10	Develop guidelines or codes for best practice noise reduction in mixed-use developments or for residential activities along heavy traffic routes to illustrate noise and vibration attenuation and glare methods.	City Development	Environmental Health	VIB 2(e) ACCESS 6(b)
	INFO11	Investigate the use of awards for businesses that use innovative designs to improve environmental performance or create attractive new public spaces.	City Development		ESR 7(a), 8(a)
	INFO12	Develop a Design Guide for Development in Rural and Rural-Residential Character Areas to promote development that is consistent with the character of the area and contributes towards enhancement of biodiversity and landscape in the city.	City Development		ESR 2(a)(b) MEM 1(a)(c), 3(a), 6(b)
	INFO13	Consider the use of an Urban Design Panel to provide advice to developers as part of pre-application advice.	City Development	University of Otago- Property Services New Zealand Institute of Architects	MEM 2(a)(c)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
<b>Investigate</b>	INFO14	Develop guidance for Whole of Property Management Plans for large rural properties, including guidance on restoration, corridor, riparian planting and fencing of waterways.	City Development		MEM 3(a)
	INFO15	Develop Design Guides for Development in Residential Character Areas.	City Development		MEM 3(d)
	INFO16	Develop a Design Guide for Large Stand-alone Retail Buildings	City Development		VIB 2(h)
	INFO17	Continue to provide advice on managing and enhancing biodiversity within the city, particularly working with landowners.	City Development		ESR 2(a)(c)(d)
	INFO18	Investigate the need to establish a staff resource to assist with implementing and driving actions of the Spatial Plan and other strategies particularly as they relate to community-based initiatives.	City Development Corporate Policy	Events and Community Development	ESR 11(a)(b)
	INFO19	Promote the use of lifetime design principles in redevelopment of existing housing stock and in new residential developments, including multi-unit and infill, to encourage ageing in place.	City Development		LIV 9(a)(b) MEM 2(g)

## Parks, reserves and open space management

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In progress	Parks1	Undertake, where appropriate, and support urban stream and waterway beautification and conservation through community participation and partnerships.	Parks and Recreation Services	Otago Regional Council Water and Waste Services Department of Conservation Kāi Tahu	ESR 3(b)
	Parks2	Develop and implement management plans for Harbour Cone and other reserves or open spaces of district-wide significance.	Parks and Recreation Services		LIV 6(e) ESR 3(a)
	Parks3	Develop cycleways, biking and walking tracks in reserves that link to other networks throughout the city.	Parks and Recreation Services	Transportation Planning	LIV 6(f) ACCESS 7(a)
Investigate	Parks4	Develop protected green and blue networks within the city using public open space, waterways and other protected land to provide ecological connections between rural and urban environments. Identify opportunities to provide linkages in the network involving private land.	City Development Parks and Recreation Services	Department of Conservation Otago Regional Council Water and Waste Services	LIV 6(d) ESR 3(a)(c) Maps 13 and 14 – Areas to maintain and enhance existing values
	Parks5	Investigate the prioritisation for and, where appropriate, the casual and organised use of parks and reserves, including information provision about such use.	Parks and Recreation Services	University of Otago Unipol and Sport Otago Getting Dunedin Active	LIV 6(e)
	Parks6	Develop a policy on the use of parks and reserves for community gardens and consider identification of areas appropriate for these.	Parks and Recreation Services		ESR 4(a)
	Parks7	Investigate development of a second Town Belt.	Parks and Recreation Services	City Development	ESR 3(a)
	Parks8	Investigate the use of unformed legal roads and easements to create a network of tracks to connect townships and settlements.	Parks and Recreation Services	Transportation Planning	LIV 6(f)
	Parks9	Review the Tree Planting Policy.	Parks and Recreation Services		ESR 4(a)

## Property development and public-private partnerships

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
<b>In progress</b>	PROP1	Purchase strategic sites and properties.	City Property		LIV 7(b), MEM 5(c), PDE 5(a)
<b>Investigate</b>	PROP2	Work with leasehold owners to freehold sites in areas identified for redevelopment.	City Property City Development	Lessors	MEM 5(d)
	PROP3	Work with private property investors and developers on strategic sites that will be triggers for redevelopment in identified areas.	City Property	City Development	MEM 5(b)(d)
	PROP4	Investigate public-private partnerships to develop key heritage buildings in partnership with other parties.	City Property City Development		MEM 5(b)(d)

## Research and monitoring

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	RM1	Undertake a review of all activity centres and evaluate these centres against principles of good urban design.	City Development		VIB 2(e)
	RM2	Develop a monitoring strategy and programme for the transportation network.	Transportation Planning		ACCESS 1(b)
	RM3	Work with the Otago Regional Council to identify areas of potential flooding hazard and future hazard areas as a result of climate change.	City Development	Otago Regional Council (lead) Corporate Policy	ESR 5(a)(b)
	RM4	Monitor and review effectiveness of recently implemented low-impact design schemes.	Water and Waste Services		ESR 9(b)
	RM5	Investigate the effectiveness of a range of water conservation measures in the Dunedin context.	Water and Waste Services		ESR 8(a)
	RM6	Continue to undertake research and monitor changes to international climate change science to understand better the risks posed by climate change and use findings to develop a climate change adaptation plan. Research includes the feasibility of engineering options to manage risks and the DCC's role in these options.	Corporate Policy		ESR 5(a)
	RM7	Undertake research to identify outstanding landscapes, landscape features and ridgelines within the city.	City Development		MEM 1(c)
	RM8	Undertake research to identify levels of transportation resilience in outlying communities and general accessibility mapping to identify areas of transport poverty.	Transportation Planning		ACCESS 4(b) LIV7(a)
Investigate	RM9	Undertake research to identify cultural landscapes.	City Development	Kāi Tahu ki Otago	MEM 1(c), MEM 6(a)
	RM10	Investigate the future infrastructure requirements necessary for a secure food supply for the city to ensure future-proofing of potential climate change effects.	Corporate Policy		ESR 4(b)
	RM11	Identify significant view shafts within the central city from key walking, cycling or transport routes and public spaces to key heritage buildings, the Harbour and hills.	City Development		MEM 2(d)
	RM12	Investigate the possibility of partnering with local education providers to develop apprenticeships in heritage building techniques.	City Development		MEM 5(a)(b)
	RM13	Investigate mechanisms to illustrate how green space can be achieved when increasing density of development. Green space is for the purpose of growing food, amenity and reducing impervious surfaces.	City Development	Parks and Recreation Services	ESR 4(a), 9(e)
	RM14	Monitor current land capacity and report every two years.	City Development		Urban Form (d)

## Roading and parking management

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	RPM1	Manage public parking supply and pricing.	Transportation Planning	Citipark Transportation Operations	ACCESS 6(c)
	RPM2	Investigate using a proportion of parking revenue as a targeted fund for amenity improvements for the area in which it is collected.	Transportation Planning	Citipark Transportation Operations City Development	VIB 2(i)

## Standards and bylaws

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In Progress	REG1	Promote standards for housing accommodation (e.g. Housing STARS, BRANZ).	Building Control	Corporate Policy Events and Community Development University of Otago	LIV 10(a)
	REG2	Implement Water Bylaw.	Water and Waste Services		ESR 9(d), 10(a)
	REG3	Implement Trade Waste Bylaw.	Water and Waste Services		PDE 8(a)
Investigate	REG4	Review Code of Subdivision and Development to encourage and support low-impact design features, Low Impact Urban Design and Development principles and ensure all new housing provides for internet fibre access.	Corporate Policy	Water and Waste Services Digital Strategy Steering Group City Development Parks and Recreation Services	LIV 6(d), LIV 10(a), ESR 8(a) ACCESS 7(b) PDE 4(b), 8(c)
	REG5	Investigate amendments to Building Control standards to ensure healthy and energy-efficient homes.	Building Control	Energy Manager Corporate Policy	LIV 10(a)(b)

## Transportation projects

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In Progress	TP1	Investigate ways of improving key pedestrian connections between the central city, waterfront and Tertiary-Medical Precinct areas.	Transportation Planning	KiwiRail City Development Transportation Operations Corporate Policy City Property University of Otago New Zealand Transport Agency	ACCESS 7(a) Map 15 – Key actions – Central city, Tertiary-Medical Precinct and surrounds
	TP2	Promote and assist in the development of Travel Plans for high trip destinations such as schools, the University, Hospital and major employers.	Transportation Operations	University of Otago Southern District Health Board	ACCESS 6(b)
	TP3	Explore and keep up to date with how intelligent transport systems can be used to improve accessibility.	Transportation Operations		ACCESS 1(a), 7(f) ACCESS 2(a)
	TP4	Work with the Otago Regional Council to improve public transportation facilities, including bus shelters, and information provision.		Otago Regional Council (lead) Transportation Planning Transportation Operations City Development	ACCESS 2(a), 7(f)
	TP5	Investigate feasibility of park and ride linked by affordable bus or train services.	Transportation Planning	Private operators Otago Regional Council University of Otago	ACCESS 4(a)
	TP6	Investigate improvements to pedestrian connectivity between main University campus and Medical and Dental School campuses.	Transportation Planning	New Zealand Transport Agency University of Otago	ACCESS 7(a)
	TP7	Investigate opportunities for improvements to public transport routes.		Otago Regional Council (Lead) City Development Transportation Planning New Zealand Transport Agency	ACCESS 2(a) ACCESS 4(a)
	TP8	Provide more bike racks at strategic locations around the city.	Transportation Planning	City Development Transportation Operations	ACCESS 7(a)
	TP9	Investigate the possibility of an inland port.		Port of Otago (lead) Transportation Planning KiwiRail Taieri Gorge Railway New Zealand Transport Agency	ACCESS 3(a)(b), 5(a) PDE 8(b)
	TP10	Work with interested parties to promote sustainable transport choices and to establish alternative public transportation services.	Transportation Planning	Transportation Operations	ACCESS 2(a)

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In Progress	TP11	Investigate improvements to pedestrian access to Queens Gardens.	City Development	Transportation Planning Transportation Operations New Zealand Transport Agency	ACCESS 7(a)
	TP12	Identify locations on busy roads to apply traffic calming methods or changes to road space allocation to improve safety.	Transportation Planning	Transportation Operations New Zealand Transport Agency	ACCESS 7(a) VIB 2(e)
	TP13	Identify and implement a strategic cycling network, particularly along the flat area between North East Valley and South Dunedin, from outer suburbs to the central city, and between outlying settlements, connecting disconnected cycleways where required.	Transportation Planning	New Zealand Transport Agency Parks and Recreation Services	LIV 6(f) ACCESS 7(a)(d)
	TP14	Ensure freight routes are clearly identified and signed.	Transportation Planning	New Zealand Transport Agency	ACCESS 5(a)
	TP15	Review road layouts in the central city to support provision of parking, slower traffic speeds, and reduced traffic volumes in strategic locations.	Transportation Planning	Transportation Operations City Development University of Otago New Zealand Transport Agency	VIB 2(e) ACCESS 7(e)
	TP16	Investigate converting Crawford Street and Cumberland Street south of Queens Gardens to two-way streets.	Transportation Planning	New Zealand Transport Agency	ACCESS 6(a), 7(a)(e)
	TP17	Investigate options for future strategic corridors in Dunedin, including the Strathallan Bypass, western relief routes, the State Highway between Andersons Bay Road and the Pine Hill Road intersection and connections to Port Chalmers.	Transportation Planning	New Zealand Transport Agency Port Otago Ltd	ACCESS 3(a), 7(e) PDE 8(b)
Investigate	TP18	Investigate improvements to pedestrian access to North Ground.	Transportation Operations	City Development University of Otago New Zealand Transport Agency	ACCESS 7(a)
	TP19	Investigate options for supporting the reconfiguration of the State Highway roading network as proposed by the University of Otago Campus Master Plan.		University of Otago (lead) New Zealand Transport Agency	
	TP20	Work with the Otago Regional Council to review bus routes through the central city to ensure the best balance between certainty and stability of service routes, maximising accessibility for users, providing for high amenity for pedestrians and retailers and the ability to use key streets for events (Octagon/George Street).	Transportation Planning	City Development Otago Regional Council	ACCESS 2(b), 4(a), 7(a) VIB 2(e)
	TP21	Investigate opportunities to improve transportation for cruise ship passengers within the city.	Transportation Planning		ACCESS 4(a)
	TP22	Investigate working with interested parties to improve passenger rail.	Transportation Planning		ACCESS 2(b)
	TP23	Investigate the feasibility of undertaking health impact assessments on appropriate transport projects.	Transportation Planning	Southern District Health Board Public Health South	ACCESS 7

## Urban amenity improvement projects

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies and maps
In Progress	UA1	Undertake streetscape improvements in key pedestrian corridors to improve the safety and amenity for pedestrians.	City Development	Transportation Operations	ACCESS 7(a)(c)(f) Map 15 – Key actions – Central City, Tertiary-medical precinct and surrounds
	UA2	Investigate projects to improve amenity values and accessibility to the Water of Leith.		Otago Regional Council (Lead) City Development Parks and Recreation Services University of Otago Otago Polytechnic	ESR 3(a)
	UA3	Provide more public seating so people can sit and enjoy areas.	City Development	Transportation Operations Parks and Recreation Services	VIB 2(e)(i)
	UA4	Improve the design of existing and new public spaces to provide for participation in arts and cultural events.	City Development	Parks and Recreation Services Events and Community Development	VIB 1(c), 2(e)(k)
Investigate	UA5	Investigate urban amenity projects to create a high quality public realm and support greater recognition of identified creative (arts/fashion/technology) precincts.	City Development	Economic Development Unit	VIB 2(k), PDE 1(a)
	UA6	Identify locations for pocket parks and communal green spaces where there is demand or need.	Parks and Recreation Services	City Development	VIB 2(f)(k)(i)
	UA7	Co-ordinate the integration of public art into the design of infrastructure projects, from design of street furniture to large structures.	City Development	Transportation Operations Events and Community Development Parks and Recreation Services Water and Waste Services	MEM 4(a)(b)

## Water and Waste Services projects

Status	No	Actions	DCC lead department	Who else may have a role (note if led externally)	Linked policies
In progress	WWP1	Implement planned programme of water upgrades.	Water and Waste Services		LIV1(a)
	WWP2	Implement extraction of methane gas from landfill closures and other facilities for energy.	Energy Manager	Water and Waste Services University of Otago Otago Polytechnic	ESR 7(a)
	WWP3	Remove wastewater discharges from all urban waterways.	Water and Waste Services		ESR 3(b)

# Part 4: Background

## Introduction

This section provides a broad overview of the people, economy, and environments of Dunedin as at 2012. It is a high level summary of some of the background research that was undertaken as part of the development of the Spatial Plan. It looks at the local and global challenges the city faces, and the implications of these challenges for spatial planning in Dunedin. The strategic framework and preferred development option, provided in Part 2, was developed to respond to these key challenges.

## Our people

### History of settlement

Māori have lived in the vicinity of present-day Dunedin for many centuries. Some occupation sites date back to approximately 1000 AD. The wider Dunedin area was of singular importance to the Waitaha, Kāti Mamoe and Kāi Tahu people as a source of mahika kai and mahika kaimoana, a place of settlement, a burial place, and as a cultural landscape that embodied the ancestral, spiritual and religious traditions of all the generations that came before European settlement. Today, the traditional settlement areas for Kāi Tahu are located at Ōtākou (Otago Peninsula) and Puketeraki (Karitane), within close proximity of the traditional fortified pa of former times, Pukekura (Taiaroa Head) and Huriawa (Karitane) (Map 21).

European settlement began with the establishment of whaling stations in the early 1830s. The first agricultural immigrants settled on farms in the Karitane and Waikouaiti areas. The site of what is now urban Dunedin was chosen by Frederick Tuckett in 1844 on behalf of the New

Zealand Company. The survey by Charles Kettle in 1846 established the street pattern and layout of the central city. Kettle set aside the Octagon and Town Belt reserves of approximately 550 acres (approximately 222 hectares), which remain today, giving Dunedin's urban area much of its special character and beauty. The first settlers arrived in 1848. The growth of Dunedin was greatly enhanced in 1861 by the Otago gold rush. As the population grew, land was reclaimed, establishing the current foreshore and Portsmouth Drive area, which extended the street systems towards the Harbour. During the 1880s and 1890s, a solid industrial base was established, largely on these reclaimed lands. This base included engineering works associated with gold dredging, the railway workshops, the textile industries and refrigerated shipping developments.

Urban Dunedin continued to expand outwards, into the suburbs and farm land surrounding the city, as population grew. The suburbs were governed as separate boroughs from the mid-1870s and developed different levels of infrastructure. Over time, the boroughs joined the Dunedin City Council and, in 1989, the amalgamation of the remaining boroughs established the current city boundary.

### Population

According to the 2006 Census, Dunedin's usually resident population was about 122,300<sup>1</sup> and, on a peak day, our population swells to about 146,900<sup>2</sup> with visitors to our city. Among the usually resident population, about 100,000 people live in urban Dunedin with a little more than 11,000 living in and around Mosgiel<sup>3</sup>. The city is also

home to a number of outlying settlements and townships including: Middlesmarch (170), Outram (650), Brighton (1,500), Waldronville (550), Portobello (500), Aramoana (270), Waitati (520), Warrington (440), Karitane (360) and Waikouaiti (1,120)<sup>4</sup>.

The median age of Dunedin's population as at June 2006 was 34, slightly lower than New Zealand's median age of 35. However, as shown in Figure 3, the similarity in the median age masks significant differences in the structure of Dunedin's population when compared to that of New Zealand.

For example, Dunedin has a lower proportion of the population aged between 0–14 years (16.6% compared to 21.2%) and a slightly higher proportion of its population aged 65 and over (13.2% compared to 12.2%). The most striking feature of Dunedin's age profile is, however, the high proportion of 15–24 year olds (21.8% compared to 14.6% in New Zealand). This age structure is influenced by the central role of education in the city, with Dunedin home to about 28,000 tertiary students of whom about 80% (22,400)<sup>5</sup> are from outside Dunedin. Dunedin is also home to about 18,000 primary and secondary students, of whom about 15% (2,700) are from outside of Dunedin<sup>6</sup>.

There are significant differences in the age structure of different suburbs. For example, Hyde has a relatively high proportion of residents aged 0–14 (28.6%), North Dunedin a high proportion aged 15–39 (92.1%), Company Bay has a high proportion aged 40–64 (47.3%) and Wyllies Crossing a high proportion aged over 65 (46.7%).

Dunedin has an educated population. In Dunedin, only

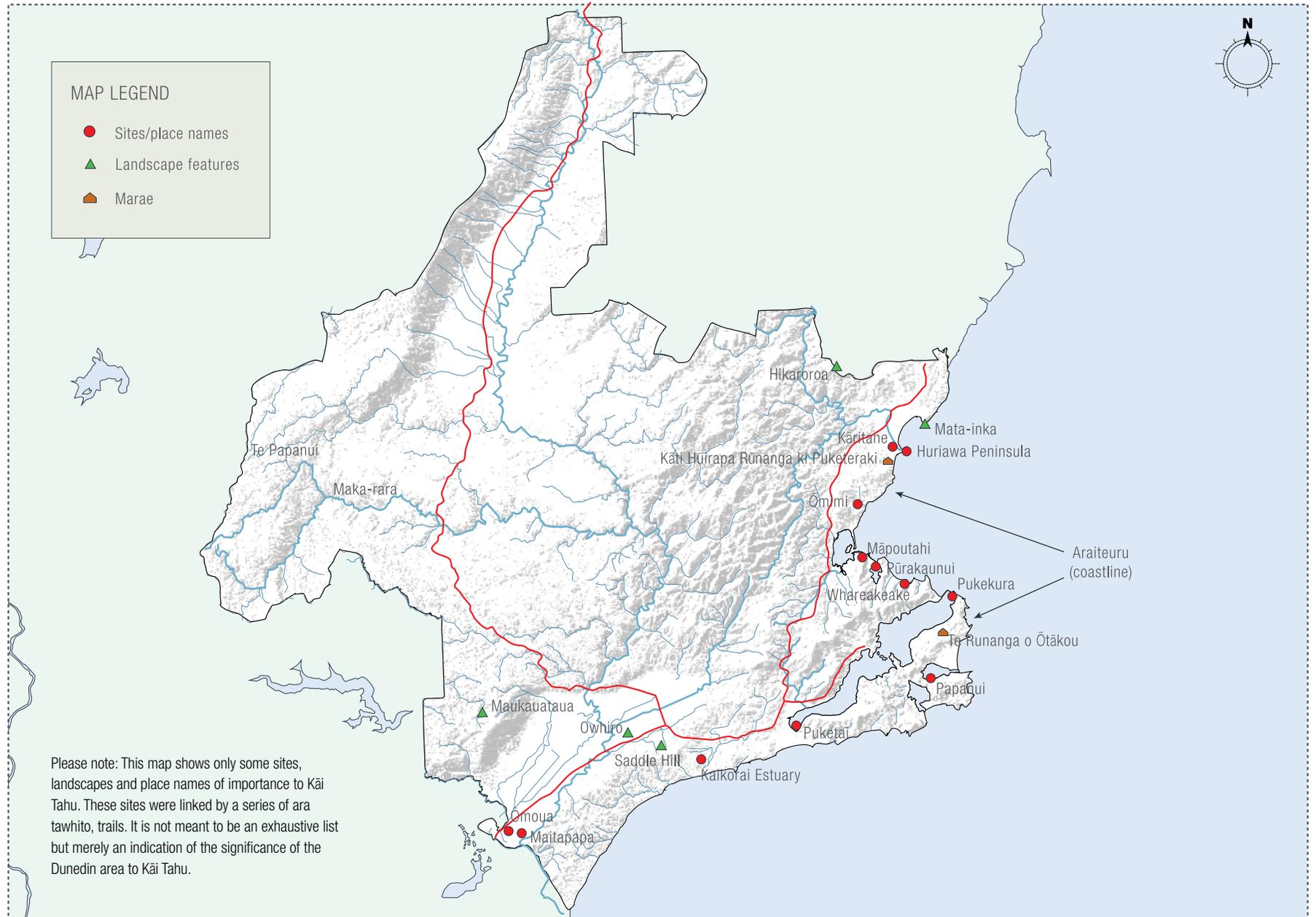
21.3% of people aged 15 or older have no qualifications, as opposed to 25.0% in New Zealand as a whole<sup>7</sup>. At the other end of the spectrum, Dunedin has a higher proportion of its population with Bachelor or postgraduate degrees as their highest qualification. This is a result of the presence of the University of Otago, the Otago Polytechnic and other learning facilities which play a significant role in the city.

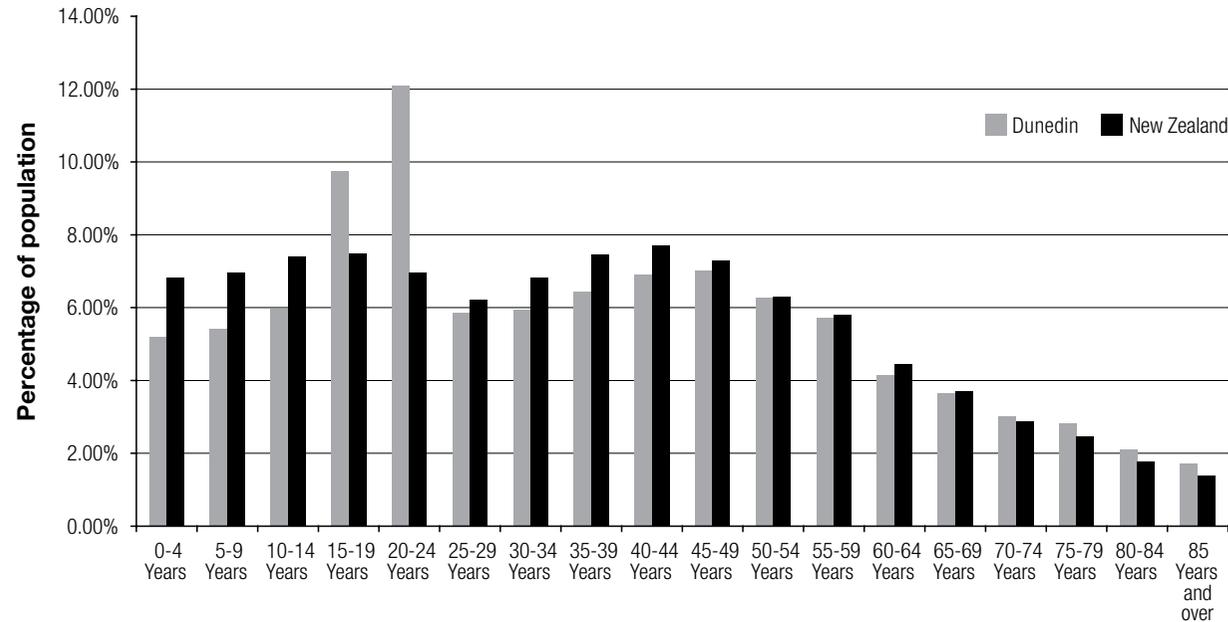
Dunedin's population is increasingly diverse but remains less diverse than that of New Zealand as a whole. In 2006, 78.7% of Dunedin's population were identified as New Zealand European (down from 92.7% in 2001), 6.4% as Māori (up from 5.9%), 2.2% as Pacific Peoples (up from 2.1%) and 5.3% as Asian (up from 4.0%)<sup>8</sup>.

The most diverse parts of Dunedin are located near the University but other parts of the city also have ethnic populations. For example, in Corstorphine West, 14.0% of the population are Pacific peoples, in Middlesmarch, 32.7% are Māori and in the area between Stuart and Frederick Street, 24.4% of the population are Asian.

In 2006, Dunedin's population was made up of about 47,700 households<sup>9</sup> and, as is true across New Zealand, most of these households contain one family. However, the proportion of one-family households in Dunedin is lower than in New Zealand (63.6% compared to 69.1%). This is because Dunedin has a relatively high proportion of 'other multi-person households' (8.8% compared to 5.1%), and one person households (26.4% compared to 23.0%). This reflects both the age of our population, as older people are more likely to live alone, and the large number of tertiary students flatting in Dunedin. In terms of family

Map 21 – Kāi Tahu values and cultural features in Dunedin



**Figure 3. Population by age group in Dunedin and New Zealand 2006**

composition, a higher proportion of Dunedin's families are couples without children (43.6% compared to 39.9%) and among those that do have children, a slightly lower proportion are one-parent families (29.6% compared to 30.2% across New Zealand).

In recent years, the overall rate of population growth in Dunedin has been low, averaging about 0.12% per annum between 1996 and 2006<sup>10</sup>. The DCC estimates that, based upon median projections, this rate of growth will increase between 2006 and 2061 to about 0.24% per annum<sup>11</sup>. While this growth rate is modest, over time it will result in a notable rise in Dunedin's population, which could reach about 139,000 in 2061 and swell to about 168,000 on a peak day<sup>12</sup>.

Dunedin has an ageing population and a declining trend in the size of households with the average household size estimated to drop from 2.5 persons per household

in 2006, to 2.3 persons per household by 2031<sup>13</sup>.

Dunedin's ageing population is a result of a decline in the percentage of the population under 24 years of age and a significant increase in the percentage of the population over 60 years of age. Dunedin's working-age population is therefore projected to become smaller and more middle-aged between now and 2031 as the percentage of 15-24 year olds and 45-65 year olds declines. This is likely to lead to a fall in the size of our workforce which may not return to current levels until 2061. Figure 4 shows how Dunedin's age structure is expected to change between now and 2031.

In part, the decline in the average size of households in Dunedin is explained by this changing structure of Dunedin's population. It is also a reflection of changing lifestyle choices and people starting families later in life and choosing to have fewer or no children.

### Standard of living

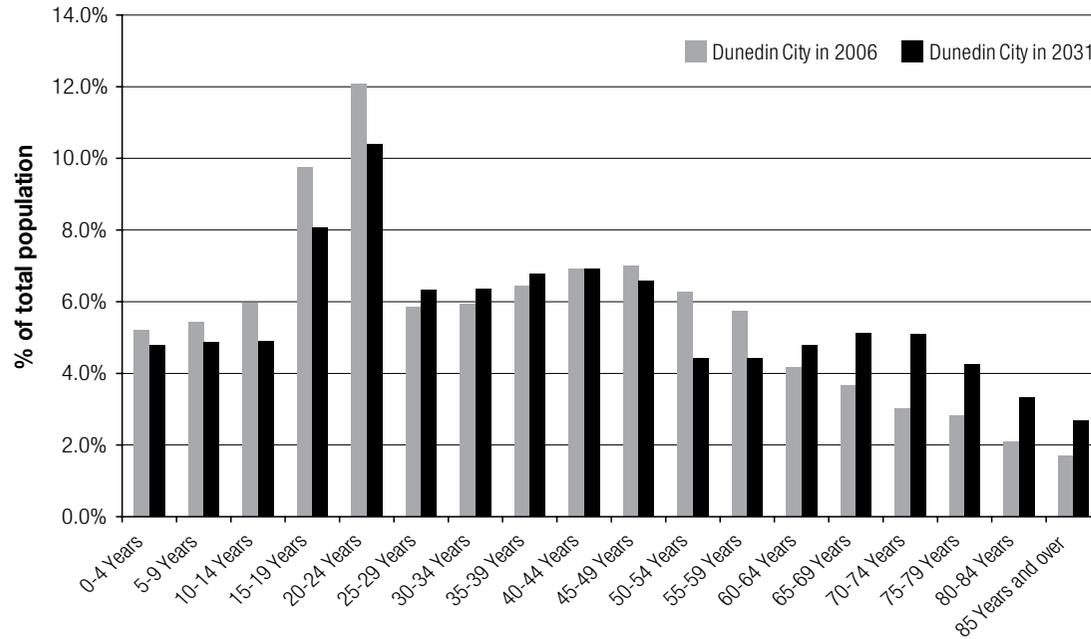
The term 'standard of living' generally refers to the degree of material comfort available to a particular individual or community. Gross Domestic Product (GDP) per capita is the most frequently used measure of material standards of living. GDP per capita is a measure of the total value of all the goods and services produced in an area per person. In March 2010, Dunedin's GDP per capita was estimated at \$37,343, compared to \$44,662 across New Zealand<sup>14</sup>. However, measures of GDP per capita do not take into account the distribution of income and may not reflect the standard of living of a typical resident or household.

A more useful measure of the standard of living of a typical resident or household is median household or personal income. When compared to the New Zealand average, a higher proportion of Dunedin households and individuals fall in the lower income brackets and a

lower proportion of its households and individuals fall in the higher income brackets. As a result, the median household income in Dunedin (\$43,400 gross per annum) is lower than the New Zealand average (\$51,400 gross per annum) as is Dunedin's median personal income (\$19,400 compared to \$24,400). Within Dunedin, the median household income ranges from \$20,600 in South Dunedin to \$73,000 in Kaikorai Hill while personal income ranges from \$4,800 around the University of Otago to \$33,800 in Hyde.

The New Zealand Deprivation Index<sup>15</sup> combines a range of indicators of standard of living. In 2006, it showed that 26% of Dunedin's population lived in areas included in deciles 8, 9 or 10 of the deprivation index, which represent areas that are most deprived. This represented an improvement on 2001 but shows that 26% of Dunedin's population still live in areas which are among the most deprived in New Zealand<sup>16</sup>. A high proportion

**Figure 4. Dunedin population by age group in 2006 and 2031**



of Dunedin's population is either studying or outside the working-age population and this is a contributing factor to these results.

Other measures of standard of living include home and car ownership. In Dunedin, 55.3% of households, own, or partly own, their home, a similar rate to that nationwide (54.5%)<sup>17</sup>. Another 13.3% of households live in a dwelling which is held in a family trust. However, patterns of home ownership vary across Dunedin, with more than 90% of households in North Dunedin renting, but only 6.8% of households in Saddle Hill. Another area with a relatively high proportion of renters, but not typically occupied by students is South Dunedin (57.4%).

While Dunedin is seen to have relatively affordable housing, affordability of housing is still an issue for parts of our population. The proportion of net household income spent on housing costs provides a measure of housing

stress. In 2008, 33.8% of households were spending 30% or more of their net household income on housing costs (including mortgage payments, rental payments and rates, but excluding other costs such as insurance, utilities and maintenance). In addition, 10.8% of households were spending 40% or more of net household income on housing costs.

Almost half (48.7%) of all households in Dunedin have access to two or more motor vehicles. However, a relatively high proportion of Dunedin households do not have access to any motor vehicle (11.6% compared to just 8.1% nationally). In some suburbs, the proportion of households with no access to a motor vehicle is particularly high. This includes a number of suburbs in the south of the city, including South Dunedin (41.1%), Fernhill (24.7%), St Kilda Central (20.7%) and St Kilda East (19.5%), along with areas that house a large number of tertiary students, e.g. North Dunedin (24.6%).

Another broader concept of one's standard of living is quality of life. This concept takes into account the economic, environmental, social and cultural aspects of community wellbeing in a place. The 2010 Quality of Life report indicated 93% of Dunedin residents rated their overall quality of life as 'extremely good' or 'good' in 2010, down slightly from 94% in 2008. This is above the average across the eight urban centres for which data was collected in New Zealand during 2010 (92%) and the New Zealand average in 2008 (92%)<sup>18</sup>. In general, Dunedin performs more strongly on measures of social, cultural and environmental wellbeing, than it does on measures of economic wellbeing.

## Future housing and land needs

Based on the medium population projections an additional 7,600 households will need to be provided for by 2031<sup>19</sup>.

Residential capacity based on existing provision of the District Plan was measured in residential and rural-residential zoned areas in 2009, based on whether the site could contain a dwelling or several dwellings based upon the relevant density permitted<sup>20</sup>. The measurement of capacity considered vacant individual sections, greenfield sites suitable for subdivision, and infill sites as shown in Figure 5.

It is expected that some capacity may never be developed due to constraints, existing patterns of development, or land ownership. In general, it is anticipated that vacant individual sites without constraints would be developed ahead of those with minor or major constraints to development and those that are more difficult to develop because of the need for subdivision. Constraints include hazards, topography, aspect, significant trees, existing buildings, restricted access. They do not include unresolved water and waste water infrastructure constraints which affect some areas.

The residential capacity studies have not assessed the desirability of a particular area and it is acknowledged that some areas with residential capacity may not be in popular locations.

These residential capacity figures do not take into account any of the proposed changes suggested by the Spatial Plan. Changes to the District Plan to implement a number of policies suggested in this Spatial Plan may affect these numbers. In general, they may reduce or change the nature of the current capacity of some outlying areas and increase the capacity within Urban Dunedin.

In addition to land currently zoned for residential or rural-residential living, capacity for residential activity exists in our rural areas and inner-city mixed used environments. Only a broad estimate of inner-city capacity has been provided, based on an estimate of a doubling of current levels of residential activity. However, the theoretical capacity is much higher if a larger proportion of space in commercial buildings was converted into apartments.

The capacity of rural areas has not been calculated due to the wide variability of site sizes and levels of residential activity in the rural zone.

While, in theory, there is sufficient residential capacity for Dunedin to provide for the likely residential needs of the city over the next 60 years, the likelihood is that there will be a shortage of sites for traditional low-density residential development within existing reticulated areas by 2041.

**Figure 5 – Residential capacity based on vacant sites and potential new sites in existing residential areas in 2009 based on current District Plan provisions**

	Unconstrained	Minor constraints	Major constraints	Total
<b>Vacant land (totals)</b>	914	206	168	1288
Urban Dunedin	293	115	112	
Other Dunedin (outside core urban)	168	1		
Chalmers	128	23	33	
Mosgiel-Taieri	156	14	6	
Otago Peninsula	139	25	11	
Saddle Hill	30	5	2	
Strath Taieri	19			
Waikouaiti Coast	120	206	54	
<b>Infill (totals)</b>	3771	2732	1591	8094
Urban Dunedin	1218	1534	1190	
Other Dunedin (outside core urban)	1			
Chalmers	371	196	173	
Mosgiel-Taieri	470	292	62	
Otago Peninsula	555	357	41	
Saddle Hill	289	146	58	
Strath Taieri	169	1	13	
Waikouaiti Coast	698	206	54	
<b>Greenfield (totals)</b>	2725	1527	760	5012
Urban Dunedin	500	420	455	
Other Dunedin (outside core urban)	29	168		
Chalmers	136	100	77	
Mosgiel-Taieri	763	677	40	
Otago Peninsula	264	116	105	
Saddle Hill	100	15	44	
Strath Taieri	311	2		
Waikouaiti Coast	622	29	40	
<b>Rural-residential Vacant and Greenfield (Totals)</b>	648			648
<b>Inner-city mixed (Totals)</b>	308			308

### **Implications for spatial planning**

Population projections and trends are important for determining the amount, types, and sizes of housing that will be required in future.

Overall, it makes sense to utilise existing residential capacity within the city (areas already zoned for residential development), where beneficial, before encouraging new greenfield development which generally has higher costs for transportation, environmental and social infrastructure, and can decrease rural productive capacity or threaten natural or landscape values. The redevelopment of existing residential areas within the city and encouraging inner-city living can maximise use of existing infrastructure and increase residential capacity prior to considering greenfield development.

While Dunedin's total population is expected to increase by only 7,400 by 2031, the population in the 65+ age-group is expected to rise by 10,300, taking it from 16,200 to 26,500 people. This equates to an increase of about 63%.

The trends of an ageing population and a decrease in the average household size, leading to an overall increase in 1-2 person households will lead to an increasing demand for a wider variety of housing types other than the traditional three or four bedroom detached family home. The trend for smaller households with one or two occupants (often students or the elderly) is likely to create demand for smaller dwellings (one or two bedrooms). Greater choice in housing will need to be provided, including more options for good quality apartments and townhouses.

Associated with the ageing population and large number of low income households will be an increased demand for social housing. Demand could be for up to an additional 700-1,500 residential units by 2031. To provide for people who cannot afford to own their own house, often the elderly or low-income households, it may be necessary to consider dividing existing three-bedroom or larger houses into flats or providing more single-room accommodation as social housing. Providing for a wider choice in housing size will also improve affordability so people can choose houses that fit their needs.

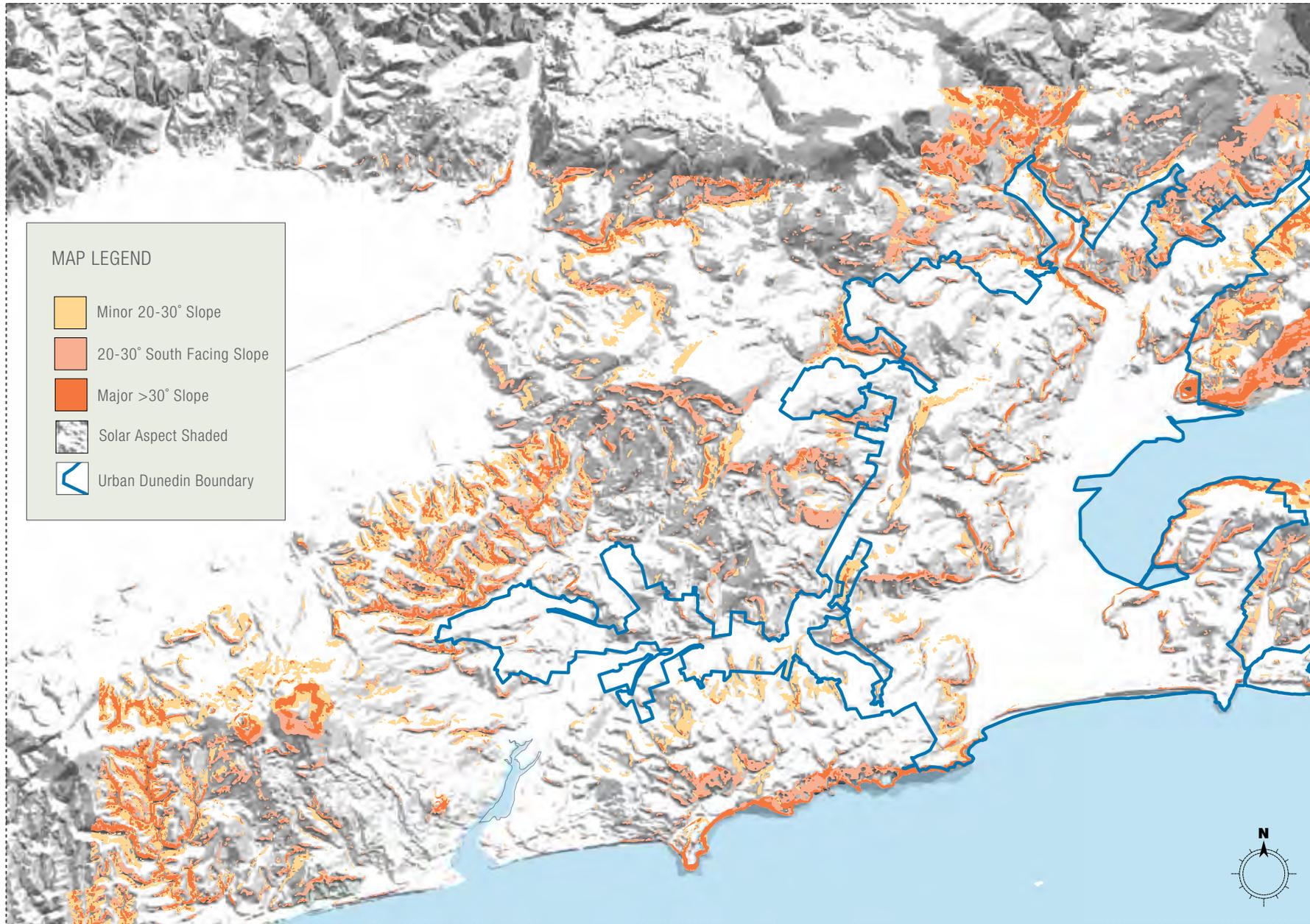
Housing will also need to be affordable to run. As one of the biggest household running costs is heating, improving the environmental performance of housing, for example by passive solar design and better insulation, will be important. Requiring good quality design will also be important to create good amenity for residents and neighbours.

Providing homes close to public transport and other services will reduce reliance on private motor vehicles and overall transportation costs, which are likely to increase over time. In these areas, the requirement for on-site car parking may be reduced to enable additional residential units to be provided with adequate amenity open space.

Different urban planning tools will be needed to encourage developers to build a broader range of housing types, particularly in areas with good accessibility, e.g. proximity to centres (Map 34), schools (Map 32 and 33), reserves and public transport (Map 31), and to avoid areas with negative factors e.g.

known hazards (Maps 23 and 24), and steep slopes and shading (Map 23).

Existing areas that have old, cold or low-value building stock but have good accessibility may provide opportunities for redevelopment. This may include a change in the density or dwelling type, especially where opportunities exist to combine a number of smaller sites to create a large site with greater options for design and flexibility.



**Map 22. Solar aspect and steep slope constraints in urban Dunedin**

## Our economy

In 2010, Dunedin generated about \$4.5 billion of gross domestic product (GDP), about 2.4% of New Zealand's economy, and created jobs for almost 50,000 full time equivalent (FTE) employees<sup>21</sup>. This was down on 2009 but represented a significant increase from ten years earlier, when Dunedin generated \$3.8 billion in GDP and created jobs for about 42,000 FTEs. Overall, total employment in Dunedin grew 16.6% between 2000 and 2010. Almost all sectors grew in absolute terms, with the exception of the manufacturing and primary sectors which employed 767 and 58 fewer FTEs respectively.

In the last decade, Dunedin had seen substantial changes in the range of activities that contribute to its economic wellbeing. In terms of earnings, since 2000, the trend in Dunedin, and in New Zealand generally, has been for a continued reduction in the percentage contribution of goods-producing industries and a corresponding increase in the contribution of services, including the growth in a knowledge-based services economy. Between 2000 and 2009, 1,090 employees were lost in the manufacturing sector as a result of closures of major food and engineering companies, such as Fisher & Paykel. The number of employees in textile, leather, clothing and footwear manufacturing dropped by 530, machinery and equipment manufacturing lost 540, and printing lost 270 in this period.

Figure 6 shows the composition of employment in Dunedin between 2000 and 2010. It shows that the social services sector (which includes all levels of health and education employees) employs the largest share of Dunedin's workers (29.7%), followed by the retail and distribution sector (24.6%), the business services sector (17.1%) and the manufacturing sector (10.6%). Figure 7 also shows that the recreation services, business services and construction sectors significantly increased their share of total employment over the last ten years. This reduced the share of total employment in the retail and distribution, manufacturing and primary sectors.

Figure 6. Composition of employment by sector in 2000 and 2010

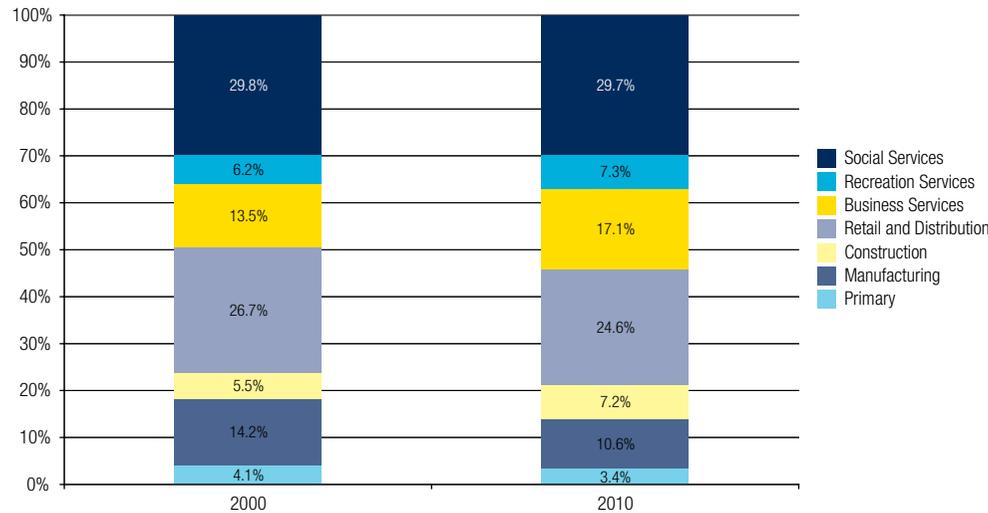


Figure 7. Sector composition of employment and GDP in 2010

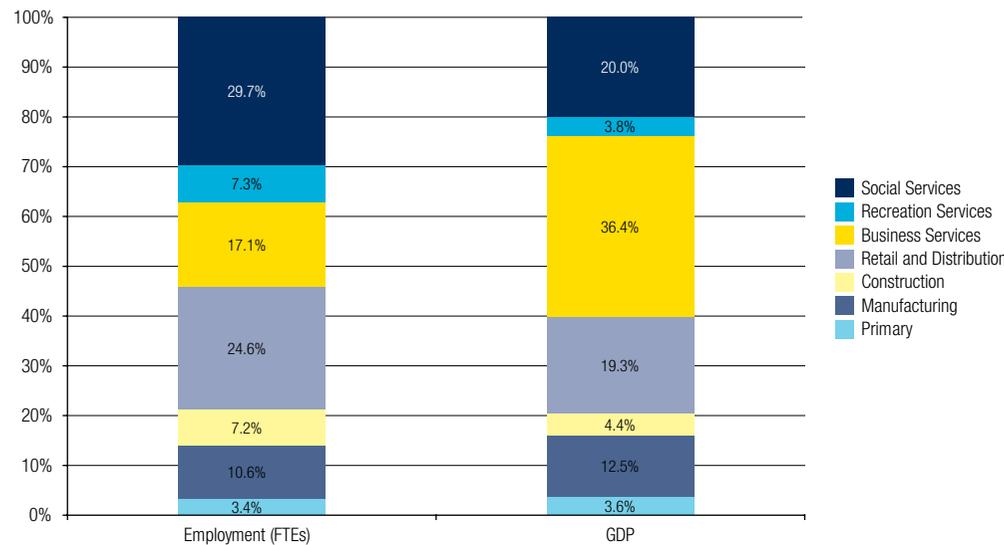


Figure 7 compares the sector's contribution to employment with the sector's contribution to the GDP generated by Dunedin's economy. It shows that some sectors contribute far more in terms of income than they do in terms of employment, and vice versa. For example, the business services sector contributes 36.4% of Dunedin's income, using only 17.1% of Dunedin's employees, indicating that this sector generates a high amount of income for each person it employs, or in technical terms, that it has a high labour productivity rate. The manufacturing and primary sectors also fall into this category. The remaining sectors are more important in terms of their contribution to employment than their contribution to income. For example, the social services sector employs 29.7% of Dunedin's workers but generates 20.0% of Dunedin's income and the retail and distribution sector employs 24.6% of workers but generates 19.3% of income.

## Future trends

Currently, one of the main economic strengths of Dunedin is its perceived liveability. Many people choose to live in Dunedin for lifestyle reasons, even if they could have a 'better' job or higher salary somewhere else. Dunedin is seen by many as a good place to live and raise a family because of its quality schools, abundant recreational, leisure and cultural opportunities, relatively low crime rates and friendly and supportive community. Dunedin is also relatively inexpensive in terms of housing and transport costs. Finally, Dunedin is often seen to have an attractive urban environment enhanced by its stunning landscapes.

Overall city liveability can be one of the most important assets for attracting and retaining a skilled workforce and new businesses, particularly 'footloose' technology and creative businesses. However, as a city, while Dunedin competes well within New Zealand, it has been difficult to obtain recognition globally.

Dunedin's geographic isolation imposes some constraints on its competitiveness with the physical distance to markets increasing the cost of goods and services. However, the isolation is reduced with the existence

of international transport infrastructure including the Dunedin International Airport, Port Otago and the railway. The growth of the internet and digital communications, although having some limitations, reduces our isolation from the rest of the world.

The predicted increase in the size of Dunedin's population could bring new employment opportunities to the city, particularly in service industries, creating new opportunities for commercial development in some areas.

In terms of sectors of the economy, one of Dunedin's main economic strengths is its tertiary education, medical and related research businesses. Research shows that proximity to universities is a key factor in sparking technology businesses and innovation. Opportunities for growing this aspect of our economy include enabling co-location of activities and supporting key facilities in the city. The University of Otago has a strong emphasis on scientific and medical research and has a large number of important academic research groups and centres of excellence. The Centre for Innovation at the University of Otago campus is an example of a key facility in the city that supports and showcases its entrepreneurship.

Another important sector is the advanced computer-based software and creative technologies sector. According to a recent report commissioned by the DCC "this (sector) provides the best opportunity to grow new, future-oriented, high value, high growth businesses providing high skilled, high-income employment that can drive the future Dunedin economy"<sup>22</sup>. Building on the existing concentration of technology businesses at the southern end of the central city represents an opportunity to encourage ideas sharing and partnership in the city, and to showcase the city's talent in this area.

Finally, the long industrial tradition within the city has contributed to an industrial workforce that has strong capabilities in its technical knowledge, particularly in the manufacturing and engineering sectors. With the decline in the manufacturing industry over the past few years and the small market within the city, the focus of many industries has been to seek opportunities to specialise

and focus on niche markets, rather than compete. This is evidenced by a number of successful business clusters and the supportive relationship between firms in Dunedin. However, there are potential local threats to industrial activities in the city, including:

- the sale of the Hillside Workshops and more losses in manufacturing or key partners;
- rising land prices (or ground-rents); and
- land constraints restricting expansion or restricting the ability of businesses to co-locate where advantageous.

Conversely, there are potential opportunities, including the ability to grow or build on existing industries, including rural products processing (dairy, forestry etc) or specialised engineering. This aspect of Dunedin's economy is important for providing relatively well-paid job opportunities.

Dunedin also has a wider economic role in the Otago region as a financial and commercial service hub and as a distribution hub for goods with its key national and international infrastructure eg. Port Otago.

### **Implications for spatial planning**

Looking towards 2050, it is important to try to understand the likely pattern of economic development and its implications for spatial planning, particularly the effects on the central city which is the main focus of economic activity and investment within the city.

While Dunedin has a number of strengths, the city must continue to address some of its weaknesses, including the run-down parts of the central city and some of its entrance points and safety issues at night. The natural environment and built heritage in Dunedin form an important basis for the tourism and eco-tourism sectors. However, they are continually under threat from inappropriate development.

Maintaining and enhancing our liveability will be vital to attracting talented staff and investors to the city. It is also important to provide for industries that contribute to

income and to employment, to ensure there are employment opportunities for all residents.

Some of the key weaknesses to address for spatial planning identified in the Kemp (2011) report include:

- no visible clusters of 'new economy businesses' – they are scattered and out of sight on upper floors and in the back of commercial buildings;
- no obvious specialised professional, business and visitor clusters – apart from the cafes and bars around the lower Octagon;
- jaded and poorly maintained central city commercial properties – apart from those in the retail heart;
- the reliance on the natural attractions and the heritage built environment as the main visitor attractions;
- the lack of obvious free family recreational attractions in the central city, to attract residents and visitors to stay longer and return more frequently to this area;
- vacant or under-utilised heritage, warehouse and character buildings – including the Railway Station, Chief Post Office and substantial office and warehousing buildings;
- poor quality surface car parking on vacant sites depressing the nearby local environment and creating the impression of abandonment and decline;
- perceived and real personal security issues in the central city – especially on weekday winter evenings, at night and on weekends;
- poor quality of cycling and pedestrian connections, including from nearby residential areas to different parts of the central city;
- lack of shelter and pleasant sheltered outdoor spaces to spend time and socialise in the central city; and
- lack of long-term visitor, campervan, coach and tour operator parking in the central city.

The economic strengths of the city that need to be protected include:

- maintaining choice and location for industry operators;
- supporting the cluster of foundries and advanced engineering and manufacturing support businesses;
- maintaining or improving our quality secondary and tertiary education opportunities, hospital and health services, recreation and sporting opportunities, and other aspects that contribute to being a liveable city;
- the availability of affordable business incubation space;
- maintaining the stock of heritage buildings and streetscapes attractive to visitors and residents;
- maintaining a high quality natural environment;
- the compact, walkable central city and residential areas conveniently close to all major family facilities; and
- the safe, convenient family lifestyle with facilities and visiting performances, entertainment and attractions normally only expected in a larger city.

## **Major challenges we face**

### **Peak Oil**

Oil is a finite, non-renewable resource that has powered significant economic and social change over the last century and a half. Oil is important, not only as an energy source for transport, other machinery, and heating, but also for its use in the production of many everyday items.

Peak Oil refers to the peaking and subsequent decline in the world's oil production. The peak in oil production will result in a rise in the price of oil. Most economies (including Dunedin's and New Zealand's) rely on oil, and therefore the economic and social consequences of high oil prices will be significant.

The International Energy Agency has suggested the peak in conventional oil production may have been reached in 2006, and has predicted an imminent supply crunch, which is likely to result in continued price spikes<sup>23</sup>.

As the cost of all economic activity rises when oil prices rise, oil price spikes will affect the discretionary spending

of all businesses, people and governments. Projects of any size (from large infrastructure renewal to home renovations) will be less affordable.

As the global economy is very closely coupled to oil production, spikes in oil prices can cause global recessions. There is a strong chance that the world is entering a phase of oil price spikes followed by recessions, with a subsequent recovery resulting in another oil price spike, and so on<sup>24, 25</sup>.

### **Implications for spatial planning**

In the short to medium term, as the price of fuel increases, residents may adapt their travel behaviour, choice of location, and/or transportation mode to use less fuel. In the longer term, this may change if alternative technology vehicles are available and affordable (e.g. electric cars). Dunedin's urban form and transportation infrastructure needs to have adaptive capacity and be resilient to these changes. This could include reducing the need to travel or distance travelled by encouraging more housing in areas with good access to employment, schools and facilities, and making better provision for other transport modes (e.g. public transport, ride-share, walking, and cycling)<sup>26</sup>. The townships are most vulnerable to changes in the cost of travel. It may be important to retain or achieve a critical mass for these communities to enable more local services and better public transportation services to establish. However, any new development outside the main urban area should be carefully scrutinised to ensure that any positive effects in terms of building a critical mass are not outweighed by the numerous other arguments against peri-urban development as outlined in this Spatial Plan.

Dunedin businesses and industry will also be affected by increasing oil prices, as long distance freight and travel becomes less affordable. Sectors reliant on tourism and bulk exports likely to be most affected<sup>27, 28</sup>.

Peak Oil will likely mean fewer imports and exports, and, therefore, a potential increased demand for local

food, local goods and local services. This could have a positive impact on local businesses that are able to tailor products for the local and domestic market. Dunedin could be well resourced in terms of local access to food, fibre and timber, provided these resources are managed sustainably.

As the importance and relative cost of electricity will also rise, local renewable energy production (and increased energy efficiency) will be important. Rail and coastal shipping may also become increasingly important.

### **Climate Change**

The most recent Intergovernmental Panel on Climate Change (IPCC) report (2007) predicts global temperatures will warm 0.7-1.1°C by 2050, and sea levels will rise 0.1-0.3 metres, although more recent science suggests these predictions are reasonably conservative. These predicted changes, whatever the magnitude, will have both direct and indirect effects on Dunedin<sup>29</sup>. The current climate change projections the DCC has adopted are for temperatures to rise by +1.1°C by 2040, and +2.5°C by 2090 and sea levels to rise +0.3m by 2040 and by +0.8m-1.6m by 2090<sup>30</sup>, bearing in mind that warming and sea level rise will continue after 2090 for centuries even if greenhouse gas (GHG) emissions are stabilised. These projections are being continually revised as our scientific understanding of climate change develops.

Climate change will have greater direct effects on some areas of the city than on others. Areas of the city most at risk include low-lying areas and coastal areas. This includes some densely populated urban areas and major infrastructure including the Dunedin International Airport. The main issue will be rising water tables, inundation and increased frequency of flooding which will affect both above ground and below ground infrastructure. Engineering solutions may be available for some areas, but these may be prohibitively expensive for others, particularly in the longer term. The DCC is currently researching how to adapt to the effects of climate change in areas most at risk, with initial work being undertaken in South Dunedin.

Climate change may also have indirect effects on Dunedin. Environmental refugees<sup>31</sup>, particularly from the Pacific, but also from further afield, may settle in Dunedin. The increased frequency of extreme events that climate change brings is also likely to cause increased disruption to overseas markets and to the global economy.

In the short term, climate change may also bring some benefits to Dunedin, such as longer growing seasons, increased rainfall and reduced demand for energy use.

### **Implications for spatial planning**

Spatial planning decisions today should consider both short and long term predictions for climate change, as many buildings and most infrastructure have a relatively long life span. There will be a need for new development (including intensification of existing development) to avoid areas subject to hazards, sea level rise and other constraints. Changes in locational preferences, or eventually perhaps, the deliberate retreat from some low-lying areas, will need to be planned for by identifying and protecting land for future urban expansion, when it is required, and by providing for an increase in housing and other land-use in existing urban areas not subject to constraints. Protection of rural productivity will also be increasingly important as rising oil costs will make local food production more important.

In addition to preparing for the effects of climate change, spatial planning can also contribute to New Zealand's international obligations to reduce GHG emissions and transition to a low carbon economy by reducing travel demand and fuel consumption. There is some chance this may happen naturally as a result of Peak Oil, which is predicted to lead to a decline in the use of oil.

### **Natural hazards**

Like most of New Zealand, Dunedin is at risk from a wide range of natural hazards, including river and lake flooding, earthquakes and seismic hazards, landslides, coastal flooding and erosion, severe wind or snow, tsunami,

storm surge and soil erosion (Maps 23 and 24). On-going research and monitoring has improved awareness of the likely extent and effect of these different natural hazards<sup>32</sup>.

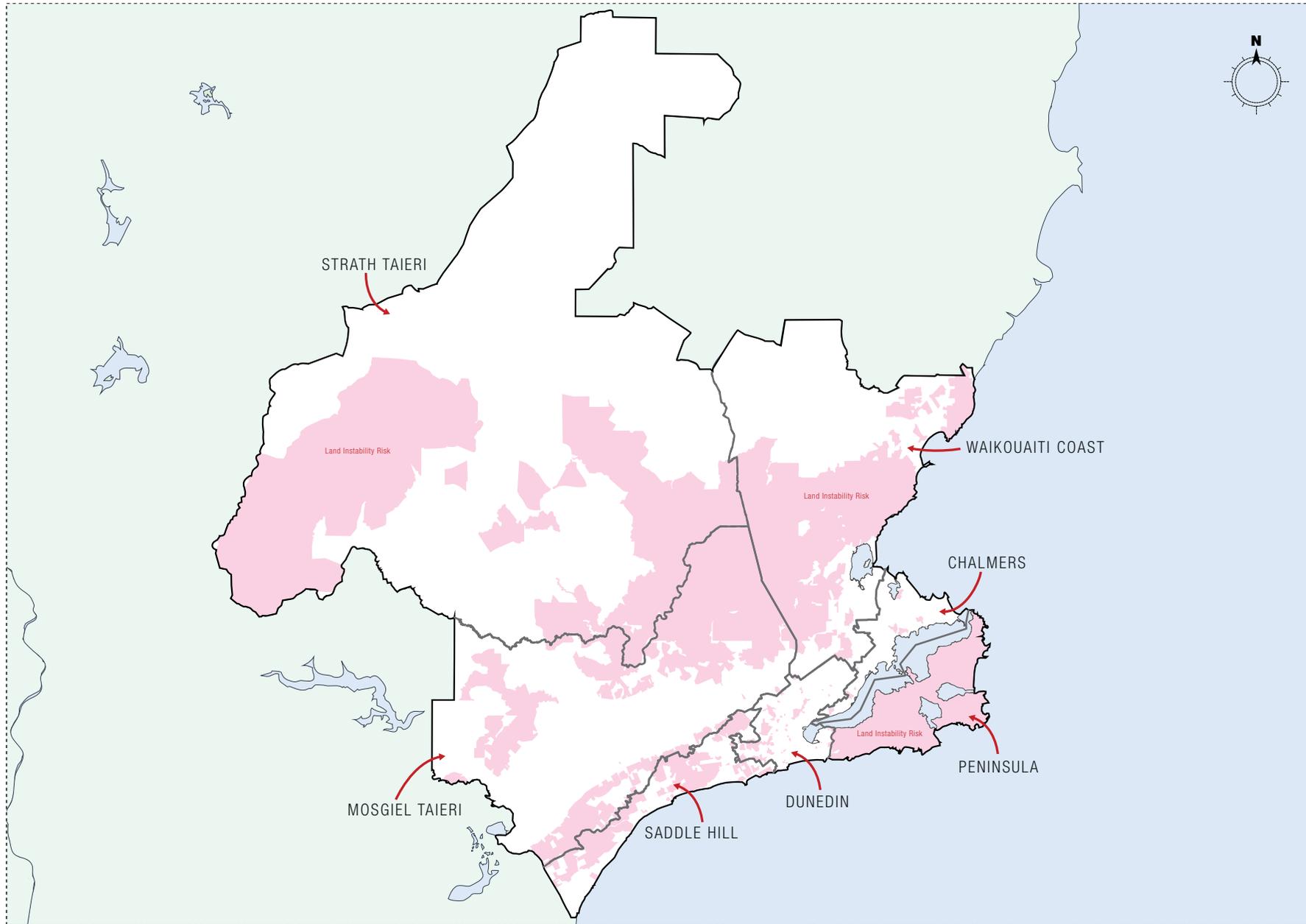
With regard to seismic hazards, Dunedin is mainly at risk from the Alpine Fault and the Akatore Fault. The Alpine Fault is located along the western edge of the Southern Alps, and there is an approximate probability of 15-20% of a magnitude 8.0 earthquake occurring in the next 20 years, and 50% within the next 100 years. However, the likely effects of this event on Dunedin would be minor damage to household goods. On the other hand, it is estimated that the Akatore Fault, to the immediate southeast of Dunedin, near Taieri Mouth, could generate a magnitude 7.1 earthquake and cause extensive damage to buildings and widespread liquefaction. However, the probability of this occurring is very low as earthquakes on this fault occur only every 2-3,000 years.

Coastal erosion is a significant issue for large parts of coastal Dunedin, including adjacent to South Dunedin, where a range of options is being investigated to address erosion issues, particularly at Ocean Beach Domain Reserve.

### **Implications for spatial planning**

Looking towards 2050, it is important to avoid development in areas subject to constraints, including areas of known hazards such as coastal erosion, flooding and land instability.

Consideration also needs to be given to the risk posed by earthquakes, which is more prominent in many people's consciousness after the Christchurch earthquakes. While Dunedin has a relatively low level of risk compared to Christchurch or Wellington, as a city with a large number of heritage buildings, the city must consider the risk associated with retaining unstrengthened heritage buildings. One option would be to be more proactive in encouraging and supporting the earthquake-strengthening of these buildings.



**Map 23. Areas affected by land instability constraints in Dunedin**

Map 24. Areas subject to flooding risk in Dunedin



## Our built environment

### The overall form and character of the city

Most people would agree that Dunedin is a distinctive and memorable city. The extensive boundaries of the city include a range of natural and rural environments and several distinct rural and coastal settlements, with their own identity, character and history.

The current built environment of the city is dominated by urban Dunedin (map 3, p.8) which remains the focus for social, economic and cultural activities in the district. The character of Dunedin's urban environment is based on its hilly topography, waterways and connection to the coast, Harbour and rural hinterland. The central city contains a well-planned network of streets with open spaces, green spaces and distinct residential and commercial areas. The Octagon, George Street, the Exchange and the University provide clear focal points for the central city. A hierarchy of suburban, neighbourhood and rural centres complements the role of the central city, and helps to define the character and identity of urban neighbourhoods and rural settlements and create a strong sense of place.

Overall, Dunedin's compact urban form, its network of streets, waterways, green spaces, and public space, and the physical and visual connections with the coast and the rural hinterland need to be maintained and reinforced. In places, these characteristics are being eroded by development that does not contribute positively to the environment or breaks the connections. In the past 20 years, there has been a trend towards retail activities, including supermarkets, moving into large (big box) retail buildings with design that favours car parking over visual amenity and active frontages, creating poor public realm outcomes. New retail developments have also often had weak or no connections to existing centres, which limits accessibility for people without a car. This trend has had a detrimental affect on the character and identity of the city and the vibrancy and success of the central city and other retail centres, and undermines public investment in these areas. There is an opportunity to improve the quality of the built environment by strengthening the role of our existing

centres and by applying urban design principles to all retail development.

One of the strengths of Dunedin's built heritage is the collection of heritage buildings that define the distinctive townscape in the central city. Most buildings were established following the 1860s gold rush and reflect the wealth of the era and the Victorian and Edwardian architecture of the time. There are also other precincts in the city that are recognised for their distinctive character, often due to their heritage buildings. While the majority of heritage buildings in the city are protected, their continued retention is under threat from insufficient investment, maintenance and repair. This situation has been blamed on a lack of economic viability due to the cost of earthquake-strengthening and building code upgrades combined with a lack of tenant demand and low returns on investment. As a result, the distinctive character of a number of these areas is gradually being eroded. Heritage buildings are being lost and poorly designed buildings that have limited character and a poor relationship to public space are being introduced. There are also gaps in the urban fabric where a building has not replaced the one removed.

### Our residential environments

Dunedin currently has about 49,600 residential dwellings<sup>33</sup>, of which 96% are in urban environments such as urban Dunedin, Mosgiel and other outlying townships and residential settlements. The predominant dwelling form is the single-storey detached dwelling on sites with an area of 500m<sup>2</sup> or larger. The majority of this type of development was established in the 20th century as the city expanded, taking in the outlying boroughs such as Fairfield and Green Island. There is a greater variety in dwelling types surrounding the central city with higher density dwellings occurring in the form of villas, terraces and townhouses or cottages on small sites. South Dunedin and North Dunedin are the most intensively developed parts of the city.

The majority of residential development occurring over the past ten years has been in the form of greenfield development in Mosgiel and on the edges of urban Dunedin.

To the north and east of urban Dunedin, a string of townships and small settlements dot the coastline. Many of these developed originally as rural townships or seaside holiday towns but now are seen as attractive, lifestyle suburbs for people working in Dunedin, as well as retired people. The character and distinct identities of many of these settlements is under threat from the blurring of boundaries between settlements and the loss of services and facilities.

To the south-west of the city, the Taieri Plain supports a small farming population, as well as an increasing number of residential and rural-residential areas centred in Mosgiel and other townships.

The remaining inland rural parts of the city are sparsely settled, with large tracts of the high country almost unpopulated.

### Implications for spatial planning

One of the key challenges for Dunedin is its ageing housing stock. One in five dwellings in Dunedin was built prior to 1920 and a large number of dwellings were built from 1950-70<sup>34</sup>. The design and condition of many of the city's buildings are poor. They are generally poorly insulated with minimal passive solar design features or other energy or water efficiency features. Building code changes since 2004 have greatly improved the environmental performance of houses, although New Zealand still lags behind standards in many western European countries. There is, however, growing consumer demand for well-insulated and energy-efficient housing. The knowledge and experience of low-impact design and retrofitting of buildings to improve their efficiency, is slowly increasing. The Healthy Homes Insulation Grant Scheme and the insulation scheme administered by the Energy Efficiency and Conservation Authority have assisted with improving the insulation standards of homes.

Some residential areas in the city have a consistent character often associated with heritage. The protection and enhancement of this character through design

controls in some key areas will be important.

The DCC commissioned research to identify areas of special character where greater controls on design may be applied.

### The Tertiary-Medical Precinct

The Tertiary-Medical Precinct refers to the area extending from Dundas Street in the north, to Hanover Street in the south, Great King Street to the west and Anzac Avenue to the east. The area encompasses the University, Polytechnic and Dunedin Public Hospital and also contains student housing and residential colleges.

The University of Otago was New Zealand's first university, established in 1869. The University has grown rapidly in recent decades, and now has approximately 22,000 students and the equivalent of 4,000 full time staff<sup>35</sup>, across all facilities in the country.

The Otago Polytechnic developed from New Zealand's first school of art in the 1870s. The Polytechnic now has facilities in Dunedin and Central Otago and, in 2010, had a total of approximately 8,650 full and part time students and 700 staff<sup>36</sup>. The tertiary student population comprises about 20% of the population of Dunedin<sup>37</sup>.

The geographic/age distribution of students reflects a stereotypical 'scarfie' migration pattern, which may be generalised as:

- first year in a hostel or still at the parental home;
- second and third years flatting in Castle Street or Grange Street and their surrounds; and
- from fourth year onwards, the desire to be 'in amongst it' in North Dunedin starts to fade, and areas like North East Valley and City Rise (High Street – Stuart Street, Fernhill) start to become more attractive.

The student residential areas adjacent to the University and Polytechnic are near capacity and are characterised by high rents in popular streets. Students, mainly the fourth-year or older post-graduate students, are having

to, or electing to, live further away from the tertiary institutions than they have in the past<sup>38</sup>. As a result, student numbers have also increased in other residential suburbs. These include areas where some low-cost housing is situated, such as Caversham, Pine Hill, Vauxhall, Mornington and St Kilda.

### Future housing and land needs

The University of Otago anticipates an increase of 6,500 students and 500 staff in the next 25 years<sup>39</sup>.

Additional residential accommodation needs to be provided to cater for the anticipated growth in student numbers. It is likely that the form of accommodation will be a mixture of student flats, additions to and/or new residential colleges and possibly inner-city apartments.

On average, residential colleges provide for 300 students each. The location of new residential colleges within the Tertiary-Medical Precinct is desirable for ease of access of students to the relevant tertiary institution. However, as high density residential development, they will require careful consideration with regard to their design and amenity, along with their potential demands on water and waste infrastructure.

The existing residential areas and central city can absorb the other demands for student accommodation in the traditional form of student flats and apartments. These areas should provide sufficient capacity for post-graduate students, but may not be in a location or form attractive to first, second or third-year students. As the areas for student living expand, maintaining and enhancing access to this precinct will be important, with pedestrian, cycle and public transport routes essential.

### Implications for spatial planning

Surrounding the main campus area, particularly to the north and east, are residential areas that are popular for student housing. These areas have a mix of dwelling types, including many historic buildings on small sites with a strong relationship to the street. This character is under threat from demolition of historic buildings, the

use of front yards for parking, and infill or higher density redevelopment that lacks adequate on-site amenity or otherwise suffers from poor design or construction.

Development in these areas, particularly intensification of use, requires design controls to ensure adequate privacy and amenity is provided, and that structures have a positive public interface and provide for a reasonable level of streetscape amenity.

### Retail and commercial centres

Unlike other New Zealand cities, Dunedin is fortunate to have maintained, for the most part, a well established and clear hierarchy of commercial centres, each with various economic and social roles and functions, and to be free from out-of-centre shopping malls. Dunedin has a generally vibrant central city, centred on the Octagon, which provides the heart of the city and caters for major city events and, with Moray Place, provides a hub for cafes, bars and arts and cultural activities. The Octagon connects to the Tertiary-Medical Precinct to the north via George Street, Dunedin's 'high street' or 'main street' retail area. It connects to the office and hotel precinct centred near the Exchange to the south via Princes Street. The majority of employment in Dunedin is located within or near to the central city including most commercial offices and other activities such as the Hospital, tertiary campus area and industrial areas.

The development of retail outside of the centres hierarchy, along the one-way system south of the central city and on industrial land around Andersons Bay Road has drawn retail activity out of the central city and traditional suburban centres. If out-of-centre retail is not strictly managed, it has the potential to undermine the social and economic functioning of the central city and suburban centres, as well as the city's transport network, which can have significant effects on the economic performance of the city as a whole.

Based on research completed in 2011 Dunedin had approximately 180,000m<sup>2</sup> of retail floorspace, of which approximately two-thirds was in the central

city and Andersons Bay Road areas, and the balance distributed throughout the other centres<sup>40</sup>. Mosgiel, with almost 14,000m<sup>2</sup> of retail floorspace, is the largest of the suburban centres. Dunedin's vacancy rate was approximately 6% (~12,000m<sup>2</sup>), marginally above the typical rate of 3-5%. Two-thirds of this vacancy was in the central city and Dunedin North catchment. However, it was also noted that retail space can sometimes be used for other activities, masking an underlying surplus.

The central city had 85% of Dunedin's clothing and footwear retail, and this was noted as an advantage that must be protected and strengthened.

Just over 70% of all retail floorspace in Dunedin was occupied by medium-large format (bulky or non-bulky goods) retail activities (defined as activities with a floorspace >400m<sup>2</sup>), with 31% in the main part of the central city, 20% in the southern part of the central city, and 21% in the Andersons Bay Road area.

Most department store floorspace (70%), which together with supermarkets makes up the large format (non-bulky goods) retail activity, was within the central city. The Andersons Bay Road area and the southern part of the central city contained 80% of all large format (bulky-goods) retail activity in Dunedin.

Despite the concentration of activities within the central city, there are still pockets of under-utilisation which create gaps in the urban fabric and threaten the vibrancy of the central city. The area to the south of the Octagon and around the Exchange has been under-utilised since the early 1980s when a number of central Government offices closed in this area and associated legal and financial services relocated to other parts of the city. The growth of the University, as well as the location of public car-parking around the Golden Centre and Meridian malls has also created a strong magnet for retail activities to migrate north of the Octagon along George Street to form the main retail precinct within the city.

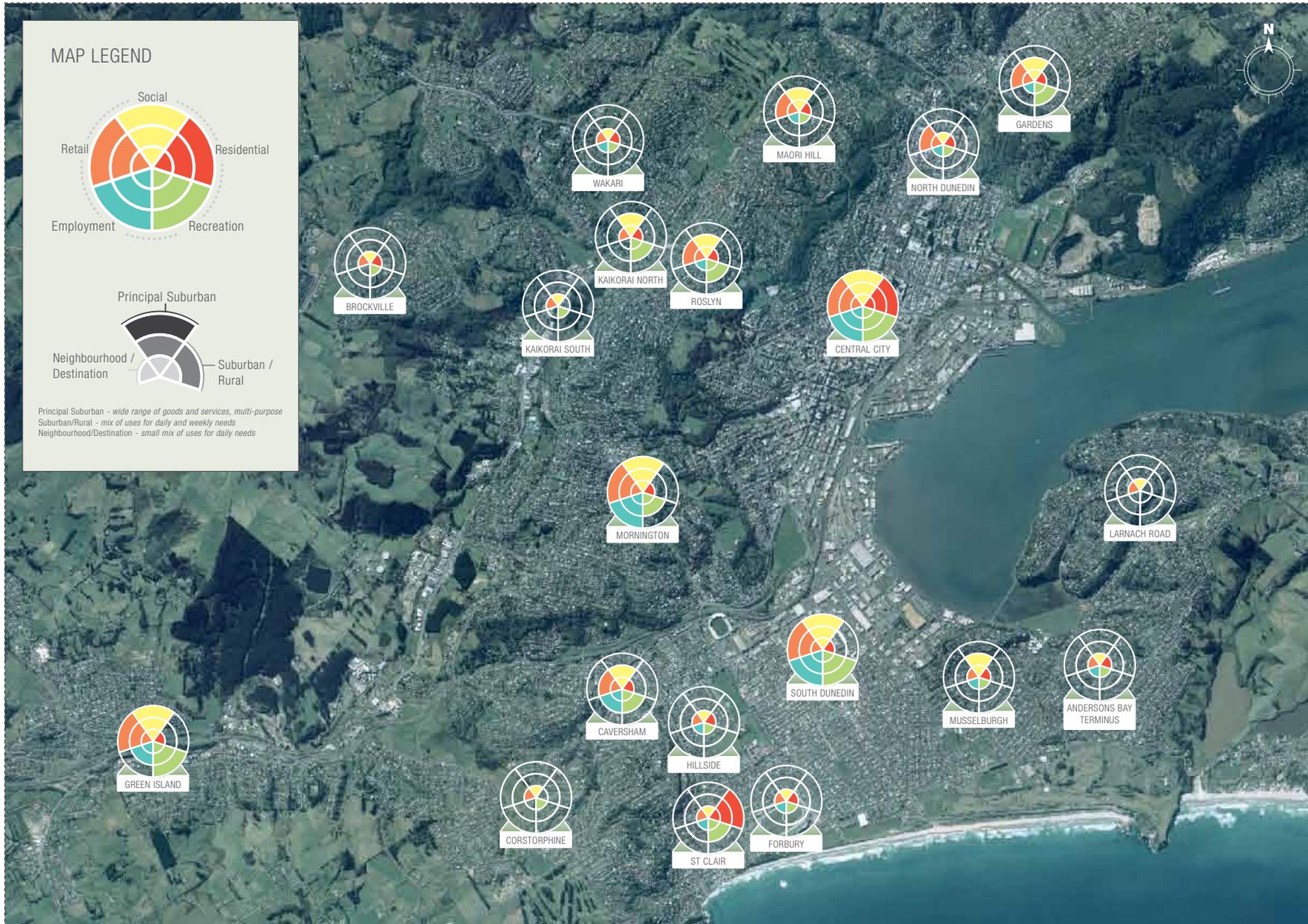
The role of the central city is complemented by a variety of other centres which have varying, and often

overlapping, catchments. Centres have been identified as groups of three or more shops, which provide a social and economic focal point for a neighbourhood or community. These centres have been classified into a hierarchy which includes:

- Principal suburban centres – Mosgiel, South Dunedin, Green Island, Port Chalmers;
- Suburban centres – Caversham, Gardens, Mornington, North Dunedin, Roslyn;
- Neighbourhood centres – Andersons Bay Terminus, Brockville, Forbury, Maori Hill, Musselburgh, Kaikorai North, Kaikorai South, Hillside, Larnach, Corstorphine, Mosgiel South, Brighton, Macandrew Bay and Karitane;
- Rural centres – Middlemarch, Waikouaiti, Outram, Waitati; and
- Destination centres – St Clair, Portobello.

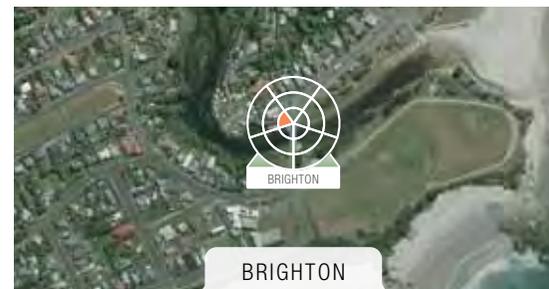
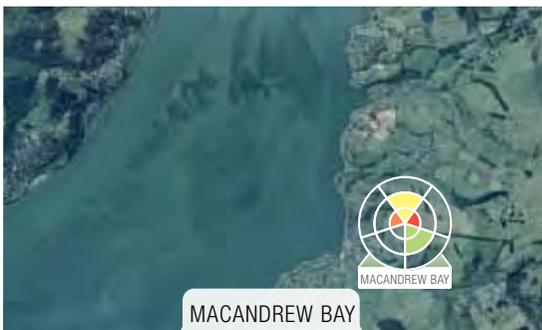
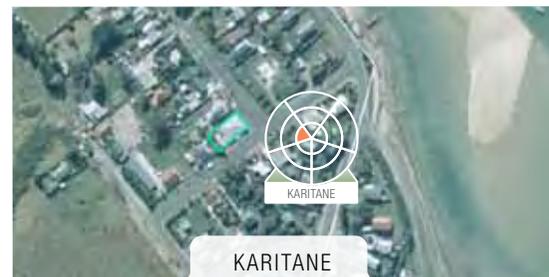
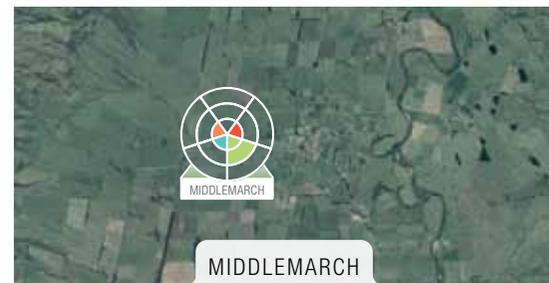
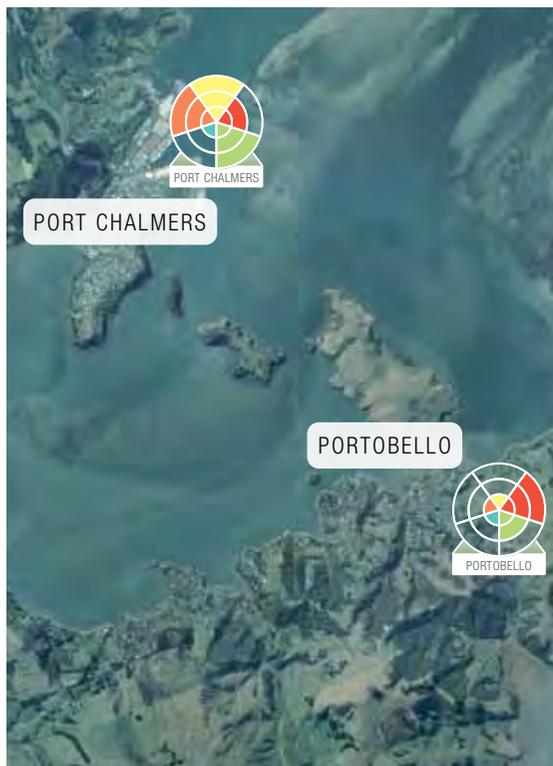
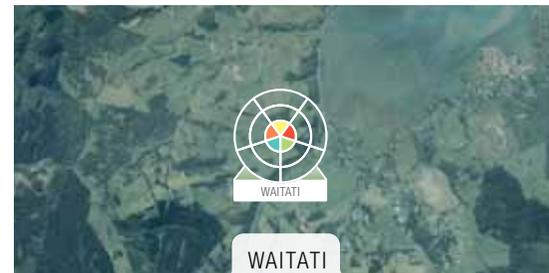
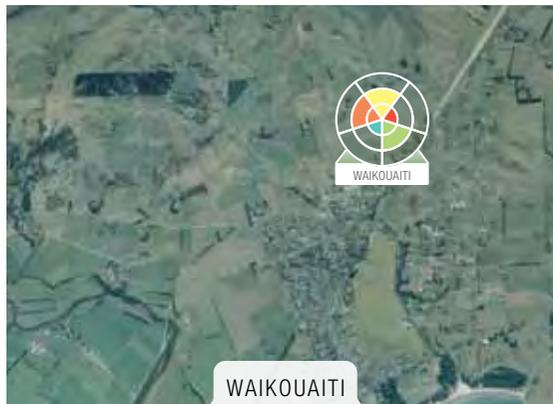
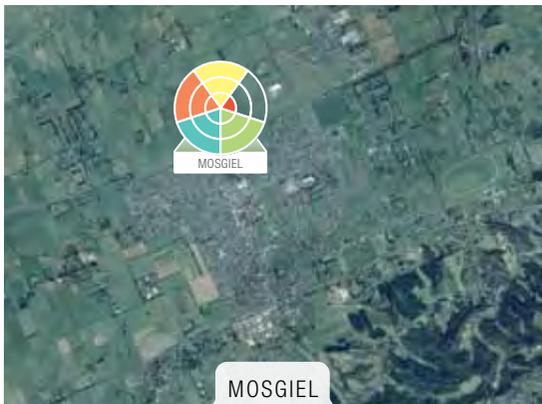
The role and function of each centre in the hierarchy is defined by the range of activities, the size of the centre and the catchment they serve. The type of activities in centres can include social, retail, employment, recreation, and residential activities. Maps 25 and 26 illustrate a summary of the activities in each centre, based on a 2009 survey. The size of the pie wedges indicates the number of activities of each type in the centre. Brighton and Karitane are the only centres identified based on just one current shop. However, it was seen as desirable to promote expansion of the Brighton centre to provide a focal point for activities adjacent to this important recreational area.

Within this hierarchy, principal suburban and suburban centres provide for a wide range of goods and services for both daily and specialised needs and should provide vibrant hubs of local economic and social activity, and transportation hubs. Neighbourhood centres are within walking distance of residential areas and provide for activities that meet people's most common day-to-day needs (dairies, pharmacies, takeaway food shops etc). Rural centres serve the surrounding rural community and tourists with a small mix of uses for daily needs along with providing for rural functions or activities.



**Map 25. Centres hierarchy – Dunedin**

**Map 26. Centres hierarchy – townships**



Destination centres provide a limited range of activities with a predominance of cafes, restaurants and tourist-related activities along with a high number of visitor accommodation facilities in the centre or nearby.

Some of Dunedin's suburban centres are successful and vibrant, such as Roslyn, while others, such as South Dunedin and Port Chalmers, have suffered from problems of under-utilisation due to shifts in retail activity across the city. This is reflected in the overall vacancy rates in these centres, which were 6.6% and 17.2% in 2010 respectively<sup>41</sup>.

There is continual pressure to allow more commercial businesses to locate outside or on the margins of the central city and established centres. Currently, Dunedin arguably has an over-supply of commercial buildings and, unless the location of commercial activities is carefully managed, more holes will appear in the central city, reducing amenity and foot traffic. In many other cities, this has resulted in a negative spiral of decline, affecting not only city vibrancy but also security and safety, economic prosperity through loss of transport and economic efficiencies, and social capital and cohesion through decreased social interaction.

### Future land-use demands

Demand for additional retail floorspace from 2010-2021 has been estimated at 73,000m<sup>2</sup>, with 21,000m<sup>2</sup> for the furniture, houseware and appliance sector, and 31,000m<sup>2</sup> for department stores, 6,000m<sup>2</sup> for supermarkets, and 15,000m<sup>2</sup> for specialty retail. Demand for additional retail floorspace for the period from 2021-2031 has been estimated at 73,000m<sup>2</sup>, with 17,000m<sup>2</sup> for the furniture, houseware and appliance sector, 37,000m<sup>2</sup> for department stores, 4,000m<sup>2</sup> for supermarkets, and 15,000m<sup>2</sup> for speciality retail<sup>42</sup>. However these estimates are based on a continuation of current retail trends as at 2010 and may not fully account for changes to retail models based on increased competition from the internet. As an additional 17,000m<sup>2</sup> in bulky goods retail space could be driven by two large format activities, or several smaller ones, it is difficult to determine additional land needs, if any.

While it is difficult to determine the capacity or demand for commercial office space, the likelihood is that trends in growth in office space will continue as the population grows<sup>43</sup>. Surveys of commercial office space in the central city show growth that, when extrapolated, indicates the need for an additional 12,500m<sup>2</sup> of office space per decade until 2050. There is currently just over 150,000m<sup>2</sup> of commercial office space in the central city. Sufficient land capacity within the central city for growth in commercial office space is available.

It is envisaged that, based on the projected median population growth and anticipated demographic change, Dunedin is unlikely to require the creation of any new retail centres, in the short to medium term. However, relatively small adjustments to the size of some existing centres may be needed to allow for growth. For example, in Mosgiel, population increases may lead to additional businesses that fit within the role and function of that centre wanting to establish. Additional space for retail and commercial use may be required to meet that demand. The Spatial Plan sets out a preferred hierarchy of preferences for where those activities should locate.

To enable future centre expansion, it may also be necessary or desirable to control the built form of development in areas adjacent to some centres to enable flexibility in future use of buildings to provide for growth.

### Implications for spatial planning

Dunedin's hierarchy of activity centres is important to the form and functioning of the city, for example by reducing the need to travel by locating an appropriate range of services and activities close to where people live. However, the desire to provide for more vibrant suburban centres must be balanced against maintaining the role of the central city.

Carefully managing the location of different types of commercial, and particularly retail, activities, along with targeted amenity improvements in the city, is essential to maintaining or re-creating vibrant suburban centres and maintaining the vibrancy of the George Street Retail

Precinct and addressing issues of under-utilisation in other parts of the central city. Activities in centres will need to be managed to ensure the built form of development promotes the role of the centre, for example by providing for appropriate land-uses and active street edges.

Strongly discouraging out-of-centre retail, apart from small shops that provide for local day-to-day needs, will be crucially important to maintaining a hierarchy of vibrant centres.

The Spatial Plan responds to this by suggesting an adjustment to the management framework for retail distribution (District Plan zoning and rules) to better recognise the difference between retailers selling trade-related/ home improvement retail, and bulky goods and large supermarkets who require larger stores that may, in some cases, not be able to fit into existing centres (such as Mitre 10 and Bunnings) and non-bulky goods retail, which should almost always be located into existing centres. There is also a need to better control the design of large retail buildings and their associated car parking areas to manage the effects on the public realm.

Recognition of built heritage within centres and providing for uses appropriate for adaptive re-use of heritage buildings will also be important. There are potential opportunities to fill in the gaps in the urban fabric of the central city but they will be dependent on an integrated place-based approach to planning. For example, in the Exchange area, there are a number of heritage buildings that have been successfully refurbished and re-used. Despite the number of buildings that are under-utilised and run-down, the area has a strong and appealing character based around its large warehouse buildings, wide streets, continuous building frontages, the open green space provided by Queens Gardens and good connections to the rest of the city. This area has all the characteristics of a successful mixed-use area and also has the potential to be a hub for creative or technology industries. However, revitalisation of areas in the central

city, such as the Exchange area, must be done in a way that does not draw activities away from the George Street Retail Precinct, or stretch the city too thin in terms of its high street retail activities.

Improvements to the amenity and design of spaces and movement corridors may also be required to support the revitalisation of under-utilised parts of the central city. For example, at the moment, the design of the State Highway 1 pair of one-way streets, Crawford and Cumberland, is successful in supporting efficient movement of vehicles through the city, but creates a hostile barrier for pedestrians travelling through the central city. The Spatial Plan responds to this by identifying Queens Gardens as a large and important green space in the city that is currently under-utilised and which requires design improvements. A range of other design improvements across the central city have also been suggested<sup>44</sup>. These include small improvements to the layout of seating on George Street, the creation of pocket parks; and some fundamental changes to the Octagon.

Small design changes may also be required to address safety issues in the city, both in terms of pedestrian safety and safety from crime. CPTED can be used to improve the safety of public spaces, and has already been applied in the design and auditing of some public spaces, resulting in safety improvements within the central city.

### Industrial and port land

As outlined in the 'Our Economy' section, there has been a general decline in the manufacturing industry and other traditional industrial land-users. However, amongst many of the industries that have remained, co-operation, in part supported by the physical clustering of activity, has been important to their resilience to the changing economic climate.

The main industrial areas are located adjacent to the Harbour edge, Portsmouth Drive, Kaikorai Valley and Mosgiel. Port Otago occupies land at Dunedin Port and Port Chalmers.

There have been a number of perceived threats to the availability of well located and serviced industrial land in the city. Firstly, there has been a continued reduction in the original industrial land in the city, including through re-zoning to provide for the Forsyth Barr Stadium and the proposed Harbourside area. Secondly, in recent years, there has also been a trend for retail activities to establish on industrial land, particularly along Andersons Bay Road. Other industrial areas within the central city are often dominated by non-industrial activities including retail and in some areas, residential or education activities.

Another issue that has been identified as a threat to industrial land is the tenure of land, particularly around the Harbour edge and the southern part of the central city, where large parts of this area are still leasehold land (land and buildings are under separate ownership). This form of tenure can discourage investment within properties by undermining the profitability of projects and introducing an element of uncertainty that makes developers wary. Encouraging large leasehold land owners to divest themselves of leasehold land would enable greater investment in properties and business within the city.

Another potential threat to the viability of industrial land is the issue of reverse sensitivity, where new activities (often residential) locate close to industrial land and then complain about noise or light from industrial or port-related activities, which can affect the ability of industry to operate and expand. Similarly, in cases where existing industrial activities seek to change aspects of their operations, there can be effects on existing residential areas that may need to be recognised through changes in the resource management regime (e.g. requiring new developments to have higher noise insulation requirements) and/or through increased mitigation measures put in place by those industrial land-users.

### Future land-use demand

As the trends in industrial activity continue to change from manufacturing to services, and from heavy (or dirty) industries to light (or clean) industries, there is likely to be sufficient serviced land in suitable locations

to provide for our future needs, provided it is not utilised by other competing activities. While growth in industrial activity is not anticipated, protecting existing industries and providing for potential expansion or relocation is important. Industrial activity requires good accessibility and proximity to transportation routes.

The Taieri Plains have the majority of greenfield development opportunities, with an additional 37ha of land provided at North Taieri in 2004 and 15ha at Dunedin International Airport<sup>45</sup>. There are a number of brownfield sites that are also available for redevelopment at Green Island and Burnside<sup>46</sup>. The availability of industrial land, particularly larger sites, in the Central city, Kaikorai Valley and Fairfield is limited.

Some green industries or high tech industries may be compatible with other activities, such as retail and commercial, and can be integrated into centres and mixed-use developments.

### Implications for spatial planning

Looking out towards 2050, consideration will need to be given to:

- ensuring industrial land containing heavier industries is protected from encroachment by sensitive activities, to enable their continued operation;
- supporting the co-location of key industries to maintain and enhance the synergies that exist between industries;
- providing appropriate locations for rural processing industries and local energy production, such as the processing of waste wood products for energy production; and
- managing carefully the location of noise sensitive activities, particularly residential activities, in respect to the location of industrial activities. While the insulation of buildings can reduce such noise, in many cases there will still be a need to ensure adequate separation between some activities.

## Our rural and natural environment

Dunedin is one of the largest territorial authority areas in New Zealand. It has an area of 3,340 km<sup>2</sup>, extending from north of Waikouaiti to the Taieri River in the south and the Rock and Pillar Range in the west, and includes 300km of coastline. Dunedin city contains vast tracts of productive rural land and a diversity of natural environments. Approximately 95% of the total area of Dunedin city is zoned rural. Dunedin's rural environment contributes to the economy of the city through farming, forestry and tourism. In addition, the rural environment is important for biodiversity, recreation, water catchments and other ecosystem services.

As a result of the extensive land area and underlying geology, the city has a diverse range of landscapes distinguished by their landform and vegetative cover. Intricately detailed coastal lands, comprising hills, downlands and small coastal flats, run northward and southward from urban Dunedin. The Otago Peninsula is an outstanding feature of this coastline. These coastal lands are backed by high hills and broken terrain, which in turn give way to much simpler, yet more dramatic, block and valley landforms further inland. Flat lands are generally confined to the river flats of the Taieri, Waitati and Waikouaiti Rivers. The low mountain ranges of the Lammerlaw, Lammermoor and Rock and Pillar rise to 1450m at the highest point and bound the city to the north-west.

Both Māori and New Zealand European communities have historical relationships with these landscapes (Map 21). They contribute to our well-being and create a sense of place for residents and visitors. Many of these landscapes include iconic landmark features which provide a focus and cultural or historical association, such as Saddle Hill, Hoopers Inlet and Sutton Salt Lake. However, there are several threats to these landscapes including poorly designed residential activities, traditional pastoral activity giving way to forestry and landscapes being changed by greater use of irrigation

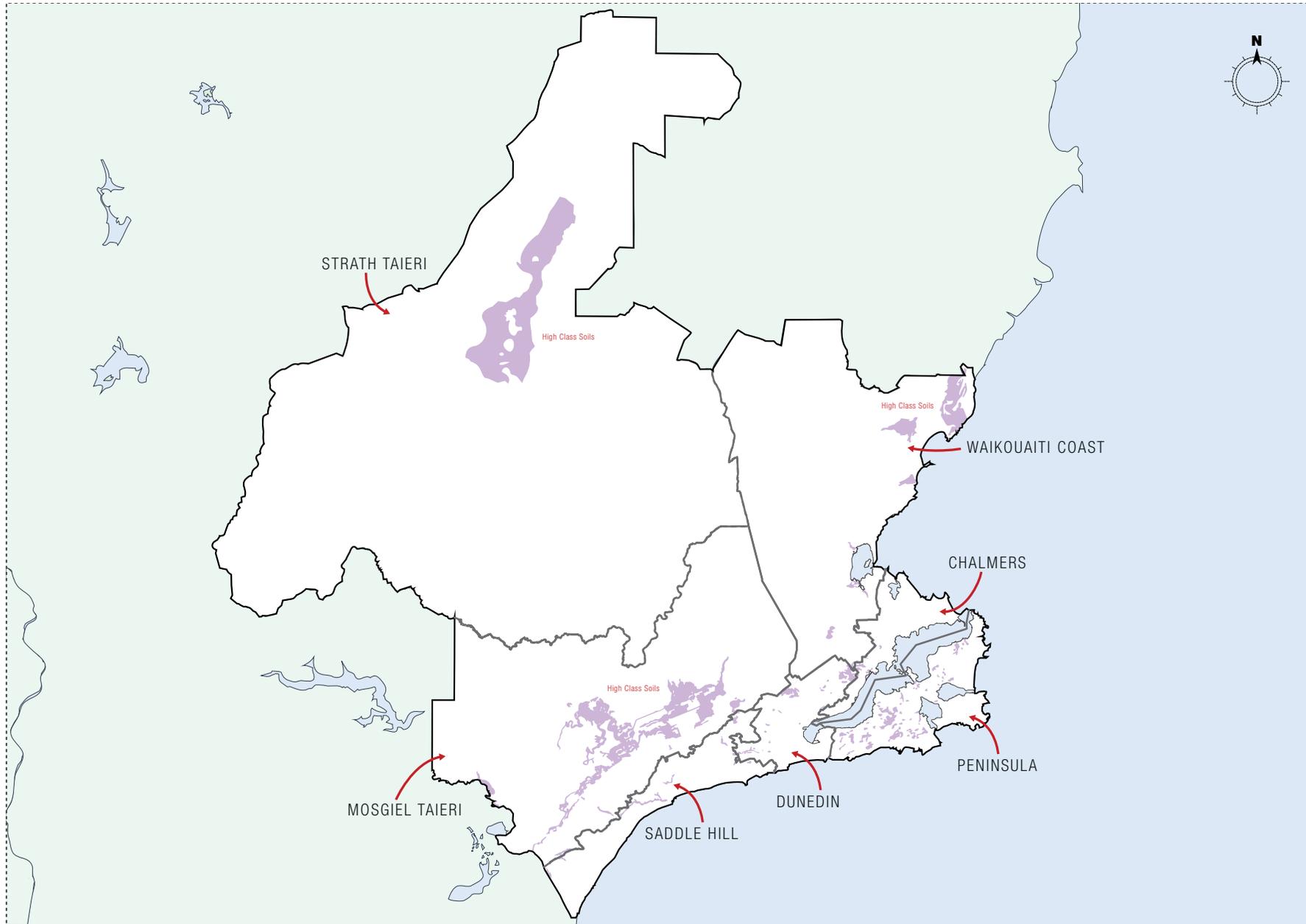
Dunedin's rugged and varied topography results in significant climate variation. On the coast, the moderating influence of the ocean is felt. Inland, altitude, distance from the ocean and the presence of intervening hills combine to create a climate of greater extremes.

The varied topography and climate provides for a diverse ecological resource which includes estuaries, coastal turf and dunes, dry forest, tussock grasslands and alpine cushion fields. The extent of indigenous vegetation and fauna has been considerably reduced over time and today, indigenous vegetation covers approximately 20% of the city.

The diverse landscapes create distinct differences in the character of the rural environment, including differences in land cover, land-use and how structures are placed into the landscape. At the moment, the current District Plan only recognises some of these differences by controlling the location and design of structures in landscape management areas. However, outside of these areas, activities and subdivision are managed generically across the rural environment. Therefore, the same provisions apply for development in the coastal environment as they do for development in the Strath Taieri. As a result, the different characteristics of the rural environment have often not been recognised, leading to poorly designed development.

Dunedin's natural environment and biodiversity is a significant strength for the city, providing food, various ecosystem services and supporting recreation and the eco-tourism industry. For example, Dunedin's tussock grasslands provide the city with a healthy water supply and its native and commercial forests represent a carbon store. There are significant opportunities in Dunedin to improve our sustainability and resilience through increased sustainable food production in the urban and rural environment and by planting forests for wood energy and as carbon sinks.

The communities that live within the rural environment and make a living from the rural environment also face challenges with the changing economics of rural



**Map 27. High-class soils in Dunedin**

activities, provision of affordable infrastructure, protection of resources and infrastructure from competing uses, including residential development, and potentially reduced access to some resources as a result of climate change and other global challenges.

Dunedin's current urban form generally maintains the distinction between rural and urban environments and protects our natural resources. However, rural land close to urban Dunedin is often threatened by competing uses, particularly from the desire for coastal properties and lifestyle development. Despite its relatively slow growth, many of Dunedin's urban edges have been, or may be, under threat in future particularly:

- the boundaries of townships (e.g. Waitati, Waikouaiti, Middlemarch);
- areas around Mosgiel and other settlements on the Taieri Plain, and
- areas on the Otago Peninsula and the West Harbour.

Residential activity in the rural environment leads to loss of productive land or land fragmentation, and can threaten our local food production capacity. On the other hand, research, innovation and diversification present opportunities within the rural environment.

Poor land management has also been noted as an issue. This includes inappropriate removal of vegetation or irrigation which can increase weeds and pests, fragment habitats and affect water quality and quantity, all of which can lead to a loss of biodiversity and soil productivity.

There is clearly a demand for residential living in or near the rural environment, particularly in coastal areas with high landscape values and on the flatter areas which tend to have high-class soils (soils with versatility to support a range of crops and other plants with high productivity as illustrated in Map 27), including demand for lifestyle blocks for small-scale livestock or market garden activities. The current District Plan provides areas for rural-residential living to provide for this demand. However, rural-residential living can lead to increased demands for infrastructure (for example connections

to water and waste infrastructure, or road sealing). It has also been associated with poor land management practices, as some owners have no interest in managing the property for lifestyle farming activities, and instead only buy the property for increased privacy and views and are overwhelmed by, and unable to undertake, the work required to manage the property properly, leading to an increase in weeds and pests. Another well known issue is the large size of houses degrading landscape values in some areas.

Increasingly, it appears that de facto, over-sized rural-residential living is happening as a result of subdivision of rural land down to the current minimum site size of 15ha. At this size, there is an even greater risk that owners will be unable to cope with the land management requirements which will likely result in degradation of the land.

### ***Implications for spatial planning***

The rural environment needs to be managed carefully to protect it from development that may threaten the productive capacity of land and/or threaten natural values such as ecosystem services, landscape, cultural and recreational values.

The expansion of rural-residential development and/or extension of existing urban areas onto rural land needs to be carefully controlled. This is particularly important in areas with high-class soils. High-class soils are a finite resource.

Areas important for biodiversity or landscape values need to be protected from development that affects those values. In terms of biodiversity, the DCC has an on-going programme to identify and encourage land owners to protect areas of significant conservation value. Encouraging restoration of habitats across the city can also enhance these protected areas by creating green corridors to connect these areas.

Research has also been completed to identify significant landscape features (Maps 15-20), which will be used as part of the Second Generation District Plan to protect these areas from inappropriate development.

Research has been undertaken which divides the rural environment into rural character areas<sup>47</sup>. The rural character areas integrate social, cultural, economic and environmental values that make each area distinctive.

It is proposed that the management of activities, subdivision and development will be tailored to each rural character area rather than the generic approach used in the current District Plan.

Dunedin's rural-residential areas have also been assessed for their character and values (including landscape), threats and opportunities. Consideration will need to be given to managing the design and location of future development in these areas to ensure these values are enhanced.

Overall, management needs to be designed to encourage good land management practices and to protect natural values. As discussed above, there is some concern that the existing management regime may not be achieving these outcomes. Consideration needs to be given to providing for a stronger and more holistic resource management regime in both the rural and rural residential environments to protect and enhance the character and values of these areas. The rural environment is also the location for wind farms and other infrastructure for renewable energy generation. The location of these structures has the potential to affect the landscape values and character of different character areas. The need to encourage renewable energy would need to be balanced with the protection of important landscape character values.

## **Our infrastructure and facilities**

### **Regional and national infrastructure**

The key infrastructure in the city provides an important economic and social role for the wider Otago region and connections to the rest of the country (Map 28). The state highway roading network within the city includes State Highway 1 which connects the city to the north and south, State Highway 8 to Central Otago, State Highway 87 through Middlemarch to the Maniototo and State Highway 88 connecting Dunedin to Port Otago at Port Chalmers.

The existing rail network is part of the national network that provides good connections for freight from the Otago and Southland regions to Port Otago and has opportunities to increase its capacity to cater for demand for freight in exported goods from the Otago region. Port Otago at Port Chalmers, complemented by facilities at Dunedin Port, plays a key role in the freight and export of goods as part of a national and international supply chain. The Dunedin International Airport, located at Momona, has a daily schedule of frequent and direct flights to Auckland, Wellington and Christchurch and connecting flights to all airports throughout New Zealand. Direct flights to the east coast of Australia are operated, with connections to long-haul international flights via Auckland and Christchurch. The city also contains important electricity transmission and distribution networks which provide power to the wider region. The city is also connected through the national communications infrastructure.

### ***Implications for spatial planning***

Looking towards 2050, it is important that the efficiency of the regional and national infrastructure in the city is maintained to contribute towards the economic and social role of the city. This may include protecting the infrastructure from competing uses that can reduce the efficiency of the networks or infrastructure, ensuring connections to local networks and land uses. The future-proofing of infrastructure to take account of the major challenges outlined on pages 94 and 95 is also important.



## Environmental infrastructure

Overall, the city's infrastructure, providing our potable water supply and the treatment and disposal of wastewater, is of a high standard. Significant investment (in excess of \$80 million) over recent years now ensures that 83% of Dunedin's population receive A-grade water (based on a Ministry of Health assessment). The completion of Stage 2 of the Tahuna Wastewater Treatment Plant upgrade project, will treat more than 99% of Dunedin's reticulated domestic wastewater and 100% of its trade waste with secondary treatment and UV disinfection prior to discharge. Since the commissioning of the long Tahuna ocean outfall in January 2009 (Stage 1), the local beaches have not been closed due to wastewater contamination.

However, parts of the city occasionally experience flooding from wastewater and storm water sewers as a result of localised network capacity being exceeded. This risk is exacerbated by ground and surface water entering cracked and damaged pipes, or cross connections between storm and foul sewer pipes – the result of an incomplete sewer separation programme. These increased flows, particularly during wet weather events can lead to overflows at pump stations and manholes, and backing up of household drainage. There are also some low-lying areas where saltwater currently enters Dunedin's wastewater network and can affect biological wastewater treatment processes. The 3 Waters Strategy project also highlighted some areas with excessive leakage from the treated water network due to ageing infrastructure and high pressure. Subsequently, a key focus in the future will be developing a co-ordinated approach to water loss management.

South Dunedin and Mosgiel currently have storm water and wastewater constraints (Map 29). While engineering solutions exist for these issues, the costs to enable further development may be prohibitive. Sea-level rise will also affect the groundwater level in South Dunedin which will exacerbate sewer network issues. There are periodic issues in the North East Valley and Kaikorai Valley waste and storm water catchments relating to network capacity

constraints during wet weather events. The long-term viability of current wastewater treatment facilities for the northern communities of Waikouaiti, Warrington and Seacliff are currently under review in conjunction with Otago Regional Council consents. With respect to the treated water network, more residential development in the Chalmers Community Board area will require careful management to ensure current levels of service can still be met.

## Social and cultural facilities and attractions

Dunedin, for a city of its size, has a wealth of social, cultural and religious opportunities. The city is well endowed with theatres, museums, galleries, churches and community facilities (Map 30). The major arts and cultural facilities have among the highest satisfaction levels in the residents' opinion survey (83-94% satisfied), and facilities such as the Dunedin Town Hall, Regent Theatre, Fortune Theatre and the Dunedin Chinese Garden also have high satisfaction levels (70-75% satisfied)<sup>48</sup>. The range of facilities needs to continue to cater for different needs of the community, including younger and older persons. However, there are significant risks with losing facilities as buildings age and health and safety requirements increase, particularly with smaller private and community venues.

Dunedin actively celebrates its dual heritage of Kāi Tahu coastal and Harbour communities and New Zealand European communities. For example, Kāi Tahu and the Māori community within the city have initiated the Puaka Matariki festival held in the city and contemporary Kāi Tahu artists have enriched the new marae at Puketeraki (Map 21).

The relationship between education and the cultural sector is a close one. Tertiary study in the arts is available through Otago Polytechnic and the University of Otago. Students and lecturers are both audience and active agents in cultural production as their passage through the city increases the currency of cultural production here. Creative industries are also a growing aspect of Dunedin's

economic base, for example Natural History New Zealand, Animation Research Limited and design and fashion companies such as Nom\*D.

Dunedin is, therefore, in many ways, a cultural incubator, exceeding all expectations for a place of its size. It provides the rest of the country with a disproportionate number of teachers, curators and other arts professionals. Dunedin is a relatively safe space for risk-taking, innovation and apprenticeship and its audiences are critical and challenging while its infrastructure caters for a variety of opportunities. Cultural icons, such as the 'Dunedin sound' music genre, remain in the nation's psyche while new work is made by the eclectic and diverse range of artists who live here.

## Recreation and leisure facilities

Dunedin has a broad range of recreation and leisure opportunities including sports facilities (e.g. Edgar Centre), parks and reserves, cycleways, playgrounds, and walking and mountain biking tracks. The majority of Dunedin residents are fortunate to live close to a range of these opportunities.

However, the city also faces a number of challenges when it comes to access. Increased demand for participation, a growing range of activities, and heightened expectations have put pressure on some facilities. For example, Moana Pool has had to turn away a number of different sporting codes due to insufficient capacity. Residential growth on the Taieri is placing pressure on the capacity of the Mosgiel Pool. The Edgar Centre has also had to turn potential users away due to excessive demand, particularly from wooden court users. More people are also choosing to participate in informal physical activity, increasing demand for cycleways, walking and biking tracks, and parks and reserves. Neighbourhood-based active lifestyle opportunities and initiatives (such as local tracks and facilities) have been identified as important, as have amenities such as toilets, car parking and barbecue areas at some locations.

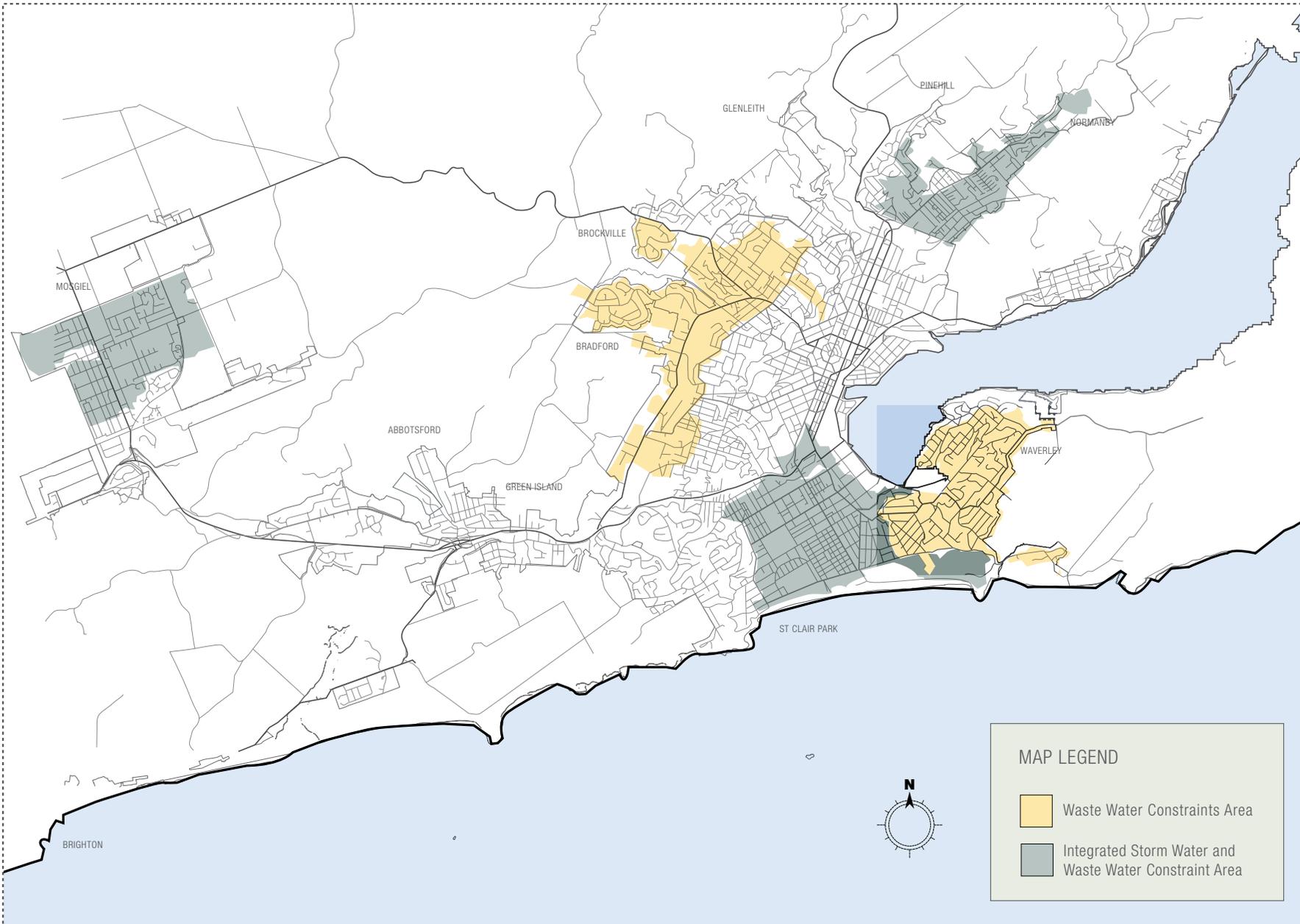
There is an opportunity to improve access to physical activities through the creation of a connected open space

network and by promoting physical activity as a primary consideration in all urban planning and design decisions. Existing Dunedin cycleways are varied in quality and connectedness, greatly reducing their effectiveness for people accessing recreational opportunities and using these networks for recreational cycling. There are limited connections between the central city and the waterfront for cyclists and pedestrians. Continued investment in recreation and leisure facilities and infrastructure will be required to ensure these meet the demands of users.

## Other social infrastructure

Accessibility to primary schools in many outlying settlements, townships and suburbs is under threat with the closure of schools in Allanton, Corstorphine, Tomahawk, High Street and South Dunedin. The closure of these schools is a significant loss of a community facility and imposes issues of accessibility and cost on families in these areas. Maia School, which also recently closed, has re-opened as a Rudolf Steiner School with an increased school roll.

For public health services, the current goal is for Dunedin to sustain its hospital, associated services and its medical research capacity, and to provide enhanced access to affordable health services. While the city is presently meeting these goals, it is essential that these services are retained in the city and that they are accessible.



**Map 29.**  
Environmental  
infrastructure  
constraints in urban  
Dunedin and Mosgiel

Map 30. Arts and culture facilities in the Central City and surrounds



### Implications for spatial planning

Looking towards 2050, there are a number of important considerations in terms of our environmental, social, cultural and recreational infrastructure and facilities. Investment in these infrastructure and facilities makes up the largest proportion of capital spending by the DCC, while they generally do not receive the subsidies that transportation infrastructure can receive.

The pattern of development affects people's access to services and facilities and also strongly influences the proportionate costs of different services and facilities. One of the principles for the DCC's role in managing urban development, introduced in Part 1, was ensuring outcomes were equitable and affordable. While the costs of urban development can be passed on to developers through development contributions, ultimately these costs are passed onto existing or future ratepayers. There is limited capacity for the community to pay for infrastructure and facilities. In general, the best way to maximise investment in improving levels of service (the nice to have things), and minimise the costs of just keeping up with development (e.g. infrastructure extensions), is to:

- avoid, wherever practicable, new development or intensified development in areas that are subject to infrastructure constraints – this avoids costly upgrades;
- encourage development in areas where we have infrastructure capacity; and
- encourage urban consolidation so that more high grade facilities and services can be provided centrally where most people can access them as opposed to the need to extend facilities and services to growing outlying areas.

### Our transportation network

Dunedin's transport network provides excellent accessibility to goods and services for people travelling by car. There is little congestion and most parts of the city have ample on and off street parking. The State Highway network passes through the centre, which makes travel by car across the city efficient and convenient. On the other hand, the quality of the transportation network for people who need to or want to travel by other modes is less strong, including the 12% of households who do not own a car.

Provision of facilities for pedestrians is inconsistent across the city, with some areas well serviced and others poorly serviced. In the central city, most of the main pedestrian routes have a good to reasonable level of pedestrian amenity. However, this is under continuous threat from poorly designed developments that result in a loss of active street edges. These developments include buildings with blank walls or car parks replacing demolished buildings. In addition, the ambience and ease of walking within the central city is also negatively affected by the speed and volume of traffic (particularly along State Highway 1), and the design of the roading infrastructure (e.g. pedestrian crossing provisions and road widths).

Cycling is one of the most common issues raised in public consultation, with an increasing number of people advocating for improved cycling facilities. As a result, the provision of on and off road cycle facilities has dramatically increased from 0.6km in 2001 to 25.1km in 2009. However compared to other cities internationally, Dunedin's provision of dedicated cycling facilities is limited (with varying quality and poor connections). Cycling is still perceived as dangerous, particularly at commuter times and along the State Highway network. Dunedin's topography also presents an impediment to cycling, yet the number of people cycling is increasing. The need for infrastructure to support people using mobility scooters has also been raised in recent consultations, as with an ageing population, the number of people using these is likely to increase.

The other common issue raised, in relation to accessibility

and the quality of the transportation network, is public transport. Dunedin has reasonably good coverage of frequent bus services (see Map 31). Sixty five percent of dwellings are located within 400 metres of a frequent bus service and 70% are within 800 metres of a frequent bus service. As Map 30 shows, there are several outlying parts of the city, such as communities on both sides of the Harbour, Mosgiel, Fairfield, Brighton, Waldronville and the northern coastal communities, that do not have access to a reasonably frequent bus service. This is often because the small population means public transport is less viable. There is also a gap in the provision of public transport in St Kilda and South Dunedin where distances to frequent bus routes are further than 400 metres. The desire for improved public transport in the city has been a consistent theme in public consultation.

Having access to good public transportation services across the city is important for citizens, including people with disabilities or on low incomes, or who have no motor vehicle. It will also likely be increasingly important across the population, as the cost of fuel is likely to continue to rise. Currently, the cost of public transport in Dunedin, when compared with relatively cheap private motor vehicle costs (plus ample convenient parking), continues to constrain the uptake of public transport. This affects the frequency, routes and types of services that are provided.

The main public transport system is supplemented by school buses which service urban secondary schools and rural schools. These have relatively large catchment areas, providing increased accessibility for those children who live too far away to walk or cycle to school. Many children are also brought to school by car, which creates safety and congestion problems at the school gates. Many reasons are given for this: the perception that the streets are not safe for children to walk or cycle, the lack of bike racks at schools, the cost of school buses or parents finding it more convenient to drop children off by car on the way to work. Primary schools have smaller catchments, and for many primary children, it is relatively easy to walk or cycle to school. However, the closure of some primary schools in Dunedin has meant some children are no longer able to walk to school due to distance.

Maps 32 and 33 shows households within 400 metres and 800 metres of a primary school in Dunedin-Mosgiel and outlying townships. Forty eight percent of dwellings are within 400 metres and 77% within 800 metres. There is a deficit of schools within walking distance in parts of Mosgiel, Ocean View, Waldronville, Ocean Grove, and parts of St Clair and Concord.

Dunedin has an existing rail network which passes through the city with links to Mosgiel, Port Chalmers and along the north coast. The network is currently utilised only for freight, with the occasional excursion train. It could be considered for passenger rail in the future if the demand for public transport increased significantly.

The strong emphasis on car-based travel in the city is reflected in the modes of travel to work recorded in the 2006 census. It showed that most people travelled by car (82%), with 3.4% using the bus, 1.9% cycling and 11.1% on foot. These trends are similar across New Zealand, except for foot travel which is high for an urban area. Foot travel is particularly high in the tertiary campus area, with approximately 70-80% of University and Polytechnic students accessing their campuses by walking.

Dunedin has good connections for freight via Port Chalmers, the rail network, and State Highway network, with some connections by air. There are opportunities to increase the amount of freight transport by rail and by sea. Port Otago is responding to these opportunities. The Dunedin International Airport, located at Momona, has a daily schedule of frequent and direct flights to Auckland, Wellington and Christchurch and connecting flights to all airports throughout New Zealand. Direct flights to the east coast of Australia are operated, with connections to long-haul international flights via Auckland and Christchurch.

### Distribution of facilities and services and accessibility

Because much of Dunedin was developed prior to World War II and the era of the car, the city's main urban area is compact with a distribution of land-uses that generally supports good accessibility. Most employment and essential services (health and community services, food

shopping) are located in the central city or suburban centres, which are along bus routes to facilitate access. In addition, 68.1% of households live within 800 metres and 38.8 % of households live within 400 metres of these centres (Map 34, p.115). These figures demonstrate that there is significant potential for people to walk and cycle to activity centres and primary schools.

However, there are still some major facilities located away from the central city or principal suburban centres, including Wakari Hospital, Mercy Hospital, Moana Pool, Forsyth Barr Stadium, the Edgar Centre and Dunedin International Airport. Some of these have reasonable public transport access. For example, the Hospital runs a free shuttle bus between Wakari and the main hospital for patients and staff, but others have no, or very limited, public transport access (Edgar Centre, Dunedin International Airport). The location of Dunedin Public Hospital in relation to bus routes has also been raised in the past, particularly for people with mobility impairments.

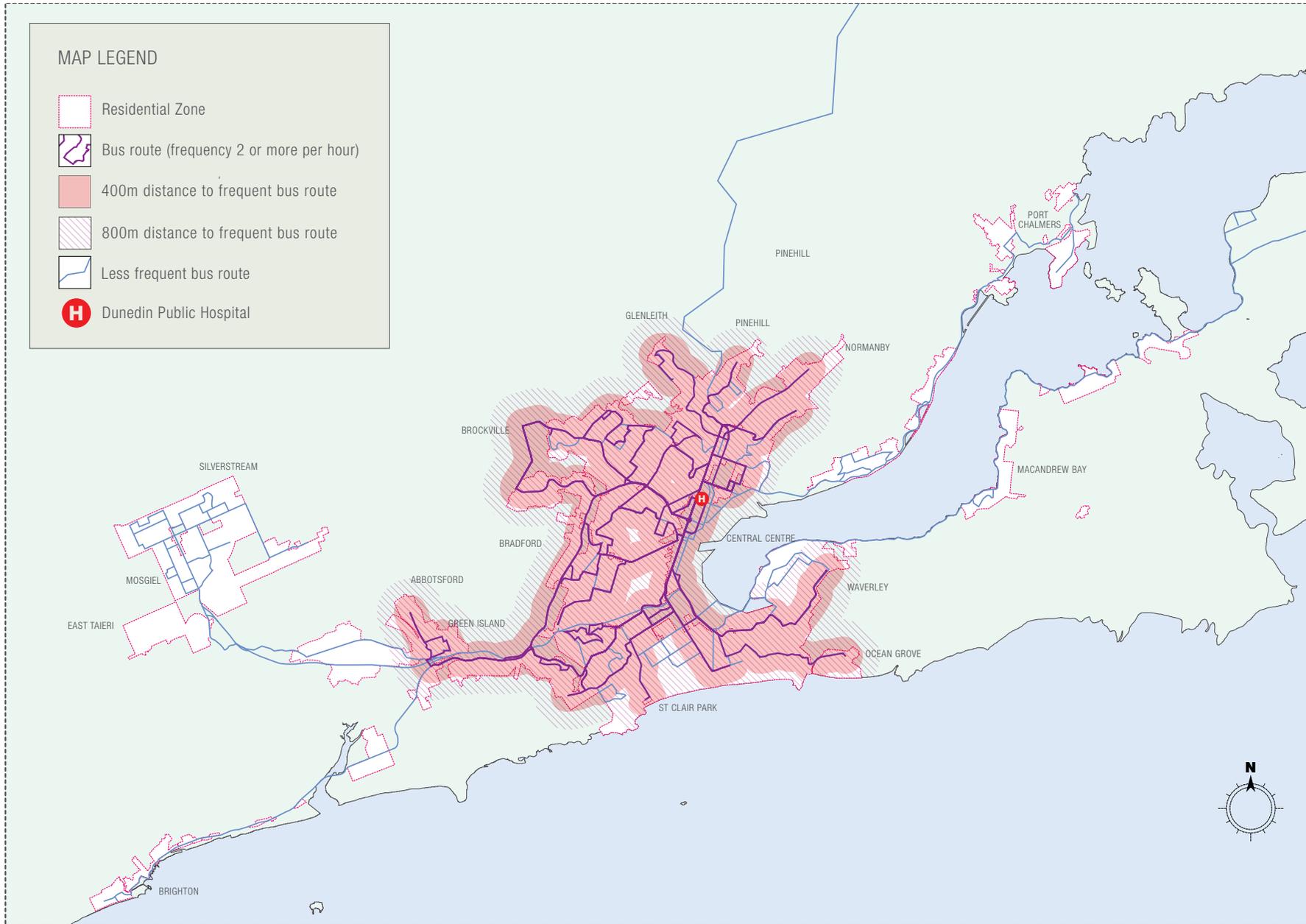
### ***Implications for spatial planning***

Due to its relatively compact form, urban Dunedin is reasonably resilient with the potential for many trips to be undertaken on foot, by bike or public transport, should the need arise. As fuel prices rise, accessibility should be a primary consideration for where we encourage new residential development. The areas with greatest accessibility are those within walking distance of the central city and principal suburban centres (Map 34), and on high frequency bus routes (Map 31). Likewise, managing the location of key destinations, including retail, offices into hubs (centres) that are pedestrian-friendly and easily serviced by public transportation will be important.

However, in some cases, residential development in townships may help that community to reach a critical mass to enable improved public transportation services and/or help to keep existing services and facilities (e.g. schools and shops) viable. While, in general these areas have poorer accessibility due to their distance from

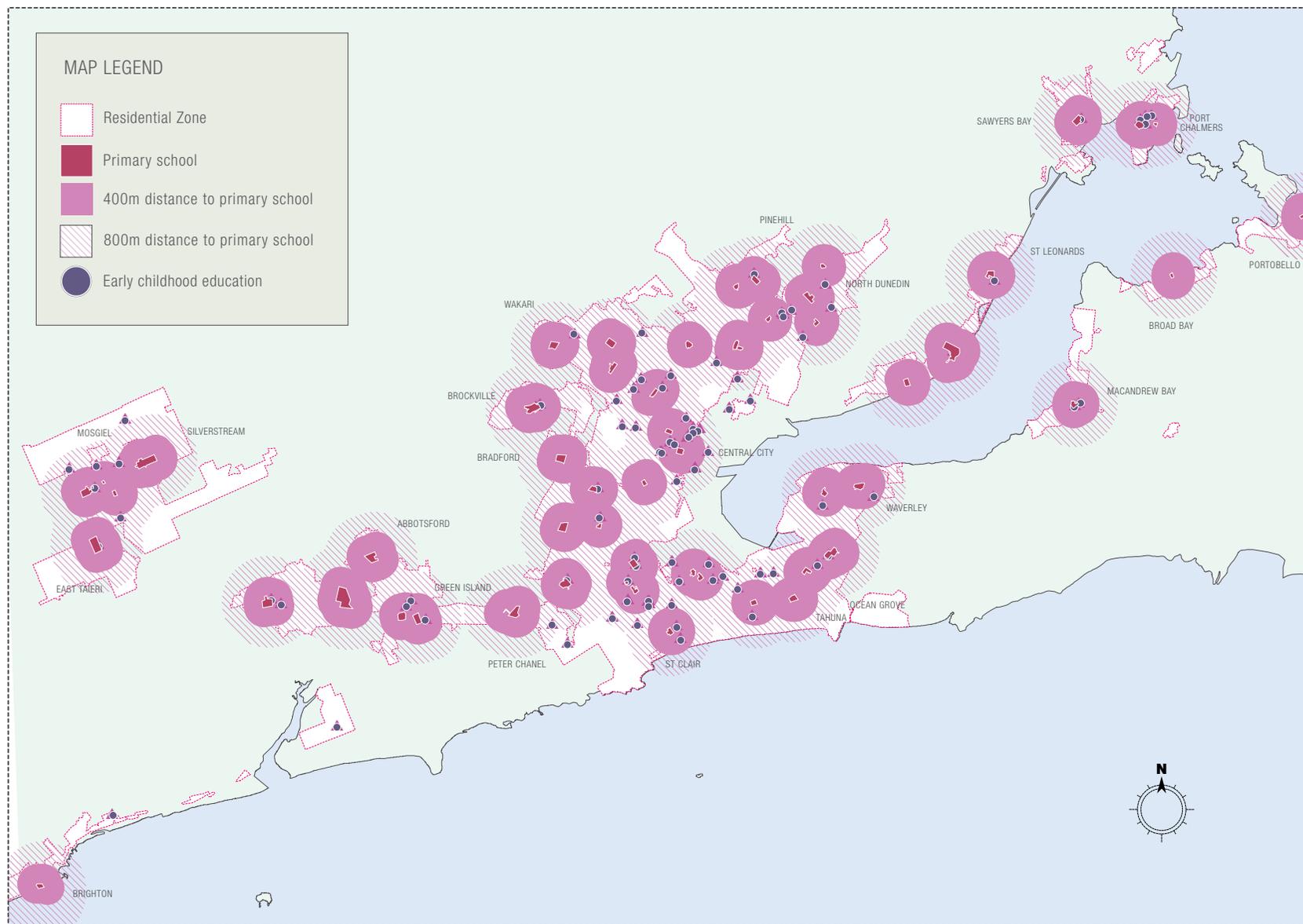
the central city, this growth in population may have an overall net benefit on accessibility for that community.

However, any new development outside the main urban area should be carefully scrutinised to ensure that any positive effects in terms of improving or maintaining accessibility for that community are not outweighed by the negative effects and costs of peri-urban development, such as the loss of productive rural land or open space, and the costs of infrastructure expansion and demand for new facilities. Therefore, the levels and locations for development should be carefully considered. Existing urban land should be used efficiently first, before any urban expansion is even considered.



**Map 31. Accessibility to frequent bus services in Dunedin and Mosgiel**

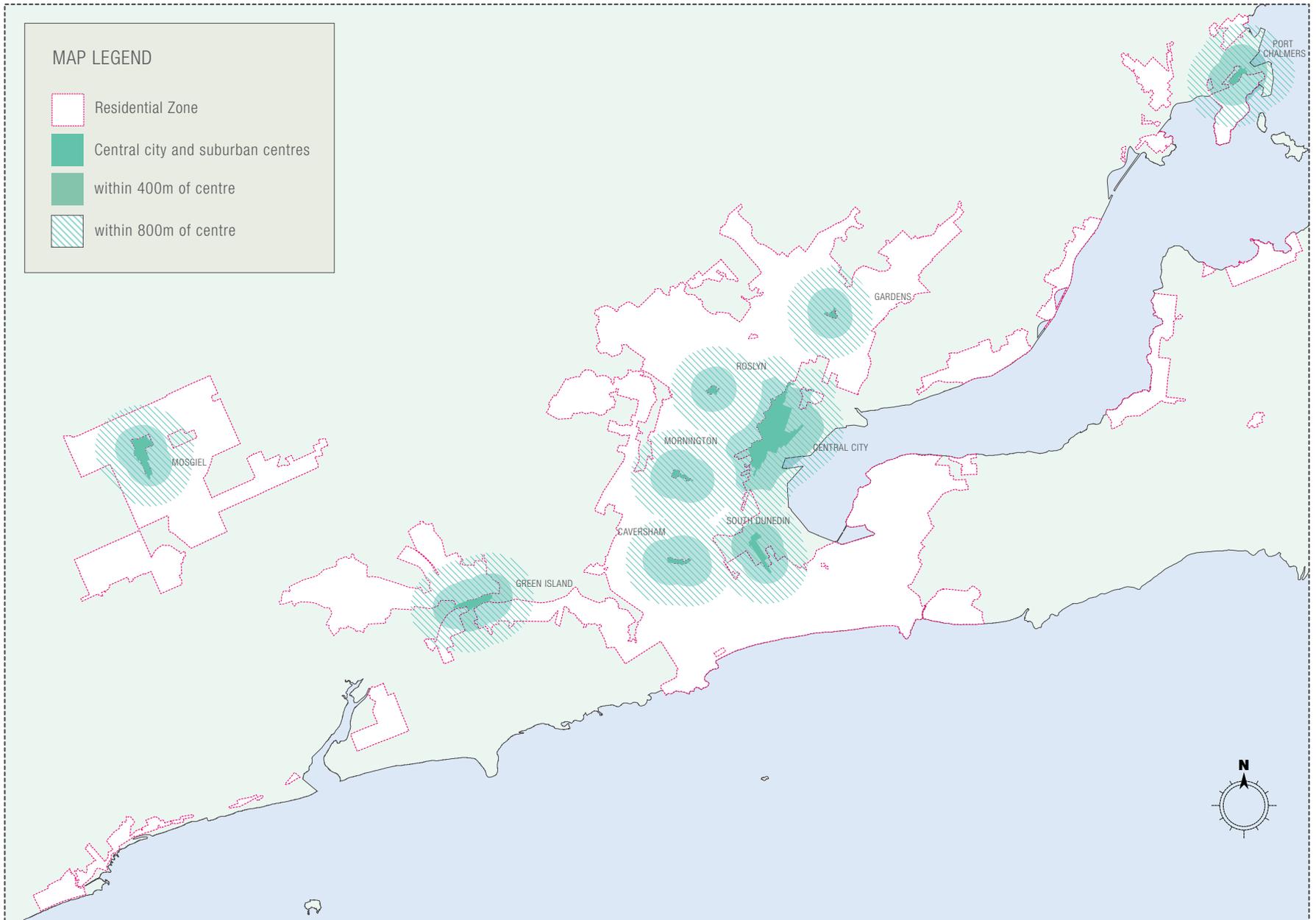
**Map 32. Accessibility to primary schools in Dunedin and Mosgiel**





**Map 33. Accessibility to primary schools in townships and outlying settlements**

**Map 34. Accessibility to the central city and suburban centres in Dunedin and Mosgiel**



- 1 Statistics New Zealand, *Usually Resident Population by Age and Sex as at 30 June 2006*
- 2 Rationale Limited (2009) *DCC Population Projections – Growth Projections – November 2009*
- 3 Wingatui, Mosgiel East, Mosgiel South, East Taieri and Bush Road Census Area Units
- 4 It should be noted that some of these figures include the population of surrounding areas in the population of the township itself. This is the case for Middlemarch, Aramoana and Portobello.
- 5 University of Otago (2010) *Campus Master Plan*
- 6 [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz)
- 7 Statistics New Zealand, *Number of Children Born Alive and Highest Qualification by Age Group as at 30 June 2006*
- 8 These ethnic categories have been grouped by Statistics New Zealand from individual responses. For example, individuals who identify themselves as Samoan or Tongan will be grouped into the 'Pacific Peoples' category.
- 9 Statistics New Zealand, *Projected Families and Households by Type and Territorial Authority Area*
- 10 Statistics New Zealand, *Estimated Subnational Population (RC, TA, AU) by Age and Sex at 30 June 1991, 2001 and 2006*
- 11 Population projections reference
- 12 Rationale Limited, *DCC Population Projections – Growth Projections – 2009*
- 13 Statistics New Zealand, *Medium Series – Projected Families and Households by Type and Territorial Authority Areas 2006-2031 (2006-base update)*
- 14 Berl Economics (2011) *Otago Regional and Sub-Regional Economic Profile 2009-2010*
- 15 Dept. of Public Health, University of Otago, Wellington, *NZDep2006 Index of Deprivation, August 2007*
- 16 More technically 26% of Dunedin residents live in areas which are included in the bottom 30% of areas with the highest levels of deprivation in New Zealand, as measured by the deprivation index.
- 17 Statistics New Zealand, *Census Quickstats About Housing – Tables (Revised 31 March 2011)*
- 18 These urban centres were Auckland, Hamilton, Tauranga, Hutt, Porirua, Wellington, Christchurch and Dunedin.
- 19 Statistics New Zealand, *Subnational Population Projections: 2006 Base – 2031 update*
- 20 Dunedin City Council (2010) *Residential Capacity Study 2009*
- 21 Berl Economics (2011) *Otago Regional and Sub-Regional Economic Profile*
- 22 Kemp, Derek (2011) *Dunedin: Economic and Employment Opportunities. Report prepared for Dunedin Central City Strategic Directions for the City Centre and the Warehouse District, for Dunedin City Council*
- 23 International Energy Agency (2010) *World Energy Outlook*
- 24 Lloyd, B. (2010) *Peak Oil and the Economy – Background Report. Report prepared for the Dunedin City Council.*
- 25 Smith, C. (2010). *The Next Oil Shock? Parliamentary Library Research Paper.*
- 26 Krumdieck, S. (2010) *Peak Oil Vulnerability Assessment for Dunedin. Report prepared for the Dunedin City Council*
- 27 Lloyd, B. (2010) *Peak Oil and the Economy – Background Report. Prepared for the Dunedin City Council.*
- 28 Krumdieck, S. (2010) *Peak Oil Vulnerability Assessment for Dunedin. Report prepared for the Dunedin City Council*
- 29 Fitzharris, B. (2010) *Climate Change Impacts on Dunedin. Report prepared for the Dunedin City Council.*
- 30 Dunedin City Council (2011) *Climate Change Projections Policy*
- 31 Defined by the Organisation for Economic Co-operation and Development as a person displaced owing to environmental causes, notably land loss and degradation, and natural disaster.
- 32 Opus International Consultants (2005) *Seismic Risk in the Otago Region. Study Report; National Institute of Water and Atmospheric Research (2007) Otago Region Hazards Management Investigation: Tsunami Modelling Study. Report prepared for the Otago Regional Council.*
- 33 Dunedin City Council (2010) *Residential Capacity Study 2009, unpublished research report*
- 34 Dunedin City Council (2010) *Residential Capacity Study 2009, unpublished research report*
- 35 University of Otago (2010) *University of Otago Campus Master Plan*
- 36 Otago Polytechnic (2010) *Otago Polytechnic Annual Report*
- 37 University of Otago (2010) *University of Otago Campus Master Plan.*
- 38 Dunedin City Council (2009) *Dunedin Tertiary Students – Residential Distribution 2008*
- 39 University of Otago (2010) *University of Otago Campus Master Plan*
- 40 Development Economics (2010) *Spatial Strategy for Retailing in Dunedin*
- 41 Development Economics (2010) *Spatial Strategy for Retailing in Dunedin*
- 42 Development Economics (2010) *Spatial Strategy for Retailing in Dunedin*
- 43 DTZ New Zealand Limited (2005) *Dunedin Office Accommodation Occupancy Survey 2005*
- 44 Urbanism Plus (2011) *Central City Framework and Warehouse Precinct Revitalisation Plan*
- 45 Dunedin City Council (2008), *Plan Change 3: Dunedin Airport*
- 46 Dunedin City Council (2009) *Industrial Land 2009, unpublished research report*
- 47 Millar, R (2010) *Rural Character Assessment Dunedin City. Prepared for Dunedin City Council by Forest Environments Ltd*
- 48 Dunedin City Council (2010) *Residents' Opinion Survey*

# Appendices

## Appendix 1: Community engagement which has informed the spatial plan

The Spatial Plan has been developed as a cross-department project of the DCC, led by the City Development team, which has relied heavily on an intensive community engagement process, along with the findings from a three year research programme.

### Your city, our future

In 2009, the Dunedin City Council (the DCC) embarked on an intensive coordinated community engagement process known as 'Your City, Our Future' (YCOF) to input into:

- the review of the community outcomes in the Long-Term Plan;
- the development of the Spatial Plan; and
- the development and review of other strategies, including the transportation and economic development strategies.

There were several components to the YCOF process. One of the main components was the creation of nine outcome focused leadership teams made up of key stakeholders across various sectors of the community. The outcome areas for the leadership teams generally reflected the outcomes of the current Long Term Council Community Plan with some additions.

The leadership teams were tasked with developing options and priorities in each of these outcome areas. They were

also specifically engaged on spatial planning for the city through a spatial planning workshop, facilitated by noted urban designer Anthony Flannery. Community Boards were also engaged in workshops specifically focused on spatial planning for their community board areas. A series of individual meetings were also held with the University of Otago, Otago Polytechnic, Otago Regional Council, and New Zealand Transport Agency.

Later in the process, the leadership teams, community boards, and individual key stakeholders were asked for feedback on how the options and priorities had been translated into the first version of the Spatial Plan. Around this time, Kāi Tahu ki Otago was commissioned to provide content for the Spatial Plan from an iwi perspective.

A number of the priorities identified by the leadership teams were tested through a questionnaire distributed to all households in Dunedin with the DCC's quarterly publication, *City Talk* in June 2011. The questionnaire consisted of a range of questions on discretionary spending activities and questions on some of the suggested key approaches to spatial planning for the city. The results of the survey were published in July 2011 (Your City Our Future City-Wide Postal Survey Report).

### Development options workshops

A series of development options workshops were held in June 2011. The goal of the workshops was to identify development options across the city, based on different scenarios for Dunedin's future and the draft set of strategic directions for the spatial plan that had come from the YCOF engagement process. These workshops addressed the following questions:

- what types of housing choice should we encourage in the city and where?;
- what might be future scenarios for industrial development in the city?; and
- what new commercial development outside of the central city should we encourage or discourage?

The workshops considered the future demand for residential, industrial, retail and tertiary uses and where these uses could fit in the city. Invitees included planning, design and surveying professionals, those involved in the YCOF leadership teams, developers, and community board representatives.

### Central city workshops

Urbanism+ Ltd were engaged to prepare a framework for the future development of the central city, to contribute to the Spatial Plan and form the basis for the development of a Central City Plan. In developing the framework, an Inquiry-by-Design workshop process was held in June 2011 involving staff from the DCC, New Zealand Transport Agency and the Otago Regional Council. A public workshop was held, attended by approximately 90 members of the public. In addition, three focus group meetings were held with key stakeholders in the central city including retailers, business operators, community organisations and key property interests. The framework directly reflected the ideas that were developed as part of this Inquiry-by-Design process.

### Submissions and hearings

Consultation on the draft Spatial Plan was undertaken in accordance with Section 83 of the Local Government Act 2002 through a special consultative procedure.

The draft Spatial Plan was publicly notified on 2 November 2011 with submissions closing on 13 January 2012. A total of 216 submissions was received on a range of topics. A hearing was held from 13-17 February 2012 at which the Spatial Plan Hearings Committee heard more than 100 submitters and commenced deliberations.

Submissions received covered a range of topics. Overall submissions were positive and provided valuable input into the final Spatial Plan document. All submissions and additional information provided at the Hearing were considered by the Committee along with staff recommendations.

## Appendix 2: List of research which has informed the Spatial Plan

Boffa Miskell Limited (2007)  
*Dunedin Landscape Management Areas Review Landscape Assessment Final Report.*  
Report prepared for the Dunedin City Council.

CPG New Zealand Limited (2011)  
*Industrial Land-use Needs.*  
Report prepared for the Dunedin City Council.

Cullen, M. (2011)  
*Spatial Planning and Centres: Retail in centres and improved social, cultural, and economic performance.*

Development Economics (2010)  
*Spatial Strategy for Retailing in Dunedin.*

Dunedin City Council (2009)  
*Industrial Land Study 2009.*

Dunedin City Council (2010)  
*Residential Capacity Study 2009.*

Dunedin City Council (2011)  
*Residential Research Summary report.*

Dunedin City Council (2011)  
*Centres Research Summary report.*

Dunedin City Council (2011)  
*Rural Research Summary report.*

Dunedin City Council (2011)  
*Potential Areas of Change Report.*

Dunedin City Council (2011)  
*Special Character Areas Report.*

Fitzharris, B (2010)  
*Climate Change Impacts on Dunedin.*  
Report prepared for the Dunedin City Council.

Kemp, D. (2011)  
Dunedin: Economic and Employment Opportunities.  
Report prepared for the Dunedin City Council.

Krumdieck, S and EAST Research (2010)  
*Peak Oil Vulnerability Assessment for Dunedin.*  
Report prepared for the Dunedin City Council.

Kunzea Consultants Ltd (2010)  
*Dunedin District Ecosystem Mapping Project 2010.*  
Report prepared for the Dunedin City Council

Lloyd, B. (2010)  
*Peak Oil and the Economy – Background Report.*  
Report prepared for the Dunedin City Council.

Millar, R (2010)  
*Rural Character Assessment Dunedin City.*  
Report prepared for the Dunedin City Council.

Moore, M and R. Millar (2010)  
*Rural Residential Areas Dunedin City Character and Values Assessment.*  
Report prepared for the Dunedin City Council.

Rationale Limited (2009)  
*Dunedin City Council Population Projections Growth Projections.*  
Report prepared for the Dunedin City Council.

Urbanismplus Ltd (2011)  
*Central City Framework and Warehouse Precinct Revitalisation Plan.*  
Report prepared for the Dunedin City Council.

### Appendix 3: Other future scenarios for Dunedin

Looking out towards 2050 requires consideration of many factors and scenarios that may or may not eventuate. Three other scenarios were considered in the development of the Spatial Plan. These scenarios do not change the strategic directions the city wants to take, or the overall preferred pattern of development for the city, but they may require a different response to deal with a change in the amount or nature of demand and/or capacity in the city across the timeframes over which we are planning.

The consideration of the scenarios focussed on the likely implications of the scenario, rather than the causes. It is possible that one or more of the scenarios may occur.

#### Scenario A: Higher than anticipated population growth

There are a number of factors that might cause the actual population growth to differ from the median population growth predictions that have been used for the Spatial Plan. This could be caused by more people coming here because of unanticipated job opportunities, or because of lifestyle reasons – where Dunedin's liveability in comparison to other places draws people here from other parts of New Zealand or internationally.

The main implications of this scenario would be the need to provide for increased residential capacity in a shorter period of time. The DCC's regular reviews of residential capacity should anticipate this need and new areas for greenfield development or more areas for intensified development would be identified within the overall framework and strategic directions of the Spatial Plan.

The implication of the location of growth and changes to our population's demographics spatially on our infrastructure, facilities and services would also need to be considered. This may require some changes to the size of centres to support local communities or the creation of new centres if major greenfield development is required.

#### Scenario B: A sustained and significant reduction in the affordability and availability of fuel

As discussed in Part 4, many experts believe that we are close to or have already reached Peak Oil after which the price of oil and oil-based products will increase and there may also be shortages of these products including fuel. The likely consequence of this scenario would be that increased travel and transport costs has a consequential increase in the demand for housing within walking and cycling distance of the central city or on high frequency bus routes. Conversely, outlying settlements that have poor public transportation will be less desirable. Increasing the capacity of areas close to the city centre and townships with local employment and services would require more areas for redevelopment and intensification, or greater infill housing. There may also be greater tension between the demand for commercial space vs residential space in the central city and this may need to be more strictly controlled with greater provision for intensification of activities in the central city (e.g. adding floors). The townships are also likely to grow, particularly if people from surrounding smaller outlying settlements or rural or rural-residential areas chose to stay in the area but live closer to the local town centre (e.g. Mosgiel). Equally there may be demand for intensification of some rural living areas to create villages to increase the affordability of rural living while also allowing more people to live off the land.

The implication of the location of growth and changes to our population's demographics spatially on our infrastructure, facilities and services would need to be considered. For example, there may be a demand for more schools and childcare facilities in existing urban areas including an increased demand for more services in rural townships, along with a desire for more opportunities for local employment and shopping. There would be a strong need to ensure that public transportation services to rural townships improved and that other options, such as ride share, are supported. More people may also choose to work from home more of the time with a greater demand on good quality broadband across the city.

#### Scenario C: Major change to demand for industrial land

Another scenario that has been suggested for Dunedin is a major change to demand for industrial activity in the city, for example due to oil or gas exploration and/or discovery near to Dunedin. This scenario may trigger increased employment opportunities which could lead to increased population growth. It could also mean that there is a need to relocate some individual or clusters of businesses to other industrial areas, for example close to Mosgiel or near Burnside. The Spatial Plan provides for this scenario through promoting an adequate buffer around industrial areas to allow for this expansion if required.



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