1 Introduction

1.1 What is the District Plan?

The District Plan is a document that has been prepared under the Resource Management Act 1991 (the Act) in conjunction with the community. It identifies issues and develops objectives, policies and methods to manage the effects of land use activities on the environment. The ultimate goal of the Plan is the sustainable management of the natural and physical resources of Dunedin.

The District Plan applies to areas above the line of mean high water springs. Those areas below the line of mean high water springs, including coastal waters, are dealt with in the Proposed Regional Plan: Coast, prepared by the Otago Regional Council.

The contents of this District Plan apply to all users of land and the surface of water bodies within the City. The Crown is bound by the provisions of this District Plan.

This is the first District Plan prepared by the Dunedin City Council under the provisions of the Act. The City covers an area that, prior to 1989, was administered by eight different territorial local authorities. Each of those authorities administered its own district scheme, prepared under the provisions of the Town and Country Planning Act 1977. This District Plan therefore replaces the following district schemes:

- Dunedin
- Mosgiel
- Silverpeaks
- Green Island
- Waikouaiti
- St Kilda
- Port Chalmers
- Maniototo (part).

Section 75(1) of the Resource Management Act 1991 sets out the matters to be included within the District Plan:

(1)	A district plan must state -		
	(a)	the significant resource management issues of the district; and	
	<i>(b)</i>	the objectives sought to be achieved by the plan; and	
	(<i>c</i>)	the policies for those issues and objectives, and an explanation of the policies; and	
	(<i>d</i>)	the methods (including rules if any) to implement the policies; and	

(<i>e</i>)	the principal reasons for adopting the objectives, policies, and methods of implementation set out in the plan; and
(f)	the information to be included with an application for a resource consent; and
<i>(g)</i>	the environmental results anticipated from the implementation of these policies and methods; and
<i>(h)</i>	the processes to be used to deal with issues that cross territorial boundaries; and
<i>(i)</i>	the procedures used to monitor the efficiency and effectiveness of the policies, rules, or other methods contained in the plan; and
(j)	any other information for the purpose of the territorial authority's functions, powers, and duties under this Act.

1.2 How to use this Plan

It is anticipated that most users of this District Plan will be seeking to determine what can be undertaken on a particular site. The following guide is provided to assist in this.

To give certainty to the users of this Plan, activities have been grouped generally in each section according to their known effects on the environment. The emphasis within this District Plan is on the effects of activities. Activities that have similar effects are dealt with together, and identified using generic terms rather than listing in detail all of the possible activities that could fit within that category. The Definitions Section (3) of the Plan will assist in determining activity categories.

Many activities are permitted with or without conditions, while some activities, because the effects on the environment cannot be accurately predicted in advance, will need to be examined by Council on a case by case basis. Sometimes the discretion of Council to examine the effects of activities is limited to only one or two matters. In processing resource consents for non-complying or discretionary (unrestricted) activities, the users of the Plan will be guided by the objectives and policies. Where a resource consent is required the Information Requirements Section (2) of the Plan should be referred to.

(i) In the first instance users should refer to the District Plan Maps. These will show the zoning of the land and any special provisions that apply to the property. The zoning of the property will be either Rural, Rural Residential, Residential, Central Activity, Local Activity, Large Scale Retail, Industrial, Special Development, Port or Campus.

By referring to the rules in the relevant zone section, the user will identify those activities or classes of activities which are permitted, controlled, discretionary, non-complying or prohibited. The definitions contained in the District Plan will clarify activities and classes of activities.

Regard should also be had to the following special provisions (as identified on the planning maps):

- (a) If the property is within an urban landscape conservation area or a heritage or townscape precinct, or includes an identified building or heritage site, then the manner in which activities are carried out is subject to the specific provisions in the Townscape Section (13). Details of heritage buildings or sites are included in Schedule 25.1.
- (b) Whether there is a Registered Archaeological Site on the property. These archaeological sites are listed in Schedule 25.2.
- (c) If the property is shown as being within a landscape area, then the provisions of the Landscape Section (14) will apply.
- (d) If the property has significant trees the provisions of the Trees Section (15) will apply. Details of significant trees can be found in Schedule 25.3.
- (e) If the property is shown as being within, or includes, an area of significant conservation value, then the provisions of the Indigenous Vegetation and Fauna Section (16) will apply. Details of Areas of Significant Conservation Value are included in Schedule 25.4.
- (f) If a designation applies, then the consent of the designating authority may be needed for any change to activities on the site. Details of designations are included in Schedule 25.5.

In some instances the provisions of the above sections will refer readers to other parts of the District Plan.

- (ii) Where the activity proposed involves one of the following, then the relevant general provisions of Part E of the District Plan must be considered:
 - (a) Activities in areas where natural hazards occur and the use, storage or disposal of hazardous substances Hazards and Hazardous Substances Section (17).
 - (b) Subdivision of land Subdivision Activity Section (18).
 - (c) The erection or painting of signs Signs Section (19).
 - (d) Traffic effects Transportation Section (20).
 - (e) Use of water, disposal of wastes, generation of noise, glare and other environmental effects which could go beyond the site Environmental Issues Section (21).
 - (f) The construction and operation of utilities Utilities Section (22).

It should also be noted that:

- the provisions of the Sustainability (4) and Manawhenua (5) Sections of the District Plan apply across all other sections and these provisions should therefore be considered prior to carrying out activities
- the provisions of regional plans prepared by the Otago Regional Council may also apply to the carrying out of many activities, and reference should therefore be made to those documents prior to carrying out activities.

1.3 Statutory Framework

The Resource Management Act 1991 identifies principles to be adopted in achieving its purpose by all persons exercising its management functions and powers. (The framework within which this District Plan was prepared, and which is described below, pre-dated amendments made by the Resource Management Amendment Act 2003.)

1.3.1 Part II

Section 5(2) of the Act reads:

(2)	and p enable	s Act, "sustainable management" means managing the use, development, rotection of natural and physical resources in a way, or at a rate, which es people and communities to provide for their social, economic, and al well being and for their health and safety while -
	(a)	Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
	<i>(b)</i>	Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
	(<i>c</i>)	Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

In Part 1.6.7 of this Introduction the natural and physical resources of importance to the City have been identified. The Act requires the sustainable management of these resources and requires local communities to identify the bests means of achieving sustainable management. This must be within the context of the expected outcome, that the health and safety, and the social, economic and cultural wellbeing of the community is to be sustained.

In achieving the purpose of the Act and its principles in relation to managing the use, development and protection of natural and physical resources in terms of section 6, the Council must:

... recognise and provide for the following matters of national importance:

- (a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
- (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- (d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- (e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

In terms of section 7 of the Act:

have	particular regard to -
(<i>a</i>)	Kaitiakitanga:
(<i>aa</i>)	The ethic of stewardship:
(b)	The efficient use and development of natural and physical resources:
(<i>c</i>)	The maintenance and enhancement of amenity values:
(<i>d</i>)	Intrinsic values of ecosystems:
(e)	Recognition and protection of the heritage values of sites, buildings, places, or areas:
(f)	Maintenance and enhancement of the quality of the environment:
(g)	Any finite characteristics of natural and physical resources:
(<i>h</i>)	The protection of the habitat of trout and salmon.

In terms of section 8 of the Act:

...take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The matters identified in sections 6(e), 7(a) and 8 of the Act are given effect to in the Manawhenua Section (5) of this District Plan.

Part II of the Second Schedule to the Act is important because it lists the matters related to districts that may be provided for in the District Plan:

1.	Any matter relating to the management of the use, development, or protection of land and any associated natural and physical resources for which the territorial authority has responsibility under this Act, including the control of -		
	(a)	Any actual or potential effects of any use of land described in section	
		9(4)(a) to (e), including -	
		(<i>i</i>) For the purpose of the avoidance or mitigation of natural hazards; and	
		(ii) For the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:	
	<i>(b)</i>	Any subdivision of land described in section 11 and Part X of this Act:	
	(<i>c</i>)	Any emission of noise from land and structures in the district, and the mitigation of the effects of noise:	
	(<i>d</i>)	Any actual or potential effects of activities in relation to the surface of water in rivers and lakes.	

- 2. Any matter relating to the management of any actual or potential effects of any use, development, or protection described in clause 1 of this Part, including on -
 - (a) The community or any group within the community (including minorities, children, and disabled people):
 - (b) Other natural and physical resources:
 - (c) Natural, physical, or cultural heritage sites and values, including landscape, land forms, historic places, and waahi tapu.
- 3. The circumstances when a financial contribution of money or land may be imposed, the manner in which the level of the contribution that may be imposed will be determined, and the general purposes for which the contribution may be used.
- 5. Having regard to section 229 -
 - (a) Where any allotment of less than 4 hectares is created when land is subdivided, the locations or circumstances in which the requirement under section 230 to set aside a 20 metre reserve should-
 - (i) Apply; or
 - *(ii)* Be waived; or
 - (iii) Be varied by increasing or reducing the width of the reserve; or
 - *(iv) Be replaced by a requirement to create, under section 232, an esplanade strip of a specified width;*
 - (b) Where any allotment of 4 hectares or more is created when land is subdivided, the locations or circumstances in which an esplanade reserve or esplanade strip is required to be set aside or created and the width of the reserve or strip:
 - (c) The locations or circumstances where an access strip would be appropriate:
 - (d) The locations or circumstances in which an esplanade reserve required under section 345 of the Local Government Act 1974 when a road is stopped should -
 - (i) Be waived; or
 - (*ii*) Be varied by increasing or reducing the width of the reserve; or
 - *(iii)* Be replaced by a requirement to create, under section 232, an esplanade strip of a specified width
 - (e) The locations where, or the circumstances in which, the vesting of ownership of land in the coastal marine area or the bed or a lake or river under section 237A would be appropriate.
- 6. The scale, sequence, timing, and relative priority of public works, goods, and services, including public utility networks and any provision for land used or to be used for a public work for which the territorial authority has financial responsibility.

1.3.2 Functions of Territorial Local Authorities

Section 31 of the Act specifies the functions of territorial local authorities such as the Dunedin City Council. These functions include:

(a)	The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the
	district:
(b)	The control of any actual or potential effects of the use, development, or protection of land, including for the purpose of the avoidance or mitigation of natural hazards and the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
(<i>c</i>)	The control of subdivision of land:
(d)	The control of the emission of noise and the mitigation of the effects of noise:
(e)	The control of any actual or potential effects of activities in relation to the surface of water in rivers and lakes

1.3.3 Relationship to other Plans and Documents

This District Plan has been prepared having regard to other documents prepared under the Resource Management Act 1991 and other enactments.

Section 75(2) of the Act requires that:

A distr	A district plan must not -				
(a)	Be inconsistent with any national policy statement or New Zealand coastal policy				
	statement; or				
(b)	Be inconsistent with any water conservation order; or				
(<i>c</i>)	Be inconsistent with –				
	(i) The regional policy statement; or				
	(ii)	Any regional plan			

In preparing this District Plan, and in considering submissions to the provisions of the proposed District Plan, the Council had regard to the following policy documents for the purpose of eliminating any inconsistencies as required by section 75(2) of the Act:

- the New Zealand Coastal Policy Statement
- the Regional Policy Statement for Otago
- the Proposed Regional Plan: Coast
- the Regional Plan: Waste

- the Proposed Regional Plan Change No 1: Air Discharges
- the Proposed Regional Plan: Water
- the Proposed Regional Plan: Air.

Section 74(2) of the Act requires the Council in preparing this District Plan to:

(a) $Any -$		
	<i>(i)</i>	Proposed regional policy statement; or
	(ii)	Proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under Part IV; and
(b)	Any -	
	<i>(i)</i>	Management plans and strategies prepared under other Acts; and
	(<i>ii</i>)	Relevant planning document recognised by an iwi authority affected by the district plan; and
	(iia)	Relevant entry in the Historic Places Register; and
	(iii)	Regulations relating to the conservation or management of taiapure or fisheries, - to the extent that their content has a bearing on resource management issues of the district; and
(<i>c</i>)		

To the extent that these matters are relevant, the Council has had regard to them. Those management plans and strategies prepared under other Acts to which the Council has referred include:

- the Dunedin City Council's Strategic Plan
- Management Plans under the Reserves Act 1977
- Conservation Management Strategies and Plans
- Fish and Game Management Plans
- Freshwater Fisheries Management Plans under the Conservation Act 1987.

1.3.4 Consideration of Alternatives and Assessment of Benefits and Costs

In preparing this District Plan the Council is required by section 32(1) of the Act to:

(<i>a</i>)	have i	have regard to -		
	<i>(i)</i>	The extent (if any) to which any objective, policy, rule, or other method is necessary in achieving the purpose of this Act; and		
	(ii)	Other means in addition to or in place of such objective, policy, rule, or other method which, under this Act or any other enactment, may be used in achieving the purpose of this Act, including the provision of information, services, or incentives, and the levying of charges (including rates); and		
	(iii)	The reasons for and against adopting the proposed objective, policy, rule, or other method and the principal alternative means available, or of taking no action where this Act does not require otherwise;		

As required by section 32(4) of the Act, the Council has prepared a record of action taken and the documentation prepared in the discharge of the duties imposed by section 32. This record is held at the offices of the Dunedin City Council.

1.3.5 Existing Use Rights

Section 10 of the Act provides that:

Certa	in existing uses in relation to land protected –
(1)	Land may be used in a manner that contravenes a rule in a district plan or proposed district plan if –
	(a) Either -
	The use was lawfully established before the rule became operative or the proposed plan was notified; and
	The effects of the use are the same or similar in character, intensity, and scale to those which existed before the rule became operative or the proposed plan was notified:
	(b) Or -
	The use was lawfully established by way of a designation; and
	The effects of the use are the same or similar in character, intensity, and scale to those which existed before the designation was removed.
(2)	Subject to sections 357 and 358, this section does not apply when a use of land that contravenes a rule in a district plan or a proposed district plan has been discontinued for a continuos period of more than 12 months after the rule in the plan became operative or the proposed plan was notified unless -
	An application has been made to the territorial authority within 2 years of the activity first being discontinued; and

The territorial authority has granted an extension upon being satisfied that -The effect of the extension will not be contrary to the objectives and policies of the district plan; and

The applicant has obtained approval from every person who may be adversely affected by the granting of the extension, unless in the authority's opinion it is unreasonable in all the circumstances to require the obtaining of every such approval.

(3) This section does not apply if reconstruction or alteration of, or extension to, any building to which this section applies increases the degree to which the building fails to comply with any rule in a district plan or proposed district plan.

1.4 Review and Changes

The provisions of the Act require that this District Plan be reviewed no later than ten years after it is operative.

The Council may, if it considers it appropriate, carry out a full review of the document before the ten years expires, or introduce changes relating to parts of the Plan, for example schedules for trees. The circumstances under which the Council will review or change the District Plan are as follows:

- (i) Where substantial changes are made to resource management legislation.
- (ii) Where monitoring of the environment identifies new issues which need to be considered within the District Plan.
- (iii) Where monitoring of the environment indicates that there has been a change in environmental circumstances which requires a modified approach in the District Plan.
- (iv) Where monitoring indicates that the objectives of the District Plan are not being achieved, and that either alternative action is required to achieve them, or different objectives are needed.
- (v) Where national policy statements, regional policy statements or regional plans are prepared or reviewed.
- (vi) Where the Otago Regional Council delegates functions to the Council, requiring additional matters to be included into the District Plan.
- (vii) Where upon receiving a request for a plan change the Council decides that it should prepare that change.

Any person may initiate a private plan change. The information to be supplied in seeking such action is set out in the Information Requirements Section (2) of the District Plan.

1.5 Contents of the District Plan

1.5.1 Format of the District Plan

(i) This District Plan is contained within two volumes. Volume One is divided into six sections as follows:

Part A - Introduction and Interpretation

1. Introduction

The Introduction provides the basis for the matters contained within the remainder of the District Plan. The description of the planning area (the City) and the statutory framework within which the District Plan operates sets the background for the content and form of the more formal parts of the District Plan.

2. Information Requirements

Under the Act a number of different procedures may be used to obtain consents from the Council. These include:

- Resource Consents (including Land Use Consents and Subdivision Consents)
- Notices of Requirement
- Plan Changes
- Certificates of Compliance.

As a guide to those persons using these procedures, this section of the District Plan identifies particular information that is to be provided by applicants. Within the relevant sections of the District Plan, additional, specific information is identified.

3. **Definitions**

This section explains words and terms that may not be familiar to users. It sets out a clear explanation of those words and terms in order that all users of the document have a common interpretation of them, and to avoid debate and uncertainty.

Part B - Significant Matters

Part B contains those matters of a general nature that are applicable to all of the City, rather than to particular identified areas. The sections within this part are as follows:

4. Sustainability

The use and development of Dunedin's natural and physical resources in a sustainable manner is the main objective of this Plan. The Sustainability Section sets the framework for all the other sections of the Plan. The objectives and policies of the Sustainability Section must be taken into account in every resource consent application where Council has not restricted its discretion. The Sustainability Section deals with the unique character of Dunedin, its natural and physical resources (including its infrastructure), and how the people of Dunedin can provide for their wellbeing while managing any actual or potential adverse effects on the environment.

5. Manawhenua

The customary authority (manawhenua) which the Kai Tahu and their ancestors have had over the Otago Region for many centuries is acknowledged. Traditional Maori culture and values are closely linked to the environment and it is of concern to the manawhenua that these values may not always be recognised in decision-making under the Act.

In terms of managing the use, development and protection of natural and physical resources in the City, the purpose of the Manawhenua Section of the Plan is to:

- (a) Recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.
- (b) Have particular regard to their kaitiakitanga.
- (c) Take into account the principles of the Treaty of Waitangi.

[Note: Subdivision, land use activities and development can impact on manawhenua values. These impacts may occur in any part of the City. Consequently it is important that the Manawhenua Section is referred to in conjunction with provisions contained in other sections of this District Plan.]

Part C - Zone Provisions

All areas of the City are zoned. Within each zone, activities are managed on the basis of the effects of those activities. The zone provisions must be referred to in conjunction with any other relevant sections of this District Plan.

6. **Rural**

The rural area of the City is large and diverse, containing approximately 95% of the City's area. A range of primary activities is carried out in the rural areas of the City, including farming, horticulture and forestry. Recreation, mining and tourism activities also take place within the rural areas. This area also contains large areas of native bush, high country tussock and wetlands that are important for their ecological values. This part of the District Plan seeks to manage the use, development and protection of rural areas and the adverse effects of activities that take place within the Rural Zone.

The Council is required to control any actual or potential effects of activities in relation to the surface of water in rivers and lakes and achieves this by having regard to those effects in a specific way in the Rural Zone where most proposed activities on the surface of water will be located, and more generally in the Sustainability Section of the Plan. The zoning of the surface of water is that of the adjoining land.

A significant number of people wish to live in rural areas to enjoy the rural lifestyle and amenity, while at the same time living in close proximity to the city. The Plan recognises this desire to adopt a rural lifestyle and provides for this activity through the Rural Residential Zone.

7. **Rural Residential** [This section was incorporated in Section 6 by Variation 9A.]

8. **Residential**

Residential areas are primarily places in which people live, and they may be grouped into suburbs, communities, towns or settlements. Within different areas there are different characteristics and values in terms of the size of sections, building types and sizes, and building density. This range means that different approaches are required in different areas. As a result the City contains six different Residential Zones. Within each of these zones the particular values of the locality are to be protected.

9. Activity Zones

From the time that Dunedin was first settled, the main streets of Princes Street and George Street have been the focus of social and economic activity within the City and the region. The role of this Inner City Area, consisting of the Central Activity Zone and the Large Scale Retail Zone (previously referred to as the Central Business District), has been dominant, not only in terms of economic activities, such as retailing, but also for other business activities, recreation, social and cultural activities. That role has been supported by Local Activity Zones within the suburbs, and in the townships and outlying settlements. The large sites required and high traffic volumes generated by Large Scale Retail activities are also provided for.

10. Industry

This District Plan zones areas for industrial purposes. This has been done in order to avoid, remedy or mitigate the adverse effects of such activities and provide for the sustainable management of the physical resources of those areas.

11. **Ports**

The major ports of the City are located at Port Chalmers and in the upper harbour at Dunedin. Port Chalmers is the region's container port, the main port for the import and export of general cargo, the export of logs and the base for a local fishing fleet. Dunedin provides facilities and processing for fishing vessels and is developing as a specialist facility for imported oil products and export products such as fruit. Given that the ports are of such importance to the region and the City, and that they give rise to particular resource management issues that are different from the issues relating to other activities and other areas in the City, ports are dealt with as a separate section in the District Plan. At Port Chalmers the proximity of residential areas to the operational port facilities necessitates consideration of means to avoid, remedy or mitigate the adverse effects of port activities, particularly noise and glare. The Council will use a combination of methods including and beyond the formal resource management processes to address these issues.

12. Campus

The Campus comprises the physical resources of three separate tertiary institutions, namely the University of Otago, the Otago Polytechnic, and the Dunedin College of Education. These three institutions have a combined roll of approximately 20,000 students, 75% of whom normally reside outside of the City. Over 2,500 staff are

employed at these institutions. The Campus includes the buildings used for education purposes and the associated residential areas. Given the importance of the Campus to the City, it is managed as a separate entity in order to recognise the special character of the area, and to protect its role as an area of education and student housing.

Part D - Special Provisions

The City contains areas of special amenity arising from:

- townscape values
- landscape values
- presence of significant trees
- areas of significant conservation value (being areas of significant indigenous vegetation and significant habitats of indigenous fauna).

These areas are shown on the District Plan Maps as an overlay with provisions applying in addition to those of the relevant zones. This District Plan seeks to protect and enhance those amenity values. The specific sections are as follows:

13. Townscape

Townscape is concerned with the quality of the urban environment. For the purpose of the District Plan, 'townscape' is regarded as being more than just the built environment and includes the aesthetic, cultural, natural, scientific, historical and architectural elements of the environment. The townscape of Dunedin is a product of its setting, history and growth. Though Dunedin has grown in size over the years, its appearance is still strongly that of a Victorian and Edwardian City. The townscape of Dunedin contributes significantly to the character of the City and is a major attraction for tourists. As a result, it is intended that this heritage be protected, and this will involve the retention of a number of buildings identified as being significant, as well as consideration of the design and appearance of new buildings within precincts identified for their heritage and townscape values. The landscapes which provide open space associated with urban areas and create a landscape setting with a predominantly 'natural' character are identified and provided for as Urban Landscape Conservation Areas. The retention of trees and the promotion of a safe environment are all considered to be matters contributing to the quality of the urban environment and the townscape of the City.

14. Landscape

Within the City's rural areas there is a diversity of landscapes, some of which are of outstanding quality. The aesthetic coherence and scenic values of landscapes contribute significantly to the environmental amenity of the City, and for that reason it is considered important to protect those values and seek their enhancement.

15. **Trees**

Trees contribute significantly to the character and amenity of the City, individually as specimens, in groups and as areas of bush. Trees are of particular importance within urban areas where they are the largest, most significant natural elements in the landscape. Trees also provide habitat for birds and other wildlife and provide shelter. Some trees have botanical, historical or cultural significance. In some areas trees are important for protecting soil or slope stability. Trees, together with other plantings, can remedy or mitigate adverse visual impacts of development, screening undesirable views. This District Plan seeks to protect significant trees, promote the retention of trees and encourage further plantings of trees appropriate to their location, particularly within urban areas.

16. Indigenous Vegetation and Fauna

The Act requires that the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna be recognised and provided for within this District Plan. The City covers a large geographic area, stretching from the east coast of the South Island inland to block-faulted mountains. The types of significant indigenous vegetation and habitats therefore cover a broad range from, for example yellow-eyed penguin breeding sites on the Otago Peninsula to tussock grasslands on the Rock and Pillar Range. The extent of the areas of indigenous vegetation and habitats of indigenous fauna in general have been incrementally depleted over time as a result of land use practices. The City is promoted as a place with high wildlife values, and as a consequence the Council seeks to protect significant areas from inappropriate use and development and to encourage retention of remaining indigenous vegetation and habitats of indigenous fauna.

Part E - General Provisions

The provisions in Part E of the District Plan apply to all of the City. The provisions within this part will apply where particular activities are either proposed or undertaken. The general provisions should be referred to in conjunction with other relevant sections of this District Plan.

17. Hazards and Hazardous Substances

The City is subject to a wide range of potential natural hazards. They need to be recognised and taken into account in providing for the use, development and protection of land and associated natural and physical resources.

The Council also has a role to ensure that the effects of the storage, use, disposal and transport of hazardous substances are avoided, remedied or mitigated.

18. Subdivision Activity

Subdivision means more than delineating areas of land by way of lines on plans. Such delineation is inevitably linked to the coordination and preparation of resources to provide for the establishment of land use activities. In assessing proposals to subdivide, it is necessary to consider amongst other matters, the provision of services and access, and areas of land for reserves.

19. Signs

Signs are a common occurrence in urban and rural areas. They range from information guides, such as road signs, to advertising signs. It is necessary to manage the adverse effects resulting from signs. Attachment 1 contains the Transit New Zealand Bylaw which controls unofficial signs on State Highways.

20. **Transportation**

The transportation network provides for the movement of people and goods, and is essential to the functioning of society. The establishment and use of the transportation network can generate both positive and negative environmental effects. The management of these effects must be comprehensively integrated with the management of the effects of the use, development and protection of other resources in the City.

Transportation via air, road, sea and rail connects the City with other centres and countries. Within the City the issues surrounding roading and pedestrian mobility are the most significant, in particular their safety, efficiency and effectiveness. The Transportation Section of the Plan focuses primarily on roading issues.

21. Environmental Issues

The health and wellbeing of the inhabitants of the City are important components of sustainable management. Effects such as noise and glare can adversely affect people and must be managed.

22. Utilities

Utilities encompass the infrastructural systems necessary for the efficient functioning of developed areas, including the supply of electricity, water, sewerage and drainage, the distribution of natural gas, telecommunications and navigational aids. Utilities are important physical resources which assist people to provide for their wellbeing, health and safety. The establishment, operation, maintenance and upgrading of utilities are subject to rules in order to manage any adverse effects that may arise.

Part F - Monitoring and Cross-Boundary Issues

The provisions in Part F of the District Plan contain matters that apply universally throughout the Plan.

23. Monitoring

The Act requires the Council to undertake monitoring of the state of the environment to the extent that is appropriate to enable it to effectively carry out its functions. State of the environment monitoring helps facilitate better understanding of the relationship between land uses and their effects on the environment as well as the identification of resource management issues that require attention. The Council is also required to monitor the provisions of this District Plan in order to assess its effectiveness and efficiency. The Monitoring Section of the District Plan considers these matters within a coordinated framework. Appendix 23A identifies the matters which are to be the subject of monitoring, and the form that the monitoring will take.

24. Cross-Boundary Issues

The Act requires the District Plan to state the processes used to deal with issues which cross territorial boundaries. These boundaries include the coastal boundary. Cooperation and consultation with other local authorities is required to ensure that the approach adopted is both efficient and effective.

Other Matters

Coastal Environment

The coastal environment of Dunedin City is highly diverse in terms of form and features spanning the high sea cliffs of the Otago Peninsula to the tidal estuaries of the Kaikorai Stream and the Waikouaiti River. The Act contains a number of provisions which seek to achieve sustainable management of the coastal environment. Because the coastal environment comprises resources of both the coastal marine area and the land, it is incumbent upon the Council to include provisions in the District Plan which also seek to achieve this objective.

The District Plan does not contain a separate coastal section. Rather, appropriate provisions have been included in other relevant sections of the District Plan in order to avoid unnecessary complexity. The following sections of the District Plan contain provisions of particular relevance to specific resource management issues pertaining to Dunedin City's coastal environment:

- Sustainability
- Manawhenua
- Landscape
- Indigenous Vegetation and Fauna
- Rural
- Subdivision
- Hazards and Hazardous Substances
- Ports
- Environmental Issues.

In addition, because the coastal environment comprises both land and coastal marine area resources and therefore requires the joint management attention of the Council, the Otago Regional Council and the Minister of Conservation, the provisions of the Cross-Boundary Issues Section of the District Plan are also of considerable importance in terms of achieving sustainable management of the coastal environment.

Persons considering activities relating to the coastal environment of Dunedin City should have regard to the provisions of each of the above sections of the District Plan.

(ii) Volume Two of the District Plan includes the Schedules and the District Plan Maps.

25. Schedules

Sites, areas and other features listed in schedules are also identified on the District Plan Maps.

- Schedule 25.1 Lists the Townscape and Heritage Buildings and Structures in the City.
- Schedule 25.2 Lists the Registered Archaeological Sites in the City.
- Schedule 25.3 Lists the Significant Trees in the City.
- Schedule 25.4 Lists Areas of Significant Conservation Value in the City.
- Schedule 25.5 Lists the Designations in the City.

26. **District Plan Maps**

The District Plan includes a series of planning maps covering the City. The main District Plan Maps show:

- (a) The location of zone boundaries. All zone boundaries adjoining a legal road, railway or other positional feature, for example a fence or a stream, are deemed to follow the centre line of any such feature, except where the feature adjoins the coast where the boundary shall be the mark of the mean high water springs.
- (b) Specific provisions within the District Plan relating to:
 - Townscape
 - Landscape
 - Trees
 - Areas of Significant Conservation Value
 - Archaeological Sites.
- (c) Any designations which apply to sites.
- (d) Other maps, including:
 - Identified Pedestrian Frontages and Central Parking Area
 - Noise Areas
 - Dunedin Airport Approach Path and Land Use Controls
 - Dunedin Airport Noise Boundaries
 - Road Hierarchy
 - High Class Soils
 - Landscape Management Areas.

1.5.2 Content of District Plan Sections

The content of each of the sections of this District Plan follows the requirements of the Act.

This District Plan identifies the significant resource management issues, and the objectives, policies and methods that derive from them. Within this District Plan these terms are used in the following way:

- (i) An **issue** is a statement which identifies either:
 - (a) a matter of resource management significance to the City which requires recognition; or
 - (b) a matter of concern which requires attention or resolution.

Issues therefore can be either positive or negative statements.

- (ii) An **objective** is a statement identifying an end position the Council seeks to achieve.
- (iii) A **policy** is a statement outlining the Council's position in relation to a matter. It can take one of two forms:
 - (a) a policy of principle identifying matters that the Council will seek to achieve in the administration of the District Plan.
 - (b) a policy of process specifying actions that will be taken by the Council.
- (iv) A method is a specific means of action that can be taken to achieve the objectives and policies of the District Plan. Within the District Plan several methods have been adopted. These methods are set out in part 1.5.3 of this Introduction.

Each section of the District Plan contains:

- (a) An introduction which backgrounds the matters covered in that section.
- (b) The significant resource management issues.
- (c) The objectives that arise from the issues which the Council seeks to achieve.
- (d) The policies which the Council has adopted to achieve the stated objectives.
- (e) The methods that the Council will use to implement the objectives and policies.
- (f) Rules, where these are used as a method in that section.
- (g) Assessment matters to be considered when resource consent is required.
- (h) The anticipated environmental results which are expected as outcomes from implementing the objectives, policies and methods.

Within each section there is cross-referencing which shows the flow from each issue to the relevant objectives, policies and methods. Cross-referencing is also included indicating other relevant sections that should be referred to in the District Plan, however other provisions of the Plan not indicated by cross-references may be relevant.

Within this District Plan provision is made for different types of activities. These are Permitted Activities, Controlled Activities, Discretionary Activities (Restricted), Discretionary Activities (Unrestricted), Non-Complying Activities and Prohibited Activities.

Where a resource consent is required, regard should be had to the Information Requirements Section (2) of this District Plan.

1.5.3 Methods of Implementation

This District Plan incorporates a number of different methods of achieving the objectives and implementing the policies across the Plan. As well as those methods contained in each section which are specific to that section, the methods in the Plan generally include but are not limited to:

1. Zoning

Zoning identifies the areas within which particular types of activities are provided for, having regard to their environmental effects. The grouping of activities in this way is considered appropriate to provide areas for development, and to avoid, remedy or mitigate adverse effects of those activities.

2. **Rules**

Under the Act, rules have the status of statutory regulations. They can:

- (a) Identify the status of an activity as being permitted, controlled, discretionary, noncomplying or prohibited.
- (b) Manage the effects of activities by setting performance standards in relation to the manner in which those activities are undertaken.
- (c) Specify conditions which are to be satisfied.
- (d) Require certain statutory procedures to be followed, for example resource consents, or specified information to be supplied to the Council.

3. **Designations**

Designations for public works and utilities can be sought by the Crown, territorial local authorities and approved network utility operators. Designations are shown on the maps in the District Plan. They limit the use of the land, overriding the zoning provisions of the District Plan and any resource consent, in favour of the designated purpose. The Information Requirements Section (2) of this District Plan specifies the information that shall be included in designation requirements submitted to the Council.

4. Maps

The District Plan Maps show the location of zone boundaries, specific provisions such as Townscape and Heritage Precinct boundaries, the location of designations, archaeological sites, significant trees and other relevant issues. The maps provide clarity and enable ease of use when using the provisions of the District Plan.

5. Schedules

The sites, areas and other features shown on schedules are subject to objectives, policies and rules in the District Plan. The schedules provide fuller details on these sites, such as legal descriptions.

6. Guidelines

Guidelines prepared by the Council or other organisations set out the manner in which activities can be undertaken, and buildings designed and used, in order to avoid, remedy or mitigate adverse effects of activities on the environment.

7. Management Plans

Management plans set out the manner in which activities are undertaken or areas are used. Management plans include those prepared under other legislation, for example the Reserves Act 1977. Under the provisions of this District Plan, compliance with management plans may be imposed as a condition of a resource consent. These might include site or noise management plans. Alternatively, these management plans may be informal documents or accords in which resource users agree to set out the manner in which particular activities will be carried out, or how the adverse effects of activities will be managed.

8. Accords and Protocols

Accords are formal agreements with resource users on the manner in which activities are undertaken. These can include codes of practice. Protocols are used to formalise procedures under the Act which involve more than one statutory authority, for example between the Dunedin City Council and the Otago Regional Council on the processing of joint applications.

9. **Bylaws**

Under the Local Government Act 1974, the Council may use bylaws to achieve some resource management outcomes. For example, bylaws can be used to exclude certain types of traffic from particular routes.

10. Economic Instruments and Incentives

Economic instruments include rates relief and other financial initiatives such as awards, incentives, competitions and financial assistance. Financial contributions and development levies are addressed through the Policy on Development Contributions of the Long Term Council Community Plan prepared under the Local Government Act 2002. [Amended by Consent Order, 8 September 2003]

11. Information, Education and Public Awareness

Information held by the Council can be made available to the public, developers, resource users and other groups. Such information can relate to opportunities for the use, development and protection of natural and physical resources, the effects of activities on the environment, changes in legislation, and taking action under the Act.

12. Advice

In some circumstances it may be appropriate for the Council to provide advice in respect of best practice or the most efficient manner in which to achieve the sustainable management of the District's natural and physical resources. Providing advice is one way the Council can achieve this in a non-regulatory manner.

13. Consultation

Consultation is a two-way process which involves providing people, groups or bodies with information, giving them an opportunity to assess that information, and objectively considering any comments or views that they may have. Consultation is required with statutory bodies, affected persons and iwi as part of the formal processes under the Act.

14. Liaison

Discussions between statutory bodies, and with resource users and other groups, can provide information on action being taken and processes adopted which will assist in decision-making.

15. **Promotion**

There will be occasions when the Council seeks to promote particular approaches to issues, or alternative actions, in order to achieve a particular outcome. This could include promoting the use of rail to transport bulk cargoes that would otherwise be transported by road. Where promotion is used, the Council cannot require particular actions to be undertaken, as the final decision must be made by the individual, business or body involved. In some instances the Council may offer incentives in order to encourage particular actions to be taken.

16. Advocacy

In some instances the Council will wish to pursue a course of action vigorously in order to achieve a particular outcome. Advocacy includes persuasion of the government, or any other organisation or individual to undertake particular actions.

17. Investigations

Investigations will be required in some instances to provide background data on the state of the environment and an assessment of the effects of activities. Studies can also assess the significance of particular resource management issues and identify options that may be available to respond to those issues.

18. Monitoring

Monitoring is the formal studying over time of:

- (a) The environment of the City, in order to assess trends on the state of the environment and to determine the cumulative effects of activities that are undertaken.
- (b) The effects of activities authorised by way of resource consents, and any conditions imposed on those consents.
- (c) The effects of the provisions of this Plan, to enable assessment of their effectiveness and the degree to which the Council has given effect to the matters set out in the District Plan.

Monitoring can be undertaken by the Council, resource consent holders and other bodies and organisations.

19. Works Programmes

Works programmes can be carried out by the Council:

- (a) To enhance an area.
- (b) As an incentive for redevelopment.
- (c) To create an asset of public value.
- (d) To assist persons to achieve the objectives of the District Plan.

20. Road Hierarchy

The demands on the transportation network require management to ensure that this resource is used and maintained efficiently. For this reason, a road hierarchy will ensure that high traffic volumes and heavy vehicles are encouraged to use the appropriate routes.

21. Acquisition of Land

The circumstances in which it may be necessary or equitable to acquire land include the following:

- (a) Where the total protection of the values of a building or site is sought.
- (b) Where a site is required for a public work.
- (c) Where the activities undertaken on the land have a significant public benefit or involve the spending of public monies to undertake works on the site.

22. Enforcement Proceedings

Where activities are undertaken in a manner that does not conform with the provisions of the District Plan, with conditions on resource consents, or in a manner that creates a nuisance, it may be necessary to use the formal abatement and enforcement procedures of the Act.

23. **Transfers of Power**

Section 33 of the Act provides for the transfer of powers or delegations to other statutory agencies. This includes the transfer of powers from the Otago Regional Council to the Dunedin City Council, or from the Dunedin City Council to other bodies.

24. Structure Plans [Inserted by C17/2008, 12/02/08]

Structure Plans as Plan provisions prepared by the Council or individuals provide a framework to guide the development or redevelopment of a particular area by defining the future development and land use patterns, areas of open space, the layout and nature of infrastructure (including transportation networks), and other key features for managing the effects of development.

25. **Design Codes** [Inserted Plan Change 7, 29/05/2012]

Design codes seek to identify predominant physical patterns and significant features of an area, including heritage values, and encourage ways in which new development can enhance those patterns and features to contribute positively to the character of the area. The design code seeks to encourage high quality buildings, places and spaces. The design code will be used to assess development to achieve good design outcomes.

1.6 Description of Dunedin

This District Plan is for the benefit of the City and the people that reside in it. The following description describes the diversity of the City, the landforms, the flora and fauna that inhabit it, its climate, the activities that take place within it, and the people who reside here.

1.6.1 Geography

The City has an area of 3,340 km² and has the largest area of any city in New Zealand. It extends from north of Waikouaiti to the Taieri River in the south. A great diversity of landforms is represented in the City. Intricately detailed coastal lands comprising hills, downlands and small coastal flats run northward from metropolitan Dunedin. These are backed by high hills and broken terrain, which give way in turn to much simpler and more dramatic block and valley landforms further inland.

- Flat lands are rather limited in extent and are confined mainly to the river flats of the Taieri, Waitati and Waikouaiti Rivers.
- A strip of rolling and hilly land runs the full length of the coast and for a short distance inland.
- Inland from the coastal hills and the Taieri Plain, is a wider belt of hilly upland country moderately to strongly dissected by stream valleys. These hills range up to 750 m high.
- The greater part of the western half of the City comprises the flattish and rolling uplands of the East Otago Plateau which grade gently down to the Strath Taieri Plain and Middlemarch from an altitude of about 500 m.
- In the northwest are the areas of steeper rolling and hilly uplands on the hill ridges to the east of the Strath Taieri basin.
- The low mountain ranges of the Lammerlaw, Lammermoor and Rock and Pillar bound the City in the west. These rise to 1450 m at the highest point.

1.6.2 Geology

The City's main geological landforms include the coastal range, Taieri Plain, Barewood Plateau, Strath Taieri Plain and the Rock and Pillar Range. Laminated schist underlies much of the area and has been exposed by earlier uplifting, faulting, and erosion. During the Cretaceous period, quartz gravels and coal forming peats accumulated, these being submerged subsequently when regional warping resulted in the advance of the sea onto the land from the east and north-east. The principal marine formations are Abbotsford mudstone, Burnside marl, Caversham sandstone, and Goodwood limestone. The basaltic volcanic activities of some 10 to 15 million years ago resulted in the present coastal range landforms. Subsequent erosion during alternate climate changes produced the present day topography.

Various parts of the City are prone to instability because of the geological structure of the area. The City and environments have been influenced by many factors over time including the local geology.

The City is underlain to a large extent by sedimentary rocks. Most notable is the Abbotsford Formation which covers a considerable area south of Dunedin, and around the Kilmog area. The composition of this material makes it prone to slumping and sliding, often on very gentle slopes as is evidenced on the

Kilmog section of State Highway 1, and the area affected by the Abbotsford slip in 1979. Sandstones such as the Caversham sandstone have formed rugged cliffs at St Clair, Concord, Puketeraki, Karitane and Cornish Head.

The other main rock types are the Dunedin volcanics which include Saddle Hill, Otago Peninsula and Mt Cargill. Volcanic activity which occurred around 13 million years ago created some significant well known landscape features in the City and assisted in the formation of the Otago Harbour.

The City's quarries and mines have sourced their material from a wide range of deposits such as lignite at Green Island, Brighton, Saddle Hill and Fairfield; marl at the Burnside cement works, stone from the Leith Valley for buildings, and breccia at Port Chalmers which was used for construction during the 19th Century.

Faulting has been significant. The Taieri Plains are bounded by faults which are effectively inactive. The Akatore fault which reaches the sea at Taieri Mouth is still active and may be responsible for earthquakes which occur from time to time.

1.6.3 Climate

The rugged and varied topography results in significant climate variation within the City. 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. Apart from the coastal strip, the area is largely water deficient, and this limits land use and makes streams vulnerable to drought and irrigation draw off.

Rainfall figures provide an illustration of the variability within the City. The average annual rainfall exceeds 1400 mm on the coastal hills around Dunedin, but is 600 mm at Karitane and 500 mm in the upland areas of the Strath Taieri. Sunshine hours at Musselburgh are approximately 1700 each year, while at Middlemarch they exceed 2000.

1.6.4 History

Maori have lived in the vicinity of present day Dunedin for many centuries, and some occupation sites date back to approximately 1000 AD. Kai Tahu whanui have manawhenua over Dunedin City, and a comprehensive summary of Maori occupation is contained within the Manawhenua Section (5) of the District Plan.

European settlement began with the establishment of whaling stations from the early 1830s. One of the whalers, John Jones, purchased Matanaka at Cornish Head and established the first farm in Otago. The produce of this farm, together with potatoes and dried fish produced by established Maori, supplied whalers, and for export to Australia. In 1840 Jones sponsored the settlement programme for the first agricultural immigrants who settled on farms within the Karitane and Waikouaiti areas. By the time the

New Zealand Company settlers arrived in Otago Harbour to found the Dunedin settlement in 1848, the land around Waikouaiti was already being farmed successfully, and was able to provide food for the new arrivals.

The original Otago block subdivision involved three classes of section:

- 50 acre rural blocks, covering the area from North Taieri to the Taieri River
- 10 acre suburban sections, including land in the Kaikorai Basin and over to Blackhead
- quarter acre town lots.

The steeper land on Three Mile Hill, Saddle Hill and adjacent to the Taieri Plains was not subdivided.

The area inland from the coastal plains was settled progressively through the issue of Government depasturing licences.

The site of what is now metropolitan Dunedin was chosen by Frederick Tuckett in 1844 on behalf of the New Zealand Company, and surveyed by Charles Kettle in 1846. Kettle also set aside the town belt reserves of approximately 550 acres, which remains today to give Dunedin's urban area much of its special character and beauty. The first settlers arrived in 1848, and growth was greatly enhanced in 1861 by the Otago gold rush. By 1864 Dunedin had a population of 15,760.

Work subsequently proceeded on reclamation of the foreshore, levelling Bell Hill and extending the street systems. Larger number of settlers arrived in Otago than in any other province, leading to extensive development in the 1870s in the urban areas and on the farming estates.

During the 1880s and 1890s a solid industrial base was laid down. Engineering works associated with gold dredging, the railway workshops, the textile industries and refrigerated shipping developments contributed towards establishing a rigid industrial base similar to that in the towns of northern England. From 1875 to 1910 the town of Dunedin saw consolidation of its commercial base but less rapid growth. Construction from the 1870s, based on the wealth accumulated from gold and business activity, also left the City with a legacy of fine architecture, the preservation of which has given the City much of its character today.

The investment of Dunedin money in northern centres, the effect of unforeseen overseas tariffs in traditional markets, competition, the formation of trading blocks such as the EEC, over-supply in world markets of products produced in and exported from Dunedin collectively combined to have a devastating effect on the City's older industries. Over the decades the warmer northern climate, and the development of Auckland as the largest city in New Zealand, attracted further investment and population causing a decline in Dunedin's population and a reduction in its economic growth.

While the heavy industries provided Dunedin with a source of employment and earnings for some time after the gold ran out, their inflexibility and inability to change eventually created a decline in the local economy until different types of industry could establish.

1.6.5 The People

More than 94% of the City's population lives in metropolitan Dunedin and its neighbouring urban areas from Port Chalmers through to Brighton and Mosgiel. The remaining people are dispersed throughout the rural parts of the City, most living in coastal areas.

To the north of metropolitan Dunedin, a string of small settlements dots the coastline. Many of these developed originally as seaside holiday towns for Dunedin people, and retain at least part of that function today. To this original function have been added retirement and commuter functions.

To the south-west of the City, the Taieri Plain supports an evenly spread farming population, served by its main centre, Mosgiel, and several small townships. The remaining inland parts of the City are sparsely settled, with large tracts of the highest country being virtually unpopulated.

Over the past 20 years the City's population has been relatively static as shown on the following table:

Population (Source: Statistics New Zealand)			
Year Total			
1981	114,774		
1986	114,348		
1991	114,504		
1996	118,143		
2001	114,342		

The 2001 population figure has been recognised as an undercount, as changes to Census 2001 meant that many tertiary students were not coded as residing in Dunedin. The Dunedin population at 30 June 2003 is estimated by Statistics New Zealand to be 121,200. Dunedin's population is projected to grow by 4% in the 20 years from 2001 to 2021.

The age group structure of the population is outlined below:

Dunedin Age/Sex Structure 2001 (Source: Statistics New Zealand)				
Age	Male	Female	TOTAL	
<5	3,396	3,084	6,480	
5-14	7,533	6,987	14,520	
15-19	5,253	5,997	11,247	
20-24	5,256	5,880	11,136	
25-34	6,876	7,719	14,592	
35-44	7,974	8,694	16,671	
45-54	7,218	7,470	14,688	
55-64	4,830	4,944	9,777	
65+	6,225	9,006	15,231	
TOTAL	54,561	59,781	114,342	

The ethnic diversity of the City adds significantly to its arts, culture and social life. The 2001 Census recorded the ethnic composition of Dunedin City as follows (note that percentages total more than 100 as people could select more than one ethnicity):

Dunedin Ethnic Composition 2001		
(Source: Statistics New Zealand)		
European	93%	
NZ Maori	6%	
Pacific Islands	2%	
Asian	4%	
Other	1%	

1.6.6 Economic Activity

Dunedin is the second major business and trading centre in the South Island and boasts a strong, balanced economy. It has a well-established network of road and rail services and is a key hub for other major centres in both Otago and the South Island as well as for tourist destinations. Dunedin has witnessed sustained employment and gross domestic product growth since 1997.

Employment Groups 2001			
(Source: Statistics New Zealand)			
	Number	%	
Agriculture/Forestry/Fishing	1,833	3.5	
Mining	129	0.2	
Manufacturing	6,663	12.8	
Electricity/Gas/Water	258	0.5	
Construction	2,616	5.0	
Wholesale/Retail	8,838	17.0	
Transport/Communications	2,268	4.4	
Accommodation/Restaurants	3,090	5.9	
Insurance/Financial/Property	6,018	11.6	
Government/Education	7,698	14.8	
Health/Community/Cultural	8,304	16.0	
Other	4,287	8.2	
Total	51,996	100.0	

Dunedin's buoyant economy is based primarily on the Business Services, Education, Health, Manufacturing and Tourism sectors. It is emerging as a key centre for Biotechnology, drawing on the scientific expertise of Dunedin's tertiary institutions as well as expansive primary production resources.

The City's future economic growth will centre on the core strengths of specialised manufacturing, education, tourism and the processing of natural resources sourced from the Otago Region. The rural sector will continue to play a major part in the production of export goods, particularly where high value added processing is used and niche markets are sought and developed.

There is an extensive area of rural land within the City, and agricultural activity ranges from intensive farming on highly productive units to extensive grazing on unimproved grasslands. Dairy cow and deer numbers in the City have increased steadily over recent decades, while the number of beef cattle has remained largely static. Sheep numbers have shown a steady decline over recent decades, in common with national trends, and a significant area of agricultural land has been converted to production forestry over the past two decades.

The City is favoured by a stable and skilled work force, advantageous electricity and property prices, as well as a developed service sector. Lower priced housing, excellent transport and port facilities, and an internationally recognised tertiary education sector as well as the health sector will continue to play an important part in the local economy.

1.6.7 Natural and Physical Resources

(i) Land

The City covers an area of 3340 km^2 . The appearance of the land is one of the attractions of the City. There are rolling hills, rocky outcrops and steep gorges, which are appreciated by tourists and local residents alike.

Land quality varies in the City, but there are approximately 15,000 ha of high class soils. These soils are capable of being used intensively to produce a wide variety of plants, including horticultural crops. Most of the high class soils are located on the Taieri Plain, but some are also located on the river flats near Waikouaiti, Waitati and Middlemarch, and on the slopes of Mount Cargill.

The City contains a wide variety of mineral deposits. These include:

Aggregate: Volcanic rock is quarried from Blackhead and Palmers Quarry and is used for concrete manufacture and road metal. There are numerous other quarries and pits from which road metal is also obtained.

Clay: Loess deposits at Wingatui have been used for red brick manufacture and large reserves remain. Clay derived from loess, mudstone and weathered volcanic rock is mined near Abbotsford and used for the manufacture of roof tiles, pipes and bricks.

Coal: Lignite coal occurs from Abbotsford to Brighton and the coal measures are up to 40 m thick. Much of the easily accessible deposits have been worked.

Diatomite: Located at Foulden Hills, near Middlemarch, this deposit is of some size (about 5 million tonnes). It is suitable as an insulating material and as a cement additive.

Gold: Gold bearing quartz has been worked at Barewood, Hindon, Pukerangi, Taioma and Saddle Hill. Sluicing has been carried out on the South Branch of the Waikouaiti River.

Sand: Sand in the Fairfield area is quarried commercially in opencast pits and is an important resource to the construction industry. Dune sand from the active and fixed dunes at Island Park has a high silica content and is used as a foundry sand.

(ii) Water

The City's water resources include streams, rivers, lakes, wetlands and aquifers. The major watercourses of the City are the Taieri River and its tributaries (Waipori River, Lee Stream, Deep Stream and Silverstream), the Waikouaiti River and the Waitati River. There are also a number of minor watercourses of significance in the City. Included among these are Leith Stream, Kaikorai Stream and its estuary, and Tomahawk Lagoon.

(iii) **Plants and Animals**

The flora and fauna that comprise the ecosystems of the City are natural resources in their own right. The diversity of ecosystems within the City means that the City covers seven different ecological districts. The extent of significant indigenous vegetation and significant habitats of indigenous fauna in the City has been considerably reduced over time by the effects of land use activities. There are also habitats for introduced species in the City, such as trout and salmon.

The following are among the important flora and fauna found within the City:

Flora

- Alpine herb field (eg Rock and Pillar Range)
- Alpine cushion bog (eg Maungatuas)
- Tussock grassland
- Remnants of silver beech forest
- Salt marsh (especially Aramoana)
- Pingao.

Fauna

- Lizards giant skink, Otago skink, jewelled gecko
- Peripatus
- Long tailed bat
- New Zealand falcon
- Albatross
- Yellow eyed penguin, little blue penguin
- Fur seal, Hooker sea lion.

(iv) **Built Environment**

The built environment is the City's major physical resource. It is within the built up areas of the City and towns where most of the City's people carry out their day to day activities. The Dunedin urban area is the focus of social, economic and cultural activities, not only for the City but also for the Otago Region.

The Dunedin urban area is a combination of separate parts, with each being used for a range and variety of activities. These include the Central Activity Area and localities dominated by residential, industrial and other activities.

Scattered throughout the City are a number of towns and other settlements, fulfilling roles as service centres, retirement towns, holiday areas and so on.

The infrastructure that supports the built environment in both urban and rural areas, including water, sewerage and communications (radio, television, telecommunications), are also physical resources.

The City functions as a coherent whole. In considering the effect of activities on the physical resource of the City, it is necessary to consider the component parts and the City as a whole.

The physical resources of the rural areas include farm infrastructure, dwellings and other buildings. Water supply networks, irrigation schemes and drainage schemes are also significant.

(v) **Transportation**

The transportation network is an important physical resource in its own right.

- Road networks provide for the movement of people and goods within, to, from and through the City. Ease of movement, particularly for local users, means that it is the most important of the transportation resources, both in terms of numbers using it and its role in the network.
- Rail networks provide for the movement of goods to, from and through the City. Rail provides an efficient means of moving bulk items and reducing the numbers of vehicles that would otherwise be on the roads.
- Air provides a rapid means of moving people and goods. The main airport facilities for the City are located at Momona.
- Sea transport facilities, particularly at Port Chalmers and Dunedin, provide important links for the carriage of goods to overseas markets.

(vi) Heritage Resources

The heritage resources of the City are a significant physical resource worthy of identification in its own right. These include:

- (a) Sites of townscape and heritage significance.
- (b) Sites of cultural importance, including archaeological sites and those sites of importance to Maori.
- (c) Buildings and precincts of townscape and heritage value, of which the City contains many.