Glenorchy City Council

Interim Land Use Planning Strategy

Adopted by Council
13th September 2010

GLENORCHY CITY
Where ideas happen

Contents

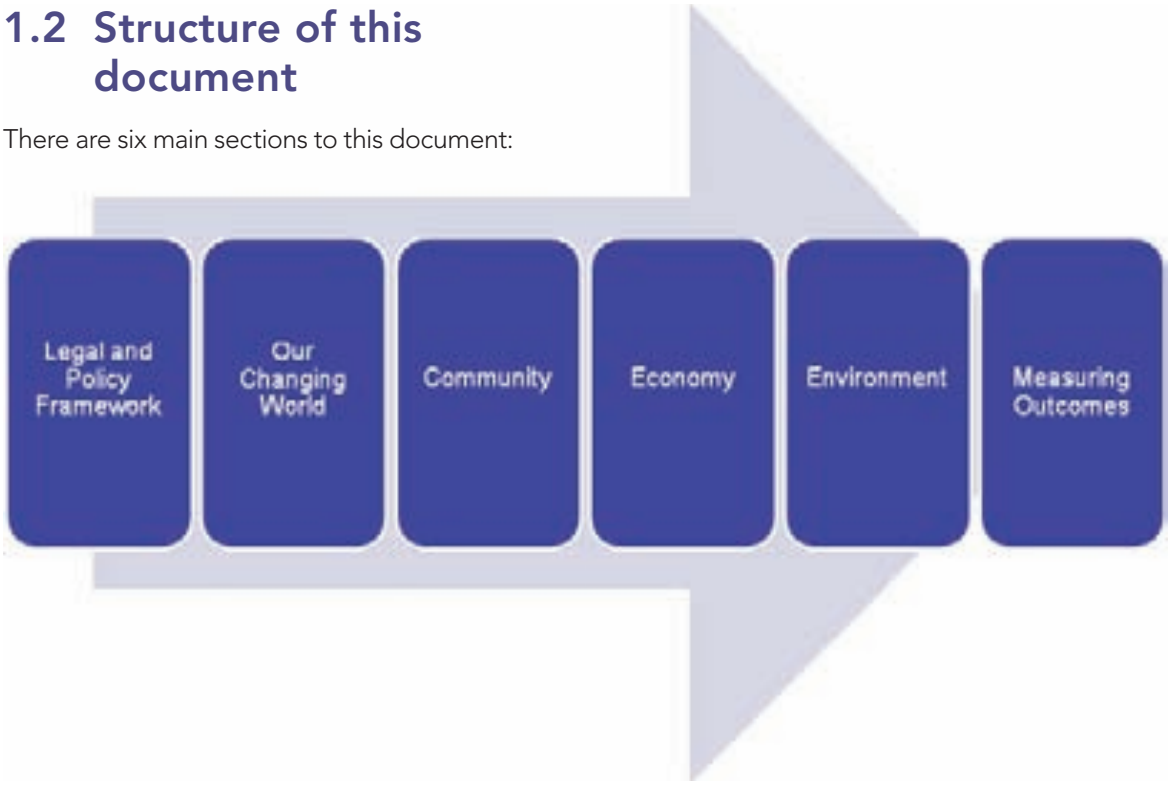
1 Introduction

1.1 Role of the land use planning strategy

The role of this land use strategy is to explain the principles which will form the foundation of a new Glenorchy Planning Scheme, along with regional strategies and common provisions. It is likely that these principles will form the basis of the local planning objectives in the new Scheme.

1.2 Structure of this document

There are six main sections to this document:



"Legal and Policy Context" looks at the legal and policy frameworks at State, regional and Council level and how they influence Council's plans for the future development of the City. "Our Changing World" looks at the key planning challenges into the future and considers how we need to adapt in order to plan for a desired future. The local land use planning strategy is a response to the legal and policy framework and considers our changing world. It is structured around three themes - community, economy and environment. These themes are the same as three of the themes used in the draft Glenorchy Strategic Plan 2010-2015. Measuring Outcomes considers the measures for evaluating the success of the land use planning strategy.

For each theme, the contents are split into topics. Within each topic, there is an explanation of the topic, a statement of the relevant objectives from the *Land Use Planning and Approvals Act 1993* (the Act) and the relevant objectives and strategies from Council's Strategic Plan 2010-2015. These are followed by a background section and the relevant land use strategy statements for that topic. The land use strategy statements are derived from detailed research and review of statements in the existing *Glenorchy Planning Scheme 1992*.

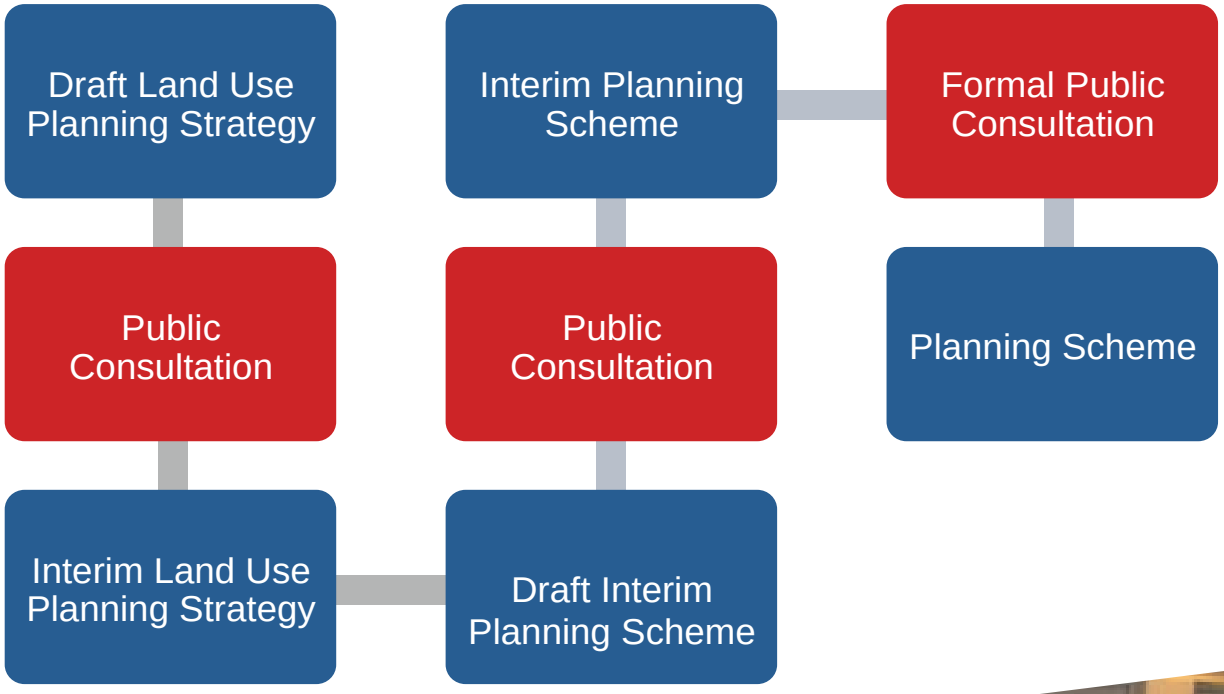
This structure has been used to show compliance with statutory requirements for a planning scheme to seek to further the objectives of the Act[1] and to have regard to the strategic plan of the Council at the time the planning scheme is prepared.[2]

1.3 Consultation

The draft Strategy was subject to public exhibition in July/August 2010. Council considered the submissions made to it during the public consultation period before adopting it as the Interim Strategy on 13 September 2010. The word "Interim" is used because the Strategy is likely to require further changes before it is incorporated into a new planning scheme. Changes required include the removal of statements which guide the planning scheme review itself; inclusion of new statements arising from detailed work in the review and changes to ensure consistency with a future Regional Land Use Strategy and with State standard provisions and policies.

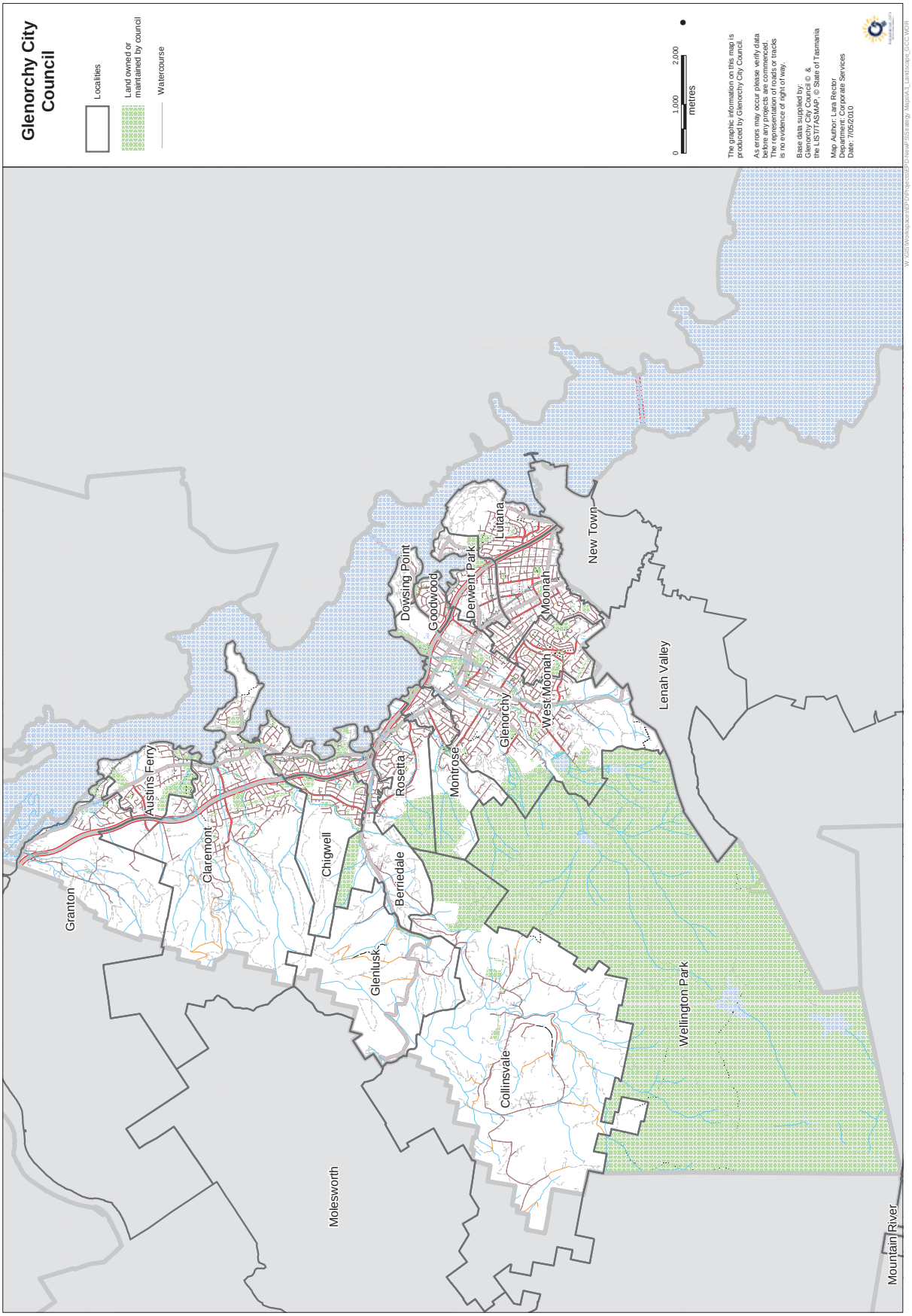
The final strategy will inform the preparation of the draft planning scheme. The draft planning scheme will be much more detailed about the planning rules to apply to the City, including the zoning of land. The draft planning scheme will be subject to public consultation before it comes into effect.

Further changes to strategy may occur during future public consultation on the draft planning scheme.



1.4 The Glenorchy Municipality

The suburbs within the City of Glenorchy are shown on the map below.

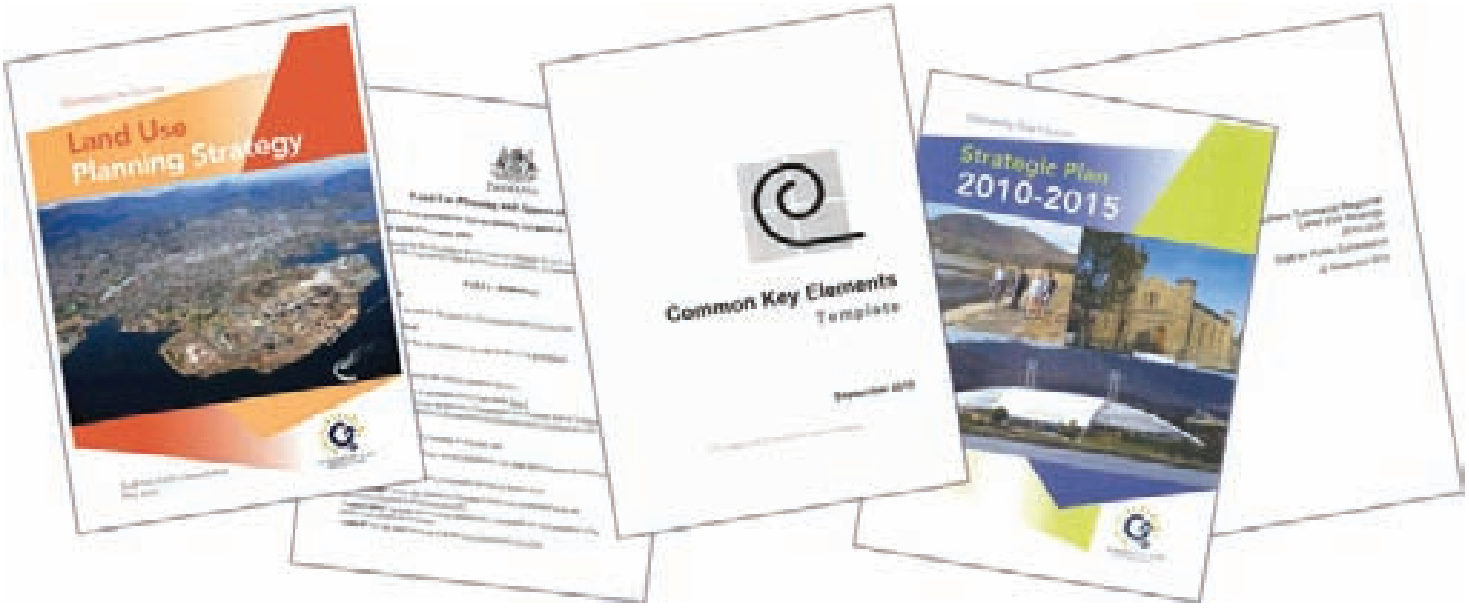


2 Legal and Policy Framework

The planning system is governed by a set of planning laws called the Resource Management and Planning System of Tasmania. The main law which applies to preparation of planning schemes is the *Land Use Planning and Approvals Act 1993*. The Act sets out the process and requirements to be followed when developing a planning scheme. The Act requires planning authorities to take into account a range of policy considerations when preparing planning schemes, such as:

1. Furtherance of the objectives of the planning system and the Act.[3]
2. Accordance with State Policies.[4]
3. Compliance with planning directives issued by the Minister.[5]
4. Must contain mandatory common provisions and may contain optional common provisions.[6]
5. Regard to the use and development of the region as an entity in environmental, economic and social terms.[7]
6. Consistency and likelihood of furtherance of the objectives and outcomes of the regional land use strategy.[8]
7. Consistency and co-ordination with adjacent planning schemes.[9]
8. Regard to the strategic plan of the Council as adopted at the time the planning scheme is prepared.[10]

Some of these external policy requirements are at State level, some at regional level and some at local level. We will consider the requirements at each level.



2.1 State Level Policy Requirements

2.1.1 Furtherance of the objectives of the planning system and the Act

The key thrust of the *Land Use Planning and Approvals Act 1993* is to seek to further the sustainable development of the planning area through the objectives in Schedule 1 of the Act. "Sustainable development" is defined in the Act as:

> *managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while –*
>
> *(a) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and*
>
> *(b) safe guarding the life-supporting capacity of air, water, soil and ecosystems; and*
>
> *(c) avoiding, remedying or mitigating any adverse effects of activities on the environment.*[11]

In summary, "sustainable development" means carrying on the use, development and protection of natural and physical resources for the well-being of the community while managing those resources for future generations and protecting the environment.

The objectives of the resource management and planning system are set out in Schedule 1. They are:

> *(a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and*
>
> *(b) to provide for the fair, orderly and sustainable use and development of air, land and water; and*
>
> *(c) to encourage public involvement in resource management and planning; and*
>
> *(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c); and*
>
> *(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.* [12]

The objectives of the planning process established by the Act are intended to support those objectives. They are also set out in Schedule 1. They are:

> *(a) to require sound strategic planning and co-ordinated action by State and local government; and*
>
> *(b) to establish a system of planning instruments to be the principal way of setting objectives, policies and controls for the use, development and protection of land; and*
>
> *(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land; and*
>
> *(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels; and*
>
> *(e) to provide for the consolidation of approvals for land use or development and related matters, and to co-ordinate planning approvals with related approvals; and*

(f) to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania; and

(g) to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value; and

(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community; and

(i) to provide a planning framework which fully considers land capability.[13]

2.1.2 Compliance with State Policies

Since the inception of the resource management and planning system in January 1994, State Policies have been adopted in relation to:

- protection of agricultural land
- water quality management
- the coast.

National Environmental Protection measures are also considered to have the force of State Policy.

2.1.3 Compliance with Planning Directives

The Minister has broad powers to issue planning directives, subject to an assessment process under the Act. Planning directives may address:

- issues relating to use, development, protection or conservation of any land
- procedural matters
- the application of a State Policy
- any other matter the Minister considers appropriate.[14]

A planning directive on the format and content of planning schemes, Planning Directive No. 1, has been in force for some time. It is currently under review.

Planning Directive No. 1 requires planning authorities to use a "common key elements template" when preparing new planning schemes.

The intention is to ensure greater consistency between planning schemes through adoption of certain common elements; including:

- a standard set of zones
- a standard set of exemptions from the requirement for a planning permit
- standard format for zones, development standards, schedules and the like

- standard definitions for land uses and planning terms
- common administrative provisions which explain how the planning scheme works.

Draft planning directives are under assessment by the Tasmanian Planning Commission in relation to Underground and Minor Aboveground Infrastructure (No. 2) and Single Dwelling in Residential Zone (No. 3)[15] and Draft Standards for Single Dwelling and Ancillary Development in Suburban Residential Zones (No. 4).

2.1.4 Common Provisions

For many years, the Tasmanian planning system has been criticized by sections of the community for the lack of consistency between the 43 planning scheme documents for local government areas across the State. This is confusing for those wishing to undertake development and for other participants in the planning process.[16]

While it is always necessary to ensure that a planning scheme provides for the unique characteristics of each council area, greater standardization brings the following benefits:

- greater co-ordination of planning across regions and the State through integration of State and regional strategies
- more transparent planning strategies
- shared understanding of terms and provisions across different planning areas
- potential for more efficient development and updating of planning schemes
- greater concentration on planning merits in the application of planning schemes.

The Steering Committee overseeing the review of Planning Directive No. 1 has also identified the need for a number of standard planning scheme schedules dealing with matters of State interest.[17] A schedule is a part of a planning scheme which deals with specific issues in more than one zone. It is assumed that adoption of these schedules in planning schemes will be mandatory.

The schedule topics which have been identified are:

- bushfire
- road and rail assets
- heritage
- land stability
- coastal inundation & flooding
- water quality
- attenuation
- contaminated land.

2.2 Regional Policy Requirements

2.2.1 Southern Tasmania Regional Planning Project

In 2004/05, the State Government's Better Planning Outcomes Response Report, produced as part of a comprehensive review of the planning system, suggested planning schemes need to be underpinned by sound strategic planning. The absence of regional strategy has also been noted in other reviews of the planning system. [18]

In September 2008, Council resolved to participate in the Southern Tasmania Regional Planning Project. The agreed outputs of that project were:

- a regional land use strategy
- a regional infrastructure investment plan
- a model planning scheme for the region
- draft planning schemes for each Council based on the regional model
- legislation to give interim effect to the new suite of draft planning schemes for the Region upon lodgment with the Commission.

Since the project was originally conceived, there have been two significant changes:

1. Regional standard provisions have been replaced by a Statewide approach, though there is still scope for regional and local provisions in planning schemes.
2. The Act has been amended to provide for interim planning schemes to be declared by the Minister and to come into effect prior to formal public consultation.

The local strategy underpinning the new planning scheme will need to be consistent with the regional land use strategy. In addition, it is likely that there will be a regional approach to development of those common provisions, such as codes, which are beyond the scope of the work being carried out at State level.

2.2.2 Consistency with Adjacent Planning Schemes

Glenorchy City Council's planning area shares common boundaries with Hobart City Council, Derwent Valley Council and Kingborough Council. While not strictly adjacent, Brighton Council and Clarence City Council lie on the opposite side of the Derwent River from Glenorchy and there have been planning issues of common interest.[19]

Changes to strategy and common provisions at State and regional level will promote greater consistency with planning schemes for adjacent areas. Nevertheless, consultation on detailed planning scheme provisions will also be necessary.

2.3 Local Context

2.3.1 Council's Corporate Strategic Plan

Councils are required under the Local Government Act to prepare a strategic plan for their municipal area, which is to be for a period of at least five years and updated as required. [20]

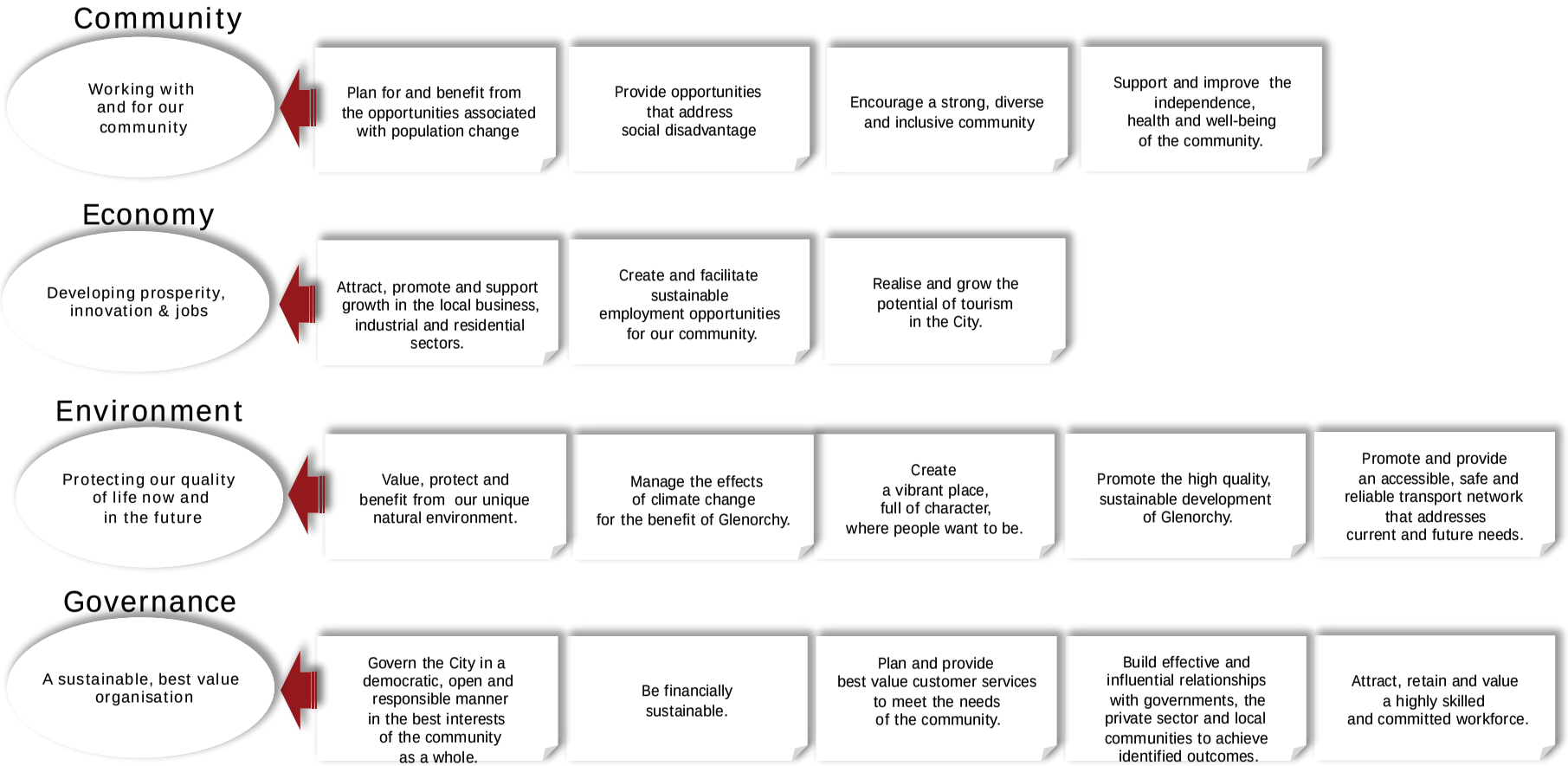
The strategic plan sets out Council's mission and vision and the outcomes, objectives and strategies which guide Council's operations.

The corporate strategic plan 2010-2015 contains the following vision, mission statements, and objectives for each outcome:

GLENORCHY CITY COUNCIL STRATEGY MAP

Vision: To ensure this City is the best place in Tasmania to live, work and play, both now and in the future. We want a City where we all care for each other and act together to improve our lifestyle and environment through a strong sense of community.

Mission: Glenorchy City Council – a leader in local government; representing its local community and ensuring best value services.



3 Our Changing World

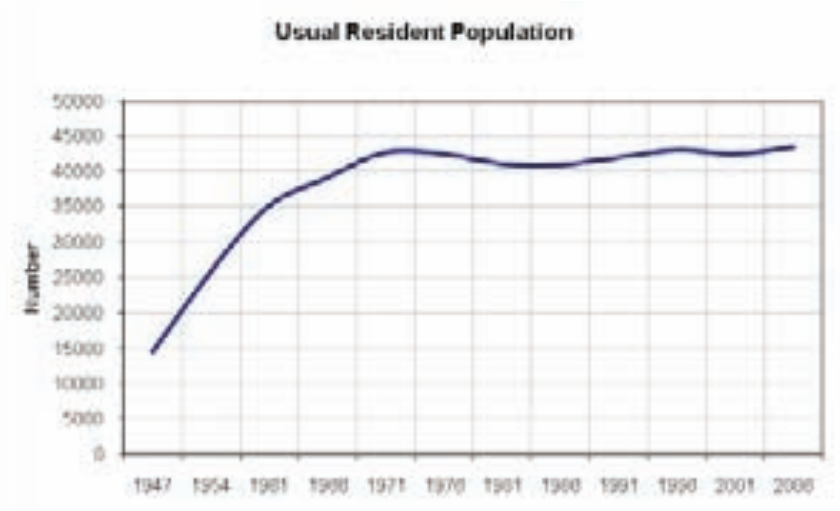
The current planning scheme, the *Glenorchy Planning Scheme 1992,* was introduced on an interim basis in October 1992 and as a finally approved planning scheme in April 1994. It was based on strategic research undertaken in the late 1980's and early 1990's.

The 1992 Planning Scheme has served the City well. However, it has now been in use for nearly two decades. Since the introduction of that Planning Scheme, there have been a range of major changes in the world around us. A new planning scheme will need to address these changes in order to prepare the City for the planning challenges of the next decade or two.

Research suggests that the major planning challenges confronting the City into the future are:

- Demographic Change
- Climate Change
- Energy
- Regional Perspective.

In this section, we will look at each of these key challenges in turn:



Source: Australian Bureau of Statistics, Census Data

3.1 Demographic Change

The characteristics of Glenorchy's population are a starting point in planning for the future of the City. The number of people, their age profile, their spatial distribution and population projections all have an impact on what Glenorchy will look like in future.

3.1.1 Number of People

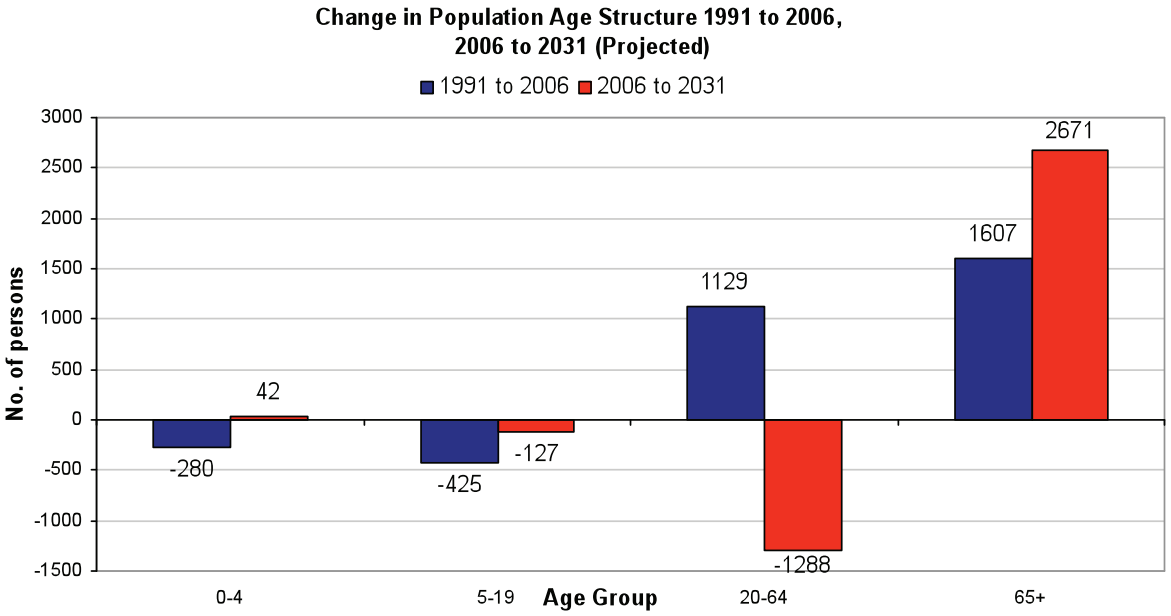
Glenorchy has a stable population. After a growth phase up until the early 1970's, the City's population has remained relatively stable ever since. At the last census in 2006, Glenorchy's population was 43,413.[21]

3.1.2 Age Profile

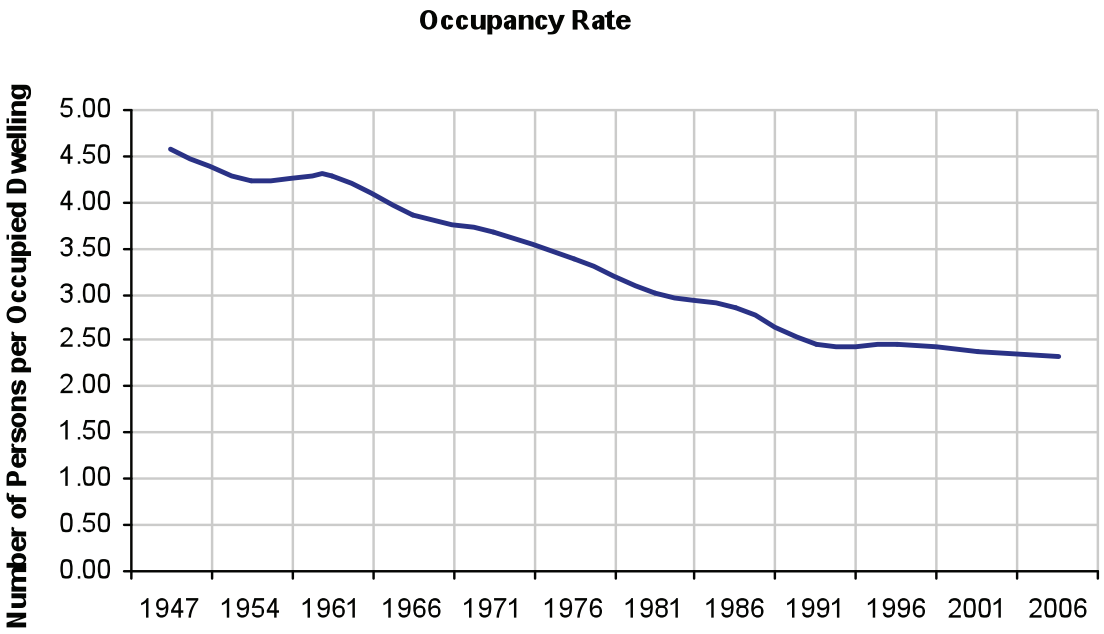
Tasmania has the oldest population profile in Australia and Glenorchy has the 7th oldest population of the 29 local government areas in the State.

Glenorchy's population has been ageing for some time and is projected to continue to age into the future.[22]

Australia-wide, a doubling of the 65 plus age group is expected before 2050 and a tripling of the 85 plus age group before 2050. Associate Professor Jackson's projections suggest a 40 per cent increase in those age groups in Glenorchy between 2006 and 2031.[23]



Source: Australian Bureau of Statistics Census Data & University of Tasmania Population Projections



Source: Australian Bureau of Statistics Census Data

Some of the likely planning-relevant effects of population ageing are:

- Changing housing needs, including smaller houses and more aged care facilities.
- Greater reliance on forms of transport other than the private car, such as public transport, as the direct access to car transport declines with age. In a society organised around private car transport, this has the potential to increase social exclusion and service deprivation.
- A community with different service needs.
- A greater emphasis on being close to services.

3.1.3 Household Size

The average number of persons per occupied private dwelling is falling. In fact, since 1947, the average household size has nearly halved. This means that it now takes nearly twice as many houses to accommodate a given number of Glenorchy residents as it did in 1947.[24]

3.1.4 Spatial Distribution

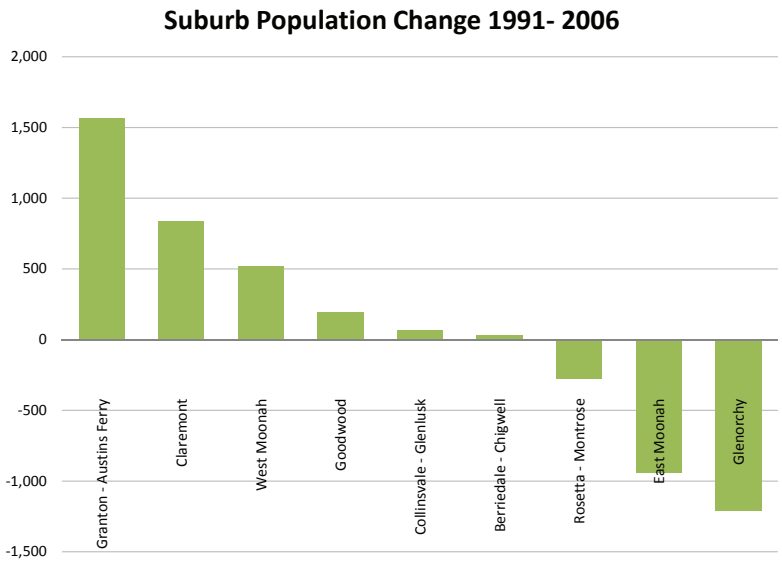
This growth pattern is also being experienced in Glenorchy itself, with decreasing population in established inner areas and an increase in population in fringe areas.[25] The central suburbs of Glenorchy, East Moonah and Rosetta-Montrose are experiencing population decline, while the strongest population growth is on the urban fringe in Granton-Austins Ferry.

3.1.5 Future Population Projections

Population projections prepared by the University of Tasmania for Council[26] suggest that Council should plan for a relatively stable population, one that is unlikely to increase dramatically in size. Indeed, it is possible that, with an ageing population, fertility rates may fall below replacement level. When this is combined with outflows of the City's young people, it is possible that the City's population may begin to decline within the next decade or two.

This is part of a wider global "demographic transition" with a shift from high growth and high birthrates to low growth and low birthrates. [27]

The University's population projections for Glenorchy were prepared for a range of birth rate and annual net migration scenarios. Three of the "middle" projections are shown on the next page. The number



Source: Australian Bureau of Statistics Census Data

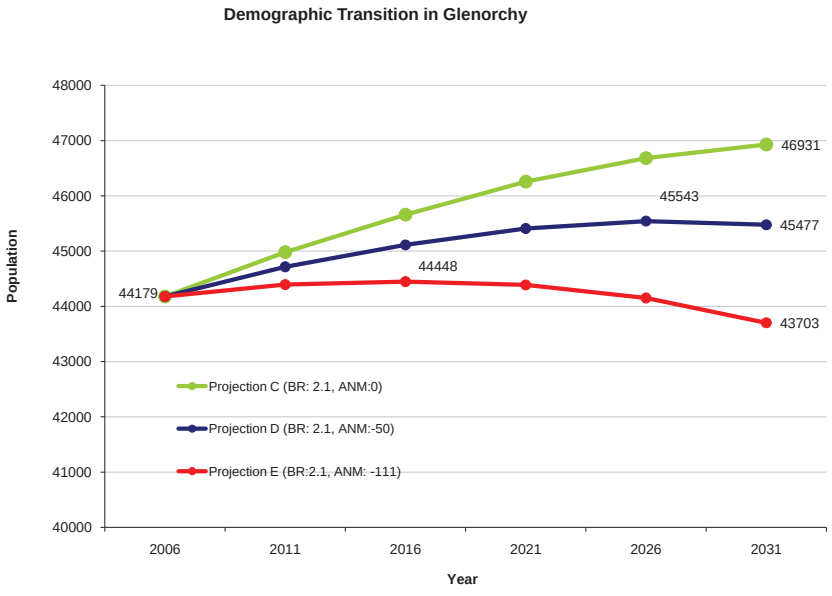
shown on each curve represents the point at which the City's population is projected to peak, before declining.

The University of Tasmania's projections are echoed by those of the Demographic Change Advisory Council (DCAC) - a body set up to look at the implications for Tasmania of future changes in population. DCAC's medium projections suggest that Glenorchy's population will peak in 2016 at just over 44,500. [28]

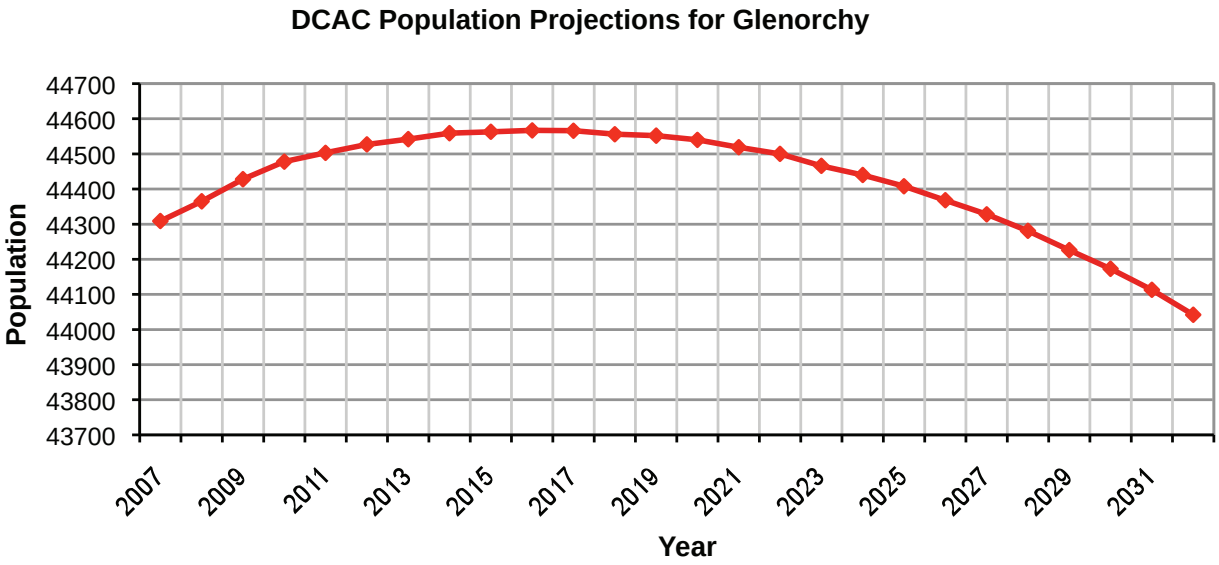
While population projections are not predictions, the two sets of projections suggest a declining population for Glenorchy within the next decade or two after population growth of 1000 to 3500 above the current level.

All things being equal, this has important implications for the City's asset management. Much new physical infrastructure has an asset life of many decades. If population declines, Council would still have an obligation to maintain infrastructure, regardless of whether or not it is operating below capacity.

Alternatively, if Glenorchy were to reverse its net outflow of young people, or to recapture a greater share of regional population growth, then projected population decline might be arrested.

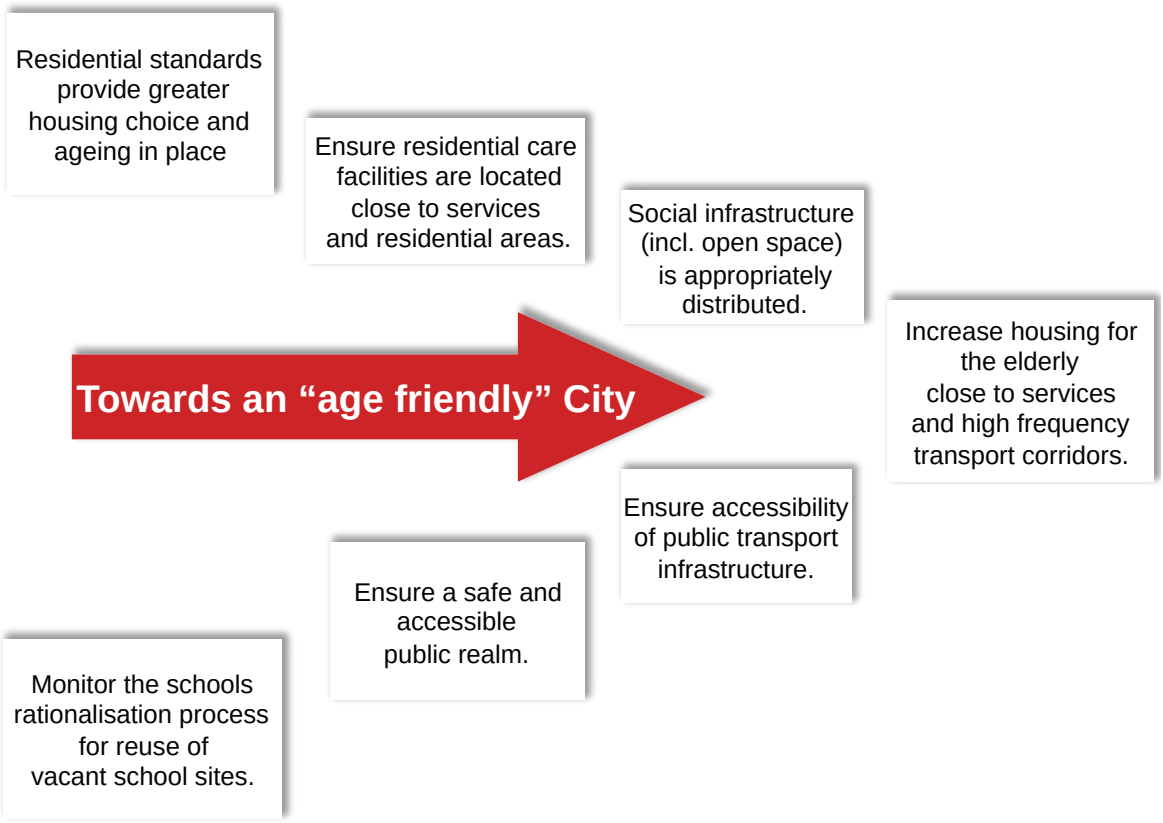


Source: University of Tasmania, Population projections for Glenorchy City Council, April 2008



Source: Demographic Change Advisory Council LGA Population Projections – Medium Series

3.1.6 Policy Response



Key policy responses to demographic change include:

a) *Providing a greater range of housing choices to meet the needs of an ageing population.*

b) *A more compact and efficient urban form which will encourage, over time, more people to live closer to services.*

c) *Greater support from the planning scheme for public transport by promoting increased residential density along high frequency public transport corridors – particularly Main Road.*

d) *Focus on making the most of the City's existing infrastructure, rather than widespread extension of infrastructure to the urban fringe as a decline in the City's population is projected in the next decade or so.*

3.2 Climate Change

The climate is changing. The fourth assessment report of the Inter-governmental Panel on Climate Change (IPCC) came to the following conclusions:

- *Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, melting of snow and ice, and rising global average sea level….*
- *At continental, regional and ocean basin scales, numerous long-term changes in climate have been observed. These include changes in Arctic temperatures and ice, widespread changes in precipitation amounts, ocean salinity, wind patterns and aspects of extreme weather including droughts, heavy precipitation, heatwaves and the intensity of tropical cyclones …*
- *Palaeoclimatic information supports the interpretation that the warmth of the last half century is unusual in at least the previous 1,300 years. The last time polar regions were significantly warmer than at present for an extended period (about 125,000 years ago) reductions in polar ice volume led to 4 to 6m of sea-level rise.*
- *Most of the observed increase in global average temperatures since the mid 20th century is very likely due to the observed increase in anthropocentric greenhouse gas concentrations … Discernable human influences now extend to other aspects of climate, including ocean warming, continental-average temperatures, temperature extremes and wind patterns.*
- *Continued greenhouse gas emissions at or above current rates would cause further warming and induce many changes in the global climate system during the 21st century that would very likely be larger than those observed during the 20th century.*[29]

3.2.1 Potential Impacts

Climate change is causing and will increasingly cause many impacts, including sea level rise, storm surge, coastal erosion, temperature rise, changes in rainfall patterns, more extreme weather events and habitat change. Many of these impacts will affect human settlements, infrastructure lifespan and capacity.

> *In summary, the message is that global warming is real, humans are very likely to be causing it, and that it is very likely that there will be changes in the global climate system in the centuries to come larger than those seen in the recent past. Future changes have the potential to have a major impact on human and natural systems throughout the world including Australia.*[30]

Some of the current and potential impacts of climate change are:

Sea-level rise

Sea-level rise is projected by the IPCC's 4th Assessment Report[31] to be in the range of 0.18m to 0.79m this century. Recent interpretations of geological data demonstrates that sea-level rise of 1m or more by the year 2100 is plausible.[32] Sea-level rise has the potential to increase the frequency and severity of storm surge events, resulting in coastal flooding.

> *For many locations, a 0.5m sea-level rise would result in the present one-in-one-hundred-year event becoming an annual or more frequent event by the end of the 21st century.*[33]

Foreshore erosion is also possible for susceptible foreshore areas as a result of sea-level rise. For an idea of the extent of likely impact in susceptible areas, Bruun's rule suggests that shoreline recession happens at a rate of approximately 100 times the

amount of sea-level rise. So as a rule of thumb, a 0.5m increase in sea level would result in 50m of foreshore recession.[34]

Other Climatic Changes

CSIRO and Bureau of Meteorology modelling for Hobart[35] from 2007 suggests the following local climate change impacts:

2030	
Temperature	0.6°C increase in temperature fairly consistently across all seasons (although the increase is projected to be 0.7°C in summer and autumn).
No. of Days Over 35°C	1.7 (currently 1.4)
Rainfall	1% decrease
Evaporation	Up by 3%
Wind speed	Increase 5% in winter, 2% in spring; Decrease 2% in summer and 1% in autumn
Relative Humidity	Down by 0.2% per annum
Solar Radiation	Up by 0.5%

2070	
Temperature	Up by 1.1 - 2.1 °C depending on the model used.
No. of Days Over 35°C	1.8 - 2.4 (currently 1.4) depending on the model used
Rainfall	Down by 3 - 6% depending on the model used
Evaporation	Up by 5 - 10% (Up by 20-38% in winter) depending on the model used
Wind speed	Up by 8 - 15% in winter, 3 - 7% in spring; down by 3 - 6% in summer and down by 1 - 2% in autumn depending on the model used
Relative Humidity	Down by 0.2 - 0.6% per annum depending on the model used
Solar Radiation	Up by 0.9 - 1.7% per annum depending on the model used

In summary, Hobart (and, by extension, Glenorchy) will be warmer, drier, windier in winter and spring and more prone to solar radiation.

Work is currently underway on a Climate Futures project, led by the Antarctic Climate and Ecosystems Co-operative Research Centre which aims to produce more "fine grained" climate modelling for Tasmania. This is expected to be available later in 2010.

Extreme Weather Events

Extreme weather events such as heatwaves and heavy rainfall are very likely to become more frequent.[36] [37]

Habitat Change

Additional stress is expected to be placed on natural biological systems, exacerbating existing problems such as widespread loss of native vegetation, over-harvesting of water and reduction of water quality, coastal squeeze, isolation of habitats and ecosystems, and the influence of introduced plant and animal pests.

The response from plant and animal species may vary from adaptation to migration to new habitat to reduced populations and possibly, extinction.[38]

Impacts on Infrastructure

Climate change has the potential to have a range of impacts on infrastructure,[39] including:

- changes in rate of deterioration of roads
- increased building deterioration and damage
- more intense rainfall events causing infiltration into wastewater networks and exceedance of drainage capacity
- increased impacts on coastal infrastructure through erosion and inundation.

3.2.2 Policy Response

There are two major policy avenues in response to climate change - mitigation and adaptation.

Mitigation involves reducing the emission of greenhouses gases which cause climate change. Adaptation involves taking action to deal with the unavoidable impacts of climate change.

From a planning perspective:

a) Mitigation strategies involves addressing ways of reducing the City's greenhouse gas emissions through changes to energy efficiency of buildings, a more efficient urban form and encouragement of sustainable transport modes.

b) Adaptation strategies manage the risk associated with the unavoidable effects of climate change and focus on hazards such as sea-level rise, bushfire and flooding.

3.3 Energy

Energy is a fundamental requirement for our modern personal and working lives. Most energy is currently sourced from fossil fuels such as oil, coal or natural gas. However, for environmental, resource limit and geopolitical reasons, comprehensive changes to energy systems are inevitable. Changes to the energy landscape are likely lead to increases in the cost of energy and to require adaptation of our living, working and transport arrangements in the imminent future. The spatial pattern of our cities has evolved in a time of cheap fossil fuel energy. There will be pressure for it to change as the cost of energy increases.

3.3.1 Energy and Greenhouse Gas Reduction

The International Energy Agency (IEA) is a body set up under the OECD to implement an international energy program. It makes the point in its World Energy Outlook 2009:[40] that as the leading source of greenhouse gas emissions, energy is at the heart of the problem of climate change. Continuing on today's energy path would mean rapidly increasing dependence on fossil fuels, with alarming consequences for climate change and energy security.

> *Energy needs to be used more efficiently and the carbon content of the energy we consume must be reduced, by switching to low- or zero-carbon sources.*[41]

The CSIRO's Energy Futures Forum also identified the imperative to reduce greenhouse gas emissions from energy sources. It also recognized the degree to which current energy generation, building design and transport systems are carbon intensive.

> *Any significant reduction in Australia's long-term greenhouse signature must involve changing the way it produces and uses energy. Australia's energy sector emissions reflect our fuel mix, economic structure, and lifestyles. Electricity generation is dominated by coal, which has a high CO_2 emission factor and electricity use is growing rapidly. Australian building design has traditionally paid little attention to energy performance and personal transport is largely based on private, medium-to-large vehicles, using petrol or diesel that also have high CO_2 emissions.*[42]

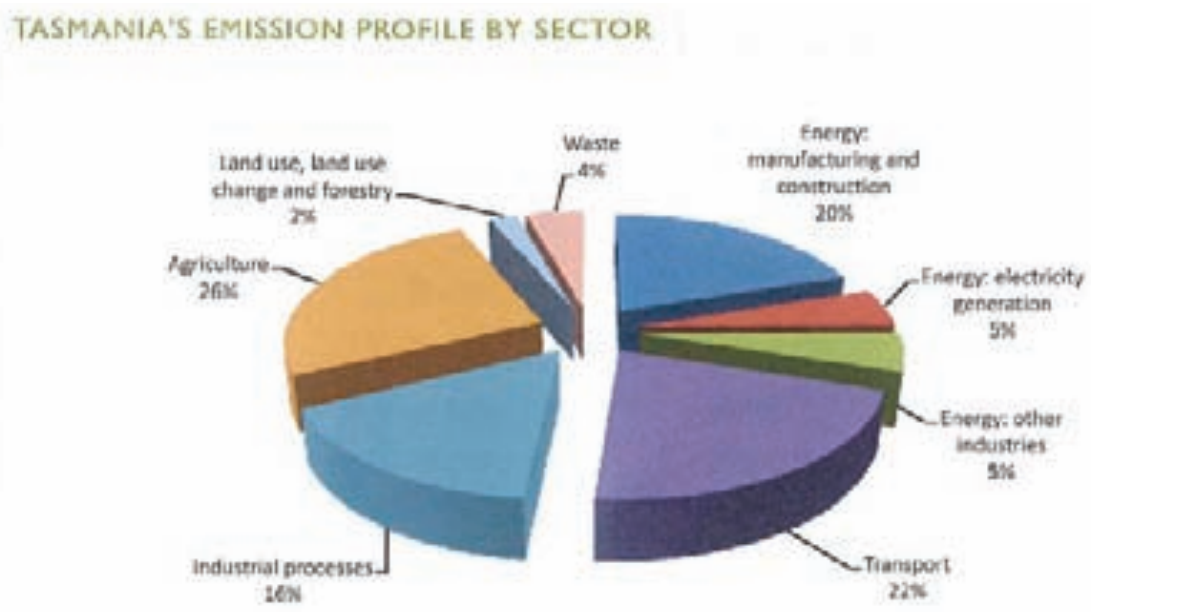
The imperative of greenhouse gas reduction from the energy sector is also accepted in the Tasmanian context.

> *In terms of sustainability there is no escaping the fact that, apart from last winter, the inflows to our hydro system have been generally below average for many years. This required a greater reliance on gas generation and imports over Basslink, and this has increased the emissions intensity of the electricity that Tasmanians consume.*
>
> *All the more reason to increase our production of clean electricity from renewable energy sources, and increase the efficiency with which we use energy.* [43]

3.3.2 Tasmania's Energy Profile

Tasmania's greenhouse gas emission profile is different to that of Australia as a whole. Because its electricity generation is predominantly hydro-electricity based, Tasmania's greenhouse gas emission profile by sector is significantly different to other Australian states. (For Australia, nearly 50% of greenhouse gas emissions are produced through the generation of electricity in coal-fired power stations.)[44]

However, Tasmania has been a net importer of coal-fire generated electricity via Basslink since April 2006. As a result, it is most likely that the proportion of greenhouse gas emissions from electricity generation in Tasmania has increased significantly since the National Greenhouse Inventory (the basis for the pie chart) was prepared in 2006. Indeed, Basslink imports grew to 24.6% of Tasmanian energy supply in 2009. [45] This is a consequence of declining energy supply from hydro sources as a result of reduced water in storages and careful management of those storages.



Source: Tasmanian Climate Change Office, Department of Premier and Cabinet, Tasmanian Framework for Action on Climate Change, p. 15

3.3.3 An increasing demand for electrical energy

The IEA's modelling suggests that global energy demand is projected to increase 2.5% per year over the period 2010-2015 before slackening after 2015, as emerging economies mature and population growth slows. Much of this growth is anticipated to occur in non-OECD countries in the developing world. Growth is anticipated in all fossil fuels and in non-hydro renewable energy sources (wind, solar, geothermal, tide and wave energy). Hydro power is expected to have a declining share of global energy production. Oil is expected to remain the single largest fuel source at 2030. [46]

In Tasmania, electrical energy demand is projected to increase (under medium and high modeling scenarios) by between 0.69 and 1.84 per cent per annum in the period 2009-2023.[47]

Growth in demand in the residential sector reflects the increasing use of energy for heat pumps and air conditioning in homes, multiple televisions, computers and other electrical appliances, along with the increasing size of houses (eg. larger rooms and/or a greater number of rooms to heat, light and sometimes cool).[48]

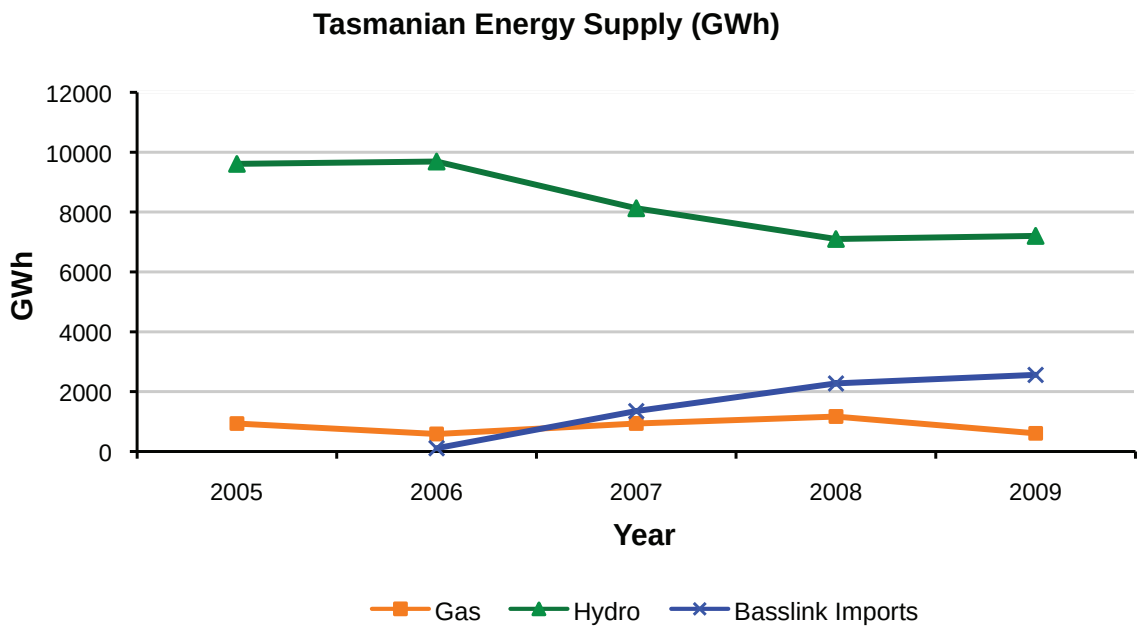
3.3.4 The likelihood of rising electricity costs

This growth in demand will need to be met from sources other than hydro as a drying climate impacts on water storages.

> *The electrical energy supply-demand balance indicates that, if low rainfall conditions continue, energy capacity will be reduced to a point where the hydro system will be unable to meet the Tasmanian demand beyond 2024.*[49]

It would seem likely that, notwithstanding its advantage in sunk investment in renewable hydro generation capacity, Tasmania will be faced with rising electricity prices as a result of increasing demand, some future form of regulation of carbon and the greater costs associated with other forms of renewable energy generation, not to mention the increased asset management costs associated with ageing hydro-electric infrastructure.

> *The recent history of electricity prices is a concern around Australia. Costs have risen quite sharply in every state, including Tasmania.*
>
> *There are several reasons for these increases, including higher demand levels, higher network costs, increasing quality standards,*



Source: Based on information in Transend 2009 Annual Planning Report

> *the need to replace ageing assets, and some underpricing in the past. Electricity prices stem primarily from energy generation costs, transmission and distribution costs and retailing costs.*
>
> *……*
>
> *Overall, the evidence suggests the supply chain is efficient. Tasmanian prices remain competitive with those on the mainland, and Australia prices remain low by international comparison.*
>
> *Nevertheless, customers should take warning that the outlook for energy prices in future is for further increases. Peak demands continue to grow, putting pressure on supply. Costs will increase because fossil fuel based generators will no longer be able to discharge greenhouse gases into the atmosphere for free. Also because large parts of the electricity supply industry in Australia are going to have to undertake a fundamental transition towards greater sustainability and new sources of supply.*[50]

3.3.5 Energy for Transport

Transport is a significant user of energy and approximately half of transport energy use is from passenger vehicles.

> *Road transport accounts for some 75% of the total transport use of energy. Reflecting the desire of Australians for personal mobility, two-thirds of road transport energy use is from passenger vehicles, with the remainder representing commercial vehicles.*[51]

Greenhouse Gas Emissions

In 2006, transport accounted for 22% of Tasmania's greenhouse gas emissions.[52]

The Likelihood of Rising Oil Prices

The IEA's 2008 World Energy Outlook points to increasing volatility in oil price. In the IEA's view, rising demand, increased costs of production, market volatility and ultimately, a finite supply of oil will see rising oil prices into the future.[53]

> *… it is becoming increasingly apparent that the era of cheap oil is over.*[54]

The IEA (2008) suggests that there are enough proven reserves to supply the world with oil for another 40 years at current rates of consumption.[55]It also projects growth in demand of 1% per annum from 85 million barrels per day in 2008 to 105 million barrels per day in 2030.[56] It estimates an ultimate potential supply of nearly 3 times the level of current proven reserves.

However, many theorists point to the phenomenon of peak oil. That is, the observation that over time oil production reaches a peak before declining. This would lead to a shortfall in the supply of oil relative to the quantity demanded, resulting in an increase in prices.

> *More conservative estimates from government sources in the United Kingdom and the United States are saying that the oil peak will occur sometime between 2010 and 2020. Many commentators are now suggesting that "world oil is peaking" rather than precisely positioning a peak date, as production appears to have plateaued and is likely to remain level for some time.*[57]

The CSIRO's Energy Transformed National Research Flagship modeled the future of transport fuels in Australia. It considered a number of possible future scenarios. For peak oil, it took the scenario to mean that:

> *from a certain point in time, due to oil resource constraints it will be impossible to supply increasing quantities of oil. … There are a wide variety of views on when oil production peak will have peaked. … The expectation, however, is that this would lead to a significant price spike that would only begin to end when substitutes to oil based fuel products become readily available.*
>
> *How the market will respond to a peak oil event will depend very much on how fast alternative fuels and vehicles become available in that event and how quickly the availability of oil based fuel declines.*[58]

Oil reserves are increasingly concentrated in fewer countries - creating more market power for oil rich nations to dictate oil prices.

> *The increased concentration of the world's remaining conventional oil and gas reserves in a small group of countries, including Russia and resource-rich Middle East countries, would increase their market power and ability to influence prices.*[59]

Significant future increases in the price of fuel appear inevitable.

> *Owing to changes in international oil markets and to a lesser extent carbon pricing, further substantial increases in the price of oil-based fuel products (petrol and diesel) are considered plausible, although very uncertain in their timing and extent.*
>
> *Modelling projected that if international oil supply continues to grow steadily, petrol and diesel prices will experience only a slight rise on present levels. However, if there is a near-term peak in international oil production resulting in declining future oil supplies, petrol prices could increase to between A$2 and as much as A$8 per litre by 2018.*[60]

For a number of reasons, Australia is more vulnerable to oil price rises.

> *Australia is more vulnerable to changing market circumstances than some other countries due to its relatively high vehicle use, the relatively high fuel consumption by vehicles in its fleet, its 97 per cent reliance on oil-based fuels for transport and declining domestic reserves of conventional oil.* [61]

Increased transport costs will hurt those who can least afford it. And increased costs is anticipated to be a phenomenon which lasts for two decades.

> *Any increase in transport costs will adversely impact low income Australians for who transport accounts for a higher proportional share of household income. This impact will be more acutely felt by those living on the urban fringe or in regional areas where average kilometres travelled per day is higher.*
>
> *Oil price increases will affect weekly fuel bills, increasing from A$40 in 2007 to between A$50 and as high as A$220 per week in real terms by 2018 for a medium passenger vehicle. The high end of this range will only*

occur if international oil supplies abruptly decline and fuel and vehicle manufacturers are unable to quickly ramp up alternative supplies and technologies. Oil price movements in 2008 have already shifted costs toward the lower end of this range although it remains to be seen whether this represents short term market volatility or a sustained shift.

Any oil price increases will also flow through freight costs to most other items in the economy adding, for example, up to 31 cents to a loaf of bread. However, in the long term (beyond 2030) the modelling projects passenger and freight transport costs can be expected to be similar or lower than today with the adoption of new fuels and technology.[62]

Transition to New Transport Technologies and Urban Form

The transition to mass ownership and use of vehicles fuelled by alternative technologies is unlikely to happen quickly. Changes to urban form to reduce the amount and duration of trips within urban areas will also take place over the longer term.

Traditionally, lead times for actions such as bringing a new fuel to large scale commercial production or implementing new city design principles are decades long. On the other hand the potential losses from not acting are also high, including, for example, loss of mobility for the consumer and loss of market share for industry.

Studies have shown that the time taken for a new technology or practice to grow from 10 to 90 per cent market share is on average 40 years but can be shorter if the new technology fits well with existing infrastructure.[63]

Nevertheless, substantial change in Australia's transport fuel mix is anticipated.

Australia's transport fuel mix will substantially change in response to the increasing cost of oil and the need to reduce greenhouse gas emissions.[64]

The choices Australians make about the size of their vehicle, how much they need to travel and in what mode (e.g. public versus private passenger transport) are likely to be equally as important as the fuel and technology choices that they make in reducing greenhouse gas emissions and their vulnerability to the impacts of higher prices for oil products.

This is important because of the uncertainty that still remains over which future technologies and fuels will proceed to be commercially available at reasonable cost. The modelling projected that a greater shift toward public transport and lighter vehicles, and increased use of rail and sea freight could reduce kilometres travelled by 30 per cent and greenhouse gas emissions by 17 per cent.[65]

3.3.6 Policy Response to Increased Energy Costs

Electricity

The Tasmanian government's Energy Policy Statement for 2009 nominates energy efficiency measures as the most effective way of dealing with increasing electricity prices.

The best, quickest and cheapest ways to offset the effect of rising energy prices, and to reduce carbon emissions, are to reduce the amount of energy that is wasted, and to reduce the amount of energy consumed through increasing overall energy efficiency in terms of units of output per unit of energy input.

Saving energy saves money and reduces our carbon emissions.[66]

From a planning perspective, this means a concentration on building energy efficiency. While this is primarily a matter for building regulation, planning can have a positive impact by encouraging energy efficient subdivision layout and building siting.

Transport

The CSIRO Future Fuels Forum identified the following policy changes to address changes in transport energy systems.

> *Strategies for improving the ability of cities to respond to significant fuel price rises include:*
>
> - *Expanding the provision of high quality integrated public transport including the targeted extension of rail services and reconfiguring urban transport networks so that local suburban and circumferential bus services link to rail services. Note, bus services that are capable of using existing road space are likely to provide the fastest response*
> - *Planning for higher urban residential and activity densities and more local services*
> - *Expanding cycle ways and pedestrian infrastructure*
> - *Improved integration of public and non-motorised transport modes*
>
> *If governments and communities acknowledge the possibility that the dominant form of transport (that is, the private motorised vehicle) could undergo a sharp decline in affordability in the near future due to a peak in global oil production, there would be greater potential to engage on improving public transport and city planning.*[67]

In conclusion, the key initiatives for policy response to increases in the relative price of energy are:

a) A more compact and efficient urban form

b) energy efficient buildings; and

c) Supporting greater transport choice.

3.4 Regional Perspective

There is a growing awareness of and trend towards regional planning. A clear perspective of those values and characteristics which make Glenorchy significant within the region is critical. These are:

3.4.1 Spatial

Glenorchy is located close to centre of the Southern Region, and is less than 10km from the Hobart CBD.

Glenorchy has a large area of flat land developed for both industrial and residential use, all of which is in relatively close proximity to the Hobart CBD. Glenorchy has a modest supply of undeveloped land zoned for residential development.

3.4.2 Population

Glenorchy has the third largest population of 12 southern Councils behind Hobart and Clarence.

However, Glenorchy's population has remained relatively constant for the last 40 years and from 2002 – 2007 Glenorchy had the lowest population growth of the 12 southern councils. Glenorchy has one of the oldest populations in the region, and is 'older' than the Tasmanian and Australian averages.

Generally, the older age of Glenorchy's population is behind the very low population growth within the City and accounts for the projected decline in the City's share of the region's population.

3.4.3 Infrastructure

Glenorchy hosts a range of regionally critical infrastructure.

This includes high voltage electricity transmission lines and injection points; trunk water supply and high pressure gas pipelines; and important transport linkages provided by the Brooker Highway, the North-South rail corridor and the high frequency public transport corridor along Main Road.

Glenorchy also contains a range of regional cultural and recreation facilities such as the Derwent Entertainment Centre, the Royal Agricultural Showgrounds and the Tattersalls Park Racecourse.

3.4.4 Economy

Glenorchy is a centre for industry in the southern region. It is home to regionally-significant retail and bulky goods shopping facilities.

The local economy is dominated by private sector activities.

Significant tourist attractions exist at Moorilla (including the soon to open Museum of Old and New Art) and the Cadbury visitor centre.

3.4.5 Natural Values

Glenorchy shares natural features with others in the region – namely, Wellington Park, a share in the skyline of Metropolitan Hobart and approximately 30 km frontage to the Derwent River.

3.4.6 Policy Response

a) Articulate the significance of Glenorchy in the regional context.

b) Protect and enhance those qualities and characteristics of Glenorchy which are important to the region.

c) Take a part in improving the integration of land use planning across the Southern region.

3.5 Policy Responses to Our Changing World

The emerging challenges of demographic change, climate change and energy are serious ones – which require major changes in our approach to cities. Fortunately, the policy responses required are, in many instances, the same.

	A more compact and efficient urban form	More transport options	Energy efficient building design	Adapting to climate change impacts
Ageing Population	√	√	√	
Climate Change	√	√	√	√
Energy cost increases	√	√	√	
Regional perspective	√	√		√

These broad policy responses have been considered in the framing of land use strategies for a range of topics as part of the strategy.

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4 Community – working with and for our community

"Community" is the strategic plan theme in Council's corporate strategic plan which deals with social issues.

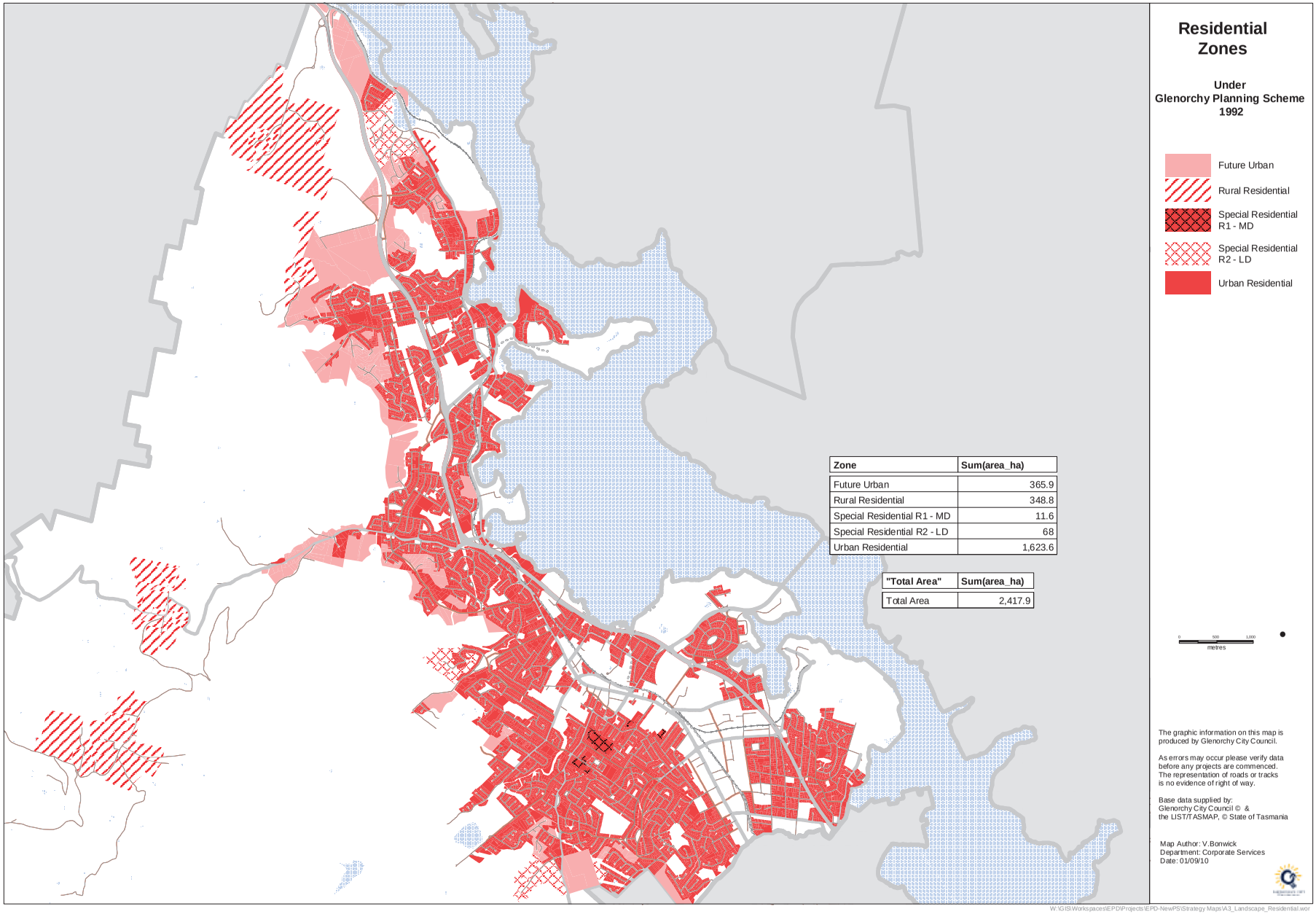
Relevant corporate objectives for the Community theme from the draft Strategic Plan 2010-2015 are:

This part of the strategic land use plan considers the following topics:

1. Housing
2. Open Space
3. Amenity
4. Safety
5. Access for People with Disabilities

For each topic, the relevant planning system objectives and Council strategic plan strategies are given, as well as a background section and a statement of the land use strategy for that topic.

The 2010 Works Festival, Photo: Lucia Rossi.



Zone	Sum(area_ha)
Future Urban	365.9
Rural Residential	348.8
Special Residential R1 - MD	11.6
Special Residential R2 - LD	68
Urban Residential	1,623.6

"Total Area"	Sum(area_ha)
Total Area	2,417.9

4.1 Housing

4.1.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

4.1.2 Council Strategic Plan 2010-2015

1.2.3 Encourage the provision of a diverse range of housing options within the City.

1.1.1 Develop and implement a plan which addresses the opportunities and challenges arising from an ageing population.

4.1.3 Background

Housing makes up the lion's share of all development in Glenorchy. As at April 2009 there were 18,581 residential properties in Glenorchy - comprising 89% of the City's 20,835 rateable properties.[67] It is estimated that there are approximately 20,000 dwellings in the City.[68]

Residential land also occupies some 62% of all zoned land in the City's built up area and 18% of all zoned land in the City.[69]

The planning strategy underpinning the *Glenorchy Planning Scheme 1992* is considered to be fundamentally sound. Its key tenets are:

- a commitment towards urban consolidation
- a high standard of design in residential development
- efficient use of the stock of under-utilized, serviced land in the City
- residential areas which are safe, pleasant and user-friendly environments for residents and visitors.[70]

However, since the mid-1990s a number of new housing issues have emerged or intensified. These now require further action. They are uniform development standards, sustainability, an ageing population and housing affordability.

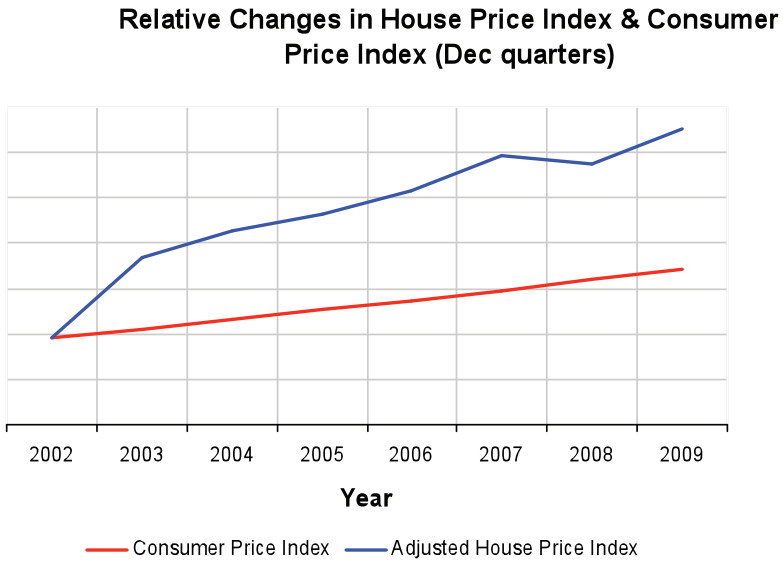
Uniform Development Standards

There is a continuing demand for greater uniformity in the structure and content of planning schemes throughout the State, including the implementation of regional land use strategies and an expanded suite of statewide common provisions. (See 'Legal and Policy Framework' above).

Adoption of revised common standard zones are likely to be a requirement following the review of the common key elements template for planning schemes under Planning Directive No. 1 (See 'Legal and Policy Framework" above.) Statewide standard residential provisions are under preparation for single dwellings. Work is also underway at the regional level to develop provisions for residential development and subdivision.

Sustainability

There is increasing awareness within the community of environmental issues and greater consideration of how dwellings contribute to sustainability through energy efficiency, transport costs, greenhouse gas emissions and impacts on water quality and stormwater management.



Source: Australian Bureau of Statistics Housing Price Index Cat. No. 6416.0 and Consumer Price Index for Hobart (All Groups) 6401.0.

Despite this, in Glenorchy, the median single dwelling increased in floor area from 135 m^2 to 208 m^2 between 1992 and 2007 - an increase of 54%. The median floor area of a unit went up from 80 m^2 to 103 m^2 over the same period - an increase of 28.8%. [71]

This increase has an impact on the cost of housing, the amount of energy required to light and heat housing and the footprint of housing (reducing the area available for the absorption of storm water).

An Ageing Population

Glenorchy's population is ageing. The proportion of people aged 65+ years has been increasing since 1991 and a 40 per cent increase in both those aged over 65 and those aged over 85 is projected between 2006 and 2031.[72] (See "Our Changing World" above.)

There are now more small households and fewer large households. The number of people in Glenorchy living in 1 or 2 person households increased by nearly 2,500 between 1991 and 2006. The number of people living in 4, 5 or 6 person households decreased by 770 over the same period. [73]

Glenorchy's housing stock has developed during the "baby boom" era - at a time when there was a much greater need to house larger families. However, the average number of people per household is now much smaller. It halved in the City between 1947 and 2006 from 4.7 down to 2.33. [74]

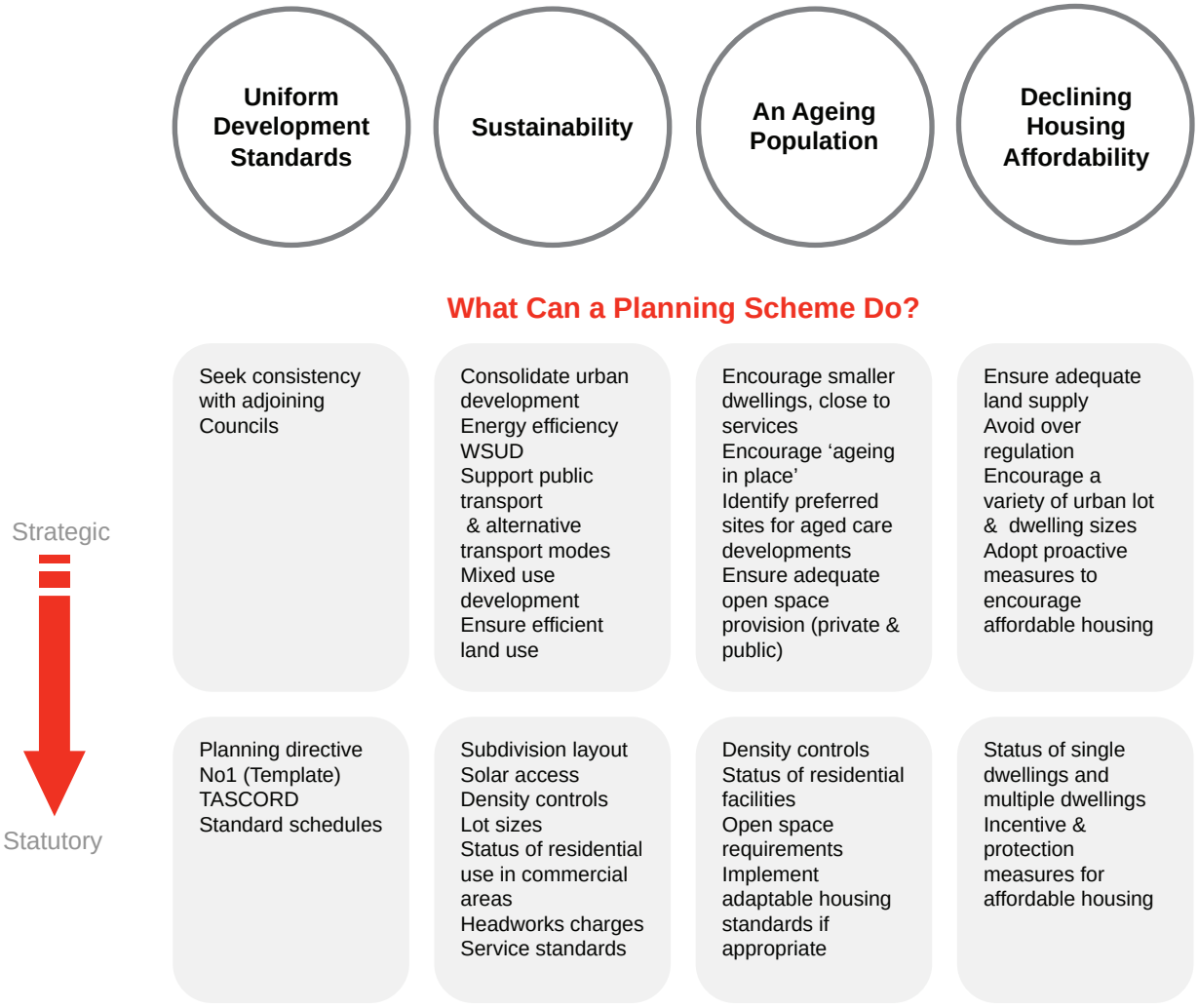
On average, flats and units made up little over a quarter of the total dwelling approvals in the ten years to 2009.[75] As at 2006, the bulk of the City's dwelling stock (73.9%) was still made up of detached dwellings.[76]

There is potential to encourage a mix of housing types more appropriate to the emerging needs of the community.

Housing Affordability

The price (purchase and rental) of dwellings is increasing and has seen an increasing proportion of residents experiencing 'housing stress'. The most obvious sign of housing affordability is the marked increase in property prices seen over the past decade. In March 1985, the median price for a house in Hobart was $45,000. In March 2005, the median house price for a house in Hobart was $301, 200.[77] . It had reached $370,000 by December 2009.[78]

The rate of increase in the house price index for established houses in Hobart (capital city) and the consumer price index for Hobart (All Groups) over time suggests that house prices are far outstripping the increase in the general price level.[79]



The planning system has sometimes been criticized as the cause of declining housing affordability through restrictions on residential land supply, developer charges and development control.[80]

However, there are many, complex influences on house prices. The Productivity Commission held an enquiry into first home ownership in 2004.[81] It found that the cause of rapid escalation in prices was primarily a surge in demand underpinned by income, employment growth and more affordable finance. It pointed out that housing supply could not immediately respond to increases in demand because of the time taken for land to become development ready. In any event, it also considered that land release policies had a relatively insignificant influence on housing affordability:

> *… given the small size of net additions to housing in any year relative to the size of the stock, improvements to land release or planning approval procedures, while desirable, could not have greatly alleviated the price pressures of the past few years. Nonetheless, removing unnecessary impediments on the supply side is clearly important to affordability in the long run, particularly in the context of the focus on planning to contain 'urban sprawl'.*[82]

Provision of an adequate residential land supply is clearly important to ensure that land supply constraints do not impact on housing affordability. (See 'Land Supply" ahead).

Through its regulation of development, a planning scheme can help address these emerging issues.

There is inherent conflict between some of these needs. Improved energy efficiency of dwellings may (in the short term) increase the cost of dwellings.

However, a number of initiatives such as smaller sized, higher density dwellings located in close proximity to services has the potential to assist sustainability, housing affordability and be more suited to an ageing population.

There is benefit in promoting alternative forms of housing that may be preferred by an ageing population, rather than a continued reliance upon the traditional 'detached house'. Similarly, encouragment of more efficient use of residential land, by allowing a higher density of housing in some locations, particularly those areas in close proximity to services and transport corridors would be worthwhile.

4.1.4 Land Use Planning Strategy:

a) Adopt the standard zones for residential areas required under Planning Directive No. 1.

b) Support greater uniformity in residential planning provisions by adopting standard regional provisions for residential use and development provided justifiable local variations are allowed.

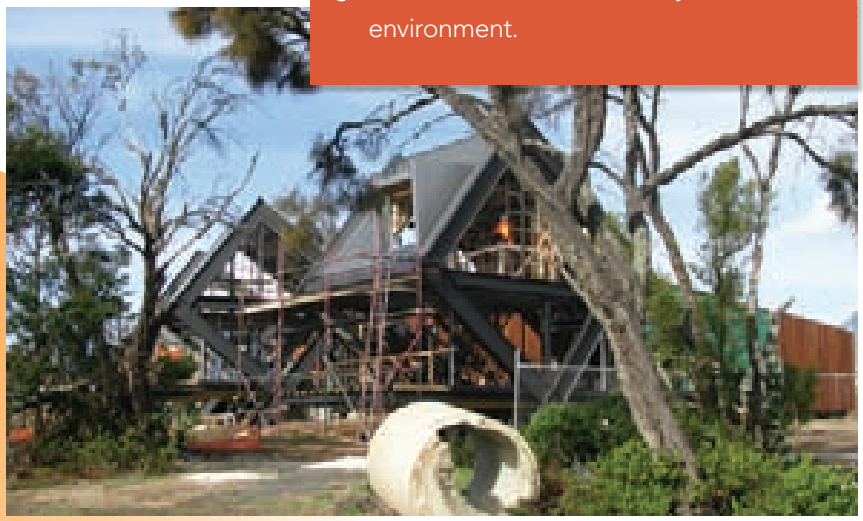
c) Encourage more people to live closer to services by maximising the use of existing serviced land and carefully managing the orderly of release of new areas which might require significant infrastructure investment.

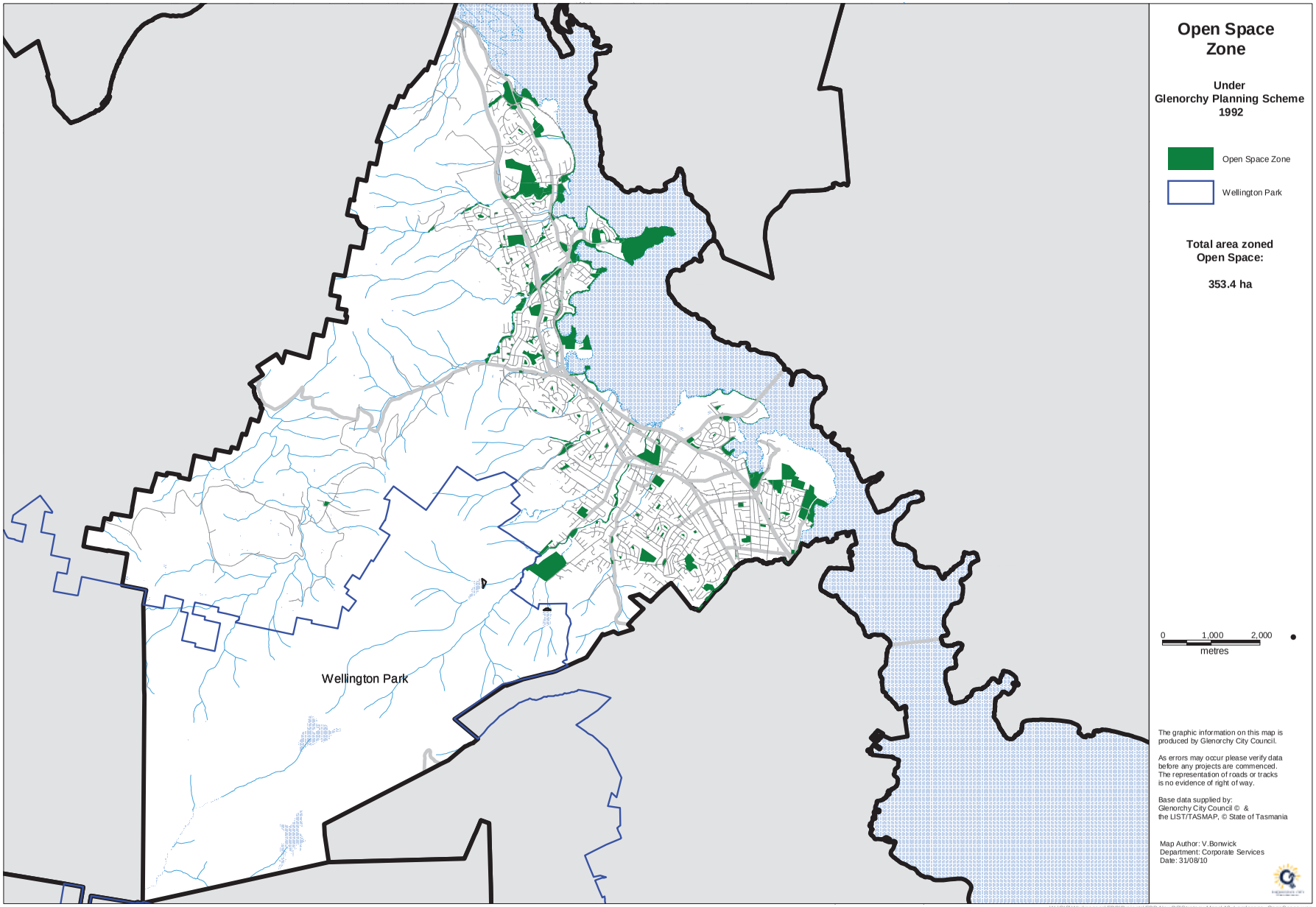
d) Promote housing choice by encouraging a range of housing types to meet the needs of an ageing community.

e) Adopt planning provisions and measures which promote housing affordability - particularly the maintenance of a sufficient supply of suitably-zoned land to meet anticipated demand for a 15 year period.

f) Promote residential amenity by reducing the potential for land use conflicts between residential and other land uses.

g) Foster a safe and healthy residential environment.




Open Space Zone
Under Glenorchy Planning Scheme 1992
Open Space Zone
Wellington Park
Total area zoned Open Space:
353.4 ha
0
1,000
2,000
metres
Wellington Park
The graphic information on this map is produced by Glenorchy City Council.
As errors may occur please verify data before any projects are commenced. The representation of roads or tracks is no evidence of right of way.
Base data supplied by: Glenorchy City Council © & the LIST/TASMAP, © State of Tasmania
Map Author: V.Bonwick
Department: Corporate Services
Date: 31/08/10
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4.2 Open Space

4.2.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;

(Schedule 1 Part 2(h) LUPAA)

4.2.2 Council Strategic Plan 2010-2015

1.4.3 Promote recreational activity by maintaining and improving facilities and assisting access to funding for sporting and community groups.

1.4.4 Encourage healthy lifestyles through participation in active and passive recreation.

4.2.3 Background

The provision of open space within large urban areas such as the City of Glenorchy contributes greatly to the City's amenity and quality of life by providing opportunities for active play, sport and recreation as well as relaxation and enjoyment of the outdoors. It is also beneficial in providing habitat corridors and/or linkways for native wildlife and as recession areas for climate change.

Council manages large areas of open space within the City for recreational purposes. Glenorchy residents enjoy a high level of access to significant outdoor areas such as Wellington Park and the River Derwent foreshore. The City also provides a diversity of recreational and sporting facilities with a significant number of parks, entertainment centres and sporting facilities. In general, the City is well-provided with open space. However, there are some gaps where local communities are not well-served with nearby open space.

There is a hierarchy of open space, which provide a range of recreational facilities and avenues from local playgrounds to City-wide significance.

City of Glenorchy Recreation Plan 2008 - 2013

In August 2008, Council endorsed the City of Glenorchy Recreation Plan 2008 - 2013 (the Recreation Plan) prepared by the consulting firm, @ leisure.

The Recreation Plan proposed the following key recreation goals for Glenorchy:

- *Provide for the changing needs of the community.*
- *Provide a greater focus on recreation and open space planning and design before development, in Council's strategic and land-use processes, and the improvement of experiences in urban parks.*
- *Enhance the distribution, quality and suitability of recreation facilities to increase access, and enhance the quality, amenity and viability of recreation facilities in the City.*
- *Develop an integrated network of off-road trails for walking and cycling, and other trail based activities.*
- *Co-ordination of Council resources to achieve quality outcomes for recreation.*[93]

The Recreation Plan recommended the following in relation to the planning scheme review:

This (planning scheme) should ensure the potential of its natural assets are realised, protected and carefully managed into the future, and that recreation and open space land uses are planned and developed in conjunction with other urban elements in a coordinated fashion.[84]

The following strategies were recommended:

- *Ensure open space is acknowledged as a legitimate land use in the new planning scheme.*
- *Integrate the planning of open space, sport and leisure facilities into other land use planning.*
- *Engage qualified recreation and open space professionals to make input into structure and strategic planning projects.*
- *Promote, and continue to protect, significant physical and historic attributes in open space.*[85]

The following specific actions were identified:

18 *Ensure recreation issues identified in this plan are addressed in the revision of the Glenorchy Planning Scheme.*

19 *Seek to secure access to strategically important corridors for recreation (such as the River foreshore, creek corridors and Wellington Park).*

20 *Prepare the long term vision for the River Derwent foreshore as a public asset.*

21 *Consider taking an urban square / town park with further development in association with activity / shopping centres.*[86]

Open Space Hierarchy

In 1996, Hepper Marriott and Jerry de Gryse prepared a City of Glenorchy Recreation Strategy. The Strategy contained Open Space Plans of Management for a range of open space types: significant areas, community parks, neighbourhood parks, linkways, bushlands, outdoor sports venues, amenity reserves and utility reserves.

Recently, Matt Lindus reviewed the @leisure and Hepper Marriott work and recommended an open space classification system based on the categories: "neighbourhood park", "community park", "linkway" and "natural resource area" for sites of conservation value.[87]

Neighbourhood park catchments were identified by adopting a catchment of 5 minutes walking distance (500m) and would serve approximately 2000 people.[88] Analysis showed that the Granton/ Austins Ferry and Claremont areas generally have the lowest density of playgrounds, with most other neighbourhoods within the City well covered.[89]

Community Parks attract a higher level of facilities than Neighbourhood Parks such as public toilets, picnic shelter, barbeque facilities, play equipment and seating. Visitors are more likely to drive or use other transport forms in order to transport young family members and necessary equipment to these sites (i.e. picnic hamper, eski/cooler, sporting equipment). There may be one Community Park per suburb or community precinct.

Linkways are those reserves, paths, unmade roads and sidewalks which combine to create a network of recreational and pedestrian linkages within and through the City.[90]

Open Space Contributions

In relation to the ongoing acquisition of open space areas through the planning process, the Recreation Plan had the following to say:

> *The pattern of recent subdivision suggests that not all residential areas are relatively equitably supplied with open space and recreation facilities, at the quality required.*
>
> *More detailed guidelines about desirable attributes of open space and distance thresholds may need to be included in the subdivision policy.*
>
> *Planning must also ensure every open space has a dedicated function, and that this is consistent with the nature and characteristics of the space to be provided.*[91]

Under the *Local Government (Building and Miscellaneous Provisions) Act 1993*, Council can acquire up to 1/20 (5%) of the value of the area of the total area being subdivided for public open space. If Council wishes to acquire a greater area of land, it

must purchase the amount of land that is in excess of 5% of the value of the total area being subdivided. The Act also provides Council with the authority to require a cash payment instead of land as a public open space contribution.

However, the existing Planning Scheme does not provide any detail concerning the adequacy or quality of public open space contributions when determining a subdivision application.

4.2.4 Land Use Strategy

a) Adopt the standard zones for recreational and open space areas required under Planning Directive No. 1.

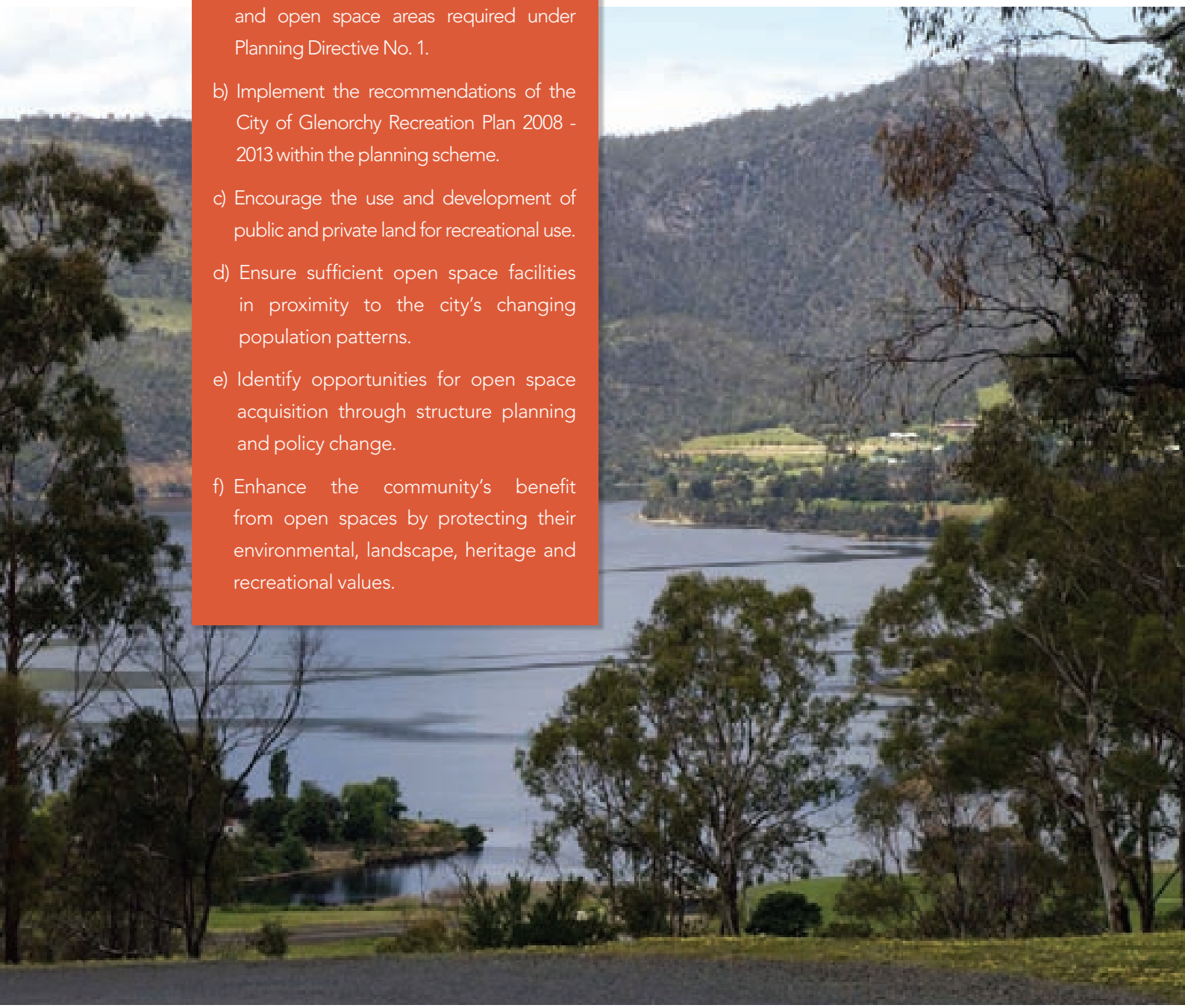
b) Implement the recommendations of the City of Glenorchy Recreation Plan 2008 - 2013 within the planning scheme.

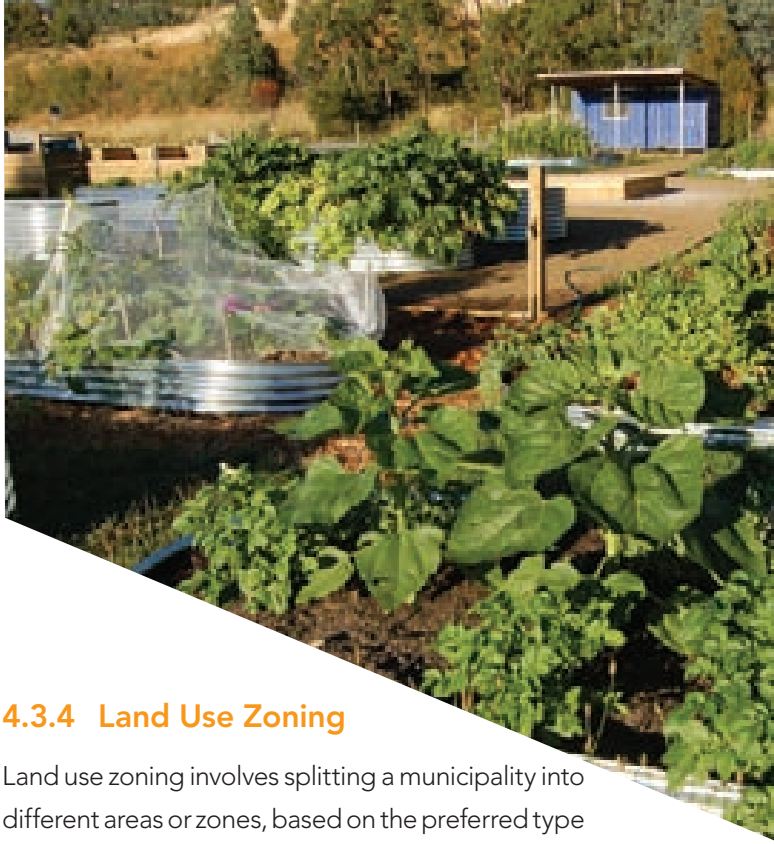
c) Encourage the use and development of public and private land for recreational use.

d) Ensure sufficient open space facilities in proximity to the city's changing population patterns.

e) Identify opportunities for open space acquisition through structure planning and policy change.

f) Enhance the community's benefit from open spaces by protecting their environmental, landscape, heritage and recreational values.





4.3 Amenity

4.3.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

4.3.2 Council Strategic Plan 2010-2015

3.3.3 Improve the quality, design and appearance of the City's buildings and public spaces.

4.3.3 Background

One of the main objectives of the planning system is to protect the "amenity" of the community.

The Amenity of a locality or building means "any quality, condition or factor that makes or contributes to making the locality or building harmonious, pleasant or enjoyable."[92]

So, the planning system seeks to protect those qualities which we enjoy about the place in which we live. This is sometimes easier said than done.

For example, development of a house on a vacant block next door may often result in some loss of amenity. Any building will block a proportion of outlook. Any building will cast a shadow. Any building with windows will have the potential to allow overlooking of neighbours. It is the extent to which these effects occur which is the concern of planning.

The planning system seeks to safeguard a "reasonable" level of amenity. To decide what is reasonable, a planning authority must consider general community expectations, when balancing competing demands and interests in land.

The planning system protects amenity in two main ways:

- by separating potentially conflicting land uses through the use of land use zoning controls
- by requiring proposals for use and development of land to meet certain use and development standards.

4.3.4 Land Use Zoning

Land use zoning involves splitting a municipality into different areas or zones, based on the preferred type of land use in that area. For example, in a residential area, commercial or industrial activity is generally prohibited. One purpose of land use zoning is to minimize the potential for land use conflict – where incompatible land use cause problems for one another.

4.3.5 Use or Development Standards

A standard is defined as "a level of quality which is regarded as normal, adequate or acceptable".[93]

Development standards may apply to such matters as building setbacks (distances from boundary), height, density, car parking requirements and open space.

Current development standards often adopt a "performance-based" approach whereby compliance with a numerical standard is not necessary, provided the objective for the standard is satisfied. For example, a 2m minimum setback from boundary may not be required if a proposal would not cause unreasonable visual bulk, overshadowing or privacy impacts on neighbouring properties.

4.3.6 Land Use Strategy

a) Protect the amenity of the City's community through the appropriate application of land use zones and well-drafted and comprehensive use and development standards.

4.4 Safety

4.4.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

4.4.2 Council Strategic Plan 2010-2015

1.3.10 Partner with other stakeholders to implement crime prevention, community safety and fear of crime initiatives, in consultation with the community.

4.4.3 Background

The way the physical environment is developed can deter and reduce the opportunity for crime. Crime Prevention through Environmental Design (CPTED) is a situational approach to crime prevention which considers how a specific physical environment might be designed, altered or managed to reduce the opportunity for, and fear of, crime.

Glenorchy was one of the first councils in Tasmania to introduce CPTED provisions into its planning scheme in 1996.[94]

Some of the major principles underpinning CPTED initiatives are:

- *natural surveillance* – the ability to see and be seen by others by maximising visibility. People's ability to see and understand the significance of their surroundings (what is happening around them and ahead) is also important
- *natural access control* – design that maximizes the visibility of access and exit points from the street and parking areas also helps to maintain access control, increase natural surveillance and reduce excuse-making opportunities for would-be offenders
- *territorial reinforcement* – the provision of signs, fences, landscaping and markings that help distinguish boundaries and inform people as to the intended function and ownership of the space/place. This helps to clearly identify which spaces are public, which are private and which are semi-private
- *mixed use development* – high levels of activity in public spaces/places reduces opportunities for crime and indicates that the area is safe and that help is available if required
- *elimination of pedestrian movement predictors* – when potential offenders are unable to predict the movements/ intended destination of potential victims, the opportunity for crime is reduced.

The core of the existing CPTED provisions are contained in Clause 9.9 of the Glenorchy Planning Scheme 1992. These are:

9.9 CRIME PREVENTION

The Council must not grant a permit (including a permit for a plan of subdivision) if in its opinion the use, development or subdivision fails to make reasonable provision for:

(a) public safety, security and a reasonable sense of security for residents and other users of the locality;

(b) lighting, visibility and natural surveillance to provide safe access in public spaces and pedestrian access ways;

(c) minimising the potential for, and effect of vandalism and anti-social behaviour through good design and construction;

unless it is satisfied that such measures can be implemented by the imposition of conditions of approval.

Other CPTED provisions are spread through the planning scheme in various intent statements, decision guidelines and information requirements.

Options for incorporating CPTED provisions into a new planning scheme include:

- objective statements
- incorporation of development standards within zones
- requirements for crime risk assessments to be undertaken for susceptible uses and developments.

While comparisons with other planning documents suggest that Glenorchy's current CPTED provisions are among the most comprehensive, there is scope to refine them within the context of a new planning scheme.

4.4.4 Land Use Strategy

a) Strengthen the existing Crime Prevention through Environmental Design provisions in a new planning scheme.

4.5 Access for People with Disabilities

4.5.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

4.5.2 Council Strategic Plan 2010-2015

1.3.3 Ensure Glenorchy's infrastructure facilitates community access for all.

4.5.3 Background

Many people with disabilities have mobility challenges which make it difficult for them to move around the City and use services, unless suitable physical access to premises is provided. Lack of this access can deprive people with disabilities of services and of opportunities to participate in society. In fact, the Social Inclusion Commissioner has identified people with a disability among those most at risk of social exclusion.[95]

In 2006, nearly 5% of Tasmanians (24,000 people) reported a core activity need for assistance; meaning they required daily assistance with self-care, mobility or communication because of a long-term health condition, disability or old age .

However, the overall level of disability in the community is significantly higher; affecting 23.5% of Tasmanians.

Glenorchy is the seventh oldest municipality in the oldest of all Australian states and territories. The likelihood and severity of disability both increase with age. Therefore it is anticipated that levels of disability will increase in the community in future.

4.5.4 Legislative, Policy & Governance Context

Under the *Disability Discrimination Act 1992* (Commonwealth), it is unlawful to discriminate against a person on the grounds of that person's disability or a disability of their associates, in access to premises (including means of access), except where rendering the premises accessible would impose "unjustifiable hardship".[96]

The Building Code of Australia has specific provisions applying to buildings accessed by the public. Access is required from a lot boundary at the main points of entry; from any accessible car park space; and from any adjacent and associated accessible building on the allotment; and through the principal public entrance. Parking requirements for accessible parking are also set out.[97]

4.5.5 DDA Action Plan

Council's Access Action Plan under the Disability Discrimination Act makes specific provision for a number of planning issues, including to ensure Council provides all members of the community access to facilities, services and employment in a fair and equitable manner.[98]

4.5.6 Planning Provisions for Access

The ability to pursue a path of travel in an uninterrupted way and to take advantage of what is generally offered to the society are critical to the access and mobility of all people.

The general accessibility of the public domain, such as footpaths, park facilities and schools, is a relevant planning matter.

A footpath should, as far as possible, allow for a "continuous accessible path of travel" so that people with a range of disabilities are able to use it without encountering barriers . Such a path should extend from the property line with no obstructions or projections in order to provide the best possible guidance line for all users including people with a vision impairment.[99]

In some instances, the planning system may seek to provide for access to private land. For example, ensuring equitable pedestrian circulation opportunities in some residential developments such as in retirement village or group home complexes.

Planning provisions should not duplicate regulation of those matters already contained in the BCA or regulation of footpath trading activities under Council's Roads By-Law. There may also be exemptions from planning controls for some minor infrastructure works.

4.5.7 Land Use Strategy

a) Ensure that the planning scheme includes provisions which address access for people with disabilities – particularly in the public domain, but also in the private domain where use or development is likely to be frequented by people with disabilities.

b) Avoid regulating for access where this would duplicate existing provisions such as Building Code of Australia controls and regulation of footpath trading activities under Council's Roads By-Law.

References

[67] *Glenorchy City Council Finance Section Data*

[68] *19,297 dwellings at 2006 ABS Census plus a historical average development rate of 188 dwellings p.a.*

[69] *Based on analysis of zoned land in the City 15/5/2006.*

[70] *Glenorchy Planning Scheme 1992, cl. 2.1*

[71] *Based on a random sample of 1992 and 2007 building permit applications.*

[72] *Associate Professor Natalie Jackson, Demographic Analytical Services Unit, University of Tasmania, Population projections for Glenorchy City Council, April 2008*

[73] *Australian Bureau of Statistics Census data for 1991 and 2006 Censuses.*

[74] *Australian Bureau of Statistics Census data.*

[75] *Glenorchy City Council building records.*

[76] *Australian Bureau of Statistics, 2006 Census data. N.b. The definition includes all dwellings separated from another by a distance of more than 1 metre. So detached units are included in this figure.*

[77] *Housing Industry Association in Legislative Council Select Committee on Housing Affordability, "Housing Affordability in Tasmania 2008, p. 19.*

[78] *ABC Radio National, Hobart, "House Price Record", posted 1/2/2010. Downloaded on 21/4/2010 from http://www.abc.net.au/news/stories/2010/02/01/2806533.htm?site=hobart*

[79] *Australian Bureau of Statistics Housing Price Index Cat. No. 6416.0 and Consumer Price Index for Hobart (All Groups) 6401.0. The House Price Index has been adjusted additively so that it starts at the same point as the Consumer Price Index – in order to better compare the gradient of both curves.*

[80] *A. Moran, Losing the Greater Australian Dream - The Tragedy of Planning, Institute of Public Affairs 2006, p. 5*

[81] *Productivity Commission, 2004, First Home Ownership, No. 28, Commonwealth of Australia, Melbourne, pp. XVII, 59, 124*

[82] *Productivity Commission, 2004, First Home Ownership, No. 28, Commonwealth of Australia, Melbourne, p. 154*

[83] *@leisure, City of Glenorchy Recreation Plan 2008 – 2013, p. 6*

[84] *@leisure, City of Glenorchy Recreation Plan 2008 – 2013, p. 10*

[85] *@leisure, City of Glenorchy Recreation Plan 2008 – 2013, p. 10*

[86] *@leisure, City of Glenorchy Recreation Plan 2008 – 2013, p. 24*

[87] *M Lindus, Glenorchy Open Space Review – Part 1 (draft), Feb 2010, pp. 29-30*

[88] *M Lindus, Glenorchy Open Space Review – Part 1 (draft), Feb 2010, pp. 29-30*

[89] *M Lindus, Glenorchy Open Space Review – Part 1, (draft), Feb 2010, p. 31*

[90] *Hepper Marriott et al (1996:1)*

[91] *@leisure, City of Glenorchy Recreation Plan 2008 – 2013, p. 11*

[92] *As defined in Common Key Elements Template, cl. 3.1.3*

[93] *Macquarie Dictionary*

[94] *Amendment K 21/5/1996*

[95] *Prof. D. Adams, "A Social Inclusion Strategy for Tasmania", September 2009,*

[96] *S.23. Disability Discrimination Act 1992*

[97] *Glenorchy City Council, Access Action Plan*

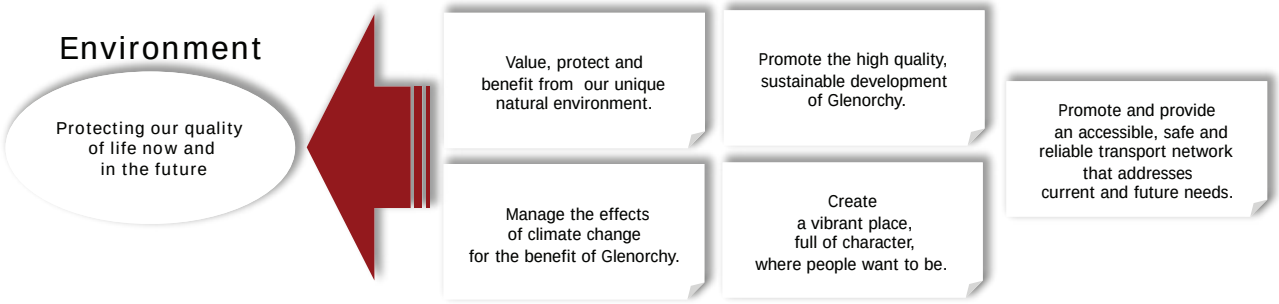
[98] *Human Rights and Equal Opportunities Commission (HREOC), "Does the DDA Cover Access to the Footpath?" Accessed on 16/3/2009 from http://www.hreoc.gov.au/disability/_rights/faq/Access/access.html#footpath*

[99] *Ibid*

5 Environment – Protecting our quality of life now and in the future

"Environment" is the strategic plan theme in Council's corporate strategic plan which deals with issues for the natural and built environment.

Relevant corporate objectives for the Environment theme from the Strategic Plan 2010-2015 are:



This part of the strategic land use plan considers the following topics:

1. Infrastructure
2. Transport & Urban Form
3. Natural Values
4. Land Hazards
5. Heritage

For each topic, the relevant planning system objectives and Council strategic plan strategies are given, as well as a background section and a statement of the land use strategy for that topic.

5.1 Infrastructure

5.1.1 Planning System Objective

to require sound strategic planning and co-ordinated action by State and local government;
(Schedule 1 Part 2(a) LUPAA)

to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;
(Schedule 1 Part 2(h) LUPAA)

5.1.2 Council Strategic Plan 2010-2015

3.4.1 Manage the orderly growth of the City in a way which maximizes the take-up of existing infrastructure capacity.

3.4.4 Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.

4.1.6 Manage Council's assets in a way that maximizes the "whole of life" benefit to current and future citizens.

5.1.3 Background

What is "Infrastructure"?

The term "Infrastructure" describes the assets needed to provide people with access to economic and social facilities and services. In general, infrastructure facilities are fixed in place, are costly and time consuming to plan and build, are durable and have low operating costs, and often exist as networks. They require routine maintenance and periodic upgrading to prolong their lives. Such assets often have environmental or social benefits that cannot be fully recovered by user charges.

Because of the public goods which it provides, infrastructure is often publicly owned or regulated.

Asset management aims to maintain assets to deliver services in the most cost effective manner for present and future consumers. Sound asset management will prolong the life of assets and minimise their whole-of-life costs. The proper management of local government assets has implications for the financial sustainability of many local governments.

Infrastructure Providers

Local government plans, develops and maintains key infrastructure for its communities. This infrastructure includes "physical" infrastructure such as local roads, bridges, footpaths, stormwater drainage and waste disposal; as well as "social" infrastructure such as recreation areas and community halls.

Other forms of infrastructure may be owned or provided by State government authorities (State road network, rail network); local government joint authorities (Southern Water - water and sewerage); government business enterprises (Metro Tasmania, Hydro, Transend, Aurora) or by the private sector within a regulated environment (Telstra, Optus, Vodaphone).

Some works on infrastructure are exempt from planning control by virtue of special legislation. Examples include certain electricity, gas and telecommunications works.

Local government also has planning responsibilities that affect provision of infrastructure by government or by business. These responsibilities include town planning, land zoning, subdivision approval, development assessment and building regulation.[100]

Planning for Infrastructure

A planning scheme can further Objective 2(h) of the Act in a number of ways:

- protection of public infrastructure
- orderly provision and co-ordination of infrastructure
- for community benefit.

There are a number of ways in which land use planning can further the planning system's objective for infrastructure:

Protection of Infrastructure

In Glenorchy, there are both local infrastructure which serves an area within the municipality only, and regionally significant infrastructure which serves the City as well as the wider region. Glenorchy hosts infrastructure of regional importance, including:

- the Lake Fenton and West Derwent Pipelines pass through the City, providing bulk water sourced from the Derwent River and Mount Field National Park
- the Chapel Street Transend substation is currently the only injection point for bulk electricity into Greater Hobart (though a second is planned for the Eastern Shore)
- welllington Park provides a second water catchment for the City
- in terms of transport, the Brooker Highway provides the principal gateway to central Hobart
- the main railway line passes through the City. Though the rail line may be downgraded with the development of the inter-Modal hub at Brighton, the rail line has potential as some form of future transport corridor.

Planning for Infrastructure

Protection	•Recognise statutory easements. •Separate conflicting uses. •Adequate asset management, renewal & replacement. •Avoid incremental and cumulative impacts on infrastructure. •Do not unnecessarily fetter infrastructure provision with planning requirements.
Community Benefit	•Decide who pays – whether the end user or the broader community? •Maximise use of existing infrastructure capacity. •Locate infrastructure close to the community served. •Maximise /promote choice e.g. transport modes, energy sources. •Maintain community safety. •Minimise visual & environmental impacts. •Promote co-location of use and development,where practical.
Orderly Provision	•Identify land for infrastructure in advance of need. •Provide infrastructure in advance of need. •Provide infrastructure commensurate with clearly-defined standards for different locations. •Provide infrastructure with adequate capacity. •Development is not to occur without an adequate standard of services. •Co-ordinate services at local, regional and State levels. •Consider use of a development contributions regime to support orderly development.

- Powerco pressurised strategic gas main travels through Glenorchy
- a future regional waste transfer site at 129 Derwent Park Road jointly owned by the Glenorchy and Hobart City Councils
- the Derwent Entertainment Centre and other regionally important sport and recreation facilities - namely the Tattersalls Park Racecourse and the Royal Agricultural Showgrounds.

It is important to protect this infrastructure for the benefit of the City and the wider region. The main means of doing this are:

1. dedicated zoning of key infrastructure
2. standards and decision guidelines which ensure infrastructure is protected from damage or fettering during the application assessment process.

Orderly Provision of Infrastructure for Community Benefit

The available capacity of Glenorchy's infrastructure is uneven relative to the development which it services.

In general terms, the City's existing built up areas are well served by infrastructure. However, there are a number of localised capacity constraints which have the potential, if not rectified, to place limits on infill development.

In the City's northern corridor, infrastructure is stretched. Particular constraints include the need for:

- new reservoirs at Granton and Chigwell
- duplication of the trunk sewer main above the northern outlet to provide for additional capacity
- a new electricity substation or injection point at Granton to service growth
- redesign of the ramp which connects the Northern Outlet with Upper Hilton Road/ Gillies Road.

It will be important to ensure that new development in these areas is co-ordinated with infrastructure investment to ensure that the development is appropriately serviced in a planned manner.

There is also a need to ensure that new development is provided with adequate social infrastructure as there is some inequity in the distribution of services such as local parks and shopping opportunities.

5.1.4 Land Use Strategy

a) Adopt planning provisions to encourage more compact development.

b) Identify and protect critical infrastructure from encroachment and fettering.

c) Identify and protect regionally significant infrastructure.

d) Ensure the planning scheme provides for the future infrastructure projects.

e) Put in place an ongoing strategic planning process to co-ordinate residential development processes and infrastructure.

f) Prepare a structure plan for the northern corridor.

g) Consider future social infrastructure in settlement planning.

5.2 Transport and Urban Form

5.2.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

to require sound strategic planning and co-ordinated action by State and local government;

(Schedule 1 Part 2(a) LUPAA)

to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;

(Schedule 1 Part 2(h) LUPAA)

5.2.2 Council Strategic Plan 2010-2015

3.5.1 Manage the City's transport network to promote sustainability, accessibility, choice, safety and amenity.

3.4.1 Manage the orderly growth of the City in a way which maximizes the take-up of existing infrastructure capacity.

3.4.4 Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.

5.2.3 Background

"Urban form" is a term used to describe the shape and pattern of a city.

The shape and pattern of a city is moulded by three major elements – the landform, the location and type of land use; and the transport corridors (road, rail etc.).

Urban form is important because it:

- influences the distance people have to travel to access employment and services
- determines the footprint of a city and the extent to which natural systems are disturbed
- impacts on the overall energy use of a city
- shapes the kind of transport systems required to service a city.

Greater Hobart is a "linear" city. The settled area of the City is confined to the narrow river plain and foothills either side of the River Derwent between the Wellington and Meehan Ranges.

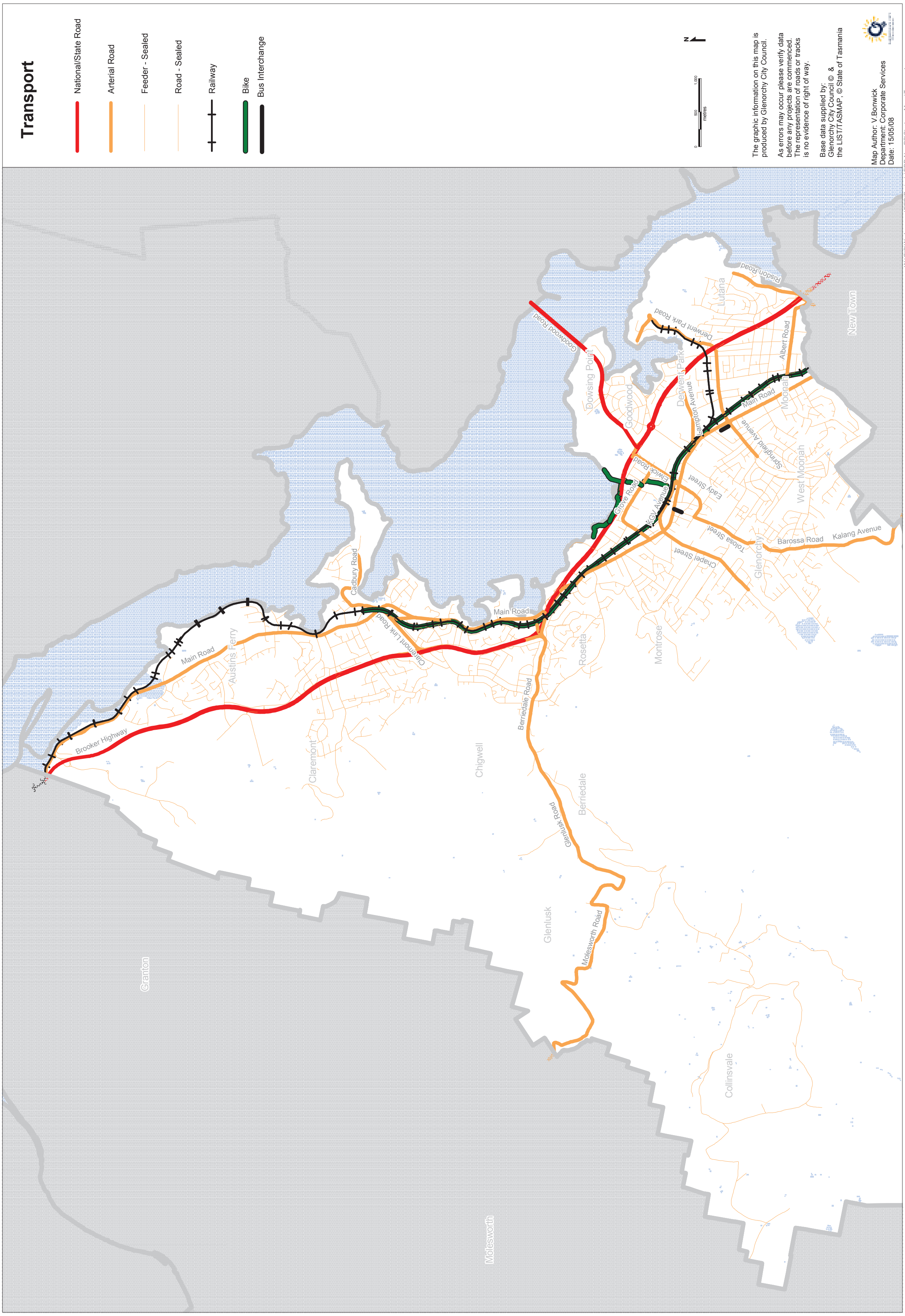
Glenorchy is situated between the River Derwent and the Wellington Range. It is, itself a linear city, with its centres formed as strip development along the Main Road spine.

The dominant means of transport has been the main shaper of the form of cities.

> *Where people live, work, do business and engage in the myriad of other activities has always been based on accessibility. The transport modes available determined the density, location and spacing of settlements. Walking distances, horse-drawn carriages and, later, rail were the determinants of urban form and structure until the motor car made dispersal of housing and activities possible.*[101]

In the Hobart context, suburbs such as Battery Point developed when walking was the prevalent transport mode. As a result, there is a grid street pattern, small lot sizes and higher population densities. For example, the block bounded by Hampden Road, Kelly Street, MacGregor Street and South Street, Battery Point has a density of 37 dwellings per Ha.

The next phase of urban development saw the arrival of public transport – by rail, train and bus. This saw the first waves of suburbanisation, as people could live outside of the inner city and commute to work. This saw the urbanisation of Glenorchy, which until then was a largely agricultural district. Proximity to public transport stops was still important. So, street networks continued to be laid out in a grid pattern – which is the most efficient network for accessibility. This phase lasted from the 1880's to the 1950's. For example, the block bounded by Amiens Avenue, Coleman Street, Johnson Street and the rear of Main Road properties, Moonah has a density of 16.2 dwellings per Ha.



Transport
National/State Road
Arterial Road
Feeder - Sealed
Road - Sealed
Railway
Bike
Bus Interchange
N
metres
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Base data supplied by: Glenorchy City Council © & the LIST/TASMAP, © State of Tasmania
Map Author: V.Bonwick
Department: Corporate Services
Date: 15/05/08
Risdon Road
Lutana
Derwent Park Road
Goodwood Road
Albert Road
Dowsing Point
Goodwood
Derwent Park
Main Road
Moonah
Springfield Avenue
Elwick Road
Eady Street
West Moonah
Grove Road
Tolosa Street
Glenorchy
Barossa Road
Kalang Avenue
Chapel Street
Cadbury Road
Main Road
Claremont Link Road
Rosetta
Montrose
Main Road
Austins Ferry
Berriedale Road
Brooker Highway
Claremont
Chigwell
Berriedale
Glenlusk Road
Glenlusk
Molesworth Road
Granton
Collinsvale
Molesworth
New Town

From the 1950s to the present day, there has been a rise in vehicle ownership as cars have become more affordable. This means that "getting around" is less tied to the need to consider walkability in the design of our cities. Streets have become more curvilinear and culs-de-sac more common. For example, the block bounded by the rear of Main Road properties, the rear of Sharron Drive properties and Hestercombe Road contains two culs-de-sac and has a density of 10.9 dwellings per Ha.

This highlights a general trend towards decreased dwelling density and decreased walkability; the dominant means of transport in cities has evolved from walking to public transport to private car. As car ownership became more widespread in the 1950's and 1960's, cities expanded ever outwards to house a growing population. This growth was fed by cheap fuel and large scale road infrastructure projects.

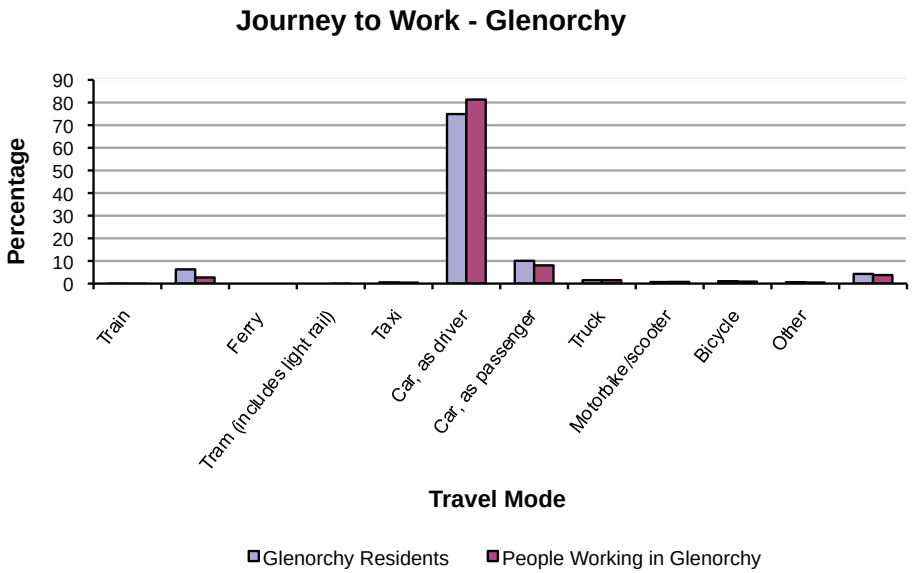
The car remains the predominant means of transport today and has enabled Greater Hobart to spread out to the extent that its residential density is the lowest of all Australian capital cities.[102] In fact, Greater Hobart is among the least dense cities in the world, with a very large footprint considering its population size.

While this is partly a function of Greater Hobart's topography, it is also a function of a lack of co-ordinated planning and growth management.

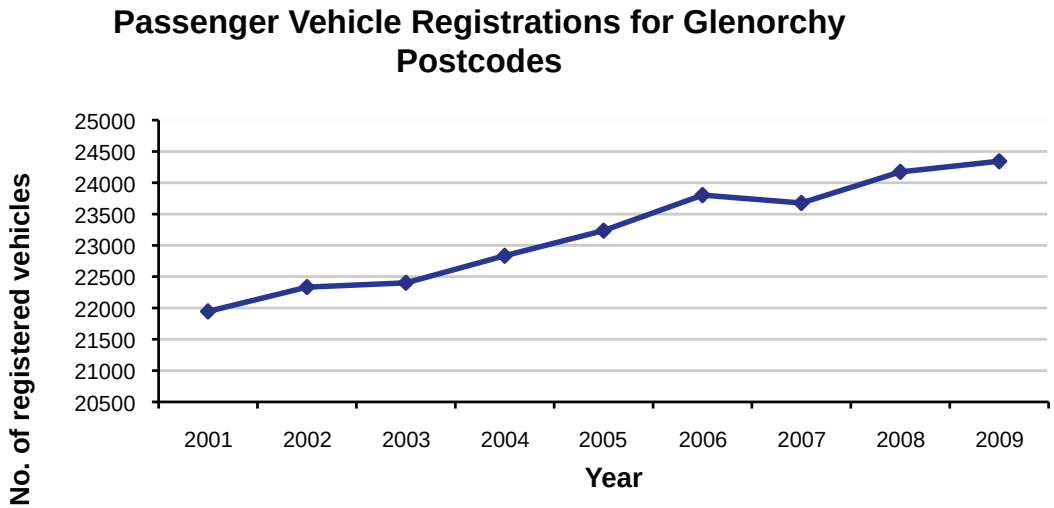
> *Greater Hobart has an average population density of only 217 people per km^2. However, its development footprint is comparable to Sydney (2,058 people per km^2), New York City (10,194 people per km^2), or London (4,761 people per km^2) – cities with population of many millions. A preference for single detached houses, often on larger blocks, lifestyle choices to live in outlying coastal and rural areas and the location of affordable housing (both public and market-driven) in outer urban areas where land is cheaper, contribute to the dispersed nature of our urban areas.*
>
> *At the suburb level, where we live, shop, work or conduct many of our daily activities are often located some distance apart. …*
>
> *The combined result of small, dispersed populations and separation of land uses is a reliance on cars to meet our travel needs. Distances travelled tend to be longer and households face higher transport costs as a result. The ability to provide public transport services or effective walking and cycling linkages are constrained.*[103]

The following statistics highlight the dominance of car travel in Glenorchy:

85% of residents and 89.4% of workers in Glenorchy journey to work by car. 6.3% of residents and 2.7% of workers in Glenorchy use public transport to travel to their workplace.[104]



Source: Australian Bureau of Statistics 2006 Census Data



Source: Australian Bureau of Statistics, Motor Vehicle Census, Cat. No. 9309.0

As at March 2009, there were 24,343 passenger vehicles registered under Glenorchy postcodes. That is one car for every 1.4 adults in the City. The number of registered passenger vehicles increased by 10.9% between 1991 and 2009.[105]

40% of the land in the Glenorchy and Moonah centres is devoted to the car – in the form of road pavements or at grade car parking areas.[106]

However, there are a number of present and emerging challenges which demand a rethinking of such a heavy reliance upon car transport as the dominant transport mode – at least in the way it has resulted in such spread out cities.

These are:

Our ageing population

- our population is ageing and as people age, proportionately fewer have direct access to car transport and the services that car travel facilitates
- in a society organised around private car transport, this has the potential to increase social exclusion and service deprivation.

The likelihood of significant future petrol price increases.

There is considerable consensus that global oil production is approaching its peak. Along with this, rising demand for oil, geopolitical instability and long transition times associated with new vehicle fuel technologies mean that the price of petrol is likely to rise more sharply in future.

The need to address climate change

- Motor vehicles contribute to greenhouse gas emissions. A more compact urban form has the potential to reduce the number and length of vehicle trips.

Public health issues

- A more compact urban form increases the walkability of our cities by reducing the distance to services. This encourages healthier lifestyles in a society where chronic obesity is a problem.
- There was a 20% increase in the proportion of overweight and obese Australians in the decade to 2004/05.
- Car-reliant cities encourage sedentary lifestyle choices with a host of accompanying serious health implications.

Social exclusion & lack of transport choice

- At the 2006 Census, more than 1 in 8 Glenorchy households did not own a car. When a city is built around car access, those without a car are deprived of equitable access to services and social opportunities.

- A city built around the car also deprives all of its people of choice in transport modes.

Other Potential Benefits

- By returning to a more compact urban form, the urban footprint ceases to grow, thus saving land for food production and preserving natural areas.
- A more compact urban form enables more efficient use of expensive infrastructure capacity by the community.

5.2.4 National Charter of Integrated Land Use and Transport

In 2003, the Australian Transport Council and the Local Government and Planning Ministers' Council endorsed a National Charter of Integrated Land Use and Transport. The Charter provides an agreed set of good planning practices which local governments are encouraged to implement, namely:

1. *Concentration of provision of goods and services at hubs linked effectively by an efficient transport system.*
2. *Promote a widened choice in transport modes and reduced vehicle travel demand and impacts.*
3. *Developing regional and urban structures which make better use of the existing transport infrastructure and urban land and are less dependent on unsustainable forms of transport.*
4. *Decisions should take account of future land development to ensure that they do not undermine achievements in maximising the use of existing infrastructure and land use.*
5. *Protect and enhance major transport routes and their associated land uses.*
6. *Integrated planning as a means of achieving a balance between the need to provide for accessibility and mobility and to create a sense of place where vehicle traffic does not dominate and the impact does not affect people's lifestyles.*
7. *Creating a more inclusive society through integrated planning of accessibility in urban, rural and remote communities.*
8. *Safe access to preferred destinations, especially for pedestrians and cyclists and reduction in exposure to noise and air pollution.*[107]

Land use planning has focused largely on providing for car travel over recent decades. There is now a renewed emphasis upon the need to better support alternative transport means which have been somewhat neglected in the past, particularly public transport.

The Department of Infrastructure, Energy and Resources has prepared a Tasmanian Urban Passenger Framework[108] with the following vision for action:

Action Area	Vision
Moving Minds	Increased public awareness, acceptance and usage of public transport, walking and cycling options. Building partnerships with key stakeholders.
Moving Places	Consolidation of population around designated transit corridors, providing the critical population density to support future mass transit systems. Strengthening the role of regional urban centres to support more localized access to commercial centres and other key facilities.
Moving People	High frequency public transport delivered with high quality infrastructure that enhances the attractiveness, efficiency and utility of public transport.
Moving Policies	Encouraging use of alternatives to private vehicles.
Moving Legs	Encouraging walking and cycling through infrastructure, land use planning and behavioural change.
Moving Forward	Adopting a long-term approach to integrated land use planning and behavioural change.

Identified opportunities under the Framework include:

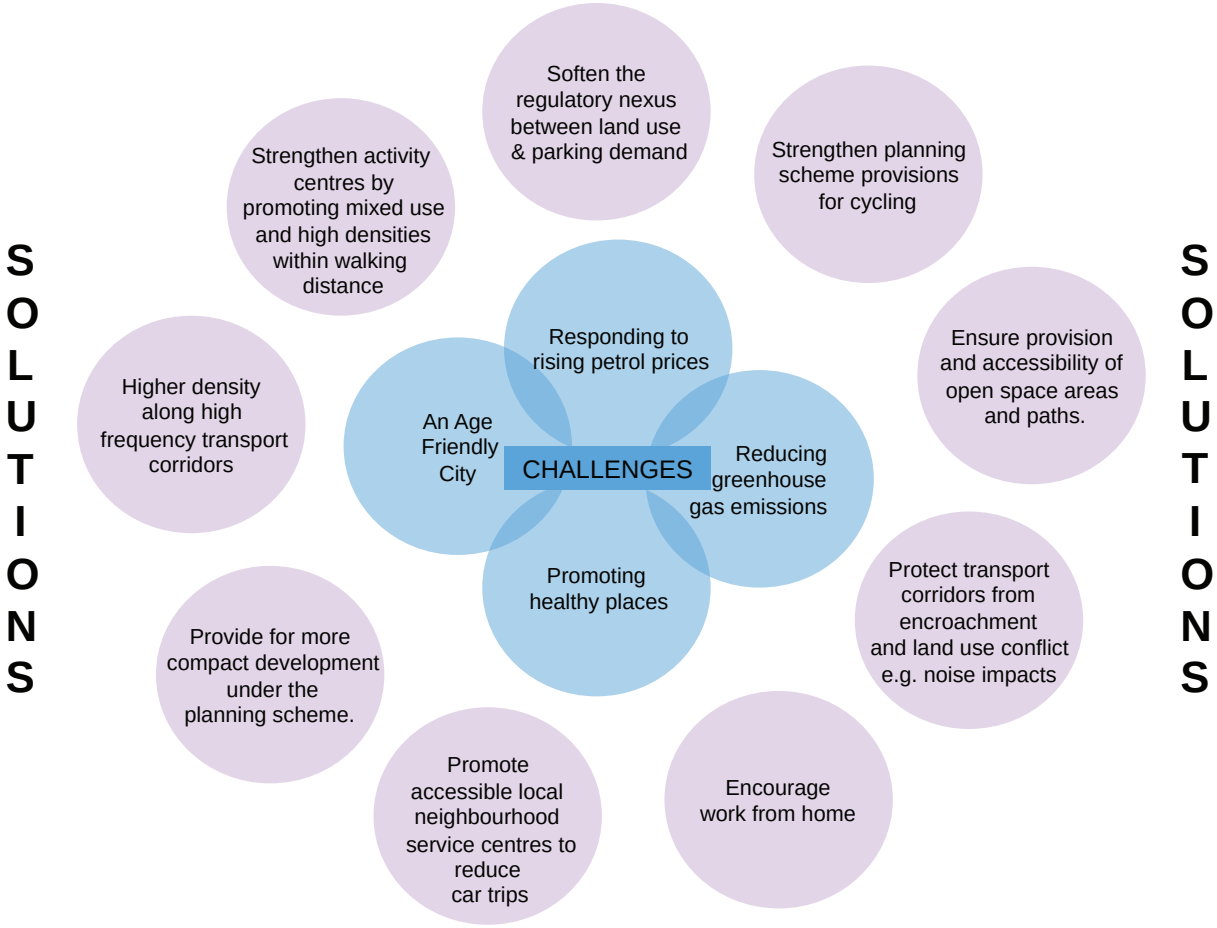
- Designated transit corridors for high frequency bus services e.g. along Main Road.
- Delivering of transit priority on key corridors.
- Metropolitan car parking strategies to address minimum cark parking requirements, shared parking provisions, uniformity of parking requirements.
- A "Walking and Cycling for Active Transport" Strategy.
- Establishment of a Strategic Integrated Land and Transport Committee in conjunction with the Tasmanian Planning Commission and regional authorities.

Glenorchy is in a fortunate position to take advantage of opportunities arising from the Framework. The Main Road through Glenorchy is a high frequency public transport corridor for Metro; and the intercity cycleway now extends from Hobart's Lower Domain to Claremont, thus providing an important sub-regional trunk bicycle and pedestrian route.

The car is likely to remain the principal transport mode into the future. Nevertheless, there is a need to reduce overall dependence on the car - to promote land use patterns which encourage a more robust transport system with reduced trip numbers and trip length, reduced car use and increased choice of alternative transport modes.

Of course, it is not possible or even desirable to change the form and structure of a City over night. The approach is necessarily a long term one. However, the reasons for arresting the current outward drift of the City are compelling.

Planning can do the following things to reduce reliance on the car and increase transport choice:



5.2.5 Land Use Strategy

a) Plan for improved energy efficiency in the City's built form.

b) Promote public transport use by allowing increased density of residential development within walking distance of the high frequency transport corridor along Main Road.

c) Develop planning provisions which support alternative means of transport to the car, in order to promote greater transport choice, including walking, cycling and public transport.

d) Review the City's car parking requirements, in line with the adopted recommendations of the Main Road Corridor Master Plan Response Report.

(e) Protect the main line railway corridor as an important transport and infrastructure link.

(f) Actively monitor the progress of the proposal for light rail along the existing railway corridor and adjust the planning strategy, if necessary, to accommodate the additional transit corridor and associated transit oriented development.

5.3 Natural Values

5.3.1 Planning System Objective

to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and

(Schedule 1 Part 1 1(a) LUPAA)

to provide for the fair, orderly and sustainable use and development of air, land and water;

(Schedule 1 Part 1 1(b) LUPAA)

to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;

(Schedule 1 Part 2(c) LUPAA)

5.3.2 Council Strategic Plan 2010-2015

3.1.1 Protect the City's natural values including the City's vegetated hill faces, streamside areas, urban bushland reserves, Wellington Park and the River Derwent and foreshore.

3.1.2 Minimise the risk of environmental harm.

3.4.3 Plan for the sustainable development of the City, ensuring compliance with the planning scheme and community involvement in the planning process.

5.3.3 Background

While most people would think of Glenorchy as a built-up area, the reality is that nearly 57% of the municipal area is zoned Landscape and Conservation under the current planning scheme.[109]. This zoning covers the City's large share of Wellington Park, as well as the Glenorchy's skyline. With such large areas in Landscape and Conservation zoning, it is not surprising that Glenorchy has significant natural values to protect including threatened plant and animal species and communities, Wellington Park and a significant share in the metropolitan skyline and hillsface. In addition, Glenorchy has approximately 30km of direct frontage to the Derwent River. Some fourteen creeks have their outfall into the River. Water quality is therefore an important issue for the City.

Threatened Plant and Animal Species and Communities

Much of the native vegetation of the lower and flatter land within Glenorchy has been cleared, originally for agriculture and later for industrial and urban development. Within the more elevated parts of the City, such as Mt Faulkner, the Goat Hills and Mt Wellington, large areas of native vegetation remain intact.

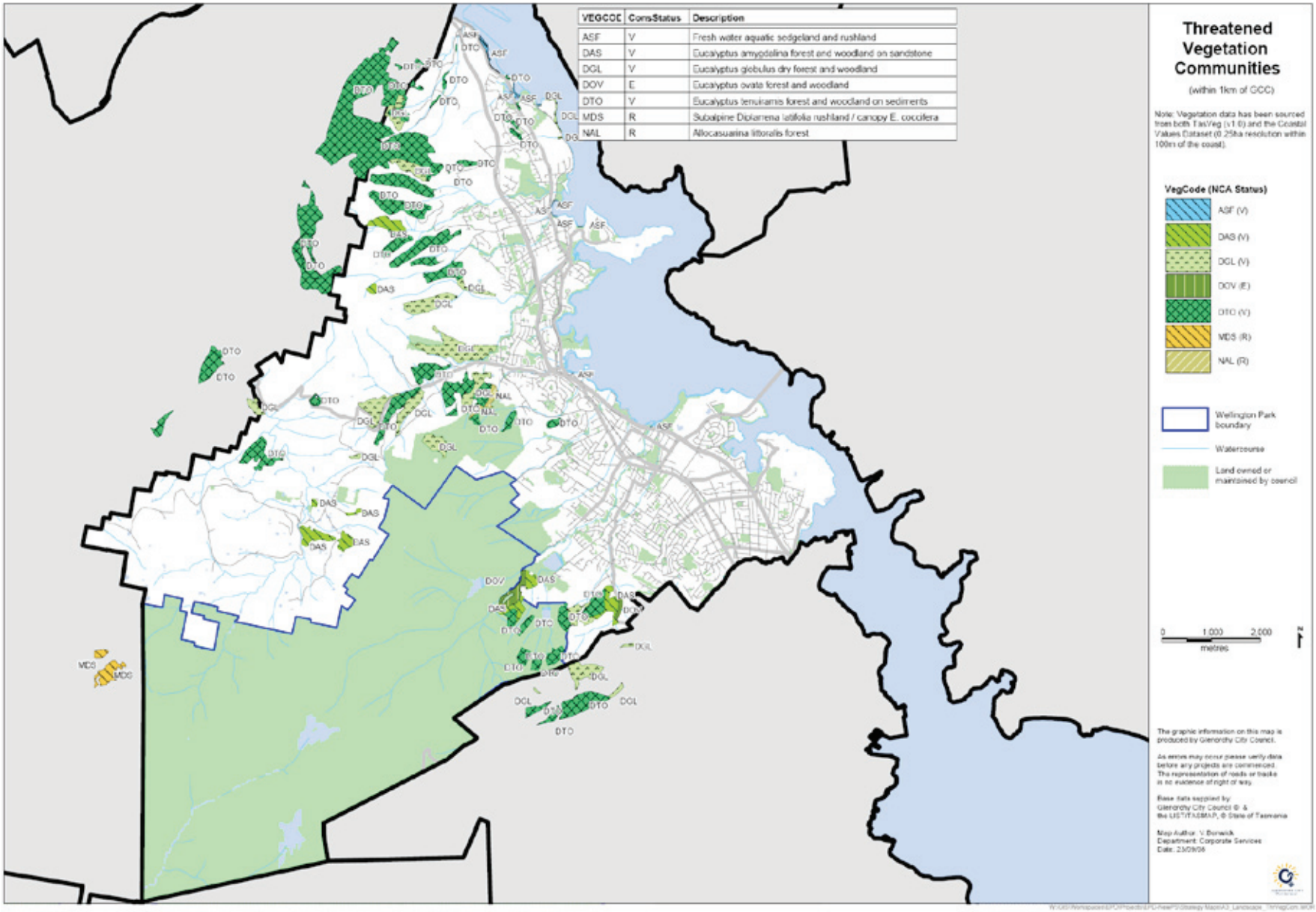
Numerous plant and animal species listed under the Tasmanian *Threatened Species Protection Act 1995* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* have been observed in the city..

The majority of observations within Glenorchy generally occur in bushland or fringe bushland areas; including listed orchids, herbs and perennials near Poimena Reserve and St Virgils College, and observations of the Swift Parrot around Faulkners Rivulet.

Glenorchy is also home to several vegetation communities listed as vulnerable and one listed as endangered under the *Tasmanian Nature Conservation Act 2002*. *Eucalyptus ovata* (black gum) forest and woodland is listed as endangered and has been mapped to the southwest of Tolosa Reserve and near Kalang Avenue.

Other rare communities such as *Eucalyptus tenuiramis* (silver peppermint) forest and woodland, and *Eucalyptus globulus* (blue gum) dry forest and woodland, occur on the mid-slopes of Mt Faulkner, between Mt Faulkner and the Goat Hills; and between Kalang Avenue and Tolosa Reserve.

Under the *National Parks and Reserves Management Act 2002*, the River Derwent estuary, north of Dogshear Point (Cadbury Peninsula), including Goulds Lagoon, is a proclaimed as the River Derwent


VEGCODE | ConsStatus | Description
ASF | V | Fresh water aquatic sedgeland and rushland
DAS | V | Eucalyptus amygdalina forest and woodland on sandstone
DGL | V | Eucalyptus globulus dry forest and woodland
DOV | E | Eucalyptus ovata forest and woodland
DTO | V | Eucalyptus tenuiramis forest and woodland on sediments
MDS | R | Subalpine Diplarrena latifolia rushland / canopy E. coccifera
NAL | R | Allocasuarina littoralis forest
Threatened Vegetation Communities
(within 1km of GCC)
Note: Vegetation data has been sourced from both TasVeg (v1.0) and the Coastal Values Dataset (0.25ha resolution within 100m of the coast).
VegCode (NCA Status)
ASF (V)
DAS (V)
DGL (V)
DOV (E)
DTO (V)
MDS (R)
NAL (R)
Wellington Park boundary
Watercourse
Land owned or maintained by council
0 1,000 2,000
metres
N
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As errors may occur please verify data before any projects are commenced.
The representation of roads or tracks is no evidence of right of way.
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Department: Corporate Services
Date: 23/09/06

Marine Conservation Area. Under this Act the Parks and Wildlife Service is responsible for managing the reserve, the boundary of which extends to the High Water Mark.

Foreshore areas such as those in Granton, Beedhams and Bilton Bays and surrounding Goulds Lagoon, also contain freshwater aquatic sedgeland and rushland. This is listed as a vulnerable vegetation community under the *Nature Conservation Act 2002*.

Glenorchy contains several sites that have been identified as being of geoheritage value in the Tasmanian Geoconservation Database. Except for 1 site on private land, all of these sites are within existing reserves.

Water Management

Glenorchy contains a number of watercourses with outfalls into the River Derwent. The management of these watercourses is important for the quality of water in local creeks, rivulets and the River Derwent.

Protection of water quality has been identified a key gap in current approaches to environmental management components of the current planning scheme.

The *State Policy on Water Quality Management 1997* was given operation in the current Planning Scheme by an amendment[110] which requires applicants to demonstrate that a use or development will not cause environmental harm through the transport of sediments into surface waters (which are defined to include streams and estuaries).

The stormwater system is recognized as being a significant source of pollutants entering the River Derwent, including faecal bacteria, suspended solids, oils and heavy metals, and litter.[111]

There is also a need to consider further regulation of future development to bring about improvements to water use efficiency, particularly potable water conservation and stormwater reuse. Such measures can reduce potable water demand and stormwater volumes. Potentially reducing infrastructure costs and improving stormwater quality at its final outfall from the system.

A more holistic approach to water quality issues in the planning scheme could include:

- controls on vegetation clearance in riparian areas;
- zoning of riparian areas to limit the type, scale and density of development;
- further standards requiring the implementation of water sensitive urban design measures in new development; and
- explicit standards addressing wastewater (sewage) disposal where reticulated sewer is unavailable.

Skyline

Landscape value is the visual amenity value of larger landscape elements and features, common the visual value of treed skylines and vegetated hill faces.

Many landscape features within the City are of particular value to not only to residents of Glenorchy, but also those of adjoining municipalities and visitors to the region. These features include:

- the treed skyline and foothills that form the backdrop to the City;
- the rural setting of the Collinsvale area – including the agricultural land surrounding Glenlusk – flanked by forested hills and peaks;
- Lowes Ridges extending down from Mt Wellington, Mt Arthur and Mt Faulkner; and
- Isolated landscape features such as Poimena and Amy Street Reserves.

While much of the skyline is in public ownership and reserved, large areas of land on the hills face of Mt Faulkner are of significant landscape value and are under private ownership.

If not carefully managed, land development in these areas could impact upon important landscape values.

The existing Landscape and Conservation Zone, particularly the prohibition of further subdivision of land within that Zone, has effectively limited development within that Zone to a density that has not significantly impacted upon landscape values.

However, there remains a need to ensure that the design and materials of individual buildings – in important landscape areas – do not significantly impact upon landscape values.

Many of these sensitive landscape areas are also subject to bushfire risk and care must be exercised in order to ensure that bushfire hazard management practices do not cause a significant adverse impact upon landscape values.

Wellington Park

Approximately 30% of Glenorchy (over 3,600Ha) lies within Wellington Park.

Council owns 20% of Wellington Park. The Park itself covers an area of 18,250Ha and features a number of qualities valued by the community. These qualities include:

- the large scale, integrity and diversity of ecosystems;
- its supply of clean water to Hobart;
- the history of use of the area by both Aborigines and European colonists;
- the aesthetic values of the Park;
- the natural character of the Park and its role in defining the 'sense of place' for Hobart and Southern Tasmania; and
- the high tourism and recreational values of the Park.[111]

Council is represented on the Wellington Park Management Trust, the statutory authority which co-ordinates management of the Park.

The *Wellington Park Act 1993* requires that the Park is managed under the *Wellington Park Management Plan 2005*. In the event of conflict and in line with section 23(4)(a) of that Act, the provisions of the Management Plan are taken to prevail over other planning schemes' relevant provisions.

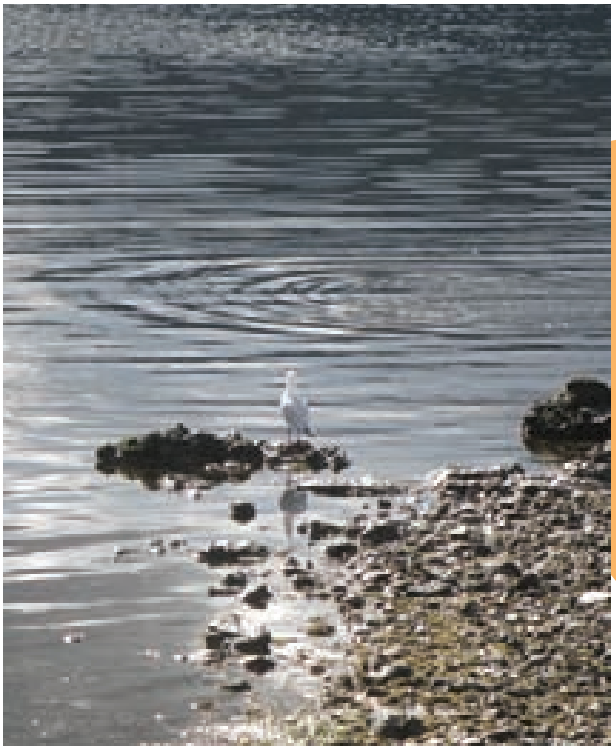
5.3.4 Land Use Strategy

a) Protect our part of the skyline.

b) Maintain planning provisions which protect natural values in the City's treed hills, riparian areas and the River Derwent foreshore.

c) Review planning scheme provisions for a range of environmental matters including protection and linking of riparian areas, threatened species, tree preservation, accommodation of natural processes including natural habitat transgression and adjustment and the coastal and marine environment.

d) Ensure planning provisions for water sensitive urban design are incorporated in the planning scheme.



5.4 Land Hazards

5.4.1 Planning System Objective

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania; (Schedule 1 Part 2(f) LUPAA)

to provide a planning framework which fully considers land capability; (Schedule 1 Part 2(f) LUPAA)

5.4.2 Council Strategic Plan 2010-2015

4.1.4 Ensure preparedness for natural disaster and pandemic by ongoing review of the City's Emergency Management Strategies.

3.1.2 Minimise the risk of environmental harm.

3.2.1 Minimise greenhouse gas emissions and address the impacts of climate change.

5.4.3 Background

Land hazards are events or processes such as flooding, bushfire or land instability that present a risk to property and life.

One of the core functions of a planning scheme is to identify land suitable for development, and in some situations land hazards may render land unsuitable for particular use or development.

Within Glenorchy, there are a number of land hazards that need to be addressed by a planning scheme.

Bushfire

Glenorchy includes a considerable area of residential development both within and abutting bushland areas. Based on a 1999 study, nearly 10,000 Ha of the City (approximately 80% of Glenorchy) is subject to some degree of bushfire hazard.[114]

There are a range of responses to reduce the risk from bushfires, including; non-residential zonings of at risk areas; lower density of development in at risk areas; incorporation of protective features in subdivision and development including buffer areas, suitable access and egress for fire fighting vehicles and dedicated water storage for fire fighting purposes; along with bushfire resistant buildings and site management.

Flooding

In many places, the landform of Glenorchy extends down the slopes of Mt Arthur, Mt Hull, the Goat Hills, Lowes Ridge and Mt Faulkner to the Derwent River foreshore. A number of rivulets originate on these upper slopes and flow down through urban areas of the City and are subject to flooding following heavy or prolonged rainfall. Areas within the City, particularly those near Humphreys and Barossa Rivulets have been subject to flooding as recently as 1995/96.

Planning measures have been shown to be the most economical way of reducing the cost of flood events. Measures include restriction of development within a floodplain and setting of minimum floor levels relative to the stipulated flood event.

While engineering works and building standards are the primary means to manage the risk of flooding, other indirect measures that seek to limit or delay the flows within the reticulated stormwater system, such as rainfall capture and stormwater retention, may also reduce the flood risk.

Land instability

Land instability refers to a range of hazards that affect the stability of the land. While the most common of these hazards are landslides, others may include rockfalls and debris flows.

Glenorchy has two local areas declared as 'A Landslip Areas' in Rosetta and Berriedale. These areas are subject to specific controls on building under the *Tasmanian Building Act 2000* and *Building Regulations 2004*.

Modeling by Mineral Resources Tasmania has identified other areas within the municipality that are potentially subject to debris flow, deep seated landslide or rockfall hazard.

Council's planning approach to land instability hazards has been to require submission of geotechnical reports addressing stability and risk and prepared by suitably qualified engineering geologists or geotechnical engineers with development and subdivision applications.

As part of the regional planning initiative, the State Government has committed to the development of a number of standard codes for land hazards. It is assumed that these standard codes will adopt a leading practice approach – incorporating, for example, new landslide risk management guidelines.

Coastal hazards

Coastal hazards include storm surge flooding and coastal erosion.

Storm surge flooding is the flooding of low-lying, low profile coastal flats backing the mean high water mark. During storm events, low atmospheric pressure and wind can cause an increase in the height of near shore water. High tides can also contribute to storm surge inundation.

In Glenorchy, areas such as Goulds Lagoon, and low lying land adjacent Windermere, Lowestoft and Elwick Bays, are the most susceptible to storm surge flooding.

Many coastal landforms, particularly softer shorelines such as muddy and sandy shores, are dynamic landforms that may change their shape as a result of natural processes.

The shorelines in Glenorchy with the highest vulnerability to erosion are sandy shores in the vicinity of Berriedale Reserve, Connewarre Bay, Windermere Beach and Frying Pan Island; and the muddy/erodible shores in the vicinity of Goulds Lagoon, Beedhams Bay, Bilton Bay, Windermere Bay, Berriedale Bay and Elwick Bay.

Coastal inundation and erosion are projected to worsen as a result of sea level rise resulting from climate change.

Site Contamination

Some sites have been subject to contamination as a result of prior land use.

Potentially contaminated sites are where there is a pollutant that is above background concentration, and is causing or is likely to be causing environmental harm or nuisance, particularly if it is not appropriately managed.

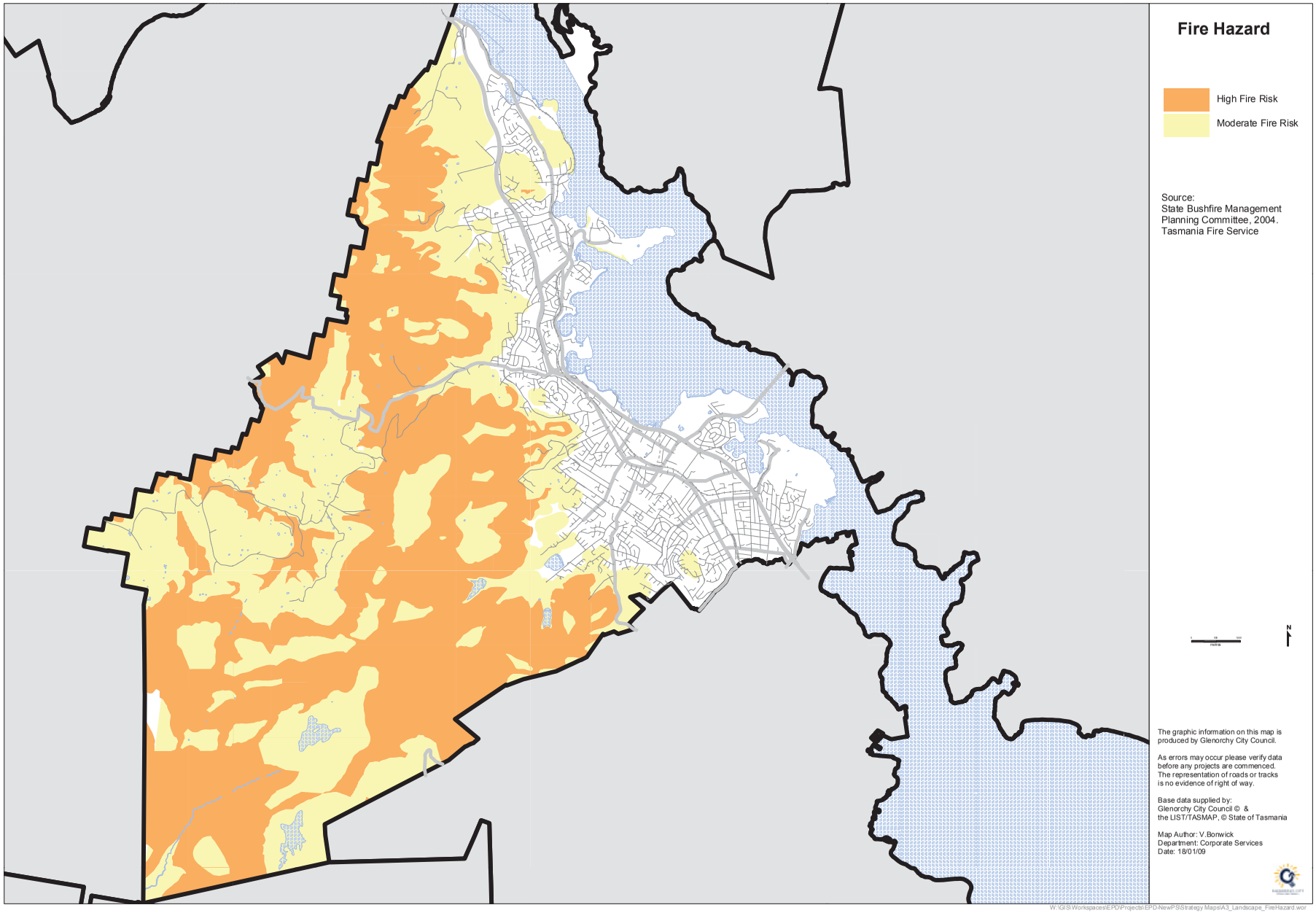
The State Government maintains an Environmentally Relevant Land Use Register, which contains information regarding potentially contaminated sites. The main concentrations of which within Glenorchy are located within the City's industrial areas.

The use and development of contaminated sites is generally assessed under the *Environmental Management and Pollution Control Act 1994*. However potential site contamination is an issue for strategic decisions such as the future zoning of land.

Soil hazards

Tunnel erosion is the most relevant soil hazard in Glenorchy. Tunnel erosion occurs where runoff finds its way into the sub-soil through cracks and holes causing the sodic sub-soils to form a slurry. The slurry may collect additional clay particles, and larger soil particles (silt and fine sand) which then fall into the flow and steadily build a tunnel. [115 116]

In Tasmania, soils are not mapped at a scale which readily distinguishes susceptible soils. However tunnel erosion is generally confined to some soil types that are derived from Permian mudstone or Triassic sandstone.


Fire Hazard
High Fire Risk
Moderate Fire Risk
Source:
State Bushfire Management
Planning Committee, 2004.
Tasmania Fire Service
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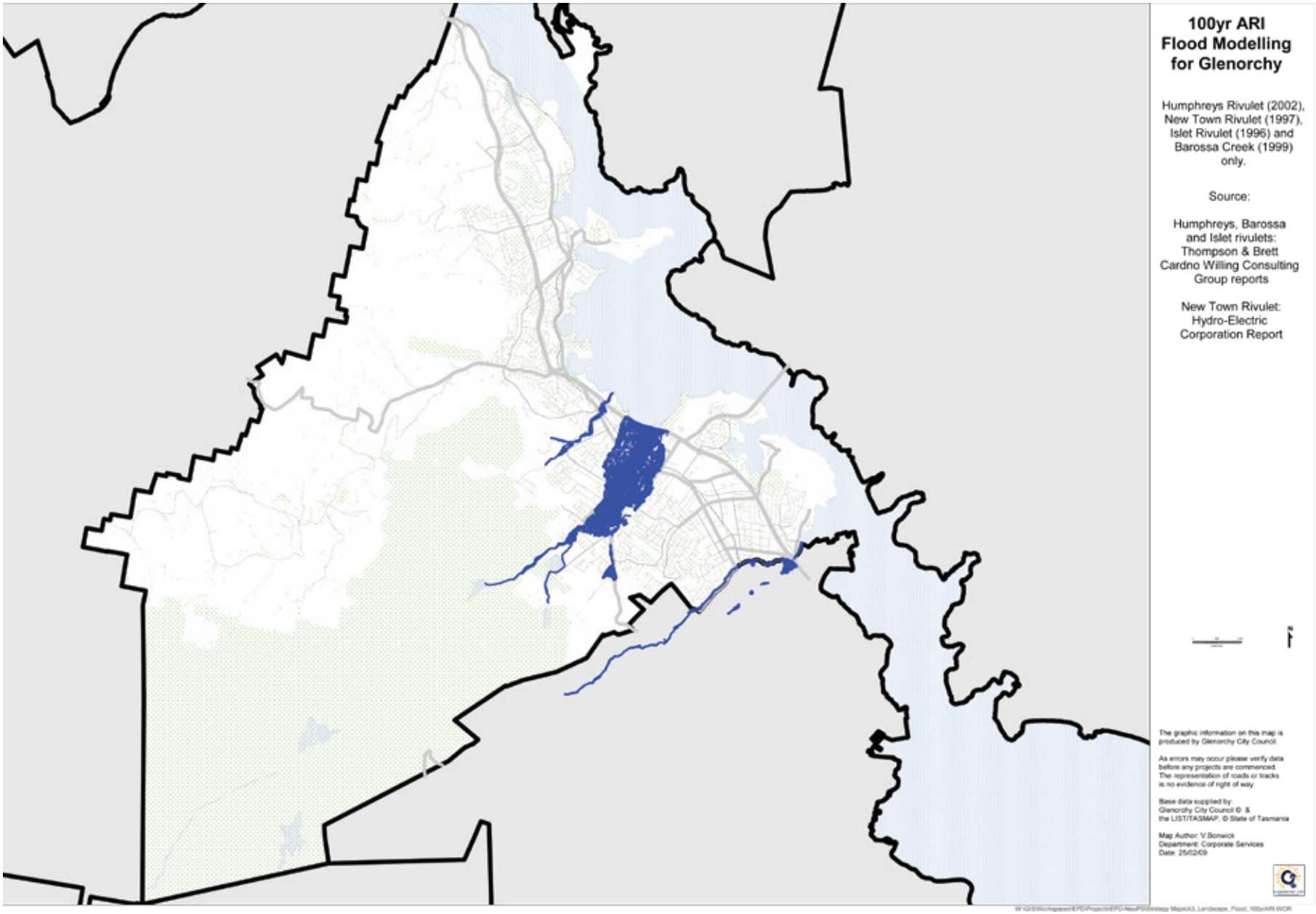
100yr ARI
Flood Modelling
for Glenorchy
Humphreys Rivulet (2002), New Town Rivulet (1997), Islet Rivulet (1996) and Barossa Creek (1999) only.
Source:
Humphreys, Barossa and Islet rivulets: Thompson & Brett Cardno Willing Consulting Group reports
New Town Rivulet: Hydro-Electric Corporation Report
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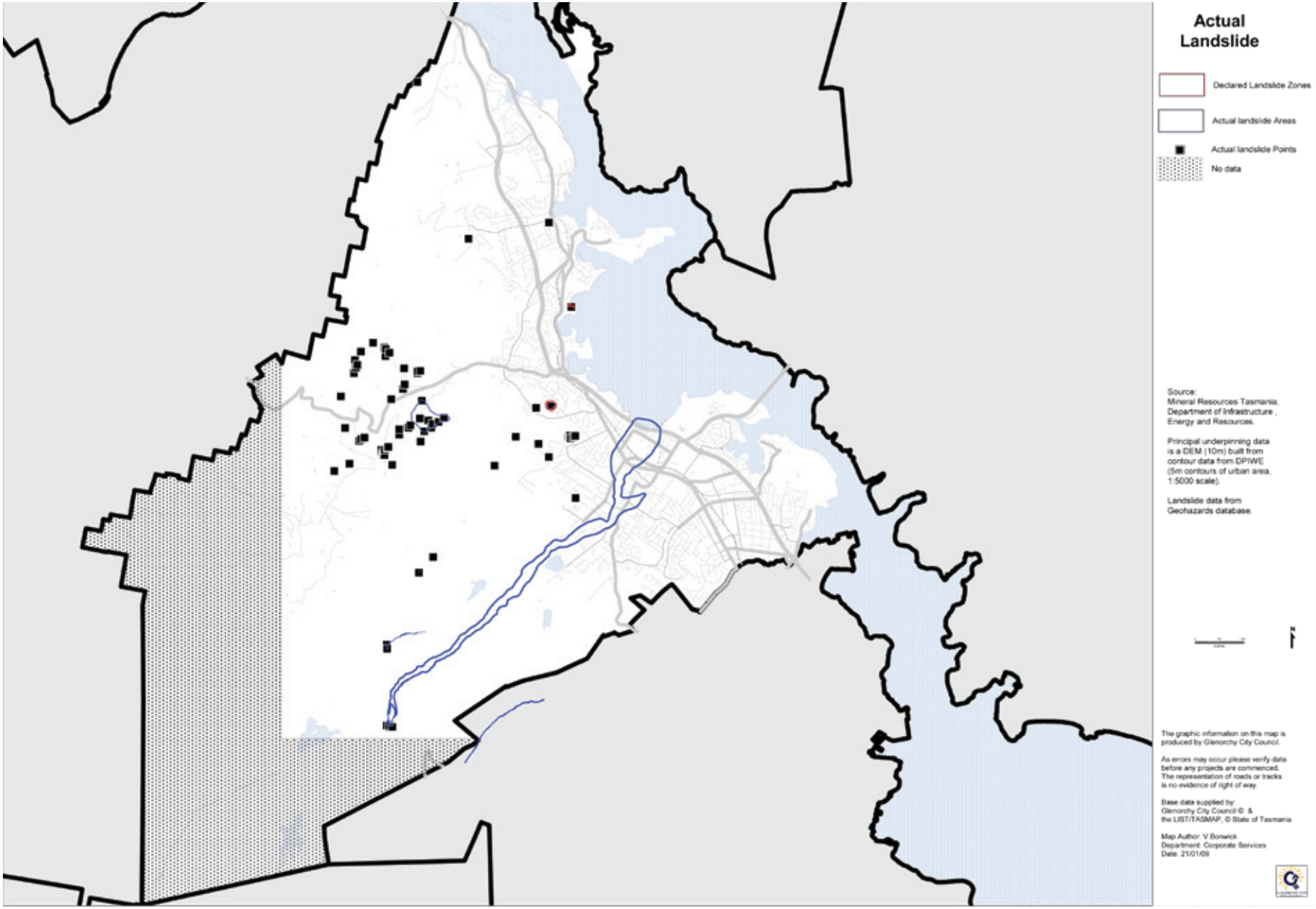
Date: 25/02/09


Actual Landslide
Declared Landslide Zones
Actual landslide Areas
Actual landslide Points
No data
Source:
Mineral Resources Tasmania,
Department of Infrastructure ,
Energy and Resources.
Principal underpinning data
is a DEM (10m) built from
contour data from DPIWE
(5m contours of urban area,
1:5000 scale).
Landslide data from
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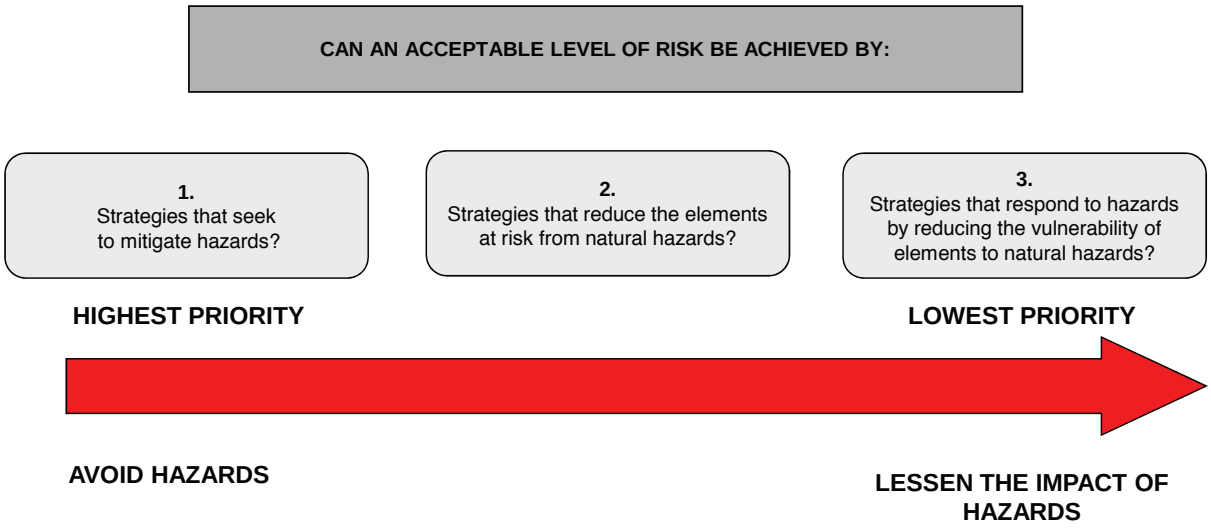

Planning approach

There are a variety of approaches to planning for natural hazards that may be implemented through a planning scheme. A conceptual framework is outlined above.

The State Government is in the process of developing standard schedules addressing many land hazards, including bushfires, land stability, coastal inundation and flooding and contaminated land.

It is likely any new planning scheme will be required to adopt these standard schedules.

5.4.4 Land Use Strategy

a) Adopt the standard schedules for land hazard issues to be developed by the State government, namely, bushfire, land stability, coastal inundation and flooding and contaminated land.

b) Plan to avoid, manage or mitigate the impacts of land hazards on the City, including an improved understanding of climate change impacts.

5.5 Heritage

5.5.1 Planning System Objective

to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value.

(Schedule 1 Part 2(g) LUPAA)

5.5.2 Council Strategic Plan 2010-2015

3.3.2 Protect the City's heritage places,including places of significance to the aboriginal community.

5.5.3 Background

Glenorchy has a rich, though perhaps under-appreciated, history.[116] More recent development has done much to conceal the history of the City.

A CONCISE HISTORY OF THE CITY

Originally home to the Mouheneener Aboriginal people, early European exploration from the 1790's onwards very quickly led to European settlement of Glenorchy, with the first land grants along New Town Rivulet in 1804.

The indigenous people of Glenorchy were displaced by European settlement and Alexander (1986) suggests their absence from the written record of Glenorchy by about 1806. In recent years, a vibrant Aboriginal community has re-emerged.

The City developed over the next century or so as an agricultural district, with many of Glenorchy's place names reflecting the names of old agricultural properties. This colonial history is now most apparent in Collinsvale Glenlusk where small pioneer settlements remain.

World War 1 saw the enlistment of 328 out of a population of under 4000 – and 1 in 6 did not return.

In the inter-war period, the first wave of subdivision occurred, with estates created for returned soldiers.

Glenorchy's wave of industrialisation started with the establishment of the Electrolytic Zinc Company in 1917 followed shortly thereafter by the Cadbury - Fry-Pascall factory at Claremont.

Population expanded and new worker estates were established by the EZ Company and Cadburys.

World War II saw 2000 people engaged in munitions manufacturing and shipbuilding within the City.

The post-war period saw decades of consolidation of industrial development within the City; accompanied by rapid population growth from European immigration and a baby boom. This growth saw the rapid expansion of the City and pressure upon infrastructure, as new suburbs were developed almost overnight.

Glenorchy was proclaimed a City in 1964.

Shortly after that population growth stabilised and Glenorchy matured as a City with diversification to a service economy based on a number of shopping centres, along with development of community facilities such as the Derwent Regional Library and the Derwent Entertainment Centre.

A planning scheme provides an important mechanism to ensure that relevant heritage values and/or the distinct character of an area or site are properly considered in land use decisions.

The Glenorchy Planning Scheme 1992 was the first planning scheme for the City to contain heritage provisions and to list places of cultural heritage significance.

As of April 2010, there were 240 places listed under the Glenorchy Planning Scheme. As of March 2010, there were 80 places in the City of Glenorchy registered on the Tasmanian Heritage Register.[118]

Council has a very active heritage program and considerable work has been undertaken in recent years, including a thematic history and a comprehensive heritage place assessment process – which is in the process of implemention by Council.

The State Government is in the process of reviewing the *Historic Cultural Heritage Act 1995*. The review is likely to see more efficient heritage assessment processes, including a split between State registered heritage places and local listing of places deemed to be of local significance. It is likely that both the local list and the Tasmanian Heritage Register would be independent of the planning scheme document.

A review of Tasmanian Aboriginal heritage legislation is also underway. An important proposal under the new legislation is to integrate the new Aboriginal heritage legislation with the Resource Management and Planning System. This may mean that some development proposals require "sign off" before a planning permit application is made.

While it may not be as obvious as a heritage site or place, many localities or neighbourhoods within the City of Glenorchy have a distinct character. This may be evident in a form of housing or a distinct street layout. In some cases, it may be beneficial to ensure any future development within such localities is sympathetic to an existing character. A number of these localities have been identified under the Glenorchy Heritage Place Assessment project.

5.5.4 Land Use Strategy

a) Protect the City's heritage places and precincts including places of significance to the Aboriginal community.

b) Adopt the standard schedule on heritage to be developed by the State government.

c) Allow for sensitive adaptive reuse of heritage places where this is consistent with maintenance of the cultural significance of the place.

d) Complete assessment of potential heritage listings under the Glenorchy Heritage Place Assessment – Parts 1 and 2.

e) Consider establishment of heritage areas and accompanying provisions under the planning scheme.

f) Protect Collinsvale's unique heritage through a combination of additional listings, zoning, tree preservation controls and, possibly, desired future character statements.

g) Investigate the feasibility of developing planning provisions for archaeologically sensitive sites within the City.

h) Acknowledge the Wellington Park Management Plan as the primary local planning mechanism for the protection of heritage places within Wellington Park.

References

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[102] *Australian Capital Territory (ACT), The Sustainable Transport Plan for the ACT, April 2004, p. 12*

[103] *Department of Infrastructure, Energy & Resources, Tasmanian Urban Passenger Framework, January 2010, p. 7*

[104] *Australian Bureau of Statistics, 2006 Census*

[105] *Australian Bureau of Statistics, Motor Vehicle Census, Cat. No. 9309.0*

[106] *40% in Glenorchy centre, 37.5% in Moonah centre, November 2008*

[107] *Australian Transport Council and Local Government and Planning Ministers' Council, 2003, National Charter of Integrated Land Use and Transport*

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[109] *Zoning analysis as at 15/5/2006.*

[110] *Amendment s13/1/98 to the Glenorchy Planning Scheme 1992.*

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[112] *Wellington Park Management Trust, Wellington Park Management Plan, October 2005, pp. 7-8*

[113] *S. 23(4) Wellington Park Act 1993*

[114] *State Bushfire Management Planning Committee, mapping of areas of high and moderate bushfire risk in Glenorchy, 27 May 2004*

[115] *Department of Primary Industries and Water, 2008. 'Tunnel Erosion' Accessed on 01/12/2008 from http://www.dpiw.tas.gov.au/inter.nsf/WebPages/TPRY-5Z66FY?open*

[116] *Cummings, D., 1999. Landcare Notes: Tunnel Erosion, Department of Sustainability and Environment, State of Victoria, p. 1*

[117] *Alexander A, Glenorchy 1804-1964, Glenorchy City Council 1986 & Alexander A, Glenorchy 1964-1998, Glenorchy City Council,1998*

[118] *Executive Officer, Heritage Tasmania, pers comm., 25/3/2010.*

6 Economy – Developing Prosperity, Innovation and Jobs

"Economy" is the strategic plan theme in Council's corporate strategic plan which deals with economic issues.

Relevant corporate objectives for the Economy theme from the Strategic Plan 2010-2015 are:

This part of the strategic land use plan considers the following topics:

1. Activity Centres
2. Industry
3. Tourism
4. Land Supply
5. Rural Land Use
6. Home Business

For each topic, the relevant planning system objectives and Council strategic plan strategies are given, together with a background section and a statement of the relevant land use strategy.

6.1 Activity Centres

6.1.1 Planning System Objectives

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[118]

(Schedule 1 Part 1 1(d) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

6.1.2 Council Strategic Plan 2010-2015

2.1.1 Support the retention of existing business and the attraction of new business to the City.

2.1.2 Promote the City as an attractive place to invest and do business.

2.1.3 Promote investment by capitalising on the City's infrastructure.

3.4.4 Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.

6.1.3 Background

Activity centres are places where there are a concentration of commercial, civic or cultural land uses taking place within a defined area. Activity centres may vary in size depending upon their position in a hierarchy from major centres to local neighbourhood centres.

Commerce and Tourism in Glenorchy

The City contains three major centres - at Glenorchy, Moonah and Claremont. Glenorchy is the principal commercial and retail centre for the City and is an important sub-regional centre. Moonah and Claremont are important local retail centres.

The Glenorchy and Moonah centres are connected along the Main Road spine by a showroom strip which is also regionally significant in terms of opportunities for bulky goods retail activities such as furniture, motor vehicles and accessories; etc.

The nearby Derwent Park area contains an important collection of industrial and specialist hardware retail stores. There are also a number of neighbourhood shopping centres at different points throughout the City.

As at June 2006, according to the Australian Bureau of Statistics, the "Retail Trade" and "Property & Business Services" sectors each had 399 businesses, each comprising 17.5% of all businesses in the City. Taken together, the "commercial" sectors involved 46.7% of all businesses in the City, marginally greater than the "industrial" sector which involved 44.8% of all businesses.

Key Changes in Activity Centres Since 1992

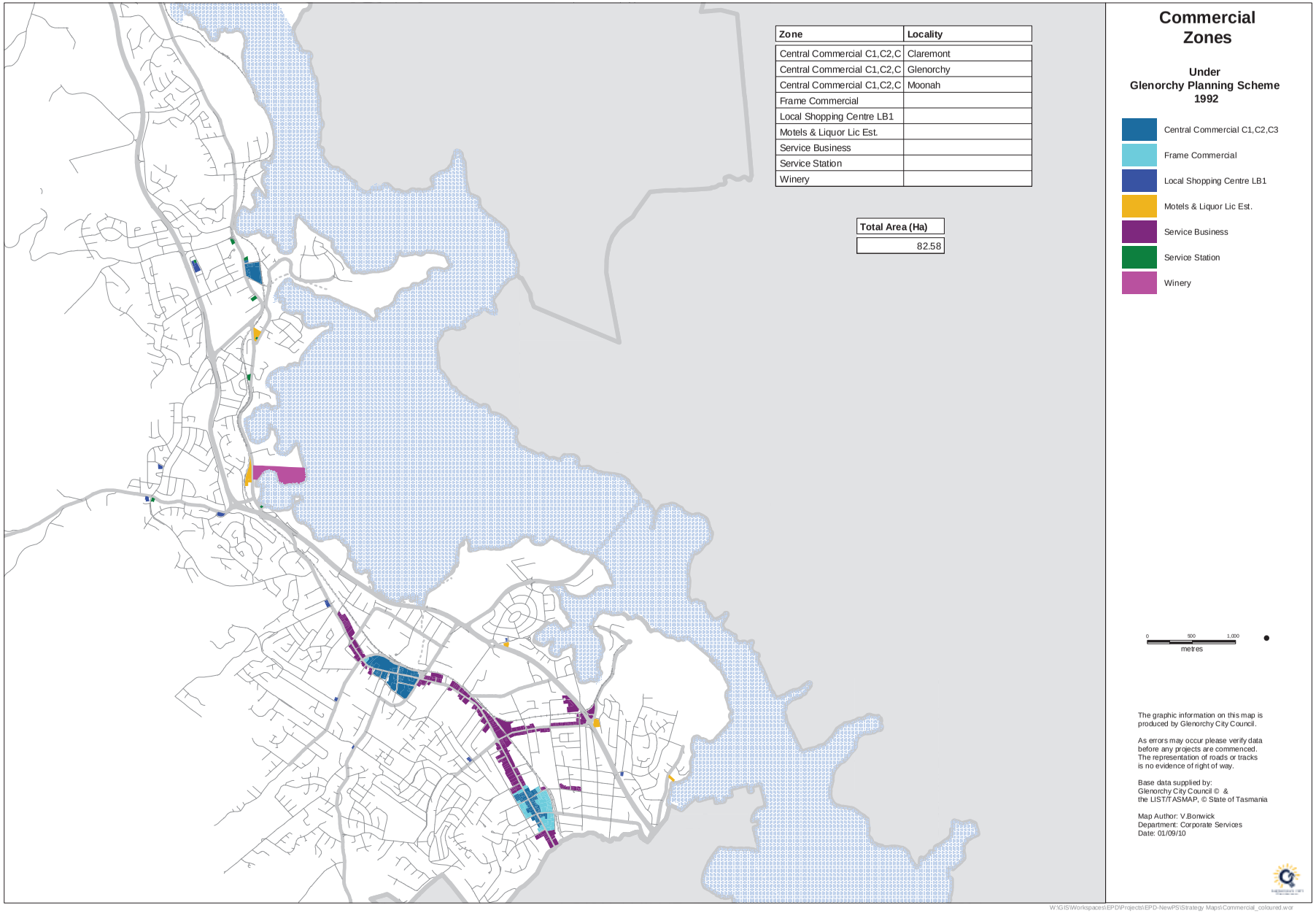
There has been considerable change in Glenorchy's commercial areas during the life of the Glenorchy Planning Scheme 1992.

Glenorchy has seen over 25,000 m^2 expansion of retail and civic activities including a major extension of Northgate and the Big W development, office (Post Office, Health Centre) and civic (Village Cinemas and Civic Centre) buildings, Main Road by-pass works and a bus interchange.

After a difficult period in the late 1990's and early 2000's, major investments in Moonah – particularly in Moonah Central, have secured important anchor activities for the centre and an expansion in retail activities of over 5000 m^2.

Claremont Village has consolidated its role as the major commercial activity in Claremont. There has also been some investment by "independents".

There has also been a growth in bulky goods retailing in the City with the K&D, Bunnings and Clive Peeters complexes in Moonah/Derwent Park resulting in 15,500 m^2 of additional floor area.



Zone	Locality
Central Commercial C1,C2,C	Claremont
Central Commercial C1,C2,C	Glenorchy
Central Commercial C1,C2,C	Moonah
Frame Commercial	
Local Shopping Centre LB1	
Motels & Liquor Lic Est.	
Service Business	
Service Station	
Winery	

Total Area (Ha)
82.58

Commercial Zones

Under Glenorchy Planning Scheme 1992

- Central Commercial C1,C2,C3
- Frame Commercial
- Local Shopping Centre LB1
- Motels & Liquor Lic Est.
- Service Business
- Service Station
- Winery

0 500 1,000
metres

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Department: Corporate Services
Date: 01/09/10

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Planning Studies

There have been two Council adopted strategic planning studies carried out in recent years with a direct bearing upon the City's activity centres:

1. Main Road Corridor Masterplan.
2. City of Glenorchy Commercial Precincts Parking Study for Glenorchy Precinct

Main Road Corridor Masterplan Recommendations

Annand Alcock Urban Design was commissioned by Council in 2004 to develop a Masterplan for Main Road from Creek Road to Grove Road.

An internal working group was set up to respond to the consultant's recommendations and to the results of an extensive consultation process carried out by Council. The Working Group's Response Report was adopted by Council on 11 December 2006 as the pathway for implementation of those recommendations acceptable to Council. The Working Group recommendations focus upon a number of key areas – in particular:

- Targeted extensions of commercial zoning,
- more medium density residential and mixed use development around and within commercial centres,
- improved planning scheme standards to deal with urban design issues; and
- improved car parking treatment and provisions

Commercial Precincts Car Parking Plan – Stage 1 – Glenorchy

The Commercial Precincts Car Parking Plan - Stage 1 – Glenorchy was adopted by Council on 21 July 2008.

The Plan for Glenorchy identifies a number of tasks to be carried out as part of the Planning Scheme Review, including:

- review of minimum parking requirements, in particular staff to customer parking rations, acknowledgement of shared parking and whether parking supply needs to be reduced
- investigate potential for parking precinct plans in activity centres
- provision of bicycle parking in activity centres for specific developments.

6.1.4 Strategic Issues for the City's Activity Centres

Adequacy of Existing Commercial Land Use Strategy

The existing commercial land use strategy underpinning the Glenorchy Planning Scheme 1992 proposed a hierarchy of commercial land use, with intensive retail activities centred around the City's three main activity centres – Glenorchy, Moonah and Claremont.

The use of a hierarchy reinforces economic development within the city by encouraging economies of scale, clustering of sympathetic activities and preventing the flight of commercial activity to cheaper industrial land.

The Glenorchy and Moonah activity centres are also attended by a "Frame Commercial Zone" which provides for supportive activities on the periphery of the centre and allows for future expansion of the Centre. Connecting the Moonah and Glenorchy centres is a spine of bulky goods sales/showroom activity (also found in Derwent Park Road and, to a limited extent, on the Brooker Highway). There are also a number of local neighbourhood centres which provide for local convenience shopping needs at the lowest level of the commercial hierarchy.

There were a number of existing "exceptions" to the hierarchy in the form of spot zones for Service Stations and Motels and Licensed Establishments, for which the existing strategy is one of containment to prevent the development of further "ad hoc" commercial nodes.

It is considered that the existing planning strategy is a sound one, which has served the City well. Maintenance of a similar hierarchy is recommended for a new planning scheme to the extent that the new standard zoning requirements allow.

Adequacy of Existing Commercial Zoned Area

The Main Road Corridor Masterplan response report recommended the zoning to "Service Business" ("Commercial" under Planning Directive No. 1) of the residential enclave around Esmond Street and recommended the extension of Central Commercial C2 zoning ("Business" or "Central Business" under Planning Directive No. 1) in Moonah to the vicinity of Florence Street.

Apart from this, there was no suggestion that the amount of commercially zoned land along the Main Road corridor was insufficient to cater for the City's needs within the 20 year horizon of the Masterplan.

It is assessed that there is still potential for greater consolidation and redevelopment to occur within the footprint of the three centres.

Another key question surrounds the adequacy of local shopping opportunities in the City's northern corridor. Hepper, in the 1989 Glenorchy Land Use and Development Study, identified the need for a local shopping centre to serve the increasing population at Ten Mile Hill. In the nearly twenty years since that Study, residential growth has continued at the northern perimeter, with Austins Ferry-Granton's population more than doubling from 1333 at the 1991 Census to 2893 at the 2006 Census and Claremont's population growing from 6823 at the 1991 Census to 7657 at the 2006 Census.

In addition, an analysis of walkable catchments for the City's neighbourhood shopping areas shows that there are no shops in Claremont on the western side of the northern outlet. This suggests that there is scope for additional local shops in this locality.

More Residential Land Use in and Around the Commercial Centres

It is generally considered that a greater mix of residential and commercial land uses can bring benefits to commercial centres in terms of vibrancy, street activity, passive surveillance and an increased customer base.

There is scope to ease restrictions on residential use and development within the City's commercial centres.

Recognising that Planning Directive 1 mandates new land uses and new zones in any future planning scheme, the sorts of initiatives which could be considered (expressed in current planning scheme terms) would be to:

- make apartments "permitted" in the central retail areas above ground floor level and "discretionary" at ground floor level and "discretionary" in the bulky goods retail/showroom strips
- make multiple dwelling units "discretionary" in the bulky goods retail/showroom strips
- relax the prohibition on apartment living in local neighbourhood shopping centres.

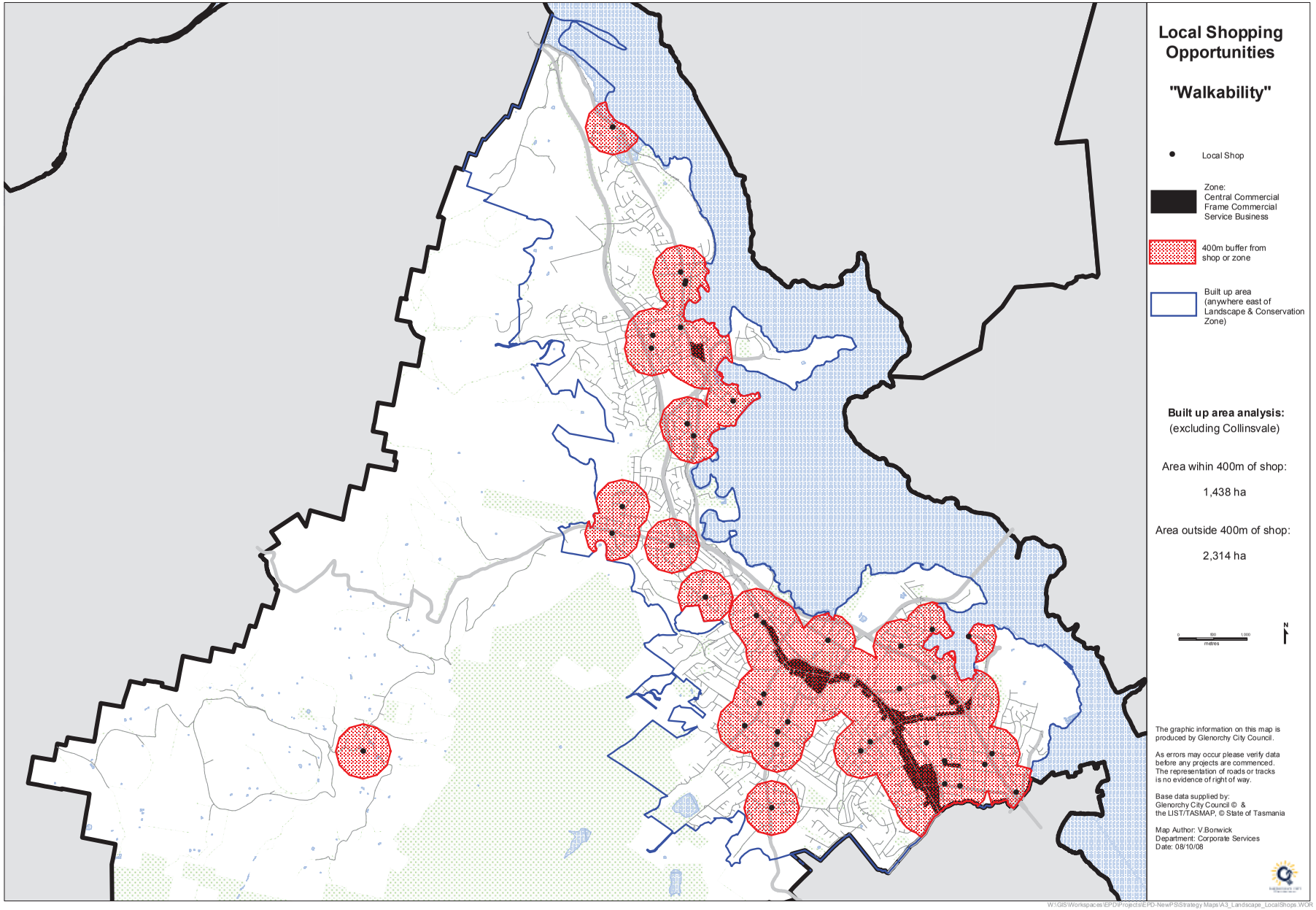
Improved Urban Design Outcomes

The Main Road Corridor Masterplan raises concern at commercial premises which present an unsympathetic façade to the street. Examples include orientation of entrances and display windows to rear car parking areas rather than to the street frontage and a lack of pedestrian weather protection via awnings.

There has certainly been adverse feedback from community members in relation to recent development which have presented blank facades to the street and to the alienation resulting from extensive loading bay areas being located at the street frontage.

It is considered that the existing Planning Scheme provisions are not sufficiently directive when it comes to the promotion of a better standard of urban design outcome in the commercial centres.

In particular, standards are required to mandate the requirements for display windows, direct pedestrian access from the street, provision of awnings for pedestrian weather protection, promotion of natural


Local Shopping Opportunities
"Walkability"
Local Shop
Zone:
Central Commercial
Frame Commercial
Service Business
400m buffer from shop or zone
Built up area (anywhere east of Landscape & Conservation Zone)
Built up area analysis:
(excluding Collinsvale)
Area wihin 400m of shop:
1,438 ha
Area outside 400m of shop:
2,314 ha
0
500
1,000
metres
N
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surveillance and the location of loading bays so as to minimise streetscape impact.

6.1.5 Car Parking

Getting the balance "right" in relation to car parking requirements is an important ingredient in maximising the potential of the City's commercial areas.

If too much parking is required, then this can act as a brake on the efficiency of land use as more space is given over to cars and less devoted to the buildings which actually generate economic activity. Furthermore, high car parking requirements can also lead to car parking shortfalls which result in the need for "cash in lieu" of car parking to be paid by applicants. This can act as a disincentive to the establishment of new businesses.

On the other hand, if there is too little parking, then this may increase the inconvenience levels associated with using a particular centre – and may deter potential customers. It may also lead to overflow parking invading surrounding residential areas.

The thrust of the car parking provisions under the current Glenorchy Planning Scheme 1992 is that businesses are required to meet the car parking demand generated by both staff and customers within their own site. This may be a reasonable proposition in those areas where economic activity relies upon single purpose vehicle trips.

However, the commercial centres typically accommodate multi-task visits by customers. They are also better served by public transport. Each of the City's three centres is now also served by the inter-City cycleway.

The current planning scheme does little to recognise the presence of public parking – on and off-street within centres, the potential for sharing of parking where different facilities generate peak demand at different times and the reality of multiple purpose trips to a centre – which act to "ration" the car parking demand.

Translation of Existing Zones to Planning Directive No. 1 Format

Planning Directive No. 1 prescribes the use of a "Common Key Elements Template" in the preparation of new planning schemes.

Council would be required to adopt the new suite of zones in respect of its activity centres.

Collinsvale/Glenlusk

Some in the Collinsvale/Glenlusk community have expressed interest in allowing more local, low-scale activity to support visitors. The current Rural Residential zoning places limits on such activities.

Alternative zoning could be considered for the Collinsvale village to facilitate such activities, if community consensus supported it.

6.1.6 Land Use Strategy

a) Adopt the standard suite of commercial zones required under Planning Directive No. 1.

b) Maintain the existing commercial hierarchy as a core strategy, with Glenorchy as the prime activity centre followed by Moonah and Claremont, bulky goods retailing and local neighbourhood centres.

c) Improve and increase the range and quality of commercial facilities and services within the City.

d) Foster a safe, welcoming and well-designed public domain which is accessible to all.

e) Support residential land uses in activity centres to promote the safety and vibrancy of those centres.

f) Promote the accessibility of activity centres by a range of transport modes.

g) Provide more flexible car parking standards for activity centres.

h) Encourage development which is sympathetic with existing centres in siting form, scale, articulation and relationship to the public domain.

i) Implement the adopted recommendations of the Main Road Corridor Master Plan for zoning extensions, urban design improvements and more inner city living.

j) Evaluate the need for more local shopping facilities in the northern corridor to meet the needs of a growing population and to promote a more walkable City.

k) Determine the Collinsvale Glenlusk community's preferred future in relation to commercial uses in the area of the Collinsvale village.

6.2 Industrial Land Use

6.2.1 Planning System Objective

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[119]
(Schedule 1 Part 1 1(d) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

6.2.2 Council Strategic Plan 2010-2015

2.1.1 Support the retention of existing business and the attraction of new business to the City.

2.1.2 Promote the City as an attractive place to invest and do business.

2.1.3 Promote investment by capitalising on the City's infrastructure.

3.1.2 Minimise the risk of environmental harm.

6.2.3 Background

The City of Glenorchy is the industrial hub of the southern region. It retains many of the features that facilitated early industrial growth, such as flat land, ready access to transport (by rail, road and river) and access to labour.

Despite the high level of fragmentation, Glenorchy is unquestionably the primary focus of industrial activity in Tasmania …[120]

Glenorchy's industrial areas remain vitally important to the City, the region and the State.

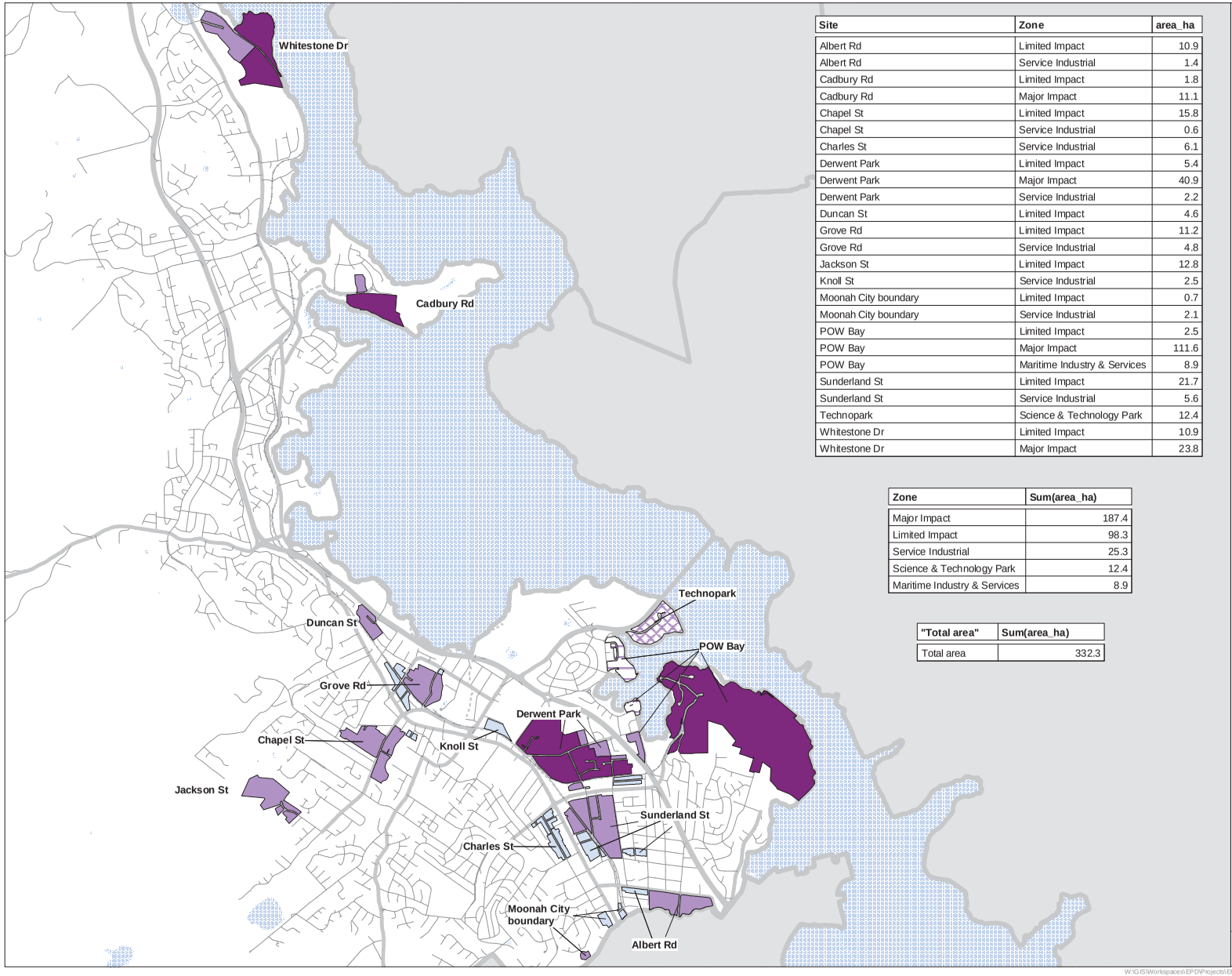
- there are over 1000 industrial businesses[121]
- 60% of the businesses in Glenorchy with turnover greater than $10M per annum are industrial[122]
- 7684 jobs - 44% of all jobs in Glenorchy[123]
- 44% of Greater Hobart's industrial employment[124]
- surveys in 1998 and 2008 show a trend to warehousing (increased from 20.3% to 24%)[125]
- however, there was also an increase in the number of workshops (from 16.8% to 17.1%)
- there was a decrease in non-conforming single dwellings in the industrial zones
- there was also a decrease in vacancy rate – from 8.7% in 1988 to 6% in 2008.

There is limited scope for new industrial areas.

6.2.4 The last 15 Years

Since the Glenorchy Planning Scheme 1992 was introduced there have been a number of changes within Glenorchy's industrial sector and its operating environment:

- closure of (relatively) large scale manufacturing plants
- variations of employment as a result of the business cycle in large industries
- a decline in institutional depot activity within Glenorchy and its redevelopment for other (usually more intensive) uses
- improvements in environmental performance through secondary treatment of industrial effluent at the Cadbury plant in Claremont and ongoing environmental improvement programs at Nyrstar
- further development of Technopark to a point where it is now close to capacity
- full development of the Riverside Industrial Estate (Bender Drive) with a focus upon the maritime industry cluster surrounding Incat
- continued evolution of Derwent Park as a logistics and warehousing hub for the Greater Hobart area.



Site	Zone	area_ha
Albert Rd	Limited Impact	10.9
Albert Rd	Service Industrial	1.4
Cadbury Rd	Limited Impact	1.8
Cadbury Rd	Major Impact	11.1
Chapel St	Limited Impact	15.8
Chapel St	Service Industrial	0.6
Charles St	Service Industrial	6.1
Derwent Park	Limited Impact	5.4
Derwent Park	Major Impact	40.9
Derwent Park	Service Industrial	2.2
Duncan St	Limited Impact	4.6
Grove Rd	Limited Impact	11.2
Grove Rd	Service Industrial	4.8
Jackson St	Limited Impact	12.8
Knoll St	Service Industrial	2.5
Moonah City boundary	Limited Impact	0.7
Moonah City boundary	Service Industrial	2.1
POW Bay	Limited Impact	2.5
POW Bay	Major Impact	111.6
POW Bay	Maritime Industry & Services	8.9
Sunderland St	Limited Impact	21.7
Sunderland St	Service Industrial	5.6
Technopark	Science & Technology Park	12.4
Whitestone Dr	Limited Impact	10.9
Whitestone Dr	Major Impact	23.8

Zone	Sum(area_ha)
Major Impact	187.4
Limited Impact	98.3
Service Industrial	25.3
Science & Technology Park	12.4
Maritime Industry & Services	8.9

"Total area"	Sum(area_ha)
Total area	332.3

Industrial Zones

Under Glenorchy Planning Scheme 1992

- Major Impact
- Limited Impact
- Science & Technology Park
- Service Industrial
- Maritime Industry & Services

0 500 1,000
metres

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- between 2001 and 2006, there were some 300 additional jobs created in the industrial sector within the Glenorchy economy. Notwithstanding an increase in absolute jobs, the industrial sector's share of overall jobs declined marginally from 44.9% to 44%)[126]
- privatisation and subsequent return to public ownership of rail operations
- arrival and reticulation of natural gas as an alternative energy source
- entry to the National Energy Market and progressive rollout of electricity market contestability to industry
- introduction of B Double vehicles to Tasmanian roads, including defined B Double routes within Glenorchy
- growth of industrial estates at Brighton, Cambridge and Mornington
- introduction of the *Environmental Management and Pollution Control Act 1994* - which provides for environmental regulation of industry by level.

6.2.5 What are the Emerging Industrial Trends?

A review of recent industrial reports[127] points to a number of emerging trends in industry. Many of these are already becoming evident within Glenorchy's industrial areas:

Focus on higher value added products

- Manufacturing has increasingly focussed on high value added goods.

Industry Clustering

- The facilitation of industry clusters will become an increasingly important economic strategy for regions and nations as large and small companies co-operate in order to compete in a more competitive global marketplace.

Changes in patterns of demand for industrial land

- Industry now has a smaller land footprint, with more efficient technologies, product specialisation, and smaller production runs, outsourcing of production to a range of "just-in-time" producers, smaller plants being less expensive and more flexible.

Glenorchy's Major Industrial Areas 1998-2008

Derwent Park
No. of premises▲ 6 to 199
Warehouses ▲22 to 35.2%
Limited Impact Industries ▲ to 20.6%
Transport Depots ▲ to 11 (5.5%)
Single Dwellings▼ 13 to 5%
Vacancy ▼ to 2.5%.

Sunderland Street
No. of premises▲ 11 to 187
Warehouses ▲ to 25.7%
Limited Impact Industries ▼ to 10.7%
Transport Depots ▲ to 3
Mechanical Repair Garages ▲ 7 to 7.5%
Single Dwellings▼ 11 to 26.2%
Vacancy ▼ to 5.9%.

Prince of Wales Bay
No. of premises ▼ 3 to 103
Limited Impact Industries ▼ to 24.3%
Marine Industries ▲ 1 to 13.6%
Warehouses ▲ to 9.7%
Single Dwellings▼ 2 to 23.3%
Vacancy ▲ 2 to 7.8%.

Chapel Street
No. of premises stable at 94
Warehouses ▼ to 14.9%
Limited Impact Industries ▲ 5 to 25.5%
Single Dwellings ▼ to 28.7%
Non-conforming use ▼ to 32.9%
Vacancy ▲ 1 to 6.4%.

Charles Street
No. of premises stable at 88
Warehouses ▲ to 13.6%
Mechanical Repair Garages ▲ 5 to 11.4%
Single Dwellings ▼ 6 to 31.8%
Non-conforming use ▼ 4 to 42%
Vacancy ▲ 4 to 5.7%.

Albert Road
No. of premises ▲ 11 to 57
Warehouses ▲ 8 to 40.4%
Limited Impact Industries stable at 17.5%
Single Dwellings ▼ to 8.8%
Non-conforming use ▲ 4 to 17.6%
Vacancy ▼ to 1%.

Source: Glenorchy Industrial Land Use Survey 1998-2008

- Industries with low inventory products seek out the lower cost land whereas industries with high inventories and high value added products seek higher cost land closer to end customers.

Improved environmental performance

- A trend towards environmentally sustainable design of industrial parks, with many industrial processes becoming lighter, cleaner and less polluting.

Growth in logistics

- There has been a growth in the wholesale trade and logistics sectors, with high productivity vehicles and a focus on fast and efficient "just-in-time" delivery to the customer.
- Industries now focus on core competencies and partner with other firms which provide intermediate goods. The logistics task has become more complex and important and is increasingly being carried out by third party specialists.

Change in Hours of Operation

- An increasing shift to 24 hour/7 days a week operations.

6.2.6 Issues for a New Planning Scheme

Land Supply

Glenorchy's industrial land supply is largely taken up. There is little capacity to open up new industrial areas because of a dearth of suitable flat land which is close to arterial roads and buffered from residential development.

The focus must be on protecting and maximising the effective use of existing industrial land stocks through measures such as promotion of industry clusters and the conversion of non-industrial land uses in industrial areas to industrial land uses.

Land Use Conflict

Industrial to residential and industrial to industrial land use conflict continues to be a real issue in and surrounding the City's industrial zones. Land use conflict has the capacity to both result in reduced residential amenity and at the same time fetter the operation of businesses.

Glenorchy's industrial land use pattern is fragmented. This greatly increases the exposure of the City's industrial land to potential for land use conflict. To make better use of scarce remaining industrial land in the City, a concerted approach is required to managing land use conflict. A number of options are available for this, including:

- careful siting of zone boundaries
- controlling the type of uses in proximity to sensitive uses
- tighter controls on non-conforming uses
- applying use and development standards to improve environmental performance.

Proposed Brighton Inter-modal Hub

The State government is developing a new intermodal hub at Brighton focused on more efficient freight transfers between rail and road. Situated at Brighton, the $79 million dollar project on a 50Ha site is expected to be open in January 2012.[128]

It is considered that the existing advantages of having an established cluster of transport depots in a regionally central location should insulate Derwent Park's transport and distribution hub to some extent from adverse impact. However, it will be necessary to closely monitor the impact of the new inter-modal hub over time.

Prince of Wales Bay

There is a need to consider carefully the recommendations of the Strategic Plan for the Prince of Wales Bay Maritime Industry Precinct, prepared for the Department of Economic Development and Tourism[129], including:

- greater focussing of planning provisions on maritime industry, including common zoning and tighter controls on land use types
- extending planning controls to the waters of Prince of Wales Bay
- rezoning of 121-135 Howard Road
- tighter controls on environmental performance
- progressive reductions in number of non-conforming uses.

Adoption of New Standard Industrial Zones

Under Planning Directive No. 1 – Format and Structure of Planning Schemes, the existing five industrial zones under the Glenorchy Planning Scheme 1992 will need to be reduced to three. This will require the transposition of each of the existing zones to the "best fit" new zone.

6.2.7 Land Use Strategy

a) Adopt the standard suite of industrial zones required under Planning Directive No. 1.

b) Define a hierarchy of industrial areas based on function and impact.

c) Promote efficient use of the City's existing industrial land stocks.

d) Minimise land use conflict in order to protect industry viability and the safety and amenity of sensitive land uses.

e) Restrict the intensification of non-conforming uses within industrial zones.

f) Carefully manage the environmental impacts of industry.

g) Recognise that there is little prospect of finding additional land suitable for opening new industrial areas within the City.

h) Monitor the impact of the proposed Brighton Inter-Modal Hub upon the city's industrial areas.

i) Actively investigate the recommendations of the Prince of Wales Bay Maritime Industry Precinct strategic plan which centre on promoting a clear maritime focus for the area.

6.3 Tourism

6.3.1 Planning System Objective

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[130]

(Schedule 1 Part 1 1(d) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

6.3.2 Council Strategic Plan 2010-2015

2.1.1 Support the retention of existing business and the attraction of new business to the City.

2.1.2 Promote the City as an attractive place to invest and do business.

2.3.1 Increase visitation to the City.

2.3.2 Promote the City as a venue for major events and conventions.

6.3.3 Background

Glenorchy is located on the northern gateway to Hobart. It contains some of the region's premier attractions. There is considerable potential to increase tourist visitation to the City.

The focus in tourism has been the major investment taking place at Moorilla Estate which is transforming into a significant regional tourism facility. There has also been significant investment in the Tattersalls Park Racecourse, with the co-location there of pacing and greyhound racing activities from the Showgrounds.

6.3.4 Major Tourism Assets

The City's major tourism assets are:

Moorilla Estate

Moorilla Estate winery has, over a number of years been transformed into a major tourist operation, with the development of tourist accommodation, the opening of an antiquities museum and the redevelopment of the restaurant and an events venue. A multi million dollar Museum of Old and New Art (MONA) is currently under construction. This is expected to be a world class facility and a major tourist drawcard.

Cadbury Factory

There is a popular visitor centre at the Cadbury factory at Claremont.

The Showgrounds, Elwick Racecourse, Wilkinsons Point Cluster

There is a cluster of facilities for horse and greyhound racing, entertainment and exhibitions centred around the Showgrounds, Elwick Racecourse and Wilkinsons Point.

A Masterplan has been prepared for the Wilkinsons Point and Elwick Bay Precinct[131] which would see the further development of this land for public uses to supplement the existing Derwent Entertainment Centre complex located on the land. Examples envisaged by the Masterplan include a tourist facility, accommodation, food and beverage premises and a tourist information facility.

The Masterplan was given effect to by including special provisions within Schedule 10 of the Glenorchy Planning Scheme 1992.[132]

GASP!, the Glenorchy Arts and Sculpture Park is a proposal for an arts-based public space at Elwick Bay. GASP! will be defined by commissioned art work of all types, both temporary and permanent and will include interactive and educational components to engage both locals and visitors. The aim is to 'link' the bay area from Wilkinson's Point through to Montrose Bay and MONA.

The project has recently received State and Federal funding.

The Transport Museum

A volunteer-run museum located in Glenorchy which houses many exhibits from the State's transport system, including working locomotives.

Accommodation

There is perceived to be a shortage of tourist accommodation within the City.

Much of the available accommodation is located on important transport routes like the Brooker Highway and Main Road outside the central business areas.

Natural Areas

The City is blessed with ready access to natural areas such as Wellington Park and the River Derwent.

Tolosa Park is a significant public reserve and is the venue of the annual Concert under the Stars conducted by the Tasmanian Symphony Orchestra.

Nearby is the recently-constructed Glenorchy Mountain Bike Park, which has been the venue of international standard events.

Myrtle Falls is a renowned place of natural beauty in Wellington Park. It is accessed via Collinsvale.

Gould's Lagoon at Granton is an important wildlife sanctuary.

Riparian areas can be used to strengthen linkages between natural areas and provide opportunities with multiple benefits for residents, visitors and wildlife.

Glenorchy's "Hidden" History

Glenorchy has rich, though possibly under-appreciated history.

It contains an interesting mix of heritage places ranging from sites of aboriginal cultural heritage significance to early colonial places to more recent sites associated with the growth of benevolent capitalism such as the EZ and Bournville Estate workers villages.

An important part of any tourism strategy must be to protect and reveal this history to citizens and visitors alike.

Transport Routes

Glenorchy is well connected to Hobart and the southern region via the arterial road system.

The City contains the national highway connecting Hobart to the north of Tasmania.

The City is also connected to the Eastern Shore and travelling routes to Richmond and the airport via Goodwood Road and the Bowen Bridge.

The inter-City cycleway now extends to Claremont and provides ready connection to the Cadbury Factory and Moorilla Estate from central Hobart.

Main Road was first constructed in 1819 and contains many places of heritage interest.

The River Derwent already provides a strong tourist route for tours to Cadbury and Moorilla. This role is anticipated to expand in future with the development of MONA and Wilkinsons Point.

Planning Scheme Provisions to Support Tourism

The *Glenorchy Planning Scheme 1992* does not contain an explicit strategy for tourism development within the City.

Matters to consider in a new planning scheme include:

- the lack of support for some tourism-related uses in the rural zones
- the discretionary use status of a number of tourism-related uses in the winery zone, recognising that cellar door sales would be an ancillary part of a winery operation
- the prohibition on "tourism facility" use at the Showgrounds
- the prohibition on tourism-related uses in the industrial zones. Despite the longstanding popularity of the Cadbury chocolate factory, any tourism activities there have been incidental to the primary industrial purpose.

The key planning scheme strategies for tourism are:

- Building on the City's key tourism assets by ensuring that planning scheme provisions enable these assets to grow as attractions, rather than stifling them.
- Consulting with Moorilla Estate and Cadbury as important strategic tourism sites to ensure that planning scheme provisions promote these important tourism assets.

- Carrying forward the "special area" provisions for Wilkinsons Point into a new planning scheme.
- Facilitating improved linkages to and between natural areas.
- Continuing to protect the City's natural and built heritage and its skyline.
- Ensuring that the planning scheme provisions allow for a growth in the tourist accommodation sector within the City; and
- Addressing the lack of support for some tourism-related uses in the rural zones

6.3.5 Land Use Strategy

a) Maintain or adopt tailored planning scheme provisions which enable key tourism facilities to prosper.

b) Adopt planning provisions which encourage tourism accommodation and experience, where appropriate.

c) Enrich the City as a tourist attraction by value adding to the city's heritage and natural assets.

6.4 Land Supply

6.4.1 Planning System Objective

to provide for the fair, orderly and sustainable use and development of air, land and water;

(Schedule 1 Part 1 1(b) LUPAA)

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[133]

(Schedule 1 Part 1 1(d) LUPAA)

to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;

(Schedule 1 Part 2(c) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;

(Schedule 1 Part 2(h) LUPAA)

to provide a planning framework which fully considers land capability.

(Schedule 1 Part 2(i) LUPAA)

6.4.2 Council Strategic Plan 2010-2015

3.4.1 Manage the orderly growth of the City in a way which maximises the take-up of existing infrastructure capacity.

3.4.3 Plan for the sustainable development of the City, ensuring compliance with the planning scheme and community involvement in the planning process.

3.4.4 Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.

6.4.3 Background

Having a sufficient supply of land available for residential development to meet projected demand is important for three reasons:

1. To ensure that land supply constraints do not put upward pressure on house prices.
2. Orderly development is important to maximize the community's use of expensive infrastructure capacity and minimize waste.
3. To provide on-going development opportunities for the construction industry, which is an important sector in the local economy, employing over 1500 people in Glenorchy.[134]

To calculate the supply of and demand for land, it is necessary to look at a number of factors, such as:

- Population
- Household size
- Approval and development rates
- Dwelling density
- Land Supply

6.4.4 Population

From the "Demographic Change" section in "Our Changing World" (above), the following are clear:

- Glenorchy has experienced a relatively stable population over the last 40 years.
- Population projections for Glenorchy prepared by the University of Tasmania and the Demographic Change Advisory Council point to low growth into the future - and possibly a transition to population decline within the next decade or two. This is a consequence of an ageing population profile, accelerated by out-migration of the City's younger age groups.

- The distribution of population is changing, with decreasing population in established inner areas and an increase in population in fringe areas.

6.4.5 Household Size

Households are getting smaller

The declining occupancy rate, when considered in light of decreasing or stable overall population suggests it is declining occupancy rate that is partially driving new housing development. As household size decreases, we need increasingly more houses for a given number of people. In 2006, based on the occupancy rate, it took nearly twice as many houses to accommodate the same number of people as it did in 1947.

6.4.6 Approval and Development Rates

Lot Approval and Creation

The average number of lots approved each year during the period 1995 to 2009 was 143. The actual number has varied considerably from year to year – presumably as a result of the business cycle.

The average number of lots created each year during the period 1995 to 2009 was 86. Again, the actual number varied considerably from year to year.

There is a delay between lot approval and lot creation. The delay between lot approval and lot creation reflects the timing of the subdivision process, with the need for subdivision design, construction and full survey to follow Council approval. The mean delay between lot approval and lot creation over the period from 1995 to 2007 was 23.6 months.

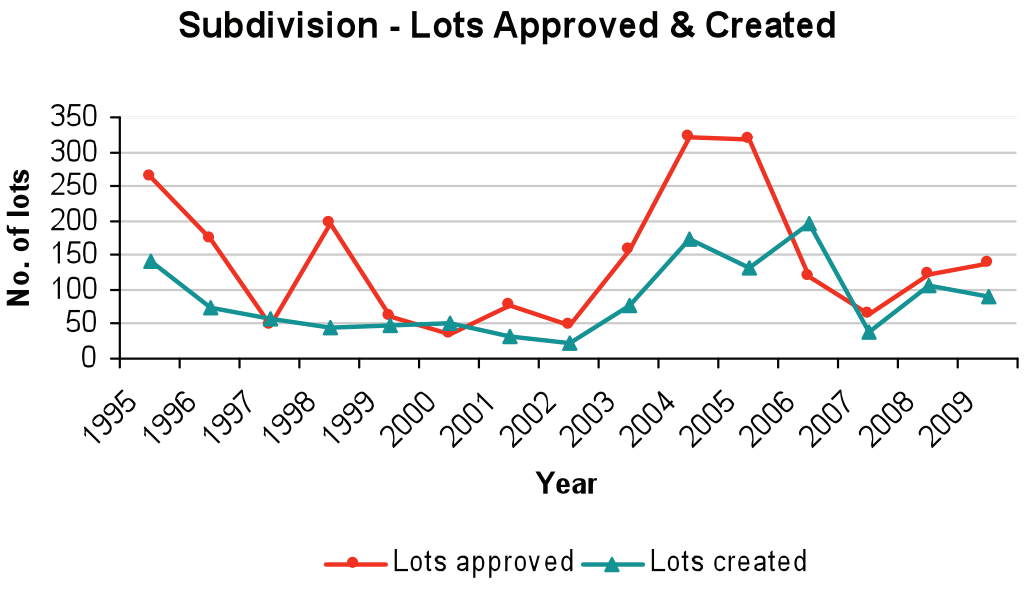
Fewer lots are created than are approved. This reflects the reality that some approvals are not taken up. The proportion of subdivisions approvals acted on (lots created) was 60.3 % over the period from 1995 to 2009.

By far the most subdivision activity took place at the northern end of the City. Of all lots created in the City between 1995 and 2007, 61% were created in Austins Ferry-Granton and Claremont. If Berriedale-Chigwell is included, the northern end's share of the City's lots creation rises to 73%.

The overwhelming majority of lot creation within the City over the period from 1995 to 2007 was within the residential zones, with three quarters occurring in the Future Urban and Urban Residential Zones. Rural Residential subdivision was minimal (3.75%)

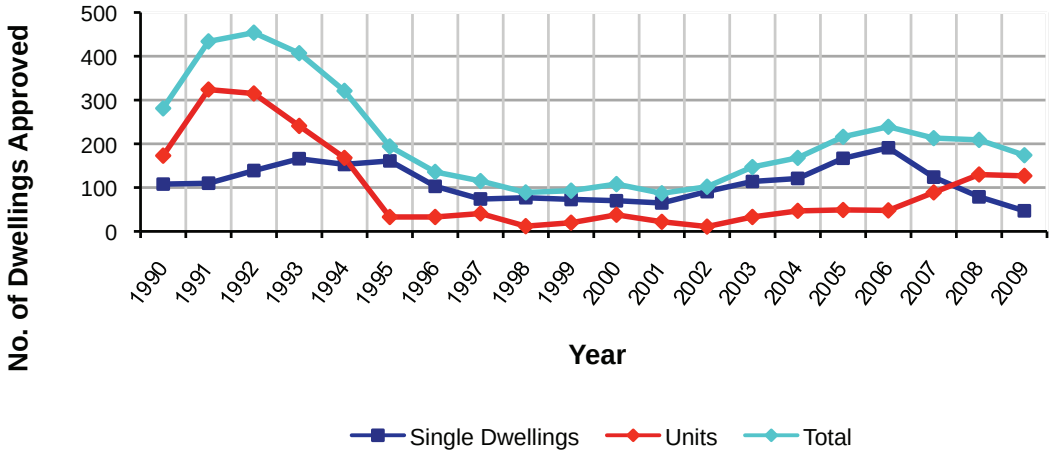
Dwelling Approvals and Development

The average number of dwellings (both single dwellings and units) granted building approval per



Source: Glenorchy City Council Subdivision Approvals & Property Creation Data

Residential Building Approvals



Source: Glenorchy City Council building approvals data

year over the period from 1990 to 2009 was 210. This was split between an average of 112 single dwellings per annum and 98 units.

Please note that units here are defined as multiple dwellings on a lot. This differs from the Australian Bureau of Statistics definition in their functional classification of buildings.[135]

However, not all dwelling approvals are acted upon.

In order to estimate how many residential buildings are actually completed following the building approval, the rate of conversion of residential building approvals to completion (i.e. granting of occupancy certificate) was estimated. This was done for the period from 1990 until 1 July 2004 by looking at the proportion of residential building approvals for which an occupancy date is given in Council records. Of the 1936 building approvals for dwellings over that period, Council records indicated that 91% of those approvals proceeded to occupancy.

This early period is used to estimate the rate of conversion from approval to occupancy because it corresponds to a time before private certification when councils had control over the issue of certificates of occupancy.

If this "conversion rate" is applied to the twenty year average of residential building approvals, the estimated number of dwellings constructed in the City per annum over the period is 191, made up of 102 single dwellings and 89 units.

Clearly, from the above graph, while the average number of single dwellings approved per year has been fairly stable, building approvals for units over the last decade has been half what it was in the 1990's. If the last ten years of data from 2000-2009 are considered, the average number of single dwellings approved per year has been 102, the number of units 52, resulting in an average total number of dwellings approved per annum of 154. Therefore, the estimated number of dwellings actually built per year over the period 2000-2009 averages 139, made up of 92 single dwellings and 47 units.

The major growth areas within the City in terms of single dwellings are Granton-Austins Ferry and Claremont. Unit development has been strongest in Claremont and Glenorchy.

The delay between approval and occupancy was examined for all building approvals proceeding to occupancy between 1990 and 2007 (as at 18 March 2007). This lag between approval and occupancy provides an indication of how long it takes to construct and complete a residential dwelling. The median time between building approval to occupancy for a residential dwelling was 191 days, or 6.28 months.

The growth in the City's dwelling stock is less than 1% per annum[136]. Declining household size is driving that growth, not population increase.

6.4.7 Dwelling Density

The density of residential development is generally a measure of how many dwellings have been developed, or can be developed, per a given area of land. This is normally expressed as the number of dwellings per hectare (eg. 15 dwellings per ha)

Net Dwelling Density is defined as the number of dwellings on the land occupied by the dwellings, plus internal public streets and incidental open spaces.

A sample of several large blocks of land within the City was selected to identify typical dwelling densities for zones under the Glenorchy Planning Scheme 1992.

In the Future Urban Zone, the net density was 10.08 dwellings per hectare. This yields an average lot size of 858 m^2 (excluding internal open space and local roads).

In the Urban Residential Zone, the net density was 12.2 dwellings per hectare. This yields an average lot size of 667 m^2 (excluding internal open space and local roads).

6.4.8 Land Supply

There was found to be 258 Ha of existing Future Urban zoned land in the City on just over 100 broadhectare parcels of 5000 m^2 or greater. However, there are only 3 sites over 10Ha in area remaining in the City - suggesting difficulties in open space and road network structure planning owing to fragmented ownership.

There was only limited broadhectare supply remaining in the Urban Residential Zone.

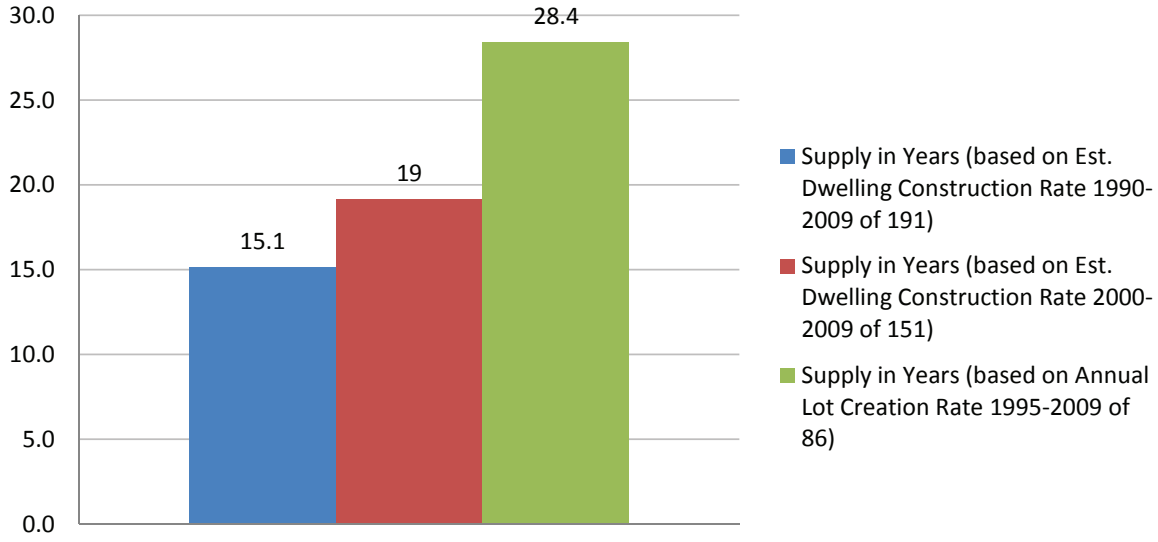
There was also limited development potential in the Low Density, Medium Density and Rural Residential Zones.

Infill potential and existing vacant small lots were also taken into account.

When historic rates of development and benchmark densities were applied, it was found that the City had an ample supply of existing residentially zoned land.

Based on several historic lot creation and dwelling construction rates, there is between 15 and 28 years of land available within the existing Future Urban and Urban Residential Zones.

Estimated Land Supply in Years - Future Urban & Urban Residential Zones



Source: Glenorchy City Council land supply analysis

This supply-based approach was cross-checked by considering projections of the City's future population and occupancy rates to 2031. This approach indicated the existing supply was sufficient to accommodate growth until at least 2031.

There are various arguments as to how much land should be made available for residential development. Previous work for the Greater Hobart area[137] suggested that 10 years supply was appropriate for the growth needs of a region, and that of this, 5 years should be immediately available for development.

More recent work by the Victorian Urban Development Program (UDP)[138] defines a sufficient supply as being adequate to meet demand from additional dwellings for 15 years, of which 10 years supply should be zoned ready for development.

The primary reason for this longer horizon is that a 15 year supply substantially exceeds the normal business planning cycles of the development industry and sufficient land stock is required to maintain an ongoing supply to market.

In Glenorchy's case, this "development pipeline" has been calculated, with advice from the Master Builders Association[139] to be 2.5 years.

6.4.9 Land Use Strategy

a) Maintain a minimum of 15 years' residential land supply within the City using structure planning to regulate land release and regular monitoring of the available land supply.

b) Acknowledging Council's central spatial position in the Southern region, focus residential zonings on suburban and inner urban densities. No large extensions of Rural Residential zoning are anticipated. Low density residential zoning may be applied in areas where land capability or visual impact constraints exist.

c) Recognise that the regional settlement strategy may have implications for Glenorchy's rate of development and land supply.

6.5 Rural Land Use

6.5.1 Planning System Objective

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[140]

(Schedule 1 Part 1 1(d) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

to provide a planning framework which fully considers land capability.

(Schedule 1 Part 2(i) LUPAA)

6.5.2 Council Strategic Plan 2010-2015

2.1.1 Support the retention of existing business and the attraction of new business to the City.

2.1.2 Promote the City as an attractive place to invest and do business.

6.5.3 Background

By 1820, a good deal of the land in Glenorchy was granted to settlers. The 1820's and 30's saw cultivation of the low-lying river flats. The names of former farming property such as Grove, Tolosa, Chigwell and Derwent Park have become familiar suburb and street names within the City. By 1890, Glenorchy was the biggest fruit growing district within Tasmania.[141]

However, with the growing suburbanization and industrial development of the City, most of Glenorchy's rural land has been lost to urban development.

The two significant remaining areas of rural zoned land in the City are the approximately 1500Ha at Collinsvale/Glenlusk and some 140Ha at Black Snake Road/Upper Hilton Road in Granton/Claremont. There are also smaller rural-zoned areas in Claremont and Chigwell.

6.5.4 Collinsvale/Glenlusk

Collinsvale/Glenlusk was a significant farming area – renowned for its small fruit industry and Collins Cap Swedes. However, changes in agricultural methods and economics saw its decline.

Agriculture has not been a significant industry in the Collinsvale district for some time. This is mainly due to the changing nature of agricultural production, the increased mechanization and subsequent need for economies of scale and the constraints placed on agriculture by the topography and soil characteristics of the district. ….

Agriculture in the area started to decline in the 1950's when the small fruit market suffered a slump. Because of the topography the industry could not be mechanized and the fruit orchards subsequently became uneconomic.

Most agricultural activity in the district today is carried out by 'hobby' farmers who do not rely on returns from agriculture as their primary source of income.[142]

At the 2006 Census, only 0.7% of residents in Collinsvale/Glenlusk were employed in the agriculture, forestry and fishing sectors.[143]

The land capability mapping carried out by De Rose et al (2000)[144] makes it clear that Collinsvale Glenlusk's existing pasture land is predominantly Class 5 – which renders it suitable for grazing and possibly for limited fodder cropping.

Existing forested areas are Class 6 and are not recommended for clearance because of constraints such as erosion potential.

Under the present Planning Scheme, Collinsvale's supply of rural lands are, on average, already in parcels which are well below the respective minimum lot sizes - Rural A (10 Ha minimum lot size – average parcel size 4.7Ha) and Rural B (20Ha minimum lot size – average parcel size 6.5Ha) zoned land.

The subdivision potential of the existing Rural Zones is essentially exhausted.

Furthermore, modelling of a 10Ha minimum lot size for those areas currently zoned Rural B, would appear to yield only an additional potential 7 lots through subdivision.

However, an analysis of the Department of Primary Industry and Water's land use codes suggests that there are some 30 lots identified as vacant within the Rural B Zone, over and above land denoted as being used for agricultural activity.

Based on advice from the Department of Primary Industries and Water[146], without significant lot amalgamation, it appears unlikely that anything other than boutique agricultural activities could be carried out in the area. It appears that much of the current agricultural activity in the area is hobby farming - predominantly cattle grazing.

Counter-balanced against this is the role of Collinsvale-Glenlusk as a rural lifestyle retreat for people who commute to employment outside the area.

Under the draft State Policy on the Protection of Agricultural Land 2007[146], the following need to be taken into account with respect to Collinsvale Glenlusk:

1. An assessment of the local and regional significance of the agricultural land at Collinsvale Glenlusk in determining the extent to which protection of agricultural land from conversion to non-agricultural use is required.
2. Protection of agricultural land from fettering by non-agricultural uses, particularly residential uses.
3. "Permitted" status for agricultural uses which rely upon the soil as a growth medium if zoned Rural Resource.

6.5.5 Black Snake Road/Upper Hilton Road

Land in the Black Snake Road/Upper Hilton Road is not prime agricultural land. It is categorised by De Rose as Class 4 and 5.[147] Land in Class 4 is well-suited to grazing but is limited to occasional cropping or a very restricted range of crops. Land in Class 5 has slight to moderate limitations to pastoral use and is suitable only for limited cropping.

The land in the Black Snake Road corridor was zoned Reserved Residential under the Claremont Planning Scheme 1980. This zoning prevented any building until such time as Council had consented to the subdivision of the land and its release for development purposes.

The Strategic Land Use Planning Study prepared by Hepper Marriott for the 1992 Scheme concluded that the most appropriate zone for the area would be Future Urban.

The local community sought to retain the rural amenity of the area and lodged an objection to the proposed Future Urban zoning.

At a hearing into the objections into the new Planning Scheme in the early 1990s, the Special Commissioner for Town and Country Planning decided to zone the land Rural "A" as a future "land bank". The Special Commissioner determined that adequate areas for urban expansion had already been set aside in the City of Glenorchy.

Following a review of the zoning of the Black Snake Road/Upper Hilton Road area by Mike Shield and Associates, Council initiated draft Amendment 4-03 to the Glenorchy Planning Scheme 1992 on 28 July 2003. The draft amendment proposed the rezoning of the immediate environs of Black Snake Village to "Residential R2 – Low Density" (1200 m^2 minimum lot size) and the remainder of the area currently zoned Rural A between Black Snake Road and Upper Hilton Road to be rezoned Rural Residential (1 Ha minimum lot size).

After considering representations in relation to the draft amendment and having taken into account research on the supply of residential land within the City, Council resolved on 17 May 2004 to report to the Resource Planning and Development Commission (RPDC) that it supported preparation of a modified amendment of lesser scale.

The amendment approved on 4 November 2005 by the RPDC involved overlay provisions for Black Snake Rural Village – allowing limited additional residential development involving a Rural A-zoned area of approximately 39Ha. The balance of the area was left in Rural A zoning, with no change to existing provisions.

6.5.6 Land at Chigwell

There is approximately 40Ha of land at Chigwell in Rural A zoning. This land is located on Lowes Ridge and is wedged between Future Urban and Landscape and Conservation zoned land. The rationale for Rural A zoning is unclear. However, it appears to recognize existing pasture land below the tree line.

6.5.7 Land Use Strategy

a) Adopt the suite of agricultural zones required under Planning Directive No. 1.

b) Apply the relevant provisions of the draft State Policy on the Protection of Agricultural Land 2007 to the City's existing "non-prime" rural-zoned areas - i.e.

   (i) Assess the local and regional significance of the agricultural land in determining the extent to which protection of agricultural land from conversion to non-agricultural use is required.

   (ii) Protect agricultural land from fettering by non-agricultural uses, particularly residential uses.

   (iii) Give "Permitted" status to agricultural uses which rely upon the soil as a growth medium if zoned Rural Resource.

c) Take into account land capability, values, constraints, existing land supply and the regional settlement strategy in evaluating the appropriate future zoning of this land.

6.6 Home Business

6.6.1 Planning System Objective

to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).[148]

(Schedule 1 Part 1 1(d) LUPAA)

to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania.

(Schedule 1 Part 2(f) LUPAA)

6.6.2 Council Strategic Plan 2010-2015

2.1.1 Support the retention of existing business and the attraction of new business to the City.

2.1.2 Promote the City as an attractive place to invest and do business.

2.1.3 Promote investment by capitalising on the City's infrastructure.

3.4.4 Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.

6.6.3 Background

Most planning schemes allow for micro businesses to be run from home provided they do not impact on the amenity of neighbours or require augmentation of services.

6.6.4 Current Planning Scheme Provisions

The Glenorchy Planning Scheme 1992 allows for two levels of home business – "Home Activity" and "Home Business".

A "Home Activity" is "permitted as of right" in the residential zones and a number of other zones. It is restricted to operation of a business by the permanent residents of a dwelling unit, with a business footprint not exceeding 30 m^2 subject a number of criteria such as no impact on residential amenity.

A "Home Business" allows for the employment of one non-resident in the business and provides for a business footprint of 50 m^2 .(which is relaxed in some of the lower density zones such as the Rural Zones). A "Home Business" has "discretionary" status in the residential zones – which means that a planning permit is required.

6.6.5 Proposed Common Key Elements Template Provisions

The proposed template would exempt a Home Office from a requirement for a planning permit.

6.6.6 National Policy

The Australian, State and Territory Governments published "Home - Based Business: Local Opportunities" in 2004.[149] It championed home-based businesses as an important part of the small business sector, pointing to their economic, social, environmental and regional benefits.

In June 2004, there were 16,700 home-based businesses in Tasmania out of a total of 25,600 small businesses. That is, 65 per cent of all small businesses are home-based.[150]

Within Glenorchy, based on Australian business register data, it is estimated that there are 800 home based businesses.[151]

6.6.7 Planning Provisions

The Home-Based Business publication included a checklist which included a number of questions pointing to desirable planning practices for home-based businesses. In summary, those relevant to planning scheme review were :

- "As of right" provisions for home-based businesses, for example for home-based businesses that do not negatively impact on the local amenity of the area.
- Rules regulating home-based business are outcomes-based rather than prescriptive and arbitrary.
- Specific rules or a dedicated policy to govern the operation of home-based businesses.
- An appeal/complaints mechanism in relation to our home-based business decisions /policies?

Benchmarking of the Glenorchy's existing planning provisions for home business found that there was a high degree of uniformity in planning provisions for home-based businesses, with most councils including controls relating to:

- place of residence
- no. of employees
- floor area
- restrictions on display of goods
- prohibition on motor vehicle repair
- requirement not to draw on utilities over and above normal residential levels
- restrictions on commercial vehicle use
- impact on amenity
- sign restrictions.

Some councils imposed additional controls in relation to:

- restrictions on retail sales
- storage
- conduct of the business within a building
- clients and vehicles waiting.
- deliveries; and
- hours of operation

It is assessed that Council's existing planning provisions for home-based businesses are in line with leading practice. Only "fine tuning" of those provisions is considered to be required in any new planning scheme.

6.6.8 Land Use Strategy

a) Continue to support the establishment of home businesses provided they are consistent with the commercial hierarchy and do not adversely affect residential amenity.

b) Carry forward the main elements of the Glenorchy Planning Scheme 1992's existing planning provisions for home business which are consistent with leading practice.

c) These are the imposition of sensible limits on activities such as requirement to be place of residence, number of employees; floor area; restrictions on display of goods; prohibition on motor vehicle repair; requirement not to draw on utilities over and above normal residential levels; restrictions on commercial vehicle use; impact on amenity & sign restrictions.

References

[118] *Schedule 1 Part 1 Land Use Planning and Approvals Act 1993; Paragraphs d (c) respectively are: (a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and (b) to provide for the fair, orderly and sustainable use and development of air, land and water; and (c) to encourage public involvement in resource management and planning.*

[119] *Schedule 1 Part 1 Land Use Planning and Approvals Act 1993; Paragraphs (a), (b) and (c) respectively are: (a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and (b) to provide for the fair, orderly and sustainable use and development of air, land and water; and (c) to encourage public involvement in resource management and planning.*

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[122] *Ibid*

[123] *Australian Bureau of Statistics, 2006 Census data*

[124] *Australian Bureau of Statistics, 2006 Census, Employment by industry based on place of employment.*

[125] *Glenorchy City Council, Glenorchy Industrial Land Use Survey 1998-2008*

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[131] *Inspiring Place Pty Ltd, Wilkinsons Point and Elwick Bay Precinct Masterplan, for Glenorchy City Council, July 2006*

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[135] *Australian Bureau of Statistics Cat. No. 1268.0.55.001 ABS Functional Classification of Buildings, 1999*

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[143] *Australian Bureau of Statistics, 2006 Census*

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[148] *Schedule 1 Part 1 Land Use Planning and Approvals Act 1993; Paragraphs (a), (b) and (c) respectively are: (a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and (b) to provide for the fair, orderly and sustainable use and development of air, land and water; and (c) to encourage public involvement in resource management and planning.*

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7 Measuring Outcomes

7.1 Why Measure the Outcomes?

It is important to identify in advance some measures to evaluate the future performance of the land use planning strategy underpinning the new planning scheme.

This helps in determining how successful the strategies have been in achieving the desired outcomes. It also provides guidance about what changes might be required to improve the performance of a future planning scheme.

Many of the policy areas for which the measures seek to provide indicators are complex and multi-faceted. As a result, planning scheme regulation will not be the sole causal factor. However, results may be indicative of the need to carry out further policy work or undertake other initiatives for that policy area.

7.2 Proposed Indicators

The indicators chosen do not attempt to comprehensively measure a future planning scheme's performance in achievement of the corporate strategies. To do so would require a much larger array of measures which would be resource intensive to service. Rather, the intent of the chosen indicators, individually and as a set, is to provide an easily understood indication of the planning scheme's performance against the corporate strategies. The indicator set would act as a signal to enable review and adjustment of Council's planning approach, as necessary.

Strategy No.	Corporate Strategy	No.	Indicator of Success
1.1.1	Develop and implement a plan which addresses the opportunities and challenges arising from an ageing population.	1	Number of additional aged care beds approved in planning permit applications. Source: GCC planning application data.
1.2.3	Encourage the provision of a diverse range of housing options within the City.	2	Diversity of the City's housing stock. Source: ABS census & Council building approvals data
1.3.3	Ensure Glenorchy's infrastructure facilitates community access for all.	3	Proportion of non-exempt public domain use and development subject to assessment re: access for people with disabilities. Source: GCC planning permit application data
1.3.10	Partner with other stakeholders to implement crime prevention, community safety and fear of crime initiatives, in consultation with the community.	4	Number of CPTED assessments undertaken on proposed uses and developments of public places and public buildings. Source: GCC planning permit application data

Strategy No.	Corporate Strategy	No.	Indicator of Success
1.4.3	Promote recreational activity by maintaining and improving facilities and assisting access to funding for sporting and community groups.	5	Spatial distribution of local and community park open space opportunities relative to population. Source: GCC GIS analysis
2.1.1	Support the retention of existing business and the attraction of new business to the City.	6	Number and value of works of commercial and industrial planning permit applications. Source: GCC planning application data
2.1.2	Promote the City as an attractive place to invest and do business.		
2.1.3	Promote investment by capitalising on the City's infrastructure.	7	Residential land supply. Source: GCC planning data
2.3.1	Increase visitation to the City.	8	No. of additional visitor beds approved in the City. Source: GCC planning application data
3.1.1	Protect the City's natural values including the City's vegetated hill faces, streamside areas, urban bushland reserves, Wellington Park and the Derwent River and foreshore.	9 10	Amount of land subject to environmental management zoning. Source: GCC GIS analysis Community and key stakeholder satisfaction with management of the natural environment Source: Community survey.
3.1.2	Minimise the risk of environmental harm.	11	Number of incidents of serious environmental harm. Source: GCC Environmental Health section
3.2.1	Minimise greenhouse gas emissions and address the impacts of climate change.	12	Council's greenhouse gas emissions. (City's greenhouse gas emissions when available). Source: Planet Footprint data

Strategy No.	Corporate Strategy	No.	Indicator of Success
3.3.2	Protect the City's heritage places, including places of significance to the aboriginal community.	13 14	Number of heritage places protected under State and local lists. Source: Tasmanian Heritage Register and Glenorchy local heritage list Community satisfaction with protection of the City's heritage. Source: Community Survey
3.3.3	Improve the quality, design and appearance of the City's buildings and public spaces.	15	Active application of urban design standards in the development assessment process. Source: GCC planning application data
3.4.1	Manage the orderly growth of the City in a way which maximizes the take-up of existing infrastructure capacity.	16	Proportion of infill residential development relative to all residential development. Source: GCC building records & GIS analysis
3.4.3	Plan for the sustainable development of the City, ensuring compliance with the planning scheme and community involvement in the planning process.	17	Number of planning permit applications assessed under the planning scheme. Source: GCC planning permit application data
3.4.4	Facilitate the development of liveable, well-connected settlements which bring people closer to the services they need.	18	Proportion of the City's residential development within walking distance of activity centres. Source: GCC building records & GIS analysis.
3.5.1	Manage the City's transport network to promote sustainability, accessibility, choice, safety and amenity.	19	Proportion of journey to work mode share by sustainable means (accompanied car travel, public transport, cycling, walking). Source: ABS Census data
4.1.4	Ensure preparedness for natural disaster and pandemic by ongoing review of the City's Emergency Management Strategies.	20	Number of premises in mapped hazard areas by land hazard type. Source: GCC GIS analysis.

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