Queenstown and Wanaka Growth Management Options Study

Stage One: How will Wanaka and Queenstown “look, feel and function” as they develop over the next 20 years?

A report to Queenstown Lakes District Council Prepared by Hill Young Cooper Ltd in Association with QLDC

Document reference :	Z:\DM Current Docs\QT\Docs 14October\Feb Report.doc
Date of this version:	6 February 2004
Status of report:	Final draft
This report was prepared by:	David Mead, Hill Young Cooper Ltd, BTP, MNZPI

Hill Young Cooper Ltd
PO Box 99847
Newmarket, Auckland
p: 09 529 2684
f: 09 520 4685
email: d.mead @hyc.co.nz

Table of Contents

1 INTRODUCTION

What will Queenstown and Wanaka look and feel like in 20 or 30 years' time given current growth pressures and trends? This is the picture that Queenstown Lakes District Council (QLDC) wishes to describe and illustrate for both Queenstown and Wanaka. In particular:

- How built up might the central business districts be?
- How busy will Frankton Road get in Queenstown? The state highway into Wanaka?
- What about housing and industry? Where will new housing be built and what form will it take: stand-alone housing; terraced housing or apartments?
- How many visitors are there likely to be in town and what will their need be for accommodation, services and activities?
- What will be the demands of the residents and visitors on community, recreational, open space and social services?

Based on this information, the council wishes to consult the community about the future direction of growth, and the advantages and disadvantages of taking different approaches to how growth might be managed.

1.1 Report structure

To help answer questions about the future shape of the district in a way that is useful for community debate, this report sets out the following material for Queenstown, then Wanaka:

- Community outcomes.

- Existing conditions, growth pressures and forecasts and the assumptions behind them.

- What the town is likely to look like in 20 years' time under a "business-as-usual" approach.

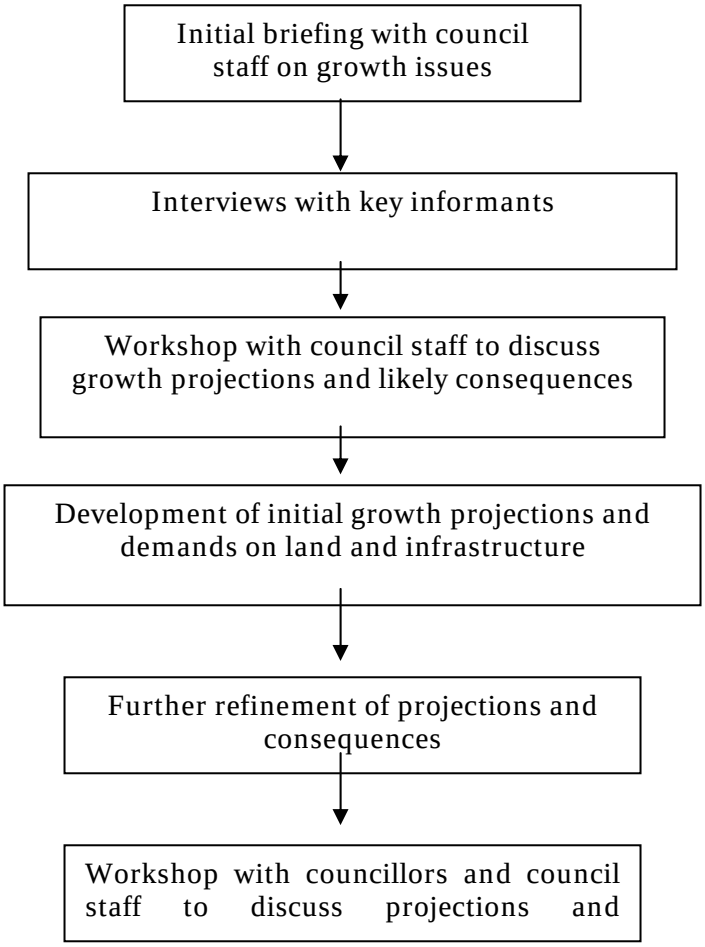
- What the key consequences of this approach are likely to be. In particular is there likely to be a miss-match between the 20 year picture and important community outcomes?

- What techniques could be used to ensure a closer match between future growth patterns and community outcomes? That is, what can the council do to ensure that the desired community outcomes are achieved over time?

The discussion of growth management techniques – how they might work, and their advantages and disadvantages – is not exhaustive. At this stage, a range of techniques are discussed to provide a flavour of the actions that the council could take to better meet community outcomes. Subsequent stages of the project will involve public workshops on the different techniques and the development of a preferred package of actions by the council. This study sets the scene for this work.

1.2 Process to develop the report

The diagram below shows the process followed to develop this report:



The following appendices are attached to this report:

- Appendix One: People and organisations consulted during the project.

- Appendix Two: Further data and assumptions related to the growth projections set out in this report.

- Appendix Three: A working paper looking at the specific issues associated with techniques to slow growth rates.

1.3 Context

In 2002, the district council ran community-based workshops in both Queenstown and Wanaka to debate growth directions. Both communities expressed a strong desire to better plan for and manage growth. They didn't want to stop it altogether, but wanted to put in place policies and actions to ensure the special qualities of Queenstown and Wanaka are protected and to ensure growth helps to make the district a better place to live. The community outcomes developed in these workshops form the basis of this project. They are set out later in the document.

Based on the growth pressures facing the two towns, it is important to consider whether current plans and policies, perhaps with some minor adjustments, are sufficient to shape growth in a way that meets these community outcomes. This is what you might call taking a "business as usual" approach to growth management. Once there is an understanding of the consequences of the business as usual approach, the need to change policies can be identified.

Business-as-usual

Current planning (as expressed in the Proposed District Plan) emphasises to the following principles:

Protect the natural environment. The protection of natural resources and outstanding landscapes and features is of fundamental importance. This is achieved by limiting development in these areas.

Provide for growth. The plan seeks to enable a range of living and working environments. The importance of visitor accommodation is recognised by limiting the rules which apply to this sector.

Mitigate adverse effects. New development is managed so that adverse effects on existing activities and the environment are minimised.

In Queenstown, higher density growth is encouraged around the Queenstown Bay area. Lower density development is provided for in Kelvin Heights. At Frankton Flats a variety of densities are possible. In the basin, there are a range of special areas, resorts and rural-residential areas where growth is possible.

In Wanaka, the emphasis is on the expansion of the current suburban pattern, with some higher density development close to the centre, and some possible infill.

1.4 Overview of the district

The growth of the district's population has been fast over the five years between 1996 and 2001. The usually resident population (the number of people living permanently in the area) is now close to 20,000 people for the whole district. Figure 1 shows the growth trend since 1991.

It can be seen from Figure 1 how the population has roughly doubled in this period. Growth was fast in the first part of the 1990s, slowed down in the middle part and then accelerated again in the past few years.

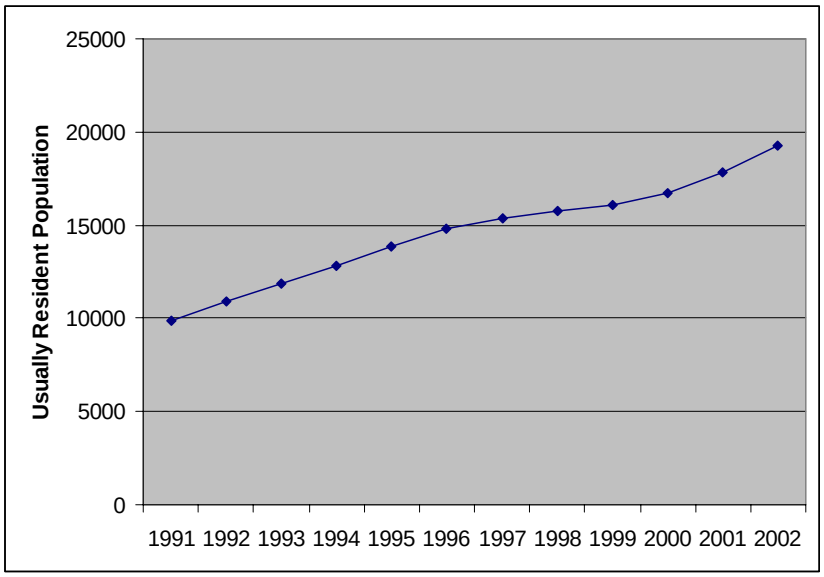


Figure 1: Queenstown Lakes District Population Growth 1991-2002

Source: Statistics New Zealand

Wanaka has been taking an increasing share of this growth. In 1991, the Queenstown urban area accounted for 52% of the district's population, and Wanaka accounted for just 19%. By 2001, these figures were 50% and 20% respectively. The District has a number of smaller settlements such as Glenorchy and Hawea. These settlements are also growing, but overall they represent only a small proportion of the total population of the district.

The number of people moving into the district is the largest source of growth. About 80% of total growth is accounted for by inward migration. In Auckland it is more like 30 to 35%. Obviously growth has been very fast over the past few years. It is possible that growth rates will slow in the medium term, as they did in the mid to late 1990s, as the economy moves through a cycle of growth followed by a period of flatter growth, or rates may possibly decline. However, the long-term underlying rate of growth is expected to remain positive.

In terms of visitor numbers, Figure 2 shows the number of guest nights as recorded by Statistics New Zealand for the whole of the district. This data only covers people staying in commercial accommodation, not with family or friends. What can be seen from the graph is the steady rise in visitor numbers, as well as the strong seasonal trend with a dual peak based around the summer and winter seasons.

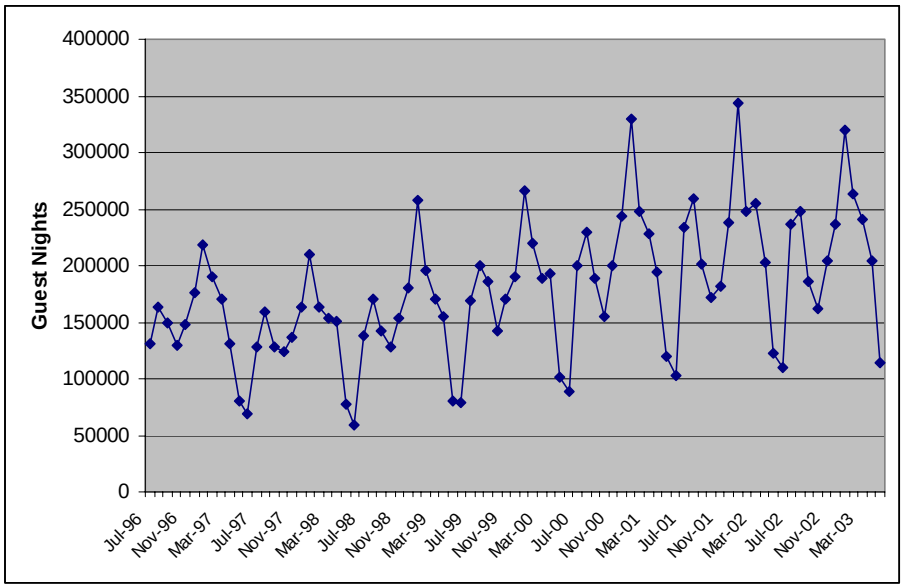


Figure 2: Visitor accommodation – guest nights for Queenstown Lakes District Council area

Source: Statistics New Zealand

2 QUEENSTOWN

This part of the report looks at the growth management issues facing Queenstown and the Wakatipu Basin over the next 20 years, and what is likely to happen under a "business-as-usual" approach. Key growth management choices are highlighted, and a number of options for how the community might respond to these choices are presented.

The study area is the Queenstown urban areas, as well as Arrowtown and the Wakatipu Basin (see Figure 3). Gibbston Valley is not included due to its physical differences and separation from the main areas of activity around Queenstown.

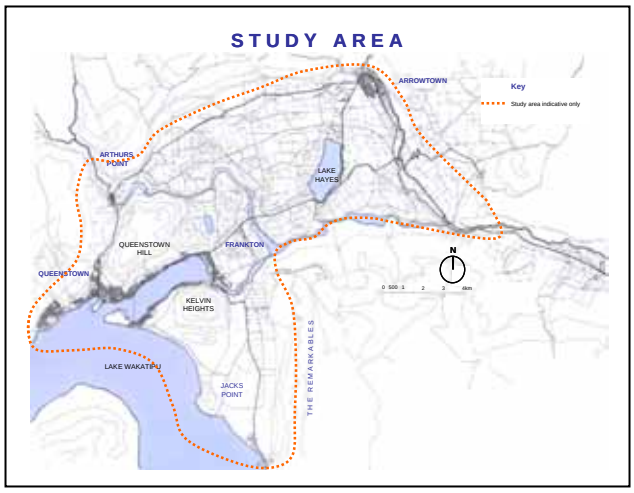


Figure 3: Queenstown study area

2.1 QUEENSTOWN COMMUNITY OUTCOMES

The outcomes listed below were developed at the Tomorrow's Queenstown community workshops. Outcomes are a statement about how the community would like the environment and community to be in the future. They are a goal or aspiration which the council and community can work towards together over time.

Queenstown – community outcomes

Manage growth in a way that is sustainable

- Landscapes should be a key determining factor in deciding the edge and location of urban development.
- Contain urban growth to long-term certain boundaries.
- Stage new urban growth areas.
- No further opportunities for rural development beyond those now in the district plan.
- Increase the achievable density of large areas within the existing and new greenfield urban areas.
- Concentrate high-density development and visitor accommodation transport routes to support higher frequency public transport.

Respect the dominance of our magnificent mountain, lake and rural environment

- Improve the ecological values of outstanding landscape areas.
- Protect iconic views and vistas.
- Protect the character of rural areas.
- Extend the green and trails network to add amenity, ecological and transport utility.

Build a strong, diverse and inclusive community for people of all ages

- The Queenstown CBD is the heart of the community – so the distance and connectivity of new urban areas to the CBD is a key consideration.
- Frankton should be the other (but not competing) hub – transport, health and sports, with local community facilities and schools.
- Development of affordable housing is needed to support a stable workforce and balanced community.

Improve access to and through rural and urban areas with good roads, the green network, walkways and public transport

- Provide good roading links between neighbourhoods including an alternative to Frankton Road.
- Plan for improved public transport services in association with plans for higher density development.
- Retain and protect the existing airport resource.

Create high-quality urban environments where safe community life can flourish

- High quality urban developments to be encouraged through design guides and controls.
- Upgrade and improve open spaces.

Provide infrastructure for a growing population

- New development must be supported by appropriate infrastructure. Plan ahead.
- Aim for sustainable systems for water and wastewater management.

Grow the strength of our economy

- Less is more for tourism. More higher yield visitors with smoothing of seasonal troughs.
- Diversify the economy with other economic activity suited to a lifestyle location (film, IT, education).
- Ensure adequate provision of business land (in a constrained land market).

2.2 QUEENSTOWN - CURRENT STATE AND EXPECTED GROWTH PRESSURES

In 2001, in the Queenstown study area:

- There were 12,000 permanent residents in Queenstown and the Wakatipu Basin, living in 4,800 dwellings. In addition to these occupied dwellings, there were also around 1,800 dwellings that were not occupied on a permanent basis, such as holiday homes and second homes.
- There were 7,300 full-time equivalent jobs in the area (full-time and part-time jobs added together). Just over 2,000 of these jobs were located in the CBD. Included in this number would be around 800 to 1,000 short-term or casual workers, many of them from overseas, who would not be counted as permanent residents.
- On an average day there were likely to be around 8,000 visitors in town. About 5,000 of these people stay at commercial accommodation, with the balance staying in private homes. The commercial accommodation sector has a capacity of around 6,000 beds per night.
- Each day during winter there were around 200 airplane movements at the airport (take offs and landings) and around 2,800 passengers passed through the airport.

During busy periods (summer and winter) the numbers of visitors would grow by at least 50%. So at the height of summer there may be more than 25,000 to 30,000 people (residents and visitors) in and around the settlement.

2.3 Growth patterns

Over the past five years between 1996-2001, in the Queenstown study area:

- Visitor numbers (domestic and international) grew by 8% per year[1]
- Employment grew by 8.5% per year[2]
- The usually resident (permanent) population grew by 3% per year[3].

Like other coastal and mountain-lake areas (Nelson, Taupo, Tauranga) Queenstown is growing faster than the rest of the country. In the case of Queenstown, however, it is apparent that a lot of this growth is being driven by tourism, rather than people shifting to the area for lifestyle reasons. The growth rates for visitors and jobs are very similar. This suggests that the increasing numbers of visitors to the area is attracting more people in search of jobs and business opportunities.

Most of the growth in visitor accommodation has occurred in and around the CBD. Accommodation for tourists is increasingly in the form of 'rentable' apartments (apartments rented for short-term stays). Industry commentators suggest there may be only one large hotel in the future. There are proposals for 600 to 700 more apartment units to be built. Much of this development is beginning to extend along Frankton Road.

For the permanent population, Census 2001 data shows the focus of growth over the five years between 1996 and 2001 has been on the fringe areas of Kelvin Heights and Frankton and the Sunshine Bay/Fernhill area. The number of permanent residents in the core, the Queenstown Bay area, was fairly stable between 1996 and 2001. Meanwhile, the population of Arrowtown, and the basin in general, has also increased.

In terms of the age and composition of the population, census data shows the average age of people living in the Queenstown Bay area is dropping as younger people move in. For the outer suburbs and the basin, the population profile is more focused on people in the 40 to 60 year age group.

In terms of commercial land, there are a number of developments proposed for the fringes of the CBD. However, overall the number of jobs in the CBD has been fairly static over the past few years, indicating most growth in employment is occurring outside the CBD, such as in the accommodation and construction sectors, and increasingly in Frankton. Yet the CBD is still the favoured location for business and professional services. There is space for further retail activities at Frankton Flats. The retail centres which are possible in this area could be, when added together, larger than the CBD.

There is little land remaining for services and light industry. The Gorge Road industrial area is heavily developed while the industrial area at Frankton is rapidly filling up. Land uses in Gorge Road and Industrial Place are becoming more orientated towards service and commercial activities, rather than industrial activities, in keeping with the areas'

[1] Based on Accommodation Survey – doesn't include people staying with family or friends. The long-run growth rate is around 5% per year.
[2] Based on Statistics New Zealand Business Demography data
[3] Census data.

business zoning. While there is still some business land at the airport, the use of the land is restricted to activities compatible with the airport location.

2.4 Current planning

The shape of future growth is dependent upon current planning and what growth is possible under these plans. The council estimates under current plans there is room for another 13,000 dwelling units spread across the urban area of Queenstown, as well as the Wakatipu Basin and Arrowtown. On the face of it, this is a large capacity, but it is available to be taken-up by rentable apartments and other forms of visitor accommodation. Holiday homes and second homes will also take up part of this capacity.

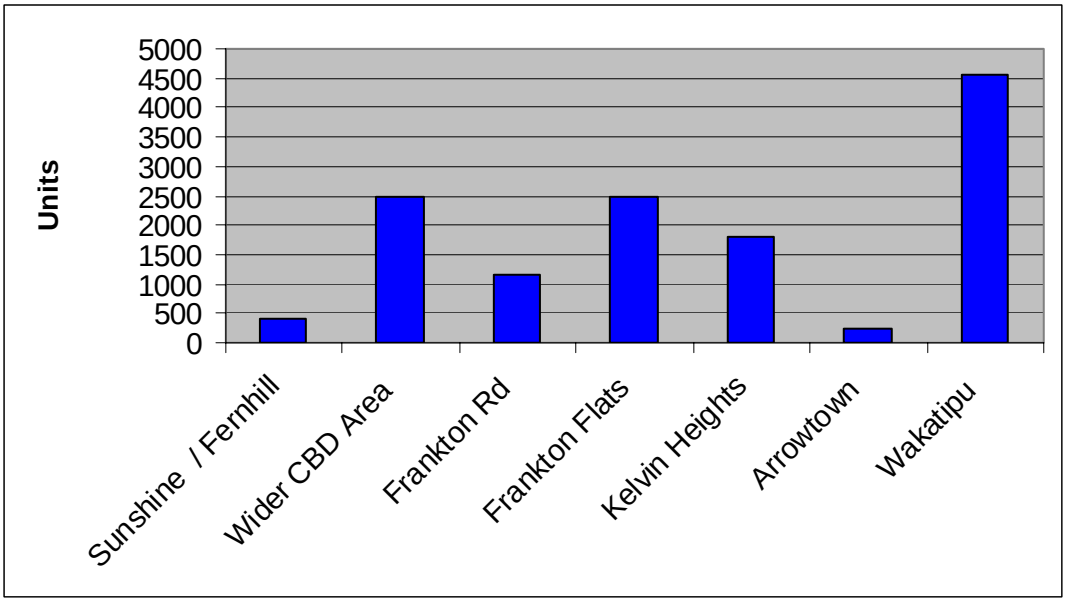


Figure 3: Capacity for Additional Dwelling Units

Source: Queenstown Lakes District Council

The Wakatipu area includes all areas outside the main urban area: Jacks Point, Arthur's Point, Millbrook, Meadow Park and Lakes Hayes Estate, as well as rural-residential and rural lifestyle areas.

2.5 Business land

There are 87 ha of commercial and industrial land, enough to accommodate around 6,800 jobs, based on standard employment to land ratios. It is estimated there are 3,600 (fte) jobs located in industrial and commercial areas, leaving a capacity for another 3,200 jobs. Most of this capacity is in the Frankton area and associated with commercial rather than industrial areas (the airport land and at Remarkables Park). There is also a lot of employment in residential areas.

Table 1: Business land availability

Business area	Area (Ha)	Capacity (ftes/ha)	Total ftes	Current ftes (estimated)	Estimated spare capacity (ftes)
Queenstown CBD	9.3	275	2,556	2,000	556
Gorge Road	10.4	50	522	500	22
Frankton industrial	16.5	50	827	500	327
Airport	27.7	30	831	250	581
Frankton Flats commercial	20	100	2000	300	1700
Arrowtown industrial	3.5	30	105	100	5
Total	87.5		6,841	3,650	3,191

2.5.1 Resident/visitor/jobs balance

The balance between local residents, visitors and jobs provides a guide to how the place looks and feels, as well as the extent to which the area can provide for its own needs.

In terms of the balance between residents and visitors, many more visitors than residents may make a place feel as though it no longer has a community. This will affect the sense of identity and belonging of people living in the area.

In the Frankton area, residents make up the greatest number of people, but in the Queenstown Bay area there is more of a mix of residents and visitors.

Table 2: Residents / visitor balance 2001

Number of People	Wider CBD area	Frankton area
Usual residents	5,639	3,362
Visitors staying in area (estimated) on average day	5,683	757

In terms of the balance between jobs and people (both residents and visitors), the Queenstown Bay area has more residents and visitors and a larger town centre, compared to Frankton. Comparison of the basic ratio between town centre-based jobs and the number of residents and visitors in the surrounding area suggests Frankton could sustain a larger retail centre. In the Queenstown Bay area, more people and visitors implies the need to expand the town centre, but growth of the centre is constrained by land use zonings.

Table 3: 2001 Jobs / People Balance

Number of people	Wider CBD area	Frankton area
Residents + visitors	11,322	4,119
Town centre workers	2,000	300
Ratio	0.18	0.07

The balance between residents and jobs also affects travel to work patterns. Census travel to work data shows there is a high proportion of people who walk or cycle into the Queenstown CBD area. This is related to the close proximity of the residential area to the CBD, as well as the large number of jobs in the area. In contrast, fewer people and longer distances see more people drive to workplaces in Frankton.

Table 4: Travel to work - 2001

Employment area	Percentage who walk / cycle / bus to employment area	Percentage who take the car to employment area
CBD	26%	74%
Frankton	20%	80%

2.6 Existing population projections

This project requires an assessment of future growth pressures. All projections about growth have to make assumptions about what may drive population growth in the future and therefore involve a degree of uncertainty. Statistics New Zealand regularly produces projections of population growth for cities and districts in the country. Under the high growth projection developed by Statistics New Zealand for the Queenstown Lakes District Council area[4], the permanent population of the Queenstown study area will reach 22,000 people by 2021, up around 10,000 people from 2001. This projection is based on assumptions about natural increase and the number of people who may shift into the area. Statistics New Zealand suggest the annual average rate of growth will fall from 3.8% in 2001 to 2.1% by 2021. Is this realistic?

Inward migration is the main driver of population growth. The rate of inward migration is obviously dependent upon economic conditions and whether there are jobs in the area. The recent past has seen the number of tourists grow quickly, fuelling economic growth, and with it population growth. All the indications are that visitor numbers will continue to rapidly increase into the future, especially under a "business-as-usual" approach.

Also influencing the number of people moving into the area is the holiday and second home market. Many people appear to be buying homes as a retirement option – renting them out or leasing them to an accommodation supplier in the short-term, with the intention of living permanently in the area once they retire. For the second home market, better transport links mean that some people can spend part of their working time in Queenstown and part in other main business centres. These factors mean the population of the area could rapidly grow in the future as more people come to live permanently in the area, even if the growth in tourist numbers levels off.

[4] Produced by Statistics NZ November 2002

2.6.1 Alternative projections

In planning ahead it is useful to consider a future in which growth continues at a fast pace. This is not because the council or community wants Queenstown to grow rapidly. Projecting forward fast growth rates helps highlight choices and tests the robustness of different approaches to growth management – can a strategy cope with a range of growth rates, whether the growth is fast or slow, for example?

The high-level projections developed for this project assume that tourism will continue to be the main driver of growth in the area. As tourist numbers grow, more people need to be employed in the industry and so more people will be attracted to the area.

If current trends continue (a long-run annual average rate of growth of visitor numbers of about 4.5% to 5%), then by 2021, the number of visitors in the Queenstown area on any given day could reach 19,000, up 11,000 from the current 8,000. If this happens, then employment could grow to around 17,000 to 18,000 full-time equivalent jobs, up from the current 7,300. The permanent population would not grow as quickly, but still might reach 29,000 to 30,000 people by 2021. This is more than that estimated by Statistics New Zealand but not unrealistic given current growth rates. See Figure 4.

The Statistics New Zealand projections are its recent high growth projection, but they assume a lowering of inward migration rates after 2006. Unless the economy slows considerably, this seems unlikely. The alternative projections therefore continue with fast population growth into the medium term.

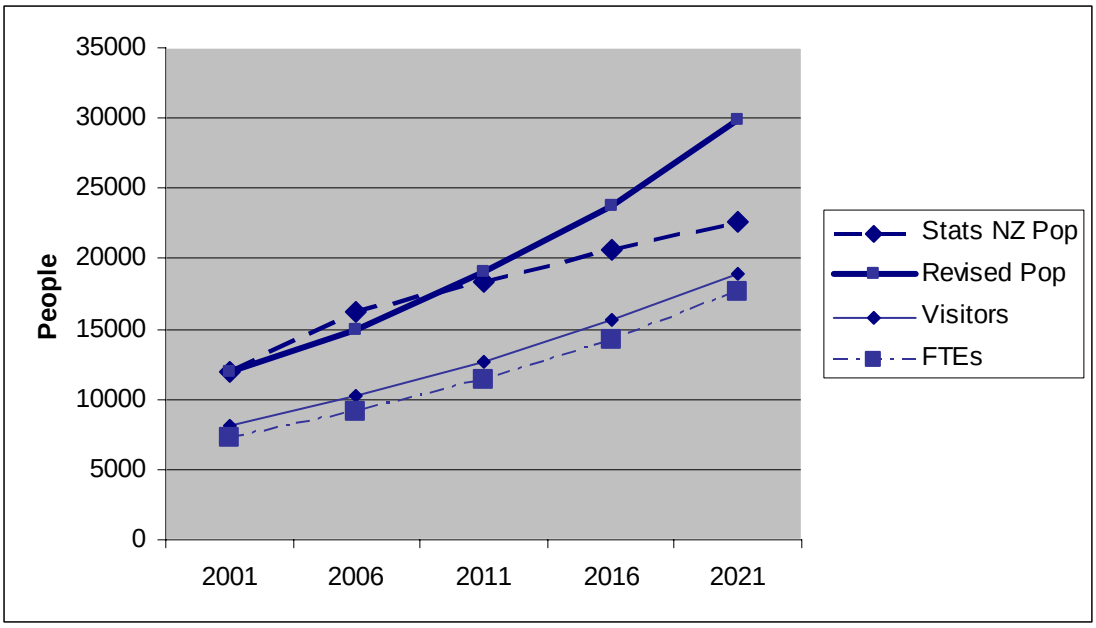


Figure 4: Projections for population, visitors and employment

Table 5: Projected growth

	2001	2006	2011	2016	2021
Stats New Zealand resident population	11,970	16,240	18,410	20,,560	22,670
Revised resident population estimate	11,970	14,963	18,996	23,830	29,826
Visitors	8,067	10,174	12,678	15,611	18,993
FTEs (jobs)	7,295	9,095	11,429	14,191	17,580

Are these numbers realistic – is there enough space to house these people and accommodate all the visitors? Will the place get too crowded? Will infrastructure like roads and sewerage systems become overloaded, dampening growth?

On the face of it, there is the potential for this growth to occur in the short to medium term at least:

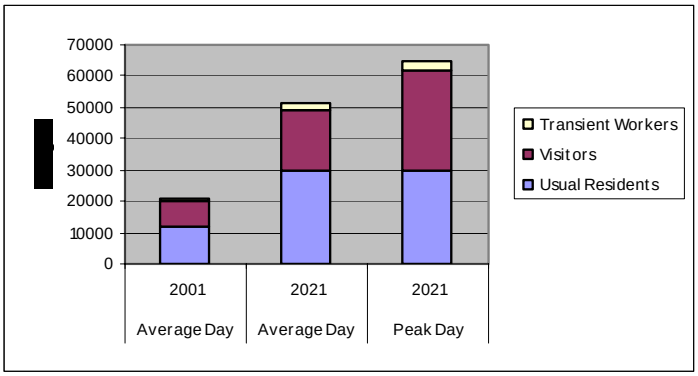
- The council estimates that under the current District Plan there is room for another 13,000 dwellings in the Queenstown/Wakatipu area, which could

accommodate a further 25,000 to 30,000 permanent residents, although an allowance needs to be made for visitor units and second homes.

- Tourism operators say there are no inherent capacity constraints on the number of people they can serve – but they may need to better manage activities and spread peak loads, for example, in the future.
- In terms of infrastructure, growth can be planned for. The wastewater plant can be extended and additional water reservoirs built. One constraint on growth may be the road into Queenstown (Frankton Road), but this constraint may just mean that growth locates elsewhere, such as Frankton Flats, or that other options such as public transport become more viable.
- More visitors in town will make the place feel busier, but open spaces and public areas can be upgraded to cope with this, such as making better use of Queenstown Gardens to help spread people around the foreshore.
- One possible constraint on growth, as discussed later, is the capacity of the airport. However, even if the number of tourists arriving by aircraft levels off at some point, the numbers arriving by road can increase.

What do these numbers mean for the total number of people in the area? By 2021, there could be over 50,000 visitors and residents in the town on an average day, a settlement the size of Invercargill today. During busy periods the number would be higher still – around 65,000 to 70,000 people. But how the place is developed will mean that it could be quite a different place from any other New Zealand town of 50,000 people. Figure 6 shows the total number of people in the Queenstown/Wakatipu area on an average day in 2001 and 2021, and on a peak day in the middle of winter or summer when there are a lot more tourists and visitors in town and the surrounding area.

Figure 5: Total people 2001 - 2021



2.7 HOW MUCH MORE SPACE IS NEEDED?

How much more space would be needed to fit in this number of people – how many more homes, visitor accommodation units and how much more land for businesses?

Estimates of future demands for space for activities can be made based on current ratios of people to homes, visitors to accommodation units and jobs to business land. This section briefly describes how the above projections of people, visitors and employment numbers can be translated into estimates of future demand for land and space for activities.

2.7.1 Housing

In 2001, the 12,000 permanent residents in the Queenstown area lived in 4,800 occupied dwellings. On average, there were 2.49 people per household. In 1996 the average number of people per household was 2.56. In addition to the 4,800 permanently occupied dwellings, there were also 1,800 dwellings occupied some of the time, for example, holiday or second homes. Put another way, for every 10 permanently occupied dwellings, there were 3.7 dwellings occupied for some of the time. This ratio between permanent and holiday homes has been declining over time as the size of the permanent population increased.

By 2021, it is assumed the average occupancy rate will be around 2.3 people per household, and for every 10 permanent households there will be 2.5 holiday or second homes. This means the expected 2021 usually resident population of 30,000 people will need to be housed in 13,000 permanently occupied homes, while there is likely to be around 3,000 holiday and second homes. This is a total of 16,000 dwellings or a demand for another 9,500 dwelling units between 2001 and 2021.

2.7.2 Visitor Accommodation

There are around 6,000 beds in commercial accommodation in the Queenstown Area, serving, on an average day, 5,000 tourists (domestic and international) who wish to stat in commercial accommodation. Added to this are people staying with family or friends or renting a home for a short period.

By 2021, if annual average growth rates remain at around 4% to 5% per year, then there are likely to be around 12,500 tourists looking to stay in commercial accommodation, not including camping grounds. As most visitor beds in commercial accommodation will be provided in the future in the form of rentable apartments, this means there will be demand for around 4,000 apartment type units between 2001 and 2021. A further 6,500 visitors will be staying with family, friends or in other forms of accommodation. The total stock of visitor beds will be around 16,000.

2.7.3 Employment

In 2002, roughly 50% of people worked in business and commercial areas, while 50% worked in residential areas, or at least had their business address listed as a residential address (for example builders and other tradespeople). The percentage of employment in residential areas is higher than in other towns, but this reflects the large number of hotels and other visitor accommodation activities, as well as the high number of tradespeople working in the area. Most tradespeople have their home address as their work address, but spend most of their time at construction sites.

Based on Statistics New Zealand data relating to job location, of the 50% of people working in business and commercial areas, it is estimated about 30% work in the Queenstown CBD and commercial areas in Frankton, while the other 20% work in light industrial areas on Gorge Road, Frankton Flats and the airport.

By 2021, there could be up to 20,000 jobs in the area if the economy grows fast. For these projections a slightly lower figure of 17,500 full-time equivalent jobs in the area is used, an increase of 10,000 jobs. If it is assumed that 50% of these additional workers will continue to work in residential areas, or at least be based there, the other 50% will need to have workplaces in business areas. If it is assumed that of this 50%, half will work in town centres in offices, shops and other commercial activities, this equals another 2,500 workers in these areas. These workers are likely to need around 100,000 square metres of floorspace, based on between 35 to 40 square metres of floorspace per person. There is space for about another 80,000 square metres of floorspace to be built in the commercial areas of the CBD and Frankton Flats, with most in Frankton Flats.

For people working in light industrial areas, 2,500 to 3,000 more people are likely to work there. There is space for about another 900 jobs in existing light industrial areas, leaving an unmet demand for about 50 to 60 ha of land for light industrial and service activities.

2.7.4 Transport

Future transport needs are hard to assess. Typically, each new household generates an additional 10 car trips per day. With just under 10,000 more households expected between 2001 and 2021, that equals another 100,000 vehicle trips in the area on a busy day. Some of these trips are for short distances, others are trips to the CBD, school or for work. More businesses and visitors in the area will add further traffic.

Currently 12,000 vehicles use Frankton Road per day near the CBD, with perhaps up to 20,000 vehicles on the more congested stretches of the State Highway network near

Frankton during busy periods[5]. This is an average of around 16,000 vehicles. If current travel patterns continue, by 2021 the road capacity (around 26,000 vehicles per day) will be exceeded. Travel times will increase substantially and there will be significant delays at intersections. This raises issues about the capacity of the CBD area, as well as the future for passenger transport. Demand for walking, cycling and buses will also rise. Taking the journey to work as an example, in 2001, 1,000 people cycled or walked to work. By 2021, up to 2,500 people may walk and cycle each day.

In the Queenstown CBD there are around 1,100 car parks, on the road as well as in off-street public and private car parks. This is about 1 car park per 70 sqm of floorspace, or 1 park per 1.8 workers.

Queenstown airport records around 2,800 passenger movements per day during busy periods. By 2023 this could climb to around 6,500 passengers. The airport has the capacity to roughly double passenger numbers before the current limits of the air noise boundary around the airport are met. The air noise boundary establishes a "bucket" of noise that can be gradually filled up as more and more planes fly into and out of the airport. Once the bucket is full - the air noise limit is reached - either the noise boundary needs to be pushed outwards to cover more land, making the "bucket" bigger, or bigger planes and/or quieter planes are needed to extend the capacity of the airport within the noise limits. This limit on the capacity of the airport may affect tourist numbers and with it economic growth rates. It is estimated that between 20 and 25% of visitors currently arrive via the airport. The airport is therefore a possible constraint on growth in tourism numbers.

2.7.5 Reserves

As the population grows there will be increased demand for reserves and community facilities. In terms of the total area of reserve land, Queenstown is generally well served at present, but there is a wide variance in the provision of different types of reserves. Overall, the Queenstown area currently has around 102 hectares of open space per 1,000 usually resident population (this only counts council reserves – if DoC reserves were added, this figure would be much higher). If no new land is acquired, then this figure is predicted to drop to around 41ha/1,000 by 2021. Whilst these figures look healthy, they are boosted greatly by the large areas of open space with limited recreation opportunities, such as Arrowtown Plantation (forest) and Ben Lomond scenic reserve. Whilst these areas are a valuable part of the reserve network, other types of reserves are also needed to cater for different needs, such as sports grounds, local playgrounds and community buildings.

The table below outlines the current level of service (hectares per thousand people) in the Queenstown area, as well as the future level of service in 2021 if no new land is acquired.

[5] Transit NZ data.

Table 6 Reserve needs

Reserve type	Ha/1000 2001	Ha/1000 2021
District reserves	1.5	0.6
Local & neighbourhood reserves	4.2	1.7
Open space passive reserves	44.3	17.7
Sports ground mixed use	2.5	1.0
Other	49.3	19.8

These reserves meet different needs:

- "District reserves" are high quality reserves in attractive locations with a high level of facilities and landscaping, highly used by locals and visitors alike (e.g. Queenstown Gardens). The visitor impact on these reserves is significant and will increase in the future as these reserves are quite small, often close to the CBD and other high use areas, and there are limited opportunities to acquire new land in this category.

- "Local reserves" and "neighbourhood reserves" are similar in that they are smaller reserves in residential areas and provide mainly for use by local residents. Neighbourhood reserves are more developed than local reserves, and include facilities such as playgrounds, seating, paths and amenity lighting. There is some visitor pressure on these reserves, particularly when they are located in areas with a high proportion of holiday homes.

- Sports reserves are self-explanatory and provide land for sportsfields and other formal sporting uses such as tennis and netball courts. The traditional New Zealand standard for the provision of these reserves is 1.8 hectares per 1,000 population. The table above shows the Queenstown area will drop well below this standard by 2021 if no additional land is acquired.

- "Open space passive reserves" typically consist of large reserves that provide for informal leisure experiences, such as walking around the lake edge. These reserves are often hilly and usually have basic facilities such as walkways, an informal carpark and perhaps toilets.

- "Other" reserves includes exclusive-use land such as golf courses, as well as cemeteries, forestry areas, undeveloped road reserves, buffer areas and other undeveloped land parcels. These reserves provide some visual amenity value in terms of a sense of open space but are of limited recreational use.

Taking the main urban reserves (district, local, neighbourhood and sports fields) the current level of provision is 8 ha per 1000 people. With more growth, particular pressures are likely to be faced in the supply of local and neighbourhood reserves, although these pressures differ somewhat for different geographic parts of the Queenstown area. Table 7 below summarises the current level of service broken down by area. These figures can be compared to the traditional New Zealand standards for reserve provision to provide an indication of how the level of service will decline in future if no additional reserve land is acquired.

Table 7 : Local and neighbourhood reserve provision

Area	Ha/1,000 year 2001	Ha/1,000 year 2021 (if no further land is acquired)	Traditional NZ standard for local and neighbourhood reserve provision
Queenstown Bay	1.158	0.702	1.8 ha/1,000
Frankton and Kelvin Heights	11.714	3.723	1.8 ha/1,000

The figures indicate the Frankton and Kelvin Heights area is well served for neighbourhood reserves, although this is skewed by the large area of Jardine Park. This park has potential to be developed into a district reserve, perhaps to take some pressure off Queenstown Gardens. If Jardine Park is taken out of the equation, the Frankton/Kelvin Heights level of service drops to 2.3ha/1,000 in 2001 and 0.74 ha/1,000 in 2021. This indicates that new neighbourhood reserves will be required as the Frankton/Kelvin Heights area is developed.

The Queenstown Bay area is currently under-provided with neighbourhood and local reserves. This situation is expected to deteriorate in the future if no new land is acquired.

2.7.6 Libraries

The wider Queenstown area has two libraries: one in the CBD (around 900m^2 floor area) and one in Arrowtown (around 200m^2). Given the future population growth, these facilities (particularly the main Queenstown library) will begin to get crowded and cramped. The Library and Information Association of New Zealand Aotearoa (LIANZA) publishes the Standards for New Zealand Public Libraries (1995). These standards recommend a level of service of 70m^2 of library space per 1,000 population. The current level of service in the Queenstown area as a whole (Queenstown and Arrowtown) is around 90m^2 per 1,000 population. If there is no expansion of library facilities this will drop to around 36m^2 per 1,000 population, meaning Queenstown will go from being above the national standard to around half the recommended national standard in terms of library provision.

To maintain Queenstown's current level of service for library provision, an additional 1600m^2 of library space would be required by 2021. However, the recommended national standard could be maintained with an additional 1,000m^2 of library space.

2.7.7 Community facilities

Future population growth will place additional pressure on community facilities such as halls and meeting rooms. The current facilities in the CBD are already under pressure, and there is demand for more modern facilities. The current proposal for a new community centre is designed to meet that demand, as well as provide for future growth. The Frankton area has very few community facilities, and needs are largely met through the church hall.

Given the predicted growth in the Frankton/Kelvin Heights/Jacks Point and Wakatipu Basin areas, a new community facility at Frankton is expected to be needed before 2021. This would ideally be integrated with a new library, and would provide some smaller meeting rooms as well as a larger space. This facility could provide for a range of community needs, such as yoga and exercise classes, meeting spaces, music classes and other community activities. This facility could also be provided as part of a joint facility shared with a school in Frankton.

The Southland District Health Board foresees the need to expand services at the hospital between 2006 and 2011. This will involve more community-based and more out-patient services. There is room on the existing site to accommodate this expansion.

2.7.8 Indoor and aquatic sports facilities

The Queenstown Events Centre is an excellent indoor sports facility for a town of Queenstown's size. It is expected to meet the community's need for indoor sports facilities until at least 2021. School gymnasiums are also available to supplement this facility. A new aquatic centre is being planned and is expected to meet the needs of a growing community until at least 2021.

2.8 Summary of growth needs

First 10 Years 2001-2011

Additional residents	Additional visitors (average)	Additional jobs	Additional community assets
7,000	4,600	4,000	

Additional houses	Additional visitor units	Additional business land	
4,500 houses	1,400	30,000 to 40,000 sqm of commercial floorspace, and 10 to 15 ha of industrial land	60 ha of reserve land Larger hospital

Second Ten Years 2011 – 2021

Additional residents	Additional visitors (average)	Additional jobs	Additional community assets
11,000	6,300	5,200	

Additional houses	Additional visitor units	Additional business land	
5,500 houses	2,500	50,000 to 60,000 sqm of commercial floor space, and 40 to 50 ha of industrial land	90 ha of reserve land New library and community facility at Frankton. Another primary and high school?

2.9 Queenstown and Wakatipu Basin under a "business-as-usual" future

This section of the report looks at what is likely to happen under a "business-as-usual" future. The twenty year period between 2001 and 2021 is broken down into two ten-year steps.

2.9.1 Visitors and Visitor Accommodation

2001-2011

- Most new visitor accommodation will be built in and around the CBD in the form of rentable apartments, along with some new units along Frankton Road. Up to another 1,000 visitor units are likely to be added.
- Visitor accommodation is also likely to be provided at Jacks Point, Remarkables Park and in selected areas in the Wakatipu Basin, say a further 500 units.
- Tourist facilities and shops will continue to cluster in and around the CBD, expanding the edges of the centre but within the existing commercial zoning. Rents and land values in the CBD will continue to increase.

2011-2021

- Visitor accommodation will continue to grow in and around the CBD along with significant growth along Frankton Road. Space is needed for a further 1,500 visitor units. This growth will displace some permanent residents and means that tourists will outnumber permanent residents in the CBD area.
- The balance of the demand for visitor accommodation units (1,000) will be met by further growth at Frankton Flats and in areas already zoned for accommodation in the Wakatipu Basin.
- High rents and land values in the CBD will also start to displace local retail and commercial activities (e.g. banks) out of the core of the CBD. The CBD will increasingly become devoted to serving the needs of tourists and become less of the "heart" of the community.

2.9.2 Business and employment

2001-2011

- Existing industrial areas will fill up.
- Further retail development will start at Remarkables Park and Frankton Flats – around 20,000 sqm of commercial floorspace may be added to areas already identified for commercial activities.
- Further business (office) and tourist-related retail development will occur on the fringes of the CBD, including the Gorge Road and Industrial Place areas, in accordance with their zoning. Around 10,000 to 20,000 sqm of floorspace needs to be added. This can occur within the current commercial zone.

2011-2021

- There is little further development in the CBD's commercial zone as it will have nearly reached its capacity. There is demand for at least a further 15,000 to 20,000 sqm of floorspace to be added to this area – floorspace that cannot be accommodated in the CBD under current bulk and location rules.
- Pressure will mount to expand the current town centre. This process eats into the residential areas, creating concerns about loss of housing, as well as adverse effects on amenity. This would require relatively new (less than 20 year old) apartments to be demolished to make way for commercial expansion which will push up development costs.
- More industry is likely to be forced out of the Gorge Road area as pressure mounts for more commercial-related activities to locate in this area.
- A larger shopping area serving the day-to-day needs of the wider community is likely to develop at Frankton. Perhaps another 40,000 to 50,000 sqm of commercial floor space is likely to be added.
- Some businesses may begin to shift out of the CBD to Frankton in search of better parking and easier access.
- By the end of the period there is likely to be a severe shortage of industrial land. Approximately 40 to 50 ha of land is needed to meet demand, with no prospect of finding such an area within the current urban limits. The lack of industrial land may put a brake on economic growth. The costs of goods and services are likely to increase significantly as most goods will have to be trucked in.

2.9.3 Population and residential housing

2001 – 2011

- Frankton Flats will continue to be a popular housing area, along with Kelvin Heights, as people seek sunny, more open sites.
- Arrowtown will reach capacity and growth of the resorts, settlements and rural-residential areas in the wider Basin will remain fast.
- Housing in the Queenstown Bay area does not grow much, as current trends favour housing for residents on the periphery of the settlement. What housing growth occurs is likely to be focused on rental accommodation, including some accommodation for short term workers.

2011-2021

- Frankton Flats, Frankton Road and Sunshine Bay/Fernhill areas are likely to reach capacity.
- Kelvin Heights will continue to grow at a steady rate, with most sections in the 800 to 1000 sqm range.
- Growth of the settlements in the wider basin remains fast (within current special zoned areas, e.g. resort zones) but costs will rise as land becomes more scarce.
- Growth in residential units occurs in Queenstown Bay as it is one of the few areas left with spare capacity. All development is in the form of apartments and terrace housing. There is a shift towards units that meet the demand from families for housing. There will be pressure to increase the height of development. More housing in the area will put pressure on public spaces and assets in the area.

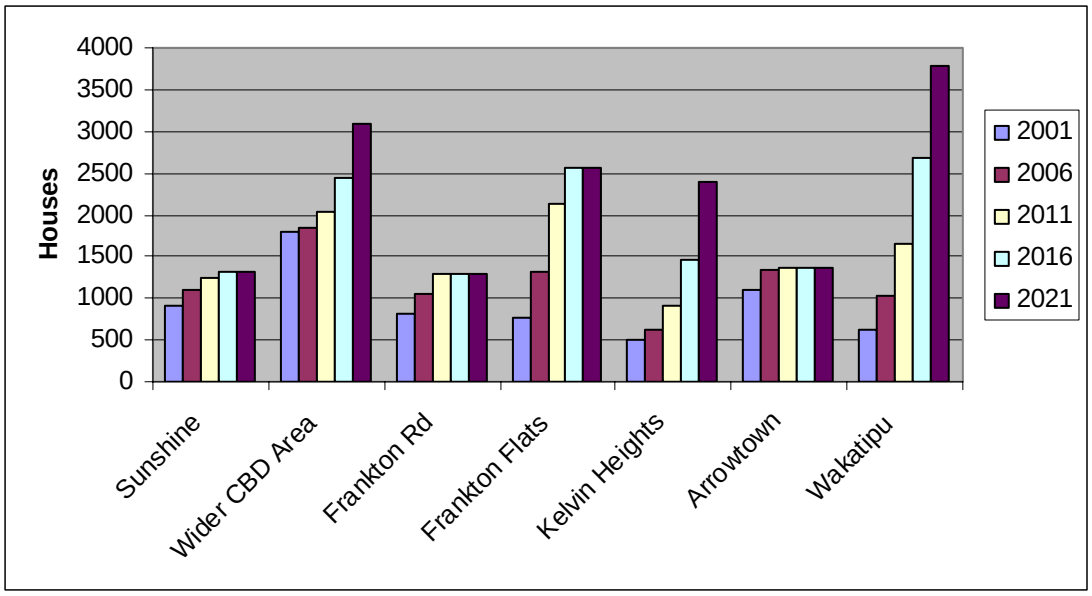


Figure 6: Housing by suburb 2001-2021

Wakatipu includes Jacks Point and other resort areas and townships in the basin.

- Figure 7 shows predicted housing growth by suburb between 2001 and 2021. It can be seen how for some suburbs, such as Frankton Road and Arrowtown, there is little growth as there are few development opportunities available. In contrast places like Queenstown Bay and Kelvin Heights continue to grow as there is room for more housing in these areas.

- Between 2016 and 2021 the supply of land for more housing will become restricted. Affordable accommodation for workers and residents will become an even more significant issue than it is today. There is a lack of opportunity for this type of housing in all areas due to rising land values. Possible locations, such as Queenstown Bay and Frankton Flats, are likely to become uneconomic due to the growth of the visitor accommodation sector in these areas.
- There is likely to be some displacement of growth to outer lying settlements such as Glenorchy and Kingston, but the numbers are not likely to be great due to the distances involved, and will mainly include moderate to low income households. Increased travelling costs erode the affordability of living in the outlying townships.
- As capacity within the existing urban area is rapidly taken up, pressure will build for a new settlement to be developed in the Wakatipu Basin, perhaps adding to the current development at Lake Hayes Estates (Carolina) or in another location. The principal issue is where such a settlement would have least visual impact, rather than transport, socio-economic or wider growth management issues.

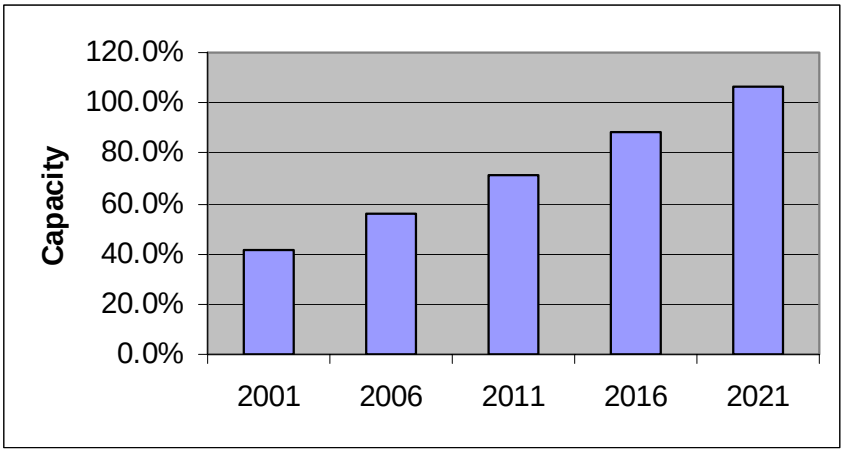


Figure 7: Take-up of total housing capacity – 2001 to 2021

Figure 8 shows, under a fast growth future, how after 2016 most of the capacity for additional houses provided for under current growth plans gets taken up. At about 80% capacity, land markets become very inefficient. A restricted supply of opportunities for housing means that land values start to rise very quickly. This may have the effect of slowing growth rates, or it may mean pressure builds for new housing areas to be identified. This is discussed later in the report.

2.9.4 Community facilities

2001-2011

- A new primary school will be built at Frankton Flats.
- The high school expands on its current site, offering more courses and attracting more staff.
- Expansion of health services and facilities is likely to occur on the Frankton hospital site. A greater number of GPs offering more choice for residents is also likely.
- Additional sportsfields will be developed at Frankton Flats.
- Demand will grow for more neighbourhood reserves in the Queenstown Bay area but land values mean it is very expensive to add to current stock. Some reserves will need to be upgraded instead.

- Council is likely to have to invest substantially in Queenstown Gardens to help spread the visitor load on the waterfront, but few locals like to visit the CBD and the surrounding amenities.
- An aquatic centre will be built in Frankton, developing the role of Frankton as an important community hub.

2011-2021

- Pressure starts to build for a new high school as the existing school is likely to reach capacity on its current site, but there is limited land for this new school and no site has been reserved. Options include Frankton Flats or somewhere in the basin.
- Expansion of health services and facilities is likely to continue on the current Frankton site. It is possible that a private health care provider may also set up.
- Further sportsfields will be developed in Frankton Flats
- Demands on neighbourhood reserves in the Queenstown Bay area are now acute, but land values mean it is now very expensive to add to current stock. The inability to expand the stock of reserves reduces the quality of the area.
- Growth in the Frankton / Kelvin Heights area, coupled with increased travelling times into the CBD will create the need for a new branch library and community facility in the Frankton area.
- The newly commissioned civic facility in Queenstown CBD may only partly serve local needs because most community activity and shopping for locals is now in and around Frankton.
- The Queenstown Events Centre and Remarkables Community Centre will become increasingly economically viable and less reliant on commercial operations such as conferences.
- There is a need for better quality neighbourhood reserves in the Frankton area, as the population of the area grows. Jardine Park will need to be developed.

2.9.5 Infrastructure

2001 - 2011

- Levels of service (free flow of traffic) on Frankton Road (currently 16,000 vehicles per day on a busy day) are likely to start to decline between 2006-2011 (at around 20,000 vpd). Average travel times will increase from around 12 minutes to perhaps 18 to 20 minutes during the day, and be unpredictable in the peak period.
- Bus services are likely to increase but travel times will also slow and become more unreliable as they get caught in the congestion.

- Reverse direction traffic flows between Queenstown CBD and Frankton are likely to grow as people travel to workplaces, shops and community facilities in Frankton.
- Carparking demands in the CBD will increase substantially. There is likely to be a growing spill-over of parking into residential areas as parking in and around the CBD becomes harder to find.

2011-2021

- Frankton Road will reach capacity after 2011. Average travel times could be over 30 minutes and will be unpredictable during the whole day.
- Bus services will also become unreliable as buses get caught in the congestion.
- An infrequent ferry service may begin between Frankton and Queenstown, principally supported by the growing number of visitors accommodated in the Frankton area, but numbers are unlikely to be sufficient to support a comprehensive service.
- Growth in and around Queenstown Bay expected in this period will not necessarily help reduce congestion (i.e. people walking to work and the CBD, rather than driving). The inability to expand the town centre means most people commute to jobs in the Frankton area.
- Further private carparking operators are likely to enter the CBD market, helping to redress some parking issues, but also inducing more traffic to travel to the CBD.
- The airport is likely to reach capacity after 2015. Either the current air noise boundary needs to be enlarged (i.e. it covers more properties) or growth in the number pf passengers will be dependent upon bigger and quieter planes.

2.10 KEY GROWTH MANAGEMENT ISSUES FOR QUEENSTOWN

Having sketched the growth pressures that the Queenstown/Wakatipu area faces over the next 20 years, and the consequences of these growth pressures given current growth plans, this section of the report highlights four key growth management issues that need to be addressed. These are:

- Long-term urban growth pressures.
- Role and function of the Queenstown CBD.
- Economic growth.
- Transport.

For each of these issues, there is a short discussion of the importance of the issue to the community outcomes set out in the first part of the report. Following this, a range of possible growth management techniques are outlined for discussion. The possible methods are listed in the table on the following page.

In general, the council can use five sets of tools to manage growth. These sets of tools relate to:

- Reducing the rate of growth.
- Internalising (changing) the cost of development.
- Managing the location of development.
- Influencing the type of development.
- Improving the quality of development.

The council already uses a number of different tools under these general headings. All of these techniques affect the nature, scale and timing of growth. Obviously growth management techniques that aim to reduce growth rates have more influence on the timing of growth pressures than, say, techniques which aim to improve the quality of development. Many resort communities focus their attention on influencing the balance between different land uses in their community, and the location, character and form of growth, rather than focusing on the rate of growth. This is because reducing rates of growth is difficult to achieve and usually highly contentious. There are also a number of major legal limitations to the use of growth management techniques that seek to overtly slow growth. Appendix Two contains a discussion of slow growth management techniques.

Consequence	Possible methods
Long-term urban growth pressures	• Slow the growth • Satellite/township development • Internalise development costs • Urban growth boundaries and more compact growth
Role and function of the CBD and surrounding area	• Manage growth pressures (growth caps, control the location of visitor accommodation) • Develop Frankton as second centre • Improve open spaces and the quality of design
Economic growth	• Slow the growth • More efficient use of existing business land • Add to the stock of business land • Affordable housing
Transport	• Take a “hands off” approach • Slow the growth • Better traffic management • Create alternative road routes • Internalise costs • More public transport, walking and cycling • Integration of land use and transport

2.10.1 URBAN GROWTH PRESSURES

Relevant community outcomes

This issue is associated with all of the community outcomes:

1. Managing growth in a way that is sustainable.
2. Respect the dominance of our magnificent mountain, lake and rural environment.
3. Build a strong, diverse and inclusive community for people of all ages.
4. Create high quality urban environments where safe community life can flourish.
5. Provide infrastructure for a growing population.
6. Improve access to and through rural and urban areas with good roads, the green network, walkways and public transport.
7. Grow the strength of our economy.

Under a "business-as-usual" approach, and given a high growth rate, all existing residential capacity is likely to be taken up between 2016 to 2021. This will create pressure for new urban areas to be added after 2021, or for much more intensive development to occur in the existing built-up area. After 2021, further growth is likely to have to be in the form of any one (or combination) of the following:

- Further infilling of the existing urban area, but this is likely to be confined to suburban areas, especially Frankton Flats and Kelvin Heights and would involve considerably smaller sections than at present.
- High rise development in and around the CBD and possibly in the Frankton area involving the removal of current buildings and their replacement with apartment buildings.
- Further rural residential, resort and cluster type development in the basin.
- Demand for additional village and resort type zonings in the basin.

How future growth pressures are managed is relevant to all community outcomes:

- Expansion of the urban area into the Wakatipu Basin will put at risk the natural landscape features of the area, undermining the sustainable development of the economy, while the visitor experience offered by the urban area may be diminished if the quality of development is poor.
- There will be significant pressures on infrastructure, especially roading networks, both within the existing urban area as well as in the basin, if there is dispersal of activities into the basin.
- The diversity of the community will be reduced if, post 2021, constraints on land supply mean that land prices escalate even further, reducing opportunities for affordable housing.
- Economic growth will also be slowed by a lack of land for services and light industrial activities.

Overall, in 15 to 20 years' time the area will face critical thresholds in terms of land supply for housing and visitors. Land supply constraints on business development will be felt even earlier. The community needs to anticipate these constraints and plan for them now, otherwise the quality of life in the area, and its value as a tourist destination, will probably suffer in the future. In particular, it is necessary to plan for more intense development within the urban area.

2.10.2 POSSIBLE STRATEGIES to MANAGE the CONSEQUENCES to URBAN FORM

2.10.2.1 Slow the growth

Slowing the growth may involve putting a cap on the total number of visitor accommodation and/or residential units that is possible to build. Alternatively, it may involve rules in the council's District Plan that limit the number of visitor units that could be built in any one year to 2% of total current stock, for example. To achieve this, each year the council would need to determine that a certain number of visitor units could be built in the area. This quantum of units could then be bought and traded amongst developers (as in Whislter, BC, Canada) or allocated to the best developments (as in Aspen, Col, USA).

Another way of restricting visitor growth may be through restrictions on the capacity of the transport infrastructure that serves the area. As discussed above, at some point in the future, the airport will reach its capacity. This may limit, to some extent at least, growth in visitor numbers but it will also affect residents and businesses.

If the growth in visitors is slowed, then economic growth rates may decline, and with it residential growth rates. Slower growth is therefore likely to delay the date when current capacity for more houses in the area is reached, as well as the capacity of other infrastructure such as roading. A delay may make planning for this eventuality easier.

Slowing the growth may also be seen as a way of pushing the visitor market towards fewer, but higher paying tourists. This would help to retain levels of economic activity without having to "flood" the town with mass market tourists. However, this outcome may be better achieved through other techniques, such as how the area is marketed.

There are a number of drawbacks/negative consequences with caps on growth rates relating to urban form:

- Caps on growth rates have not yet been used in New Zealand under the Resource Management Act, but they are a possible tool if they are tied to environmental protection. However, their implementation is likely to raise a raft of legal and technical challenges, so it will be important to understand their feasibility.

- Growth caps tend to displace growth to other areas. In the case of Queenstown, there are few opportunities to export growth to other places, unless the community is prepared to put up with people driving long distances from satellite areas into the Queenstown area.

- Unless slowing the growth of residential or visitor accommodation is also tied to its location (Frankton or the Queenstown CBD), a slower rate of growth will not necessarily alter other pressures, such as the over concentration of activity in the Queenstown CBD area. Slowing growth in the Queenstown CBD area, while at the same time encouraging growth in the Frankton area, may be a more useful strategy, for example.

- Growth caps may mean that Queenstown cannot upgrade the quality of its service. Evidence from other cities that have growth caps is that growth caps raise house prices. Over time the businesses struggle to attract and retain staff and as a result the service offered to visitors falls.

- Development of a range of community facilities is likely to be put back by slower rates of residential growth including:

    - Aquatic centre
    - New civic centre
    - Expanded hospital
    - Possible private medical facility
    - Additional sportsfields, whether at Frankton or another location
    - Additional retail and business activities in Frankton – people will still need to drive into the CBD.

- There may be financial issues for the community if, despite the growth cap, expectations for more and better infrastructure remain high. With slower growth, the council has to operate off a rating base that only grows modestly each year. This will

make infrastructure more expensive on a per-head basis. Services such as public transport which needs lots of people to be viable will be more costly to run.

Overall, slow growth policies may help in planning for future problems, and there may be a role for some management of growth rates as part of a package of techniques, but slow growth policies will not solve the underlying problems. Slow growth may mean that the area will reach its current capacity in 2030, rather than 2020, but the current capacity will still be reached at some point, while growth pressures will remain. As will be discussed later, other actions the council can take to manage the consequences of growth, such as better quality development and increased development contributions will have, as a side effect, some impact on growth rates.

Community outcome	**Effect on outcome**
Sustainable development	Likely to help by giving more time to plan for growth, but can see imbalances grow between social, economic and environmental goals.
Protection of the environment	Will help to protect the environment.
Increase the diversity of the community	May reduce the diversity of the community if growth caps lead to higher housing and land prices.
Improve access	Will help to slow growth in car numbers, but will also lengthen the time it takes for public transport services to be extended.
Upgrade the quality of the urban environment	May help, depending upon how growth caps are implemented. Caps need to be tied to good urban design outcomes.
Provide infrastructure for growth	May help if slowing the growth helps with planning, but it may also make infrastructure harder to fund.
Grow the economy	Likely to dampen economic growth rates over time and make it harder to upgrade the quality of service and expand the economic base of the area.

2.10.2.2 Satellite/township development

Rather than slow the growth, growth could be directed to other localities, such as Glenorchy, Kingston or Cromwell. This might take pressure off the Queenstown/Wakatipu Basin area. Satellite development however, often results in mixed outcomes – people may end up living a long way from jobs and services, for example.

In the case of Queenstown, satellite towns would have to be some distance away if they were not to be located in the Wakatipu Basin. Geography means that current settlements which could act as satellite centres are all 45 to 60 minutes' drive away. Satellite towns are likely to become dormitory suburbs, if their development does not also include visitor accommodation and workplaces. Economic incentives like free land or no rates are likely to be needed to make this happen, without an undesirable lag time. They may not be big enough to support a range of social and community services.

Distance and a limited range of services will mean people living in satellite areas will need to travel a lot to workplaces and to access medical, community and retail services in Queenstown. This will increase their cost of living, and therefore relative affordability.

It is likely that other settlements will grow as Queenstown grows larger, but this will be a natural process as some people shift out of the Queenstown area in search of a quieter lifestyle. Some displacement of tourist activity is likely to occur as some visitors seek a more relaxed experience. Wanaka is likely to be the main recipient of this trend, at least in the medium term. This process is valuable and needs to be facilitated by planning for the gradual growth of these other settlements. It could also be facilitated by the council working with tourism operators and accommodation providers to help increase the range of facilities and services on offer in other locations.

Community outcome	**Effect on outcome**
Sustainable development	While it may help the main urban area and the basin cope with growth, the policy raises fundamental issues about the sustainability of the satellite areas.
Protection of the environment	Will help to draw off growth pressures around Queenstown and in the Wakatipu basin, but will increase growth pressures in other places.
Increase the diversity of the community	May help to retain diversity over time.
Improve access	Access from satellite areas to main urban areas will be an important issue.

Community outcome	Effect on outcome
Upgrade the quality of the urban environment	Depends upon how growth is managed rather than its location.
Provide infrastructure for growth	New infrastructure will have to be provided in the satellite growth areas. This will be expensive to provide.
Grow the economy	While it will provide more options for businesses, such a policy is likely to push up the cost of living in the area.

2.10.2.3 User pays – internalising the costs of new development

By increasing the cost of developing in the Queenstown area, growth rates may be slowed, or more growth may be redirected to other localities. The council has considered mechanisms like a bed tax to help raise revenue to meet the public infrastructure demands of the visitor sector, while it is also developing a system of financial contributions which all new development will have to pay to help expand services like water, wastewater and open space.

These types of financial contributions may slow growth rates, although a lot depends upon how much the contributions are relative to other development costs. In general, financial contributions are a small part of total development costs, and these costs are usually incorporated into the price of land and the final building product. In other words, they may not slow growth, altogether, but they will help ensure the council has the resources to manage the pressures of that growth on infrastructure.

However, if development costs that cover a range of effects of development are combined, then the total effect may be to make development a lot more expensive, compared to other locations. For example, if levies for roading, reserves, infrastructure, affordable housing and community facilities were imposed, then some development may shift to other locations to escape the high costs.

In addition, it is possible the higher development costs will push the visitor industry to seek out higher-paying visitors, and this may help control the growth of visitor numbers. The funds generated could be used to help the supply of affordable housing, thereby helping retain the diversity of the community, while improvements could also be made to public transport and other forms of movement.

Community outcome	Effect on outcome
Sustainable development	Will help make development more sustainable by ensuring development covers all its costs.
Protection of the environment	May help to slow growth where the required contributions are high, but will increase growth pressures in other areas.
Increase the diversity of the community	May help increase diversity, depending upon how the funds collected are spent.
Improve access	Funds could be used to help pay for better facilities for walking and cycling and public transport.
Upgrade the quality of the urban environment	Revenue from user-pays could contribute to more and better open space and better streetscapes.
Provide infrastructure for growth	Will ensure there is funding for new and additional infrastructure.
Grow the economy	May harm the economy if costs are very high, but otherwise should assist growth by helping to fund required infrastructure.

2.10.2.4 Urban growth boundary and more compact growth

Under this strategy, an urban growth boundary would be established, and the District Plan would be changed to enable the more intensive use of some areas within this boundary. More growth within the current urban boundary means less pressure for outward expansion. Currently the District Plan allows for intensive housing development around the Queenstown CBD area, along Frankton Road and at Remarkables Park at Frankton Flats.

This concept of intensification could be modified and extended to other areas. For example, the wider Frankton Flats area could be identified as an important area for more housing. This would involve extending the current higher density potential of Remarkables Park to Woodbury Park and the Frankton foreshore. Within the Frankton Flats area, apartment development is already possible. Low rise apartments offer comfortable living arrangements that are warm, energy efficient, make good use of land

and have the ability to retain some green space around buildings. Some selective intensification may also be possible in other areas, such as part of the undeveloped land in the Kelvin Heights area. As part of this package the amount of intensive housing around the CBD could be reduced. This will help take pressure off the CBD area.

Figure 9 shows one possible strategy where more opportunities for housing at Frankton Flats are provided, while the amount of development around the CBD area is reduced. More housing at Frankton Flats would take pressure off both the Basin and the Queenstown CBD area, while increasing the total capacity of the current urban area to absorb more growth.

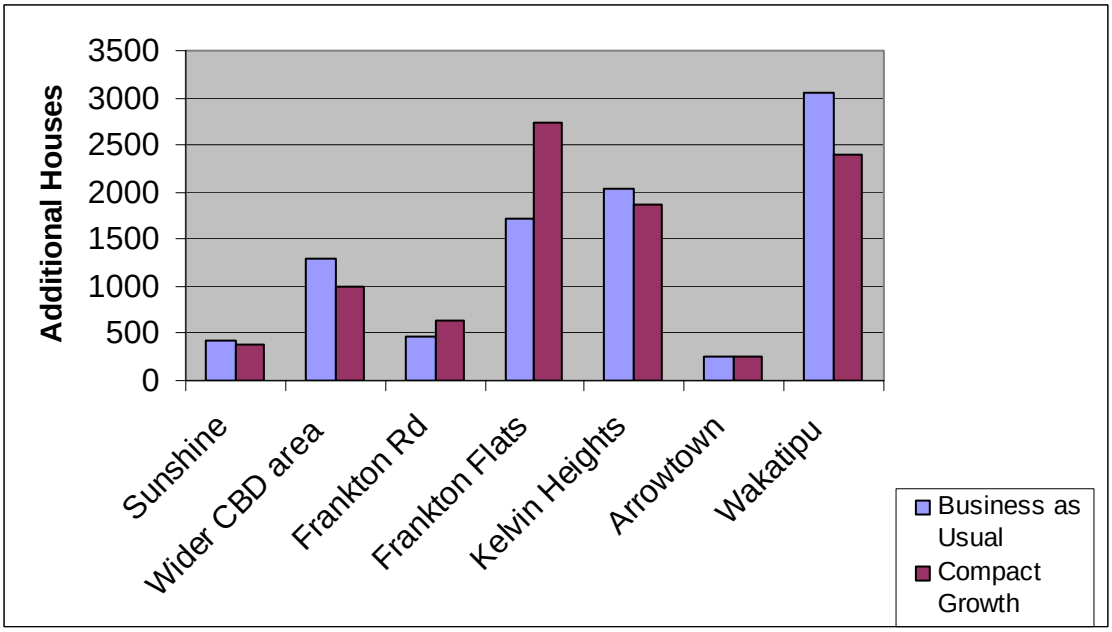


Figure 8: Business as usual versus compact growth – additional houses 2001-2021

A critical issue for more compact development at Frankton Flats is the long-term development plans of the airport. If the airport needs to expand capacity by increasing the size of the air noise boundary, then this may stymie the ability to build up the population of the Frankton Flats area. This then creates a fundamental dilemma – if the airport expands and tourist numbers continue to grow, the population may not be able to expand in a way that meets community outcomes related to protecting the wider environment and supporting economic growth.

More development in the Frankton Flats area may also require a reassessment of the open spaces in the area. Land close to the airport needs to be used for business and industrial activities. The vacant land for future sportsfields at the events centre may be best devoted to housing development, with a new sportsfield hub developed somewhere in the basin, helping to retain a green belt in the area. Decisions about further sportsfields and open space needs must weigh up the benefits of accommodating more people in the Frankton area rather than see these people spread out into the basin.

Apart from these issues, more compact development also brings with it a host of other issues. To be viable, more compact development needs to be carefully managed by the council. Intensive housing places more pressure on public resources than low density housing, and this needs to be recognised in council's planning. In areas subject to intensification, the council needs to plan for better quality open spaces and upgraded streetscapes, while controlling the design of new development. It also needs to reserve space for community activities.

Local and neighbourhood reserves will become increasingly important as the existing urban area builds up. A common standard for neighbourhood and local reserves is a neighbourhood/local reserve should be available within an easy walking distance of all housing areas. This typically equates to a 400m to 800m radius (5 to 10 minute walk). Such a standard should be applied to new housing areas. Under a more compact form of growth additional lakeside and riverside reserves may need to be acquired, possibly through the subdivision process. The recreational pressure on some of the parks around the lake edge and in the wider basin area will increase as people seek a respite from the more built up urban environment, leading to demand for improved facilities, such as improved walkways, public toilets, car and trailer parking and boat ramps.

Over time there will also be demand for a new high school as the existing school reaches capacity on its current site. Frankton will have to provide for this. A tertiary institute is also possible. Expansion of health services and facilities will continue in the Frankton area.

Careful attention also needs to be paid to affordable housing. A consequence of a more compact city is rising land and property prices. This could affect housing affordability. Managing this pressure will require the council, and agencies like Housing New Zealand, to take a proactive approach to its provision. Housing New Zealand may need to provide rental units, while the council may need to look at a range of techniques to promote affordable housing. One option would be for the council and the community to establish a Housing Trust that could build and administer affordable housing. The Housing Trust could be funded from levies from developments, for example.

Community outcome	**Effect on outcome**
Sustainable development	Will help make better use of current urban land resources.
Protection of the environment	Will help protect the Basin and other areas from urban sprawl.
Increase the diversity of the community	Will assist diversity if associated with programmes to promote affordable housing.
Improve access	Can help support passenger transport, but will also increase the number of cars in areas subject to intensification.

Community outcome	Effect on outcome
Upgrade the quality of the urban environment	Depends upon how the more compact development is designed.
Provide infrastructure for growth	May require the upgrading of local infrastructure to cope with extra demands.
Grow the economy	Will help retain critical features of the area and as a result, its attractiveness as a business and tourist destination.

2.10.3 Consequence: role and function of Queenstown CBD and surrounding area

Relevant community outcomes

This issue is associated with all of the community outcomes:

1. Managing growth in a way that is sustainable.
2. Respect the dominance of our magnificent mountain, lake and rural environment.
3. Build a strong, diverse and inclusive community for people of all ages.
4. Create high-quality urban environments where safe community life can flourish.
5. Provide infrastructure for a growing population.
6. Improve access to and through rural and urban areas with good roads, the green network, walkways and public transport.
7. Grow the strength of our economy.

The "business-as-usual" approach places an emphasis on the continued development of the CBD and the surrounding area to meet the majority of future business, retail and visitor needs – a tall order. The retail and commercial area of the CBD will have to expand beyond its current commercial area, and there will be a lot more visitor accommodation and higher density housing in the area. By 2021 there could be 9,000 residents and 11,000 visitors clustered in an around the CBD. This means the character of the CBD and surrounding area will change. High rise buildings are a prospect and there will be more cars and traffic.

At some point, these growth pressures will mean land within the CBD will get very expensive, while the main road into the CBD, Frankton Road, will become heavily congested. At this point many businesses may wish to move out of the CBD. Many residents may also wish to shift out, meaning that CBD will be increasingly devoted to the needs of visitors.

To a certain extent these trends are unavoidable, but they can be better managed than they are now. Policies can be put in place so that the CBD grows at a more measured pace. Rather than "crash" into inevitable capacity barriers, and as a result go into a decline, the centre could have a more of a "gentle landing".

2.10.4 Possible strategies for the CBD

2.10.4.1 Managing growth pressures in the CBD

One area where some sort of growth rate cap may be justified is in and around the CBD. A relationship between the capacity of the current CBD zonings, Frankton Road and the number of people who live or stay in visitor accommodation close by could be established. This relationship could be designed to preserve the current height and scale of the CBD, as well as mean that all of the capacity of Frankton Road would not be taken up by development in the core. At the moment, there are around 6,000 residents, 6,000 visitors and 2,000 workers in the wider CBD area. If the number of workers increased to 2,600 or about a third, as is possible under the current zoning, then the number of residents and visitors could also increase by a third to, say, just under 9,000 each. This is a total of 20,000 people. This would maintain the current ratio of residents to visitors.

To this end new visitor accommodation in and around the Queenstown Bay area could be better managed by restricting its location to carefully selected areas close to the CBD and in pockets along Frankton Road. The aim could be for a rough 50/50 balance between new visitor accommodation units and dwellings for residents. As part of this, there could be some relaxation of height controls in specified places (4 to 6 storeys in height in places) to allow for more intensity but also more green space around buildings.

Community outcome	**Effect on outcome**
Sustainable development	Will help development to be sustainable, provided alternative locations for commercial and visitor accommodation development are identified.
Protection of the environment	Will help to protect the environment of the CBD.
Increase the diversity of the community	Will help maintain diversity if alternatives to a CBD location are given.
Improve access	Depends upon where additional commercial development is located.
Upgrade the quality of the urban environment	Will help retain the built environment in the CBD.
Provide infrastructure for growth	May require some additional infrastructure.
Grow the economy	The CBD is clearly important to the tourist economy, and moves to limit growth in and around the CBD will retain the current asset.

2.10.4.2 Developing Frankton as a second centre

The other side of the coin of managing growth pressures around the CBD is there will need to be encouragement of growth in other areas (assuming a district-wide growth cap is not preferred or achievable).

As discussed under the More Compact Growth option, developing Frankton as a second centre will involve a variety of actions. A key issue is the future of the airport and whether the air noise boundaries will need to expand.

Efforts could be made to encourage more visitor accommodation to be provided at Remarkables Park and in the Frankton Flats area. Encouragement might involve the use of planning controls as well as the council working with developers and operators to make these places more attractive to visitors.

The council could re-identify the future Frankton sportsfield land for a mix of housing and education activities. The existing events centre and the proposed aquatic centre could remain, plus the current sportsfield, as useful community resources.

A new civic facility in Frankton beside the foreshore could become a new community focal point. It is expected the growth in the Frankton area, coupled with increased travel times along Frankton Road will mean a library will be needed in Frankton before 2021. This would be well located to serve the Frankton, Kelvin Heights, Jacks Point and Wakatipu Basin areas.

The Frankton foreshore will need to be upgraded and improved. It could have a more natural, relaxed feel to it, complementing the urban feel of the Queenstown foreshore.

The development of Frankton Flats as a second centre therefore requires the council to take a very proactive approach to its development. Significant issues arise around:

- Events centre and the surrounding land earmarked for sportsfields.
- Frankton foreshore.
- Airport mixed use zones.
- Noise attenuation related to the airport operation.
- Ferry terminals.

Community outcome	Effect on outcome

Community outcome	Effect on outcome
Sustainable development	Will help make development more sustainable by providing more options for business and commercial development.
Protection of the environment	Further development at Frankton will help to protect the values associated with the CBD.
Increase the diversity of the community	May help increase diversity by increasing options and choices.
Improve access	More activities at Frankton will support passenger transport and walking and cycling in the Frankton area.
Upgrade the quality of the urban environment	Can improve the environment in Frankton, if new development is well designed.
Provide infrastructure for growth	Demands on infrastructure can be spread between the CBD and Frankton area.
Grow the economy	Greater development at Frankton will help ensure there is space for more tourist accommodation and more businesses.

2.10.4.3 Better designed development and upgrading public and civic spaces

Improving the quality of the built environment is important as places get busier. Better designed public and private development helps overcome some of the problems associated with growth.

Upgrading existing reserves, through better landscaping and improved facilities, in order to improve their recreational experience and to enable the reserves to cope with increased usage will be important. In addition to this, areas such as the Frankton lake front and Jardine Park have the potential to be further developed to district reserve standard. This would help take pressure off the parks in the wider CBD area and also cater for a growing population in the Frankton/Kelvin Heights area.

Streets will also need to be upgraded. As development gets more intense, the street becomes a more important space. It is an area where there is the ability to increase levels of amenity (more and better quality street trees, wider footpaths) while there is also the need to provide more space for pedestrians – as on-site open spaces get smaller, people are more likely to use the street as part of their living environment. If they are well designed, local streets can become people's front yards.

As development gets more intensive, standards of urban design need to be improved. The relationship between buildings on adjacent sites, between the building and the street, and between units on the same site get more complex as buildings get closer together. The council could introduce non-statutory urban design guidelines that would provide information to developers, designers and home-buyers on important design issues. Alternatively, or in conjunction, the council could move to introduce urban design controls into the District Plan. Urban design controls would require developments to take into account certain urban design-based criteria.

Community outcome	**Effect on outcome**
Sustainable development	An upgraded public environment will go a long way to make development more sustainable by helping to improve standards of design, and support more walking and cycling and more compact forms of urban development.
Protection of the environment	A better public environment in the urban area will help to make compact development more successful, and this will help to reduce the dispersal of activities into the basin.
Increase the diversity of the community	While not changing the basic structure of the community, a better public environment will get more people out using the environment, helping to promote a stronger sense of community identity.
Improve access	Walkways and cycleways can be upgraded as part of such a strategy.
Upgrade the quality of the urban environment	Improvements to public spaces will flow onto better design of private development.
Provide infrastructure for growth	Better public spaces will help to manage future demands on the open spaces.
Grow the economy	Improvements to public spaces will help the economy.

2.11 Consequence: Economic growth

Relevant community outcomes

This issue is particularly associated with all the community outcomes:

1. Managing growth in a way that is sustainable.
2. Respect the dominance of our magnificent mountain, lake and rural environment.
3. Build a strong, diverse and inclusive community for people of all ages.
4. Create high-quality urban environments where safe community life can flourish.
5. Provide infrastructure for a growing population.
6. Improve access to and through rural and urban areas with good roads, the green network, walkways and public transport.
7. Grow the strength of our economy.

More industrial land will be needed soon. This will have to be in the basin, outside the current urban area, unless land can be identified now in the Frankton Flats area, as all industrial land in the current urban area will soon be committed. New industrial areas in the Wakatipu Basin will obviously result in adverse effects on the rural character of the basin.

Insufficient business land will harm the economy and people's living standards. A lack of land for services will put up the price of goods and services – more goods and services will have to be trucked in from other areas. The ability of the economy to develop a wider base will also be halted. Over time, this will reduce the diversity of the community.

The ability to supply further visitor accommodation reaches an important threshold, post 2021. Under a "business-as-usual" scenario, limited development potential in the CBD area, restricted road access and high land costs mean accommodation providers will start to seek space in the Frankton area. But rapid population growth in this area means there are likely to be few opportunities for this after 2020. At this point, pressure is likely to mount for more visitor accommodation in and around Arrowtown, Lake Hayes and other areas in the basin.

2.11.1 Possible strategies for employment

2.11.1.1 Slow the growth in a "hands off" way by doing nothing

One possible way to slow overall economic and population growth rates may be to not add any further business land to the current stock. A restricted supply of business land is likely to mean that fewer service activities can locate in the area and that more goods and services will have to be trucked in from other places. This might raise the cost of living in and visiting the area and therefore dampen growth rates.

However, such a strategy may not significantly slow growth in the number of visitors, as they are likely to be able to afford higher prices. It is likely to be the resident population that suffers most from such a strategy. It will also harm the expansion of the economic base of the area. New activities such as filming may not be able to find space to set up in the area. It also means that there is likely to be pressure for more businesses to operate out of residential (and other) areas, as well as sites in the Wakatipu Basin. This will cause adverse effects in these areas.

Community outcome	**Effect on outcome**
Sustainable development	Will not help the area to continue to grow.
Protection of the environment	May see ad hoc industrial development take place in residential areas in the basin.
Increase the diversity of the community	Diversity will not be widened, as job prospects are likely to shrink over time.
Improve access	Access may be reduced as more goods and services are trucked in.
Upgrade the quality of the urban environment	Small businesses may start to locate in residential areas.
Provide infrastructure for growth	Infrastructure will not be provided for growth.
Grow the economy	Economic growth will be slowed.

2.11.2 More efficient use of existing business land

It may be possible to squeeze more businesses into the current industrial areas. Planning controls could be reviewed to remove landscaping and building coverage controls, for example. Rules for non-residential activities in residential areas could be loosened. These types of actions may help in the short term, but are unlikely to meet all the future demand, while such an approach could mean a lower quality of environment will be created in the future.

Community outcome	**Effect on outcome**
Sustainable development	Will help improve the use of land, while still allowing for more growth.
Protection of the environment	Will reduce pressures for more rural land to be converted to urban use.
Increase the diversity of the community	Can help small businesses get established if development costs are reduced.
Improve access	Depends upon the location of the business areas.
Upgrade the quality of the urban environment	May lead to some loss of amenity (less landscaping for example).
Provide infrastructure for growth	No real difference.
Grow the economy	Will help the economy continue to grow.

2.11.2.1 Add to the stock of business land

There is a need for additional land for businesses and light industrial activities. The only realistic option for this, unless extra land is found in the basin, is for more industrial activities to be located in the Frankton Flats area. There are three possible areas for further business and retail development: Remarkables Park, Woodbury Park and on land owned by the airport company close to the runway and within the airport noise contours.

In terms of retail and commercial development, both the Remarkables Park and Woodbury Park areas have the opportunity to add more retail activities and this is likely to happen. This will help meet future demands to some extent. The existing neighbourhood centre could also expand. Careful design is needed so the three centres at Frankton work in unison.

In terms of land for light industrial activities, long term the council may also need to consider shifting the sewerage ponds, or at least releasing the land for industrial activities if new technologies mean the ponds are no longer needed to treat waster water.

Community outcome	**Effect on outcome**
Sustainable development	Will help the area to continue to grow.
Protection of the environment	May involve the use of some more land.
Increase the diversity of the community	More business land will help to diversify the economy and along with it the community.
Improve access	Have more workplaces closer to where people live, help to reduce congestion and travel costs.
Upgrade the quality of the urban environment	Depends upon how the new business areas are developed.
Provide infrastructure for growth	More infrastructure will be needed.
Grow the economy	Will help the economy to continue to grow and diversify.

2.11.2.2 Affordable housing

A lack of affordable housing for workers has been identified by a range of groups as a potential barrier to increased economic growth. In particular, if workers in the visitor and hospitality sector cannot find affordable housing, then this may slow growth rates. Slower growth rates would harm the economic prospects of the area. Strategies to promote affordable housing will need to be looked at by the council. This might include commercial activities like visitor accommodation having to contribute towards the cost of supplying worker accommodation.

Community outcome	Effect on outcome
Sustainable development	Supports more compact forms of growth that use less resources.
Protection of the environment	Good quality affordable housing can assist with more compact forms of urban development, reducing the need for urban sprawl
Increase the diversity of the community	Affordable housing helps retain diversity in the community.
Improve access	Affordable housing can be located close to services and transport routes.
Upgrade the quality of the urban environment	Publicly funded housing can help demonstrate good urban design.
Provide infrastructure for growth	Access to affordable housing is an important issue in attracting workers to the area.
Grow the economy	Affordable housing will help the business sector.

2.11.2.3 Consequence: Transport

Relevant community outcomes

This issue is associated with all the community outcomes:

1. Managing growth in a way that is sustainable.
2. Respect the dominance of our magnificent mountain, lake and rural environment.
3. Build a strong, diverse and inclusive community for people of all ages.
4. Create high-quality urban environments where safe community life can flourish.
5. Provide infrastructure for a growing population.
6. Improve access to and through rural and urban areas with good roads, the green network, walkways and public transport.
7. Grow the strength of our economy.

Transport is the main infrastructure area that will come under pressure first as the area continues to grow. Traffic levels are growing quickly and Frankton Road will reach capacity in around 10 to 15 years' time. At this point, alternatives like buses and ferries will become more viable, but unless they are planned for they will not have the space or facilities needed at either end of the trip (for example, wharfs and associated park-and-ride areas).

Increased transport costs will hurt people and businesses. Households on lower incomes will not be able to get around as much, while businesses will need to invest in more trucks and vans as getting about will take longer. The tourism industry will also suffer. It will be harder for people to get into the area, while the increased congestion will make the area less pleasant.

The airport will reach capacity before 2021, unless steps are taken to expand the noise boundary. This proposes a significant issue – should the airport expand and continue to help economic growth at the expense of more housing development in the Frankton area?

2.11.3 Possible strategies for transport

2.11.3.1 Do nothing

Transport problems could be left to sort themselves out. As roads like Frankton Road get busier, people and businesses start to alter their behaviour. They may make trips earlier or later to avoid congestion spots, or they may start to relocate so they do not need to travel into congested areas. Left to themselves, many businesses and people may shift out of the CBD once it gets very busy and move to less congested places like Frankton, provided there is the land for these activities.

In the short term, doing nothing is likely to spread traffic loads, but in the long term such a strategy is likely to create more pressure for urban sprawl. As people and businesses continue to shift to find less congested places, congestion tends to catch up with them, so they try and shift further out, and so it goes on.

With regards to other transport infrastructure, a do nothing approach will not help increase bus services and see ferry services introduced. These services may become more viable in the future, but only on a few key routes (provided there is space for them) while leaving many parts of the area without any services.

For the airport, a do nothing approach will not make any difference to the time when the airport will reach capacity. Do nothing assumes that the rate of growth in visitor numbers will slow by about 25% after capacity is reached, a 3.5% growth per year rather than 4% per year, for example.

Community outcome	**Effect on outcome**
Sustainable development	Does nothing to achieve more sustainable development.
Protection of the environment	Will increase air and water pollution from the transport sector.
Increase the diversity of the community	Does nothing to help increase diversity – more younger and older people, a wider range of incomes, for example.
Improve access	Will see access levels reduced.
Upgrade the quality of the urban environment	The urban environment will be degraded over time.
Provide infrastructure for growth	In the short term, may help to manage infrastructure costs but in the long term, it will make costs higher.
Grow the economy	Does nothing to improve the efficiency of the economy.

2.11.3.2 Slow the growth

As discussed in relation to other consequences, slower growth in houses, businesses and visitor accommodation may help reduce the rate at which traffic levels increase. This may give the council and community more time to put in place strategies to better manage transport issues, but slowing the growth will not solve the fundamental problem. Even if economic growth rates decline, the amount of traffic on the roads is still likely to climb because people are making more trips by car. Also slowing the growth may not see the development of the critical mass of people and businesses needed to support more public transport.

One of the biggest dangers of a slow growth approach is that as problems associated with fast growth rates are less acute, there appears to be less need to take other actions to manage the effects of growth. However, these problems do not go away. Slow the growth approaches have to be part of a package of actions.

Community outcome	**Effect on outcome**
Sustainable development	Slower growth may reduce the rate of consumption of resources, but over time consumption will still occur.
Protection of the environment	Unless linked with other strategies, slower growth in traffic will just slow down further pollution.
Increase the diversity of the community	Unlikely to change current conditions.
Improve access	Will not fundamentally improve access.
Upgrade the quality of the urban environment	Unless tied to a better urban environment, slower growth will not change current trends.
Provide infrastructure for growth	May make it easier for infrastructure to keep up with growth rates.
Grow the economy	Slower growth is likely to involve slowing the growth of the tourist market and this may harm the wider economy.

2.11.3.3 Better road traffic management

Better management of traffic will help deal with some aspects of congestion. Reducing speeds along Frankton Road and putting traffic lights in the CBD will help. More lanes could be added to key intersections to keep traffic moving. Such approaches are the common response to traffic congestion, but they do not solve the underlying problems. Instead they tend to fuel growth in traffic levels. Over time, trying to keep traffic flowing freely can also mean more and more road space gets devoted to traffic, and less is provided for pedestrians and other modes. This reduces the quality of the urban environment. It also means that it is harder to promote public transport in the long term. Buses initially benefit from the freer flowing traffic, but once congestion levels rise again, there is no space for dedicated right-of-ways for buses such as bus lanes.

In the case of Queenstown, which only has one route between the Queenstown CBD and the Frankton area, better traffic management is not a long-term solution.

Community outcome	**Effect on outcome**
Sustainable development	Will make more efficient use of existing assets, meaning additional growth is more sustainable.
Protection of the environment	Will not necessarily lead to a better natural environment.
Increase the diversity of the community	Will help maintain current trends.
Improve access	More efficient use of existing roads will help retain current levels of access.
Upgrade the quality of the urban environment	If well designed, better roads can add to the urban environment.
Provide infrastructure for growth	Will require new and better infrastructure – traffic calming, traffic lights, revamped intersections and other measures.
Grow the economy	Will help the economy to continue to grow by making the current system more efficient.

2.11.3.4 Creation of alternative routes

These actions would involve developing alternatives to Frankton Road, such as a high road over the Queenstown Hill and greater use of the Arthur's Point route. To a certain extent as Frankton Road gets busier, people will start to use alternative routes. However the capacity of the Arthur's Point road is itself an issue, while there would be substantial costs involved in developing a new roading route, along with considerable environmental costs as well.

The creation of additional roading capacity, will overtime compound current problems. More roading capacity is likely to see traffic levels build, rather than be restrained, while land uses will tend to sprawl further out due to the increased accessibility. Traffic problems in the CBD are likely to get worse.

Community outcome	**Effect on outcome**
Sustainable development	Will reinforce current patterns of resource use and so will not see development being more sustainable in the future.
Protection of the environment	Car use will increase, and as a result, the impacts of this on the environment.
Increase the diversity of the community	Will see current trends being reinforced.
Improve access	Improved access is dependent upon more roads.
Upgrade the quality of the urban environment	Generally, more traffic will reduce the quality of the urban environment.
Provide infrastructure for growth	New and better roads will be costly to build and maintain.
Grow the economy	Additional roading capacity will in the short term be good for business, but in the long term the adverse effects of more car use will add up.

2.11.3.5 Economic measures like tolls and pricing of car parks in the CBD

A toll on travel into the CBD could be put in place, like the toll that now operates in London. A toll creates an incentive for people to combine trips into the CBD, not travel at all or to use an alternative, like public transport. A toll also generates a revenue stream that can be used to fund roading improvements, or better public transport. To be acceptable, tolling needs to be combined with upgraded public transport and better facilities for walking and cycling so that people, who cannot afford to pay the toll, can still get around town. This means that spare capacity along Frankton Road would need to be reserved for passenger transport in the future. Bus lanes and bus priority measures would need to be identified and protected.

A downside of road pricing can be that, if set too high, the toll may put people off going into the Queenstown CBD and this might hurt it economically. However in the case of Queenstown the importance of the tourist market is likely to dampen this adverse consequence.

Road pricing is likely to become more common in the future, but to work, it needs to be implemented along with other measures, including better public transport, as well as giving people some choices over where they work and where they live.

Community outcome	**Effect on outcome**
Sustainable development	By helping to show the real cost of transport, economic measures can help people to make more informed decisions about resource use.
Protection of the environment	By helping to slow the growth in traffic, further air and water pollution can be avoided.
Increase the diversity of the community	A downside of economic measures is they will increase the cost of travel, and this will harm some groups in the community.
Improve access	Economic measures need to be tied to improvements to alternatives like walking, cycling and public transport if levels of accessibility are to be maintained.
Upgrade the quality of the urban environment	Less traffic congestion in the future gives more opportunities to improve the quality of the public environment.
Provide infrastructure for growth	Tolls and other money raised can be used to fund additional infrastructure.

Community outcome	Effect on outcome
Grow the economy	Freer flowing roads are likely to help business, which is more likely to be willing to pay tolls than private individuals.

2.11.3.6 More passenger transport services

Council could work with transport operators and the Otago Regional Council to extend bus services and to operate a basic ferry service between Queenstown CBD and Frankton, for example. To work well, public transport needs a big anchor, as well as relatively intensively developed catchments. In Queenstown the number of visitors obviously helps to support a much better bus service than is typical in similar sized towns. The geography of the area also helps – most development "snakes" along the lake's edge close to the main corridors. This means people are close to bus routes. These factors mean that public transport has a role to play, but to make that a bigger role a number of actions would need to be taken:

- There needs to be a greater intensity of activities along the bus routes.
- Travel times need to be improved, relative to car speeds to create an incentive to take the bus.
- Services need to be extended and better facilities provided, e.g. bus shelters, travel time information.

Achieving good passenger transport links will require investment in infrastructure (ferry terminals, bus priority measures) as well as exploring the need to subsidise services (such as more frequent services during the day and more late hour services).

Community outcome	Effect on outcome
Sustainable development	Public transport uses less resources than private transport, supports more compact forms of growth and will enable the area to continue to grow without adding to congestion.
Protection of the environment	More use of public transport will help to reduce the adverse effects of air and water pollution generated from cars.
Increase the diversity of the community	Improved transport choices will attract a wider range of people to the area, such as more retired people.
Improve access	Will help to improve accessibility for youth, elderly and people without access to a car.
Upgrade the quality of the urban environment	Will help to reduce the adverse effects of traffic congestion.
Provide infrastructure for growth	Will help to avoid costly road building.
Grow the economy	Will help with economic growth, provided that it is not too costly to run.

2.11.3.7 Integration of land use and transport planning

A balance between jobs and homes can help to spread traffic loads, as well as make it easier to walk to work. If the Frankton area is seen as a second CBD, with a mix of industry and intensive residential activities, along with selective intensification in other areas, such as around Jardine Park in Kelvin Heights, then this would create a better balance between jobs and homes in the area. Under the "business-as-usual" scenario the Queenstown CBD grows the most. More people will have to drive into the CBD. If, however, more jobs were located at Frankton, then there would be less pressure on Frankton Road. If there were also more homes in close proximity to Frankton then more people could also walk to work places in the area, just as they currently do in the Queenstown Bay area. More intensive development in Frankton would also support better public transport services to this area, as well as services between Frankton and the CBD.

The location of schools and community facilities is also important, and so considering further education facilities at Frankton will also be important. A further aspect to consider is that intensive land uses, such as shopping centres, commercial areas, higher

density housing and important community activities, should be located in areas that can be served by public transport and cars as well as by foot and bike.

Community outcome	Effect on outcome
Sustainable development	Will help to make more efficient use of existing resources.
Protection of the environment	A reduction in the rate of vehicle use will help to reduce pollution associated with car use.
Increase the diversity of the community	People without access to a car will benefit.
Improve access	Will help to support more walking and cycling and better public transport.
Upgrade the quality of the urban environment	Investment in better facilities for walkers, cyclists and public transport will be needed.
Provide infrastructure for growth	Will help to manage transport demands in the longer term.
Grow the economy	Better facilities for walking, cycling and public transport will help the tourism industry.

3 WANAKA

The Wanaka study area covers the land within the long-term urban growth boundary established by the Wanaka 2020 workshop. This is the land within the Clutha and Cardona rivers.

Figure 9: Wanaka Study Area

3.1 COMMUNITY OUTCOMES

The community outcomes for Wanaka are listed in the following box. They have been derived from the Wanaka 2020 workshops.

Managing urban growth in a way that protects the landscape and environment

- The long-term urban boundary for Wanaka is Lake Wanaka, and the Clutha and Cardrona rivers.
- Create an interim urban boundary within the long-term boundary and stage development within this boundary.
- Increase the density of the town rather than sprawl outward beyond the growth boundary into rural areas.
- Maintain and enhance access to the natural recreational amenities, the lake, open spaces and rivers**.**

A vital town centre servicing the daily needs of Wanaka

- Expand the town centre inland slightly, improve connectivity to the lakefront, introduce character guidelines and allow appropriate intensification of the town centre.
- Develop a new commercial centre on the state highway for bulk retail and other activities that would potentially conflict with the character of the existing centre.

A connected settlement that is easy to get around by foot and cycle

- A connected road network should be planned and protected ahead of development.
- Develop a network of walkways and cycleways – plan long term and acquire as development occurs.

Grow the strength of our economy

- Keep tourism low key – no monolithic hotels, sensitive rural resorts are acceptable.
- Expand the existing area at Ballantyne Road for industrial development.
- Encourage home-based businesses.

Provide infrastructure for a growing population

- Aim for sustainable systems for water, wastewater and stormwater management, thereby preserving the water quality of the lake.
- Remove the constraints to growth caused by the location and method of treatment of the sewage plant.
- Ensure growth does not result in increased traffic congestion.
- Co-location of high school, a new middle school and centralised playing fields.
- Need to plan for a hospital in the long term.

Protect Rural Character

- Retain the working rural landscape as part of Wanaka's character.
- Ensure a clear distinction between town and rural areas.

3.2 WANAKA - CURRENT STATE AND EXPECTED GROWTH PRESSURES

In 2001:

- There were 3,300 permanent residents in Wanaka, living in 1,400 dwellings. In addition to these occupied dwellings, there were also around 1,100 dwellings that were not occupied on a permanent basis.
- There were 1,700 full time equivalent jobs in the area (full time and part time added together). Most people were employed in the service and construction sector.
- On an average day there were likely to be around 2,700 visitors in town. Most of these visitors stay with families and friends. The area has only a modest sized commercial accommodation sector.

As with Queenstown, during busy periods (summer and winter) these numbers would grow significantly. If every dwelling had an average of three people in it, plus tourist numbers were up to 4,500 per day, then there could be up to 12,000 people in the settlement on a peak day.

Over the five years between 1996 and 2001, in Wanaka:

- Employment (full time equivalents or 'ftes') grew by 15% per year
- Visitor numbers have grew by 7.32% per year.
- The usually resident (permanent) population grew by 5.6% per year.

In contrast to Queenstown (where growth is clearly being driven by growth in the tourism market), Wanaka's growth seems to be driven more off the back of a residential boom. People are being attracted into the area because of the environment. Many of them, it would seem, for lifestyle reasons, as a location for a holiday home, or as a long-term retirement option. This growth is in turn creating work in the construction and service sector, thereby sustaining further inward migration. It would appear that tourist numbers are partly related to the growth in the service base – as more local services are provided, then more tourists are attracted to the area.

The question is whether, without a growth in the base economy (such as that associated with tourism), such high growth rates in the resident population continue? With better transport links (including expanded airline services) and a larger accommodation sector, it is likely tourism will develop its own critical mass, and as a result develop its own growth path. It is also likely that as Queenstown grows, Wanaka's attractiveness as an alternative mountain and lake-side destination will also develop. Between 1997 and 2002 Wanaka's share of the commercial accommodation market for the wider Central Otago region has grown from 9% to 11%. There is also a large number of self employed moving to the area for lifestyle reasons, and this trend will also fuel growth.

3.2.1 Growth Projections and Demands

Statistics New Zealand's high growth projection for the Wanaka area unit (which covers the township and the surrounding area) assumes an annual average growth rate of 5% per year. The Wanaka 2020 workshop assumed a growth rate of 4% per year. For the purposes of this report, the annual growth rates are assumed to fall from 7% per year to 3% per year by 2021. Figure 11 shows the possible trend in terms of resident population (and visitors and workers).

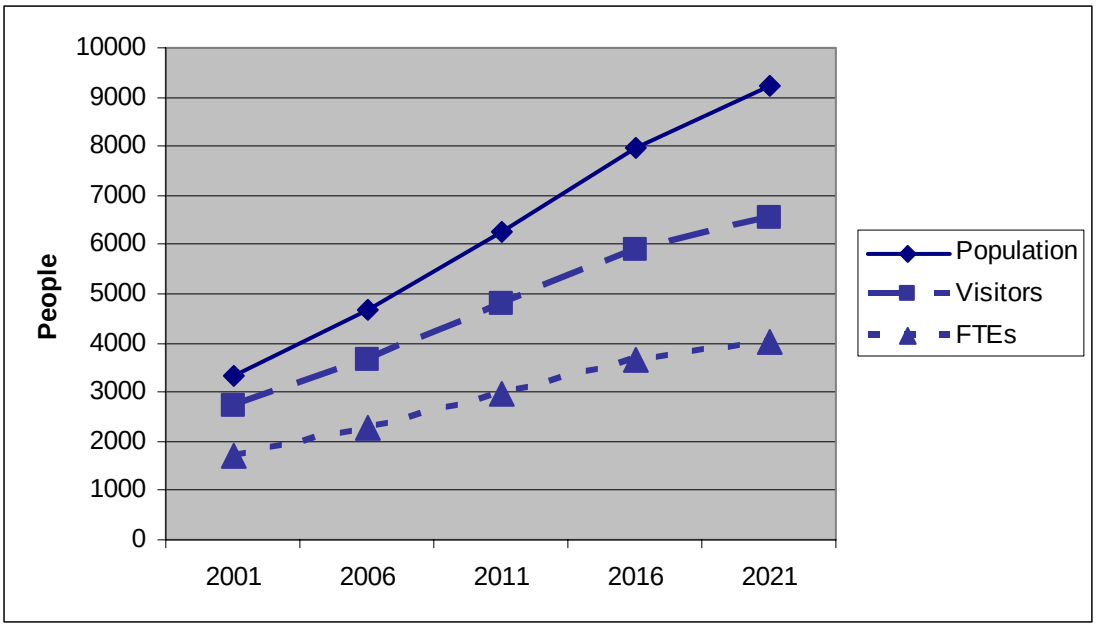


Figure 10: Projected growth

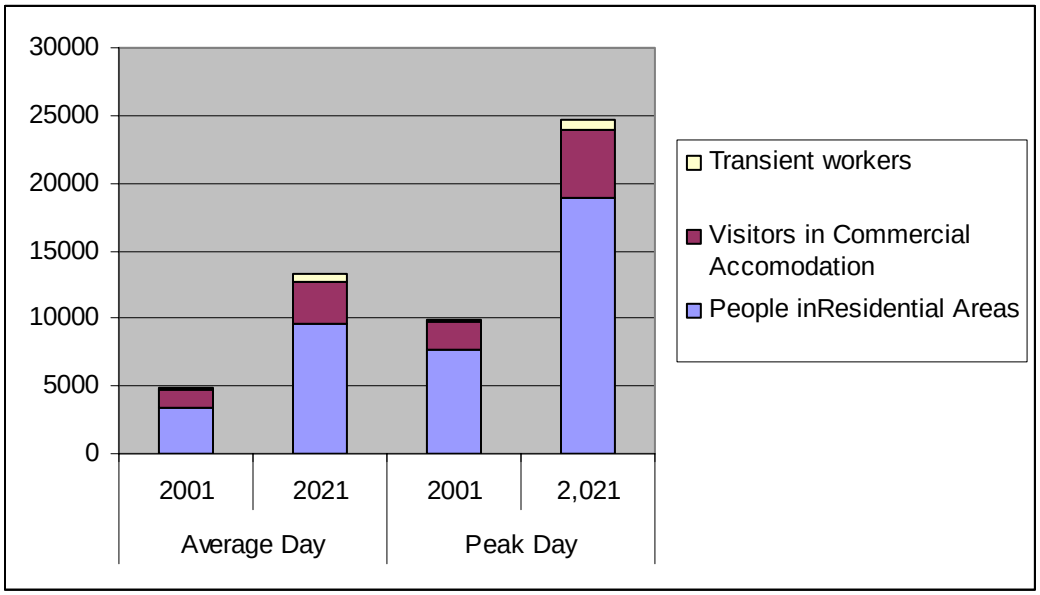
Under these assumptions, the resident population will reach 9,600 people by 2021.

Table 8: Projections

	2001	2006	2011	2016	2021
Resident population	3,450	4,839	6,475	8,264	9,581
Visitors (average day)	2,720	3,774	4,963	6,142	6,816
Jobs ftes	1,710	2,359	3,085	3,797	4,191

By 2021, on a peak day there could be up to 25,000 people in town (including local population and visitors).

Table 9: Total number of people



In terms of the age structure of the future population, current trends indicate a growth in the 40 to 60 year age band, as well as some growth in the under 20 age band. It is expected that this trend will continue.

Table 9 sets out how the future number of dwellings was estimated for this study. The total number of dwellings allows for occupied and unoccupied homes. As a proportion of the total, the number of unoccupied dwellings is likely to drop over time.

Table 10: Dwelling estimates

	2001	2016	2011	2016	2021
Resident population	3450	4839	6475	8264	9581
People per occupied dwelling	2.39	2.35	2.40	2.40	2.35
Occupied dwellings	1446	2059	2698	3444	4077
Ratio occupied to unoccupied dwellings	0.77	0.7	0.65	0.6	0.55
Unoccupied dwellings	1119	1441	1754	2066	2242
Total dwellings	2565	3500	4452	5510	6319

There is demand for a further 3,700 dwellings between 2001 and 2021. Currently the council estimates that there is capacity for another 4,100 dwellings under current land use zonings. 670 of these units are in rural-residential areas. An allowance needs to be made for rentable apartments and other forms of accommodation used for visitor accommodation in the higher density zone. There is likely that this demand will reduce the capacity available to around 3, 300 dwellings.

3.2.2 Employment and Business

Employment growth is expected to continue, but not as fast as that of recent times. By 2021 there could be over 4,000 full time equivalent jobs in the area. Currently, about 30% of jobs are located in industrial areas, with another third in residential areas. The balance are located in the town centre. The projected growth of employment will generate demand for another 25 to 30 ha of land for light industrial and service jobs, as current industrial land is almost fully occupied. About another 30,000 to 40,000 sqm of commercial floorspace will also need to be added. This equals an area of about 7 ha of land for commercial activities. Again most of this will need to be outside the current centre as it is largely fully developed now.

In terms of visitor accommodation, the majority of visitors are domestic visitors staying with friends and family. It is likely that the number of people who will need to stay in commercial accommodation will increase in the future. There may be demand for

another 2,000 visitor beds between 2001 and 2021. This could translate into a demand for about 800 visitor units if all of these beds are provided as part of rentable apartment developments. It is assumed that the will be demand for around 500 visitor units in the form of apartment type development, with the balance being in more traditional forms of development.

3.2.3 Reserves and community facilities

Overall, the Wanaka area currently has around 80 hectares of open space per 1,000 usually resident population (this only counts council reserves – if DoC reserves were added, this figure would be much higher). Whilst these figures look healthy, they are boosted greatly by the golf course, which has restricted access and a single recreational use. The table below outlines the current level of service (hectares per thousand people) in the Wanaka area, as well as the future level of service in 2021 if no new land is acquired, broken down by different reserve types.

Table 11: Open spaces - Wanaka

Reserve Type	Ha/1000 2001	Ha/1000 2021
District reserves	0.9	0.4
Local and neighbourhood reserves	5.7	1.8
Open space passive reserves	48.3	20.4
Sports ground mixed use	3.3	1.4
Other	20.0	8.5

"Open space passive" reserves typically consist of large reserves that provide for informal leisure experiences, such as walking around the lake edge (e.g. Eely Point foreshore reserve). There is not expected to be a great need to acquire additional land in this category, other than lakeside and riverside reserves acquired through the subdivision process.

Sports reserves provide land for sportsfields and other formal sporting uses such as tennis and netball courts. The traditional New Zealand standard for the provision of these reserves is 1.8 hectares per 1,000 population. The table above shows that the Wanaka area will drop below this standard by 2021 if no additional land is acquired. District and local and neighbourhood reserves will also need to expand.

3.2.4 Libraries and other community facilities

The new library in Wanaka (around 580m^2 floor area) is expected to meet the needs of the community for the next 10 years or so. The Library and Information Association of New Zealand Aotearoa (LIANZA) publishes the Standards for New Zealand Public Libraries (1995). These standards recommend a level of service of 70m^2 of library space per 1,000 population. The current level of service in Wanaka is around 265m^2 per 1,000 resident population, but the needs of visitors should also be taken into account. Combining permanent residents and visitors, by 2011 there is likely to be a need to expand the facility, and the design of the building allows for this.

The Lake Wanaka Centre is relatively new and expected to cope with demands over the next twenty years. The Arts centre is old and well used. It is likely that this will need to be rebuilt and doubled in size in 5 to 10 years' time.

A new primary school is likely to be developed soon, either as a stand-alone school or possibly as a middle school.

The existing indoor swimming pool is expected to cope with growth pressures, and with a larger population it may be able to support additional leisure facilities at some time (such as a gym and indoor area). An indoor playing court is currently available at the high school and an additional indoor court may also be needed in the medium term to cope with growing demand.

3.2.5 Wanaka under a 'business-as-usual' future

3.2.5.1 Population and residential housing

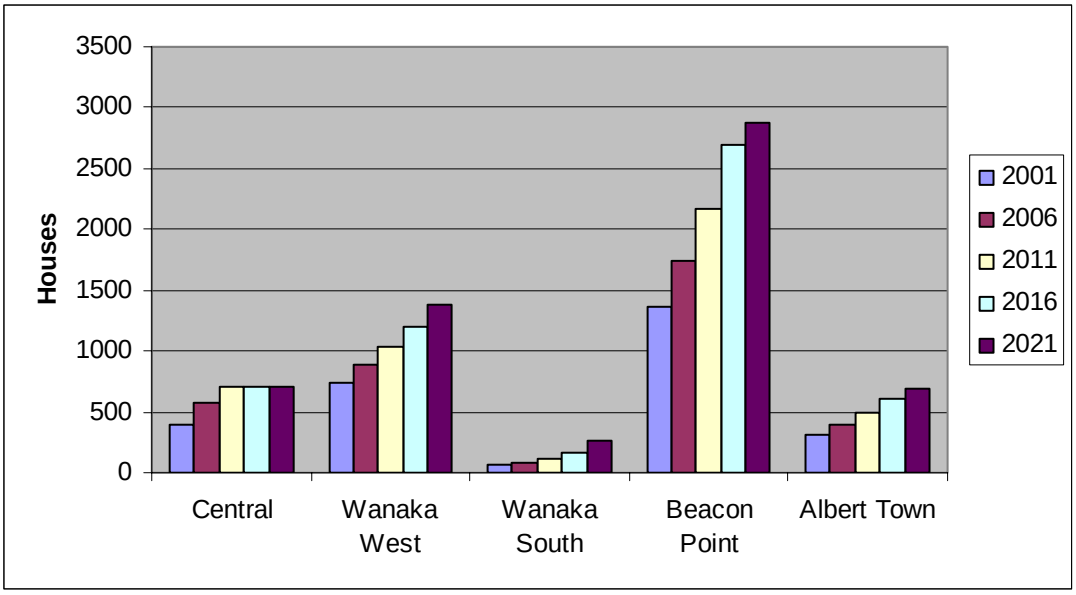
2001-2011

- Housing growth will continue through expansion of the residential areas to the west and south of the town centre and the development of the Peninsula Bay area.
- Some development will occur around Albert Town to accommodate affordable housing, but most of it is in the form of larger lots.
- Rural residential development continues to occur on the fringes of the settlement, in accordance with current zonings.

2011-2021

- Housing growth continues through expansion of the residential areas. This is likely to involve moderate to high cost sections at a low intensity – 1000 m^2 plus sections.
- Development of affordable housing around Albert Town is likely to be halted due to a lack of further suitable zoning.
- Rural residential development will continue on the fringes of Wanaka town, often outside of the current zonings and within the long term urban growth boundaries.
- By 2020 there is an unallocated demand of between 300 to 400 dwellings (demand that cannot be met by current zonings).
- Developers will begin to eye the land to the south of Golf Course Road and wish to skip over the existing rural residential development. Pod type developments are proposed which do not connect with each other and do not have a comprehensive open space network, or the scale to support local shops.
- Developers also begin to contemplate land on the south side of the Clutha River, adjacent to the state highway as land within the long-term urban growth boundary is increasingly consumed by rural residential development, industrial development and low density suburban development.

Table 12: Projected growth of dwellings. Wanaka 2001-2021, by area



This graph shows possible grow patterns by areas within Wanaka. Beacon Point takes a lot of the growth under current plans, while to the south of the current settlement there is limited growth, mostly due to the rural-residential development in the area.

3.2.5.2 Community facilities and Infrastructure

2001-2011

- Current community assets and facilities are likely to cope with growth up to 2011. The library will meet demands, and existing reserves and open spaces will be used more often as the population grows.
- There will be a need to upgrade the foreshore and improve Pembroke Park.

2011-2021

- Pressure on some of the parks around the lake edge will increase, leading to demand for improved facilities, such as improved walkways, public toilets, car and trailer parking and boat ramps.
- Additional neighbourhood reserves will be needed, but they should be able to be provided as areas subdivide.
- The sewerage ponds are likely to shift across the river, freeing up land for employment activities.
- Developments will put pressure on the town's water supply. A new reservoir to service the south of the town is planned for 2015. Meanwhile, bore water will become harder to obtain.
- Space is also needed for a small health centre and larger community facilities.
- There will also be pressure for more sportsfields.

3.2.5.3 Business and employment

2001-2011

- The existing industrial areas will fill up quickly as employment expands. A shortage of industrial land will begin to put a brake on growth in employment and local services. As a result, more goods and services will have to be brought in, which increases the cost of living.
- A further 15 to 20 ha of industrial land needs to be identified during this period.
- There is also demand for a further 15,000 to 20,000 sqm of commercial (retail, office, service) floorspace. However further development in the town centre is restricted by a lack of space. As a result there is pressure for new retail development to occur in the business area at Anderson Road, displacing activities from these areas, and putting further pressure on the supply of industrial land.

2011-2021

- Industrial expansion around Ballantyne Road in the vicinity of the oxidation ponds is likely to be underway. Other isolated industrial areas may also be proposed along Riverbank Road and perhaps beside the state highway if insufficient land is not provided in the Ballantyne Road area. Around 10 to 15 ha of land is needed.
- Provision for a further 15,000 to 20,000 sqm of commercial space is likely to be required. There will be pressure for larger buildings in the CBD if suitable zoned land becomes scarce.
- There is also likely to be pressure for new retail development along the Cardrona Valley Road as traffic flows on this road increase.

3.2.5.4 Visitors and visitor accommodation

2001-2011

- Visitor accommodation will be developed in the current high density zone and in the town centre. Smaller boutique establishments are likely to be developed on the fringe of the settlements in the rural residential areas.

2011-2021

- Most new visitor accommodation will continue to be in and around the CBD and the foreshore towards Eely Point in the form of 'rentable' apartments (apartments that are rented out short term).
- Visitor accommodation will also start to be proposed in the residential areas as the capacity of the current higher density zone is reached. This requires resource consent and is therefore likely to be of a relatively high quality of design.

3.2.6 Key Growth management consequences

The following section sets out critical community outcomes and the extent to which the alternative growth management outcomes affect their attainment. For most outcomes, major thresholds in terms of land supply will not be reached until at least 20 years time. However planning policies put in place now will make a difference to when development pressures will start to challenge the long term urban growth boundary.

The two key consequences are seen to be:

- Staging growth within the long term growth boundary
- Retaining the town's character.

Many of the growth management techniques that are discussed in the section of the report looking at the Queenstown area are also relevant to Wanaka and these two issues. Rather than repeat these techniques, the Queenstown section of the report should be referred to. The following sections provide a discussion of techniques that may be relevant to Wanaka.

3.2.7 Consequence: Staging growth within the long-term growth boundary

Community outcomes

This issue is associated with all the community outcomes:

1. Managing urban growth in a way that protects the landscape and environment.
2. Accessibility and ease of movement throughout the town area, including by foot.
3. A vital town centre servicing the daily needs of Wanaka.
4. Grow the economy.
5. Provide infrastructure for the growing population.
6. Protect rural character.

Under a "business-as-usual" approach, the main issue is how to ensure the urban area stays within the long-term urban growth boundary identified by the Wanaka 2020 workshop.

The danger is new residential development 'leap frogging' the current urban zoning and occurring in isolated pods within the long term growth boundary. The existing collar of rural residential zoning around the town will accentuate this problem. This leap-frogging of development may mean that land within the current long-term urban growth boundary is quickly used up, putting pressure on the growth boundary. Lower density development will also increase this pressure.

3.2.8 Particular options for keeping growth within the long term boundary

3.2.8.1 Slow the growth

Wanaka's growth has been spectacular over the past five years. A slower rate of growth would provide more time before growth pressures threaten the long term urban growth boundary identified in the Wanaka 2020 workshops. However, unless slower growth is tied to better use of land, then low density growth patterns will continue and at some stage in the future, the growth boundary will be reached. A reliance on low density forms of growth (rural residential housing, for example) may see this type of growth become entrenched under a slow growth future, and this will make it very difficult to alter people's housing preferences closer to the time when the urban growth boundary is reached.

Slowing the growth would require the council to down-zone current urban zonings, as the capacity for growth under these zones closely matches the expected demand over the next 20 years. Such a down zoning will be difficult to justify when the growth does not threaten any important environmental values. It is more a question of how growth is managed, rather than the total amount of growth.

The one area where there may be some potential to slow growth rates would be for the council to not zone more land for light industrial and service activities. This approach might raise the cost of construction, and therefore help to slow growth rates. However, this strategy is unlikely to work –there is likely to be strong pressure for industrial land which will not be able to be resisted by the council. As a result, rather than planning for more industrial land to be in the right locations, industrial development will occur in a haphazard manner.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	Will help to dampen down some of the growth pressures, but growth within the long-term urban growth boundary will still need to be managed.
Improve access	While slower growth will slow growth in traffic, it will not necessarily lead to improvements making walking and cycling easier.
A vital town centre	Slower growth may delay when the second commercial centre identified in the Wanaka 2020 concept becomes viable.
Protect rural character	The character of the rural settlements will need to be carefully controlled so that growth from Wanaka is not displaced to these areas.
Provide infrastructure for growth	New infrastructure will have to be provided in the growth areas, even with slower growth.
Grow the economy	It may provide more options for businesses within the long-term urban growth boundary.

3.2.8.2 Grow other settlements

Unlike Queenstown, where potential satellite settlements are far away and there are limited options for new settlements in the basin, Wanaka has the settlements of Luggate and Hawea close by. It is likely that as Wanaka grows, these settlements will also grow. This process may help to reduce some of the growth pressures on the main settlement, and it would be sensible to plan for this natural process to continue. However these settlements have limited capacity for growth and so, overall, there is likely to be only a small benefit to Wanaka from trying to direct growth to these settlements, at least in the short term. A totally new settlement would be needed. This is a very big undertaking for the council, but in the long term may be needed to manage growth pressures.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	Will help to draw off only some of the growth pressures around Wanaka and will increase growth pressures in other places.
Improve access	Access from satellite areas to main urban areas will be an important issue.
A vital town centre	Unlikely to substantially affect the town centre.
Protect rural character	The character of the rural settlements will need to be carefully controlled if there is to be a lot more growth in them.
Provide infrastructure for growth	New infrastructure will have to be provided in the satellite growth areas. This infrastructure will be expensive to provide.
Grow the economy	It may provide more options for businesses within the long-term urban growth boundary in Wanaka if there is less pressure for more houses.

3.2.8.3 Structure planning and staged release of land

A structure plan should be developed for the undeveloped land which is within the long- term urban growth boundary identified in the Wanaka 2020 workshop. The structure plan should identify:

- Future land use zonings.
- Future road, pedestrian and cycle links.
- Future reserves.

Specific actions the structure plan will need to address are:

- Medium density development (terraced housing) around the current town centre and the new retail centre beside Mt Iron.
- Average lot sizes in standard suburban developments to be 600 to 800 sqm of land per house, ensuring better use of land resources within the growth boundary.
- Further land around Ballantyne Road also needs to be zoned for industrial activities in the near future to help relieve pressure on the supply of business land.

As part of this process there needs to be a review of rural residential and rural lifestyle zones around the settlement and Albert Town. In Albert Town the zoning may need to be removed and replaced with a zoning which allows for the expansion of the township, providing the opportunity for affordable housing. In other cases rural residential development should be halted if it does not fit in with the longer term structure plan. This is to ensure that the town can grow in a logical manner and does not leap frog over rural-residential areas into new areas.

Future growth areas will need to be identified and protected from growth pressures in the interim. This will require restrictive land use zonings to be developed in the District Plan that put a hold on the areas in question. The structure plan should provide a staging plan where new development areas are released for growth in a logical, staged manner. This staging would need to be tied to the provision of infrastructure and roading.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	Will help to ensure land within the long term urban growth boundary is used efficiently.
Improve access	Roads, paths and cycleways can be identified and progressively developed.
A vital town centre	The location of the second centre can be identified and protected for future development.
Protect rural character	Rural–residential development on the fringes of the current settlement will need to be halted.
Provide infrastructure for growth	New infrastructure can be planned for and provided in conjunction with the staged release of

Community outcome	Effect on outcome
	land for development.
Grow the economy	More business land within the long-term urban growth boundary can be identified and protected

3.2.9 Consequence: Developing a special character

Community outcomes

This issue is associated with all the following community outcomes:

1. Managing urban growth in a way that protects the landscape and environment.
2. Accessibility and ease of movement throughout the town area, including by foot.
3. A vital town centre servicing the daily needs of Wanaka.
4. Grow the economy.
5. Provide infrastructure for the growing population.
6. Protect rural character

The issue relates to how to retain and enhance the town's character. This is partly a built form issue. It is also partly a marketing issue – what sort of destination is the settlement to be marketed as?

In terms of growth management approaches, the following points are relevant:

- How to accommodate larger format retail stores while retaining the village character of the town centre.
- Integrating more visitor accommodation into the fabric of the town without letting it dominate places such as the foreshore.
- How open spaces are developed – the foreshore and Pembrook Park need to be developed in a way that is evocative of the future Wanaka.
- Haphazard development of land within the long term urban growth boundary will reduce the opportunities to develop an urban form that makes it easy for people to walk and cycle around, as well as to get to open spaces easily.
- There needs to be a range of housing types to ensure that the community is diverse.
- New community facilities and activities will need to be added in the future.

3.2.10 Options for developing the town's character

3.2.10.1 Developing an alternative location for retail stores

The council could proactively develop the new retail centre identified in the Wanaka 2020 workshop, which is situated on the state highway near Mt Iron. This centre will help manage growth pressures on the existing centre. Large format stores can locate in the new centre, protecting the amenity of the existing centre. The council will need to introduce new land use zonings for this centre soon. The land use zonings need to be tied to a concept plan for the centre, setting out how the centre needs to develop so that it fulfils its function as a second town centre. A car-based centre should be avoided as this would be contrary to the desired character of the area.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	An inland location for a new centre will help to retain the low-key character of the existing waterfront centre.
Improve access	Access to the centre from future growth areas needs to be secured.
A vital town centre	The main town centre can continue to focus on its most important role as the hub of the community.
Protect rural character	More facilities in the township should help to encourage more compact growth, and reduce pressures for outward expansion of the settlement.
Provide infrastructure for growth	The infrastructure around the current town centre such as roading and parking, will not be overloaded.
Grow the economy	Additional shops and services will expand the range of services available to people.

3.2.10.2 Upgrading and extending reserves, open spaces and community facilities

Additional reserves are needed to cater for future needs, such as sportsgrounds, local playgrounds and community buildings. Future growth is predicted to create additional demand for these more intensively used reserves, and reserves will become crowded and damaged from over-use if additional land is not acquired (e.g. sportsfields). The structure plan needs to address this.

There is potential for the lakefront reserves to be improved to enhance the amenity of the lake front and to cater for future population and visitor growth. These areas need to be developed in a way that helps to impart a special feeling about Wanaka; that it has a special character.

Community outcome	Effect on outcome
Protect landscapes and the environment	The design of reserves can help impart a special character to the settlement.
Improve access	More reserves can help provide additional pathways and cycleways.
A vital town centre	Enhanced reserves around the town centre will make the centre more vital and vibrant.
Protect rural character	Better reserves will help to encourage more compact forms of growth.
Provide infrastructure for growth	More reserves are needed to meet future demands.
Grow the economy	Better quality reserves and more of them will help to retain the lifestyle qualities of the area, and will mean the settlement continues to be an attractive location for people to live and work in.

3.2.10.3 Controls on visitor accommodation

The location and design of visitor accommodation needs to be carefully managed if the settlement is not to take on an overt resort feel. To enhance the town's character there is an argument that the location of visitor accommodation should be defined, and design controls imposed. Some visitor accommodation could be provided around the foreshore and the town centre (as is currently provided for in the District Plan) but the bulk of such accommodation should occur inland, such as around the proposed new commercial centre and possibly in other selected locations within the long-term urban growth boundary. This is to ensure that visitor accommodation does not concentrate in one area, especially along the foreshore of the lake which will create a very "touristy" feeling to this area, contrary to the town's current character. This type of approach will require changes to the District Plan.

Community outcome	Effect on outcome
Protect landscapes and the environment	A control on visitor accommodation in and around the foreshore will help to retain the character of the lake edge.
Improve access	More visitor accommodation inland of the foreshore will help to reduce pressure on the main roads in the area.
A vital town centre	Visitor accommodation near the town centre helps to keep the centre alive after hours.

Protect rural character	Not having visitor accommodation within the settlement is likely to see pressure for more accommodation in the countryside.
Provide infrastructure for growth	Having controls on the location of visitor accommodation will help with infrastructure planning.
Grow the economy	More visitor accommodation is needed to meet growing demands.

3.2.10.4 Enhancement of the town centre

A range of proposals were put forward during the Wanaka 2020 workshops to enhance the town centre. These proposals included improved streetscapes, better parking arrangements, integrating the town and the lakefront and increasing the connectedness of the centre. These actions will be important in helping to shape the further development of the town centre.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	The town centre is a significant part of the settlement's character.
Improve access	Better access by foot and cycle will assist in improving access generally, including access to the foreshore and community facilities.
A vital town centre	An upgraded image is very important to the vitality of the centre.
Protect rural character	A better quality centre means more people will be willing to live close by it, helping to reduce pressure for further expansion.
Provide infrastructure for growth	Additional community facilities in the town centre need to be planned for.
Grow the economy	An enhanced town centre will improve prospects for business.

3.2.10.5 Design controls / guidelines

A further tool to help build a distinctive character would be controls on the design of houses and other buildings in the area, or at least guidelines as to what types of designs best fit with the settlement's character. Design controls would be part of the District Plan and require new houses to pass through a resource consent process. The design controls could limit the use of certain materials or colours, for

example, or encourage the use of specific design elements for the structure itself – such as roof lines, facades and other elements. Guidelines would be a non-statutory tool, educating home owners, developers and builders as to what types of materials and designs are appropriate.

The community could first develop the guidelines, in conjunction with local design professionals, and then, depending up on the success or otherwise of them, look at the need for District Plan controls if the guidelines do not achieve any measurable change. To make the guidelines (and if need be the design controls) work, a lot of effort will need to go into up-skilling design professionals, planners and council staff in how to sensitively apply the guidelines and controls. Experience in the Auckland area shows that implementation of design-based controls and guidelines is a complex process, and the quality of the built form outcomes is very dependent upon how the rules are interpreted and applied.

Community outcome	**Effect on outcome**
Protect landscapes and the environment	The character of the residential areas is important to the overall image of the town.
Improve access	Will not affect this outcome.
A vital town centre	Guidelines could also be used in the town centre.
Protect rural character	Better quality development should help to encourage more compact forms of growth.
Provide infrastructure for growth	Infrastructure will need to be provided no matter what type of controls are used.
Grow the economy	A distinctive image to the town will help with its marketing.

APPENDIX ONE: People Consulted During the Study

Infrastructure - Queenstown and Wanaka

Chris Gregory – IMTECH

Edward Guy

Open space and community facilities

Ken Gousmett
Paul Wilson - QLDC

Developers

John Darby
John Martin
Alistair Porter
Barry Robertson

Central Government

Ministry of Education - Carey Clark

Transit New Zealand - Debora Field

DQ and tourism operators

David Kennedy
Duncan Smith
Adrian Januszkiewicz
Andrew Brinsley
Tony McQuilkin
Ken Matthews
Carl Braddock (Chair of Major Accommodation Providers group – big hotels)
Jo Macpherson

QT Chamber of Commerce

Nick Lambert

Wanaka Property Developers

Bob Robertson

Wanaka International Airport Corporation

Tim Johnson

APPENDIX TWO

Demographic and economic trends and projections – Queenstown and Wanaka

Context

This work underpins the consideration of growth management options for Wanaka and Queenstown. It outlines the key demographic and economic trends facing the two settlements and, based on these trends, develops a set of high-level population, housing, visitor and employment projections for these settlements. From these projections, assessments are then made relating to future land needs for housing, employment and other activities.

The project requires the development of projections for both the Queenstown and Wanaka areas, relating to:

- Population.
- Houses.
- Employment.
- Visitors.

The brief for the project was to develop high-level projections that can be used to understand the consequences of growth. Time was not to be spent on detailed projections, rather a "feel" for future growth rates was needed.

The data presented in this report draws upon a number of sources. Because of this, figures for a particular area or locality may differ slightly between different parts of the report. Random rounding of statistical data undertaken by Statistics New Zealand to ensure confidentiality further creates small changes in the figures used in the report. The projections presented have undergone a number of iterations, and are updated as new and better information comes to hand. As a result, the numbers presented in this report may differ somewhat from earlier work presented to council workshops.

Existing Projections

Population & housing

Population projections have been produced by Statistics New Zealand, using data from the 2001 census. These projections are for a 20 year period and are available at the area unit level.

Visitors

Projections for the Queenstown Lakes/Central Otago Regional Tourism Organisation area are available out to 2009. These projections have been produced by the Tourism Research Council. The Tourism Organisation area covers Queenstown, Wanaka and the rest of Central Otago. The projections cover both domestic and international visitors.

Employment

No projections are available.

Recent trends

Population growth - permanent residents

Recent growth patterns in the usually resident (permanent) population do not need to be explored in depth. Figure 1 shows the growth of the resident population of the District, since 1991. The most recent estimate from Statistics New Zealand places the population of the district at just under 20,000 people.

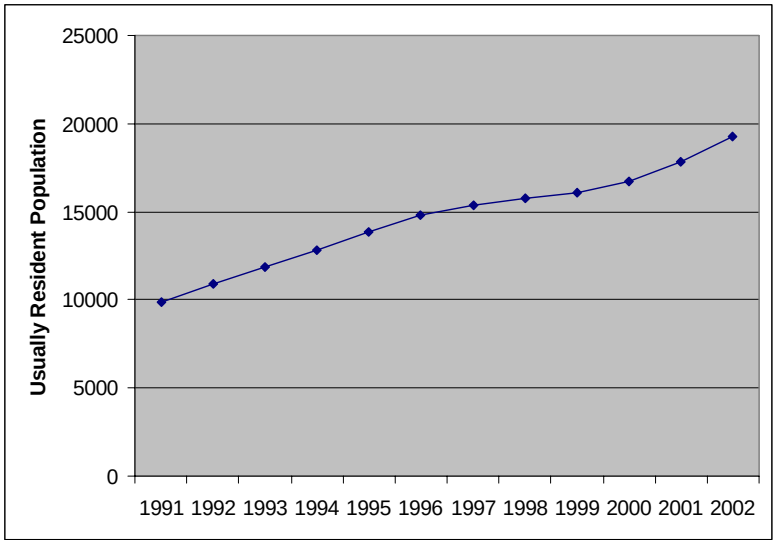


Figure 1 Population Growth (Permanent Residents) – QLDC – 1991-2002

Statistics New Zealand figures show that over the recent past, 77% of the District's growth has been attributable to inward migration. This highlights the point that population growth rates in the area are very dependent upon economic trends. Statistics New Zealand expect this high rate of inward migration to continue. Clearly, in forecasting future population levels, estimating the number of people moving into the area is critical.

Table 1: Projected population growth rate – high scenario – Queenstown Lakes District Council – Statistics New Zealand

Time period	Total growth	Growth from natural increase	Growth from inward migration	% of growth from migration
1996-2001	3050	680	2350	77.0%
2001-2006	5950	930	5000	84.0%
2006-2011	3500	990	2500	71.4%
2011-2016	3400	900	2500	73.5%
2016-2021	3300	810	2500	75.8%

In terms of the growth of specific areas, Table 2 sets out the headline data on changes to the usually resident population between 1991 and 2001 for specific areas, based on census data.

Table 2: Population growth – usually resident population - 1991-2001

Area	Usually resident population 1991	1996	2001	% Change 1991-2001
Wanaka urban	1,851	2,523	3,327	79.7%
Wanaka locality	900	1095	1,347	49.7%
Queenstown urban	5,142	7,530	8,538	66.0%
Queenstown locality	1,812	2,778	3,432	89.4%

Source: 2001 Census

What is interesting to note is that in the Wanaka area, growth has been strongest in the settlement, while in Queenstown, growth has been fastest in the surrounding locality[1]. As a result of these trends, the share of all growth accommodated by the two main settlements of the district has remained the same over the past 10 years, but for the Queenstown urban area, its share of growth has fallen slightly.[2]

[1] The Wanaka Census Area Unit has increased in size between 1991 and 2001

[2] Wanaka Urban = Wanaka Census Area Unit; Queenstown Urban = Kelvin Heights, Frankton, Earnslaw, Queenstown Bay and Sunshine Bays Census Area Units.

Table 3: Share of total usually resident population – settlements 1991-2001

Settlement	1991	1996	2001
Wanaka Urban	18.5%	17.7%	19.5%
Queenstown Urban	51.5%	52.7%	50.1%
Total Urban Areas	70.0%	70.4%	69.6%

Source: 2001 Census

These figures highlight the dispersal of population which is occurring in the Queenstown area and which is a core issue for the "Tomorrow's Queenstown" growth management strategy. The strategy seeks a containment of the urban area, but clearly market forces are in favour of dispersal. Understanding the social and economic drivers of this dynamic of dispersal is therefore important.

Within the Queenstown urban area, the fastest growing areas have been the Frankton and Sunshine Bay areas – areas on the fringe of the settlement. Central Queenstown has seen the slowest increase in the permanent population.

Table 4: Population growth – usually resident population - Queenstown urban area

Census area units	1991	2001	Change 1991-2001	% Change
Kelvin Heights	519	789	270	52.0%
Frankton	786	1641	855	108.8%
Earnslaw	1419	2340	921	64.9%
Queenstown Bay	1461	1908	447	30.6%
Sunshine Bay	957	1860	903	94.4%

Source: 2001 Census

Looking at the main settlements and their hinterlands, under the Statistics New Zealand high growth scenario, the Wanaka urban area and the Queenstown locality are expected to accommodate the largest numerical increase in population.

Table 5: Projected growth by area – Statistics NZ high growth scenario – usually resident population

Area	2001[3]	2006	2011	2016	2021	Change
Wanaka urban	3,450	5,610	6,830	8,020	9,160	5,710
Queenstown urban	8,990	10,770	11,830	12,870	13,880	4,890
Queenstown locality (Basin)	3,580	5,470	6,580	7,690	8,790	5,210
Total	17,840	24,290	28,330	32,340	36,250	18,410

Housing

A significant issue for both settlements is the number of homes in the area that are not occupied all year. In Wanaka, over 40% of homes are not occupied all of the time – these are holiday homes or second homes.

Table 6: Occupied and unoccupied dwellings 1991 and 2001Cesnsus

Urban Area	Occupied		Unoccupied	
	1991	2001	1991	2001
Wanaka urban	51%	56%	49%	44%
Queenstown urban	66%	75%	34%	25%

Source: 2001 Census

The following table shows the growth in total dwellings – occupied and unoccupied at the night of the census – by study area.

Table 7: Growth in total dwellings (occupied and unoccupied)

Area	1991	2001	Change 1991-2001	% Change
Wanaka urban	1,731	2,565	834	48%
Queenstown urban	3,198	4,644	1,446	45%
Queenstown locality	1,293	1,941	648	50%
Total district	7,164	10,491	3,327	46%

[3] The resident population figure reported in the 2001 Census and the base (2001) population used by Stats NZ for its population projections differ slightly.

In terms of dwellings (both permanent and holiday), the number of dwellings has been growing at a slower rate than the population in general, contrary to the general trend in urban areas for the number of dwellings to grow faster than the population in general. This is a desirable trend. It means that there is less pressure for new housing than might otherwise be the case. The trend arises from an increase in the average number of people per household. There may also be some conversion of holiday homes to permanent homes.

Average occupancy rates (people per household) have increased from 2.1 people per house to 2.39 people in Wanaka, and from 2.4 people per house to 2.5 in Queenstown.

However, the trend of dwellings growing slower than population cannot continue forever. Average occupancy rates are now near national averages, and they may not move up much more in the future and may decline.

With regard to the type of permanently occupied dwellings being built in the settlements, there is a significant difference between the Wanaka and Queenstown markets. Stand-alone housing dominates in Wanaka, while in Queenstown flats and apartments are an important part of the market. Between 1996 and 2001 attached housing types (such as apartments and flats) increased in Queenstown as a proportion of occupied dwellings.

Table 8: Types of occupied dwellings, 1996 and 2001

Urban Area	Detached		Attached	
	1996	2001	1996	2001
Wanaka	79.2%	79.7%	10.4%	13.0%
Queenstown	54.6%	51.3%	38.8%	43.0%

Source: 2001 Census

Age structure

Changes in the age structure of the usually resident population create differing demands on social and community infrastructure, as well as for housing.

Over the 10 years between 1991 and 2001, the biggest change in the age structure in Wanaka has been the growth of the 40-65 age band. This implies that the settlement is attractive to people and families in their middle years. The number of younger people (0-19 age bands) has also increased indicating a growing demand for educational and recreational activities. Growth of both groups further suggests increasing demands for retail and commercial services associated with a growing home-based population.

In contrast, in Queenstown the largest growth has been in the 20-39 year age band, an age group often underrepresented in provincial cities and towns. This age group is more associated with entertainment and leisure-based consumption, and renting rather than home ownership.

In both settlements, the number of older adults has also increased, suggesting that both settlements are still seen as a retirement destination, but more so for Wanaka than Queenstown.

As a result of these trends, Queenstown's age profile has got a lot younger than it was 10 years ago. In Wanaka, the change is less dramatic, and has seen the population get a bit more middle aged.

Table 9: Share of population by age bands

Age band	Wanaka urban area		Queenstown urban area	
	1991	2001	1991	2001
0-19	24%	23%	24%	22%
20-39	26%	26%	42%	45%
40-65	31%	34%	27%	25%
65+	19%	17%	8%	8%
Total	100%	100%	100%	100%

Source: 2001 Census

In the Queenstown locality – which has been growing faster than the Queenstown urban area – most growth has been in the 40-65 age band, mirroring the trend in Wanaka. Again this highlights the growing dichotomy between the Queenstown urban area and the surrounding district. The centre is characterised by a large number of younger people and a high proportion of temporary residents, while the surrounding district has more of a family focus.

Household composition

In both Wanaka and Queenstown, there are more households formed by singles and couples than in the district as a whole. Queenstown is notable for the size of the non-family households – households of unrelated people flatting together. This again reinforces the point that Queenstown is increasingly the home of younger people attracted by the work opportunities and lifestyle, while families are more attracted to the surrounding district.

Table 10: Household composition

Area	One Person households	Couples	Families	Households formed by unrelated people
Wanaka urban	23.3%	38.0%	32.5%	6.2%
Queenstown urban	25.4%	28.9%	31.3%	14.4%
District	21.9%	33.2%	35.0%	9.9%

Source: 2001 Census

Jobs and Employment

The 2001 census records that of the usually resident population aged 15 and over, 10,140 people were employed in full-time or part-time work. This is up from 8,469 people in 1996. Note that these figures are not the number of jobs in the Queenstown area, as some people who live outside the district will drive to jobs in the area, although this will be a small figure.

In terms of the ratio of employment to people of working age (15-65 years old), the ratio is relatively high, indicating that most adults work, and as a result most people moving into the area would appear to do so for work-related purposes.

Table 11: People of working age

Year	Population aged 15-65 years	Number of usually resident people employed	Ratio – population to people employed
1996	10,380	8,469	0.82
2001	12,267	10,140	0.83
% Increase 1996-2001	18%	20%	

Source: 2001 Census

The structure of the local economy has not changed much over the five years between 1996 and 2001. The business sector has grown somewhat faster than other sectors, while the primary sector has slipped back a bit. The manufacturing sector comprises only a few jobs. Table 14 sets out data from the 2001 census.

Table 12: Employment make up 1996–2001 – share of employment by industry sector

Industry sector	1996	2001
Primary	6.6%	5.3%
Manufacturing	3.6%	4.3%
Construction and infrastructure	11.9%	10.5%
Wholesale and retail	17.5%	17.0%
Accommodation	22.4%	22.1%
Transport and communications	9.4%	8.7%
Business	21.5%	23.8%
Government	7.1%	8.4%
Total	100.0%	100.0%

Source: 2001 Census

As is often noted, the economy of the district is still heavily focused on tourism. Table 13 provides a breakdown for full time equivalent jobs (full time and part time added together) by area.

Table 13: Full time equivalent jobs

Area unit	1998	2002
Hawea	170	250
Frankton	470	740
Wanaka	1020	1710
Glenorchy	110	220
Kelvin Heights	55	110
Sunshine Bay	250	310
Skippers	360	870
Lake Hayes	30	15
Matukituki	60	65
Arrowtown	310	460
Queenstown Bay	2850	3580
Earnslaw	1010	1210
Total	6695	9540

DEVELOPING THE PROJECTIONS - QUEENSTOWN

The following process was used to develop the projections for Queenstown:

1. Establish broad relationship between visitor growth, employment growth and population growth.

2. Using visitor growth as the main driver of employment and population growth in the area, determine likely growth in visitor numbers, based on expected annual rates of increase.

3. From the total visitor numbers, project out the number of full time equivalent (fte) workers, based on the current ratio between the number of visitors and the number of workers.

4. Based on the growth of employment (ftes), determine the likely population based on the current ratio of ftes to permanent residents, maintaining the 2001 ratio between workers and permanent residents. The trend has been for the ratio between workers and residents to fall over time.

5. Based on the number of permanent residents, determine the number of occupied and unoccupied houses. This is achieved by first applying an assumed number of people per household to the permanent population. This figure is derived from the 2001 census. This then gives the number of permanent homes. A ratio between permanent and temporary homes is then applied to gain the total number of dwellings.

These steps are discussed in turn.

Visitor numbers

The main source of data on total visitor numbers is projections prepared by the Tourism Research Council. The Research Council has recently produced a new set of projections for the Queenstown Lakes/Central Otago area out to the year 2009. They assume a continuation of the historical rate of growth in visitor numbers – 4.75% per year. Extrapolating this growth rate out to 2021 results in total visitors of around 12 million, up from 5 million in 2004.

Table 14:Total visitor projections

Year	Queenstown District/Central Otago forecast
2001	4,863,360
2002	5,066,000
2003	5,273,000
2004	5,567,000
2005	5,871,000
2006	6,136,000
2007	6,400,000
2008	6,670,000
2009	6,969,000

Source: Tourism Research Council

Statistics New Zealand's Commercial Accommodation Survey highlights the strong seasonality of the visitor accommodation sector. It should be noted that the commercial accommodation survey only records visitors staying in hotels, motels, camping grounds, backpackers, farm stays and other forms of visitor accommodation. It does not cover people staying with friends and relatives in their private homes.

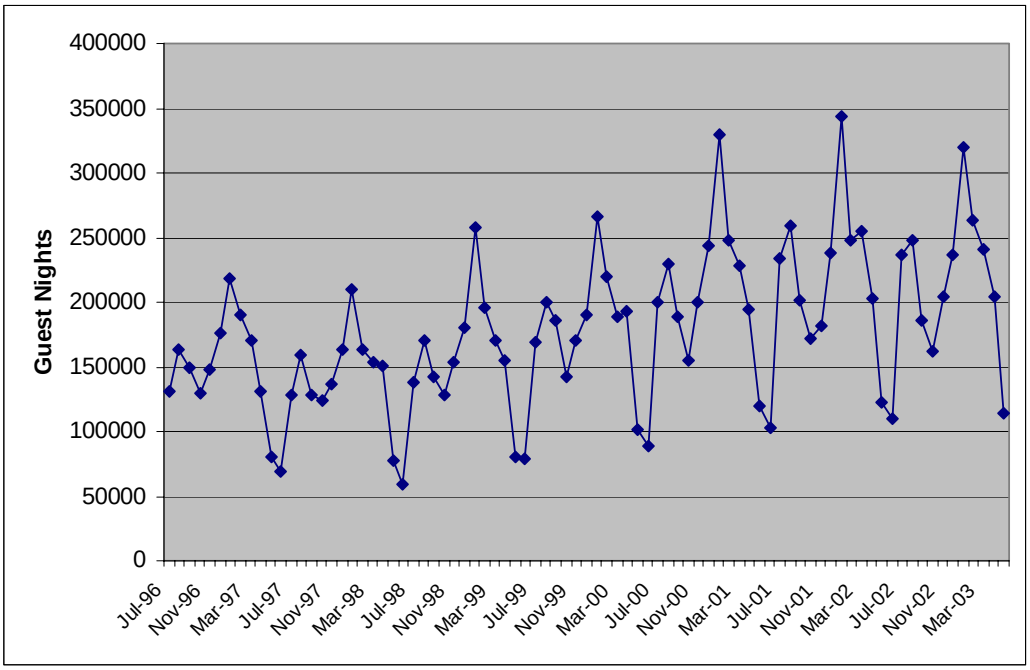


Figure 2: Guest nights for QLDC area – June 1996 to March 2003

The Tourism Research Council figures need to be broken down into the Queenstown, Wanaka and Central Otago areas. An estimate has previously been made for the council as to the breakdown of visitor numbers between Queenstown, Wanaka and other locations. The Tourism Research Council figures for total visitors to the QLDC and Central Otago Region in 2002 was 5,066,000 visitors. The figures developed for the council indicate total visitors for Queenstown and Wanaka of 3, 838,257, or 75% of the total.

Table 15: Total visitors in 2002 by area

Area	Total visitors
Queenstown	2,845,402
Wanaka	992,855
Total	3,838,257

These figures have been used as a basis to calculate the daily number of visitors in Queenstown and Wanaka on an average day. These have been adjusted upward slightly to reconcile the figures provided to the council with the accommodation monitor figure for the number of people staying in commercial accommodation in 2002.

To this daily figure has then been applied annual growth rates which are close to the projected rates from the Tourism Research Council. The following annual growth rates have been adopted:

Table 16: Assumed growth rates – total visitors

	2001-2006	2006-2011	2011-2016	2016-2021
Yearly growth rate	4.75%	4.50%	4.25%	4.00%

The projected annual growth rate after 2006 has been reduced in recognition of the fact that an annual growth rate of 4.75% is very unlikely to be maintained in the long term.

From this demand, an estimate has then been made of the amount of commercial accommodation that will be needed to accommodate this number of visitors. Different assumptions need to be made for Queenstown and Wanaka because in Wanaka the commercial accommodation sector is much smaller than in Queenstown.

In Queenstown, the commercial accommodation monitor suggests that around 70% of visitors stay in commercial accommodation. Of this 70%, about 75% stay in hotels, motels and increasingly in apartments. The proportion of people staying in these forms of accommodation is likely to increase in the future.

Table 17: Estimated additional visitor units – Queenstown area

Year	Total visitors staying in commercial accommodation	% Staying in hotels / motels / apartments	Total in motels / hotels / apartments	Total capacity needed	Average daily demand (beds)	"Visitor units" required	Additional visitor units
2001	1979441	75.0%	1484581	1781497	4881		
2006	2599345	77.0%	2001496	2401795	6580	2632	680
2011	3378053	80.0%	2702442	3242931	8885	3554	922
2016	4273511	82.0%	3504279	4205135	11521	4608	1054
2021	5199334	85.0%	4419434	5303320	14530	5812	1203

The total capacity provided by the commercial accommodation sector always runs ahead of the demand, and so an allowance of 20% spare capacity has been provided. Based on an estimated number of 2.5 visitors per visitor accommodation unit, the daily demand for visitor beds can be roughly translated into the number of visitor units (most likely to be apartments) that will be needed to cope with the projected demand. There could therefore be demand for around 4,000 visitor units between 2001 and 2021.

Adding in the capacity available in the camping grounds and official home stays (say 1,000 beds) daily bed capacity will need to grow from around 6,000 beds in 2001 to 16,000 beds by 2021.

Employment projections

Having established estimates of future visitor numbers, the next step in the process has been to estimate the amount of employment likely to be generated over the next 20 years. In 2002, there were 7,295 full time equivalent (fte) jobs in the Queenstown area. This means that for each visitor, there is currently 0.90 of an fte job. These jobs are spread across the economy, they are not just jobs related to the tourism sector. Obviously employment is related to a range of factors like growth of the permanent population, more service jobs and growth of the agricultural and business base of the area, but the bulk of the economy is driven by tourism and therefore, for Queenstown at least, it is valid to expect a relationship between the number of visitors and the numbers of people employed. Allowing for the ratio between ftes and visitors to increase over time (which assumes a widening of the employment base of the area), employment could grow to around 17,500 ftes by 2021 but up to 20,000 jobs would not be unrealistic.

Table 18: Estimated employment (full time equivalent jobs)

Employment	2001-2006	2006-2011	2011-2016	2016-2021
Ratio (fte /visitor)	0.89	0.90	0.91	0.93
Total ftes	9,095	11,429	14,191	17,580
Increase in ftes	1,800	2,334	2,762	3,389

In terms of the location of this employment, current estimates are that 50% of this employment is located in business areas (the CBD, Frankton and the various industrial areas) and the other 50% is in residential areas.

The first step in calculating future land needs for businesses is to work out the capacity for jobs available in the current business areas. Table 19 sets out the relevant data and assumptions.

Table 19: Current estimated employment capacity of business areas

Business area	Area (Ha)	Capacity (ftes/ha)	Total ftes	Current ftes (estimated)	Estimated spare capacity (ftes)
Queenstown CBD	9.3	275	2,556	2,000	556
Gorge Road	10.4	50	522	500	22
Frankton industrial	16.5	50	827	500	327
Airport	27.7	30	831	250	581
Frankton Flats commercial	20	100	2000	300	1700
Arrowtown industrial	3.5	30	105	100	5
Total	87.5		6,841	3,650	3,191

Based on these assumptions, it is possible to identify when the existing employment areas will "fill up" and new areas will be needed. Table 20 sets out the assumptions about the future split of employment between commercial and industrial areas.

Table 20: Future employment location

Employment area 2001 FTEs		Current split	Projected split	Estimated full time equivalent jobs			
				2001-2006	2006-2011	2011-2016	2016-2021
Commercial areas	2,300	31.5%	25%	450	583	690	847
Industrial areas	1,350	18.5%	25%	450	583	690	847
Other areas	3,645	49.9%	50%	900	1167	1381	1695
Total	7,295	100.0%	100%	1800	2334	2762	3389

For the employment to be located in commercial areas, the next step is to split this employment between the Queenstown CBD and Frankton.

Table 21: Location of future commercial employment

Commercial area	2001-2006	2006-2011	2011-2016	2016-2021
CBD (%)	70%	50%	40%	30%
Frankton (%)	30%	50%	60%	70%
CBD (ftes)	315	292	276	254
Frankton (ftes)	135	292	414	593

Taking into account the current capacity available in the CBD and at Frankton, the following estimates can made of the amount of additional land needed for commercial activities. It is assumed that there is about 20,000 square metres of floorspace that can be added to the CBD and 60,000 square metres at Frankton, within current zonings.

Table 22: Future land needs – commercial land (ha)

Period		2001-2006	2006-2011	2011-2016	2016-2021
Additional floorspace needed	CBD @ 35 sqm per fte	11,026	10,210	9,666	8,897
	Frankton @ 40 sqm per fte	5,401	11,669	16,570	23,726
Additional commercial land needed (Ha)	CBD	0.0	0.3	1.4	1.3
	Frankton	0.0	0.0	0.0	0.0

There is a choice as to whether the additional commercial land should be provided around the current CBD and at Frankton, as set out in Table 23, or whether instead all of it should be located at Frankton.

For industrial land, Table 23 sets out the relevant assumptions about future demands for industrial land. This is industrial land over and above what is already zoned.

Table 23: Future land needs - industrial

Period	2001-2006	2006-2011	2011-2016	2016-2021
Demand – additional ftes	450	583	690	847
Less current capacity (ftes)	744	186	0	0
Net demand (ftes)	-293	398	690	847
Industrial land needed (ha)@ 30 ftes per ha	0	13.3	23.0	28.2

Population projections

The population projections have been based on the employment projections on the basis that the key component of population growth is inward migration - expansion of the economy is drawing more people to live in the Queenstown area. In 2002, for every full time equivalent job in the Queenstown area, there were 1.65 permanent residents. Increasing this ratio over time (which assumes that the population remains mainly of people of working age), the permanent population of the Queenstown area reaches around the 30,000 people by 2021. While a relatively simplistic way of projecting population growth, it is a more robust method than simply projecting forward an assumed growth rate.

Table 24: Projected resident population

	2001-2006	2006-2011	2011-2016	2016-2021
Ratio (pop to employment)	1.65	1.66	1.68	1.70
Total resident population	14,963	18,996	23,830	29,826
Increase	2,993	4,033	4,834	5,997

Demand for households

Between 1991 and 2001, the ratio of unoccupied houses to occupied houses fell from 0.57 to 0.37. It is assumed that this ratio will continue to fall, so that by 2021 only 20% of the housing stock will be unoccupied. It is also assumed that the number of people per household will decline somewhat (inline with national trends) but then increase somewhat as housing costs rise. Table 25 sets out the way the number of households has been calculated.

Table 25: Estimated dwelling growth

	2001	2016	2011	2016	2021
Resident population	11,970	14,963	18,996	23,830	29,826
Average people per household	2.49	2.45	2.4	2.35	2.35
Occupied dwellings	4,815	6,107	7,915	10,140	12,692
Ratio occupied to unoccupied	0.37	0.37	0.35	0.3	0.25
Unoccupied dwellings	1,770	2,260	2,770	3,042	3,173
Total dwellings	6,585	8,367	10,685	13,183	15,865

Location of households

The location of future households has been based on an assessment of:

- The capacity of different areas to absorb more dwellings
- Current growth trends.

The council's housing capacity study has been used to determine the capacity of different areas in the Queenstown area to absorb growth. Based on the council figures, an allowance has then been made for visitor units. This is necessary as visitor accommodation units can take-up part of the total dwelling capacity provided for by the District Plan.

For this study, the Queenstown/Wakatipu area has been subdivided into a number of planning areas, mostly on the basis of infrastructure service areas. Table 26 sets out the data on the total dwelling capacity in these areas (based on the council study) and the allowance that has been made for visitor units.

Table 26: Capacity for growth

Planning Area	Additional capacity provided by District Plan	Expected visitor units	Net capacity - residential units
Sunshine / Fernhill	423	0	423
Wider CBD Area	2,500	1,200	1,300
Frankton Rd	1,173	700	473
Frankton Flats	2,478	700	1,778
Kelvin Heights	1,801	0	1,801
Arrowtown	252	0	252
Wakatipu	4,564	1,400	3,164
Total	13,191	4,000	9,191

Based on this data, as well as recent growth trends, the estimated housing growth has then been allocated to these different planning areas. Initially, areas grow on the basis of past growth rates, but as areas reach capacity, then growth is reallocated to other areas with capacity.

Table 27: Estimated housing growth – 2021

Planning area	2006	2011	2016	2021
Sunshine	1098	1243	1325	1325
Wider CBD area	1845	2031	2437	3091
Frankton Rd	1050	1291	1291	1291
Frankton Flats	1313	2129	2556	2556
Kelvin Heights	632	911	1472	2397
Arrowtown	1339	1359	1359	1359
Wakatipu	1021	1650	2672	3776

Wanaka projections

For Wanaka, a different approach has been taken to that of Queenstown. The drivers of growth in Wanaka appear to be different to those of Queenstown. In Wanaka, the following process has been adopted:

- Population projections as provided by Statistics New Zealand have been used as the starting point.
- From these estimates the number of dwellings has been estimated (occupied and unoccupied).
- Employment growth has been based on the growth of the population.

- Finally, growth in visitor numbers has been estimated based on the growth of the population on the basis that as more people live in the area, there will be a bigger service base, more activities and better transport links and these features will draw in more visitors to the area.

Population

The projected population for the Wanaka area is set out in Table 28. The figures used are very similar to those proposed by Statistics New Zealand. The same base population as that used by Statistics New Zealand is adopted (3,450 people rather than the census figure of 3, 327).

Table 28: Projected population growth for Wanaka Area

	2001	2006	2011	2016	2021
Resident population	3450	4839	6475	8264	9581
Visitors (average day)	2720	3774	4963	6142	6816
Jobs ftes	1710	2359	3085	3797	4191

As with Queenstown, an estimate has been made as to the number of dwellings needed to house this population.

Table 29: Estimated housing

	2001	2016	2011	2016	2021
Resident population	3450	4839	6475	8264	9581
People per occupied dwelling	2.39	2.35	2.40	2.40	2.35
Occupied dwellings	1446	2059	2698	3444	4077
Ratio occupied to unoccupied dwellings	0.77	0.7	0.65	0.6	0.55
Unoccupied dwellings	1119	1441	1754	2066	2242
Total dwellings	2565	3500	4452	5510	6319

Finally, this demand has been allocated to different areas within Wanaka, based on the council's housing capacity study. As with Queenstown, assumptions had to be made about how much of the capacity provided by the District Plan might be taken-up by visitor accommodation.

Table 30: Housing capacity – Wanaka

Planning area	Additional capacity provided for by District Plan	Less allowance for visitor units	Net dwelling capacity
Wanaka town centre	40	40	0
Wanaka high density	814	600	214
Albertown	188	50	138
North Wanaka	1160	110	1050
South Wanaka	731	50	681
Peninsular Bay	400	0	400
Wanaka rural residential	591	0	591
Wanaka rural lifestyle	88	0	88
Penrith Park	98	0	98
Total	4110	850	3260

Employment

Future employment has been calculated on the basis of the ratio of full time equivalent jobs to permanent residents. In 2001, for every 2.02 people there was one fte. It is expected that this ratio will slowly grow in the future as the population base of the settlement broadens out (more younger and older people).

Table 31: Employment growth

Employment	2001-2006	2006-2011	2011-2016	2016-2021
Ratio (population to ftes)	2.05	2.10	2.18	2.30
Total ftes	2359	3085	3797	4191

Table 32 sets out the assumptions related to the location of this employment.

Table 32: Future employment location

Area	Current Split	Future Split	2001-2006	2006-2011	2011-2016	2016-2021
Wanaka CBD	42.69%	37%	241	268	262	139
Wanaka Ind	27.49%	33%	215	239	233	124
Other	29.82%	30%	195	217	212	112

This split results in the following demand for additional land, assuming that the current commercial and business areas are largely developed and there is little room for additional growth:

Table 33: Land needs – commercial

Commercial land	2001-2006	2006-2011	2011-2016	2016-2021	Total
Floorarea (sqm) @ 40 sqm per fte	9626	10702	10471	5543	36342
Additional area (ha)	1.9	2.1	2.1	1.1	7

Table 34: Land needs - industrial

Industrial Land	2001-2006	2006-2011	2011-2016	2016-2021	Total 2001-2021
Land Needed (ha)	7.2	8.0	7.8	4.1	27

Visitor accommodation

For Wanaka, fewer people stay in visitor accommodation, and fewer of these people stay in hotels, motels and apartments, compared to Queenstown. Table 35 sets out the assumptions used to determine the number of people that are likely to want to stay in visitor accommodation units like hotels and apartments.

Table 35: Commercial accommodation demands

Year	Visitors staying in all forms of commercial accommodation	% Staying in hotels/ motels / apartments	Number of visitors	Total capacity	Daily capacity	Demand for "visitor units"
2001	475,898	45.00%	214,154	289,108	792	
2006	688,755	47.00%	323,715	420,829	1,153	144
2011	921,402	50.00%	460,701	598,912	1,641	195
2016	1,233,007	53.00%	653,493	849,541	2,328	275
2021	1,492,737	55.00%	821,005	1,067,307	2,924	239

APPENDIX THREE

Tools and Techniques for Slowing or Limiting Growth

A discussion paper prepared for Queenstown Lakes District Council

September 2003

Project Name:	Queenstown and Wanaka Growth Options
Document Reference:	\\Hyc_server\users\Adrienne\AYC documents\ACTIVE PROJECT FILES\QLDC1072 growth scenarios\Draft discussion document on growth limiting options.doc
Date of this version:	26 September 2003
Status of Report:	DRAFT
This Report was prepared by:	Matthew Grainger, Consultant, BRP (Hons), MNZPI

Hill Young Cooper Limited

PO Box 99847

Newmarket, Auckland

p: 09 529 2684

f: 09 520 4685

e: m.grainger@hyc.co.nz

Table of Contents

1 Introduction

1.1 Background

The Queenstown Lakes District is currently the fastest growing district in New Zealand. In particular, the areas around Queenstown, the Wakatipu Basin and Wanaka have experienced intense growth pressures. This growth has had a number of effects on the environment of the area; including the natural, social, cultural and economic environment. Some of these effects are positive and some are generally viewed as negative.

The policy approach of the current District Plan is generally neutral on the rate of growth, but attempts to manage the effects of growth.

The option of pursuing an active policy of slowing or limiting the rate of development or population growth of the District has been suggested by many members of the community through various consultation processes in recent years. This approach has been advocated for a number of reasons, for example:

- © to take the pressure off natural and physical resources, and to prevent further degradation of the landscape values of rural areas
- © to protect the Queenstown lifestyle, and the relatively relaxed pace of life
- © to reduce the need for further expansion of infrastructure

These sentiments primarily relate to Queenstown. The Wanaka 2020 Community Plan indicates that the Wanaka community is generally neutral on the amount of growth, but wants to manage the location and effects of growth.

1.2 Purpose of this Report

The purpose of this report is to identify and describe a range of potential methods for slowing or limiting growth and to assess their advantages and disadvantages, as well as the relevance and practicality of these methods within the Queenstown context, and within New Zealand's current legislative context. Case studies are provided of how such

methods have been applied in four North American mountain resort communities.

2 New Zealand Legislative Context

2.1 Local Government Act 2002

This is the fundamental legislation that provides for the functioning of local government in New Zealand.

The Act defines that the purpose of local government is to:

- *Enable democratic local decision-making and action by, and on behalf of, communities; and*

- *Promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.*

(section 10).

The Act provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach (section 3). The Act does not specifically define a "sustainable development approach", but provides principles (section 14) which state that:

> *in taking a sustainable development approach, a local authority should take into account—*
>
> *(i) the social, economic, and cultural well-being of people and communities; and*
>
> *(ii) the need to maintain and enhance the quality of the environment; and*
>
> *(iii) the reasonably foreseeable needs of future generations.*

Overall, the Local Government Act does not preclude a Council from adopting a growth limiting / growth slowing strategy. However, such a policy would need to be incorporated into the Council's Long Term Council Community Plan (s.93), which must be established following a rigorous process of analysis and public consultation, including the special consultative procedure.

The Local Government Act does not provide specific provisions which enable local authorities to easily slow or limit growth. Some methods may rely partly

on the Local Government Act for their implementation (e.g. development contributions, infrastructure connections), but generally any controls on development are imposed under the Resource Management Act 1991, and implemented at a local level through the District Plan.

2.2 Resource Management Act 1991

This is the primary legislation governing the use of land and natural resources.

2.2.1 Purpose

The purpose of the Resource Management Act is:

> "*to promote the sustainable management of natural and physical resources*" (section 5(1))

The Act goes on to define "sustainable management" to mean

> "*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 wellbeing and for their health and safety while -*
>
> *(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
>
> *(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
>
> *(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*"
>
> (section 5(2)).

2.2.2 Methods

The Act is not prescriptive on the methods to be used to achieve sustainable management, but leaves this discretion to Councils. Territorial local authorities can regulate land uses through a District Plan. This could potentially include methods to limit or slow growth.

2.2.3 Need for Justification

In developing District Plan provisions a local authority must evaluate:

> "*(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*

(b) whether, having regard to their efficiency and effectiveness, the policies, rules or other methods are the most appropriate for achieving the objectives."

The evaluation must take into account:

(a) the benefits and costs of policies, rules, or other methods; and

(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods."

(section 32).

A critical consideration is that any proposed regulation to be imposed by a local authority under the Resource Management Act can be appealed (referred) to the Environment Court, and then potentially to the High Court on points of law. This necessitates very strong justification for any proposed regulation. Due to the high value of land in the District, and the intense interest in the District by land developers, it is almost certain that any new regulatory proposal to slow or limit growth in the Queenstown Lakes District would be appealed to the Environment Court. For such provisions to be successfully defended, a high degree of analytical rigour and justification will be required.

3 Potential Methods for Controlling or Limiting Growth

This section outlines in tabular form a range of potential methods for controlling or limiting growth. Many of these methods would be pushing the boundaries of what is achievable under New Zealand's current legal framework; some would require legislative change to be implemented. For each method, the likely implications are outlined[1], and a comment is made about the practicalities of implementing the method in New Zealand's current legislative context.

Many of the methods focus on visitors or visitor accommodation. This is because the economy and migration-led population growth is largely driven by the tourism industry. Therefore, methods which dampen down the visitor industry are predicted to have a flow-on effect of slowing down growth in Queenstown generally.

[1] These are purposefully not categorised as "strengths" or "weaknesses" or "advantages" or "disadvantages", as this would involve a value judgement and largely depends on one's perspective on growth; what seems like a "pro" to one person may seem like a "con" to another.

Table 1: Potential Methods to Control or Limit Growth

Method	Description	Likely Implications	Practicality
Urban growth boundary *Case study:* *Steamboat Springs*	Limit or prohibit new urban development in rural areas (i.e. beyond a particular urban limit).	Restricts land supply so tends to result in increased property prices. This can have a negative impact on housing affordability. Can be used to encourage intensification of existing urban areas. Tends to result in less housing choice (e.g. less rural living opportunities). Protects the landscape values of rural areas. Reduces the need for expanded infrastructure networks, but may require upgrading of existing networks to cope with infill demand. Tends to redirect growth, rather than limit it. Can give Council more control over the timing of greenfield land release.	Can be achieved through regulation in District and Regional Plans. An established New Zealand example is Auckland's Metropolitan Urban Limits (MUL), although this had to withstand an appeal to the High Court to establish that it is a valid technique. This method should be coupled with other methods to enable intensification of existing urban areas. This concept was recommended through the Tomorrow's Queenstown planning process and received strong support from a number of community members involved in the process.
Limit	Limit the provision of	May prevent urbanisation of rural land, due	Would need to be signalled and tested

Method	Description	Likely Implications	Practicality
infrastructure provision *Case study:* *Steamboat Springs*	infrastructure (in particular wastewater and water pipes) to areas that are not already zoned for urban development. This is based on the premise that a lack of servicing is a reason to refuse subdivision consent for urban style development in rural areas.	to inability to provide essential services to new developments. Likely to result in political pressure from landowners to overturn this policy.	through LTCCP process. Requires differential rating so that unserviced areas pay lower rates. Difficult to sustain unless the infrastructure constraints are genuine constraints. Under New Zealand's "effects based" legislation this may not be successful, as developers may be able to use on-site servicing (such as package treatment plants, bores and rainwater supplies) to service their developments. Could result in greater adverse environmental effects due to large number of bores, septic tanks etc. Less efficient use of land due to larger lot sizes required for on-site treatment. High standards for on-site wastewater disposal would be required.
Prohibit the development of new visitor accommodation	Through District Plan rules. Could be for a set period	If this was successful, it would result in a restricted supply of visitor accommodation. This could act as a brake on growth in visitor numbers, or may simply result in	Unlikely to survive legal challenge. Difficult to target certain types of accommodation – matters of

Method	Description	Likely Implications	Practicality
	(e.g. 5 year moratorium). Could specify certain types of developments.	visitors staying out of town and becoming day visitors to Queenstown. Restricts the type of supply to what is currently available – does not allow for changes over time to match changing customer preferences. Could be left with an out-of-date accommodation stock (i.e. lack of modern facilities). Likely to result in increased prices for visitor accommodation, particularly at peak times, due to restricted supply and demand "bidding up" prices.	interpretation. People are likely to find ways around the rules. May need to provide for conversion / reconstruction of existing visitor accommodation facilities to adapt to changing customer preferences regarding type of accommodation.
Stricter controls on the establishment of new visitor accommodation *Case study:* *Whistler*	More restrictive district plan rules (e.g. discretionary rather than controlled activity; or limit the physical areas in which visitor accommodation can locate; or limit the scale of new developments in terms of number of	Slows the rate of development of new visitor accommodation. Increases the cost of establishing new visitor accommodation. Could result in a shortage of rooms. Likely to result in increased room prices, due to supply factors (cost of establishment) plus demand factors	Relatively achievable through Plan Change process with good justification.

Method	Description	Likely Implications	Practicality
	rooms). Could also require provision of worker housing as part of new visitor accommodation developments (on-site provision or through a cash contribution towards a fund to provide such housing).	(shortage of rooms). This could result in lower visitor numbers, or visitors having a shorter stay in Queenstown. Provision of worker housing would help to counter-act the above inflationary effects, to ensure that affordable housing was available for workers in service industries, who would otherwise risk being priced out of the housing market.	
Stricter controls on the establishment of all new developments.	More restrictive district plan rules. For example, this could include setting more development controls around design issues; or reducing the extent of the high density residential zone.	Likely to slow the process for establishing new developments. May result in housing shortfalls or housing price increases, as supply will not be able to be established in time to meet demand.	Relatively achievable through Plan Change process with good justification.
Purchase rural land, or purchase covenants over	Purchase of land or covenants over land to prevent development of	Prevents development of rural land. Could provide greenbelt in perpetuity, or be used to simply slow the rate of urban	Very expensive. Could be funded partly through financial contributions, but would be difficult to justify.

Method	Description	Likely Implications	Practicality
rural land *Case study:* *Boulder*	rural land. Could be through some form of public land trust.	expansion, by giving more control over the timing of greenfield land release.	
Tourist tax / bed tax	A tax on visitors – could be levied as either a bed tax (through accommodation providers), or as an airport landing tax, or as a local GST.	Unlikely to reduce the number of visitors coming to Queenstown unless the tax was very high. Could be an effective funding tool to more fully recoup the cost of providing for visitors (for example, worker housing). How widely is it applied? May result in people choosing to stay outside of Queenstown and visiting for the day.	Would require legislative change. Could be difficult to achieve. Equity issues – e.g. airport tax only levies those who arrive by plane.
Tourism marketing initiatives	Use the marketing message to change the image of Queenstown as a tourist destination. E.g. Market Queenstown as an elite destination, to try to shift the focus from low-end, high volume visitors	Could be successful over the long term in changing the image of Queenstown, and thus the type of visitors arriving. Smoothing out the arrivals is likely to simply fill in the troughs rather than reduce the peaks. Results in more visitors overall.	Likely to face resistance from existing tourism operators due to potential impact on revenue. Hard to achieve – nothing to prevent operators in the high volume parts of the industry from undertaking their own

Method	Description	Likely Implications	Practicality
	to high-value long stay visitors. Alternatively, reduce marketing altogether to try to attract less people to Queenstown. Or, try to smooth out the peaks and troughs to make more stable visitor arrivals throughout the year.		marketing campaigns. Could be more successful if national tourism marketing campaigns follow a consistent approach.
Transferable development rights *Case study:* *Boulder*	Create TDR regime so that development rights outside an "urban fence" can be traded for rights inside the urban area.	May encourage intensification. Does not reduce total growth numbers, but merely redistributes location of new development.	Difficult to administer. Requires careful tracking system to record where development rights have been traded from and to.
Differential / targeted rates	Set differential or targeted rates through the LTCCP and annual plan process to place higher	Could be used to more fully recover the costs to the community imposed by certain types of activities.	Provided for in Local Government Act. Relatively easy to achieve. Rates can be a politically volatile issue, as demonstrated in Auckland recently with the ARC regional

Method	Description	Likely Implications	Practicality
	share of the costs on some sectors.		rates.
Development Cap *Case Studies:* *Whistler, Banff*	Set an absolute limit on development or population size through the District Plan or a specific act of parliament.	Growth limited to a certain number (population size, number of dwellings or number of beds). Restricts supply and therefore likely to lead to increased housing costs. Could result in a changing population over time, with more high income earners and a less diverse population.	Would require strong justification of both the need for a cap, as well as the level at which the cap is set. Infrastructure capacity or environmental carrying capacity may be the most robust bases. Would be difficult to establish through the district plan process.
Rationing of development approvals *Case study:* *Boulder*	Develop a system which sets some form of limit on the number of development approvals issued in any year. The limit could be annually adjusted. Could be applied to	Restrained supply in the face of high demand is likely to create shortages and price increases. Such systems tend to encourage developers to build large, expensive houses in order to generate higher profits[2]. This could be countered by providing exemptions for low income housing, although this may be	Systems of this nature have been used in many overseas cities and towns, such as Boulder, Colorado, and Petaluma, California. In New Zealand, this would need to be implemented under the RMA through a change to the district plan, as the Building Act is solely for addressing health and

[2] Source: Nelson and Duncan (1995). Growth Management Principles and Practices, American Planning Association.

Method	Description	Likely Implications	Practicality
	certain types of development. Permits could be allocated by competition, based on the quality of design, provision of public amenities etc to encourage quality developments (e.g. Petaluma, California).	difficult to define and enforce.	safety aspects of building work. A plan change of this nature would have major implications on landowners' ability to use and develop their land, so would be expected to face strong legal challenges.

4 Overseas Case Studies

There are few (if any) New Zealand examples of growth limiting mechanisms being applied by local authorities. Various growth management mechanisms are in place around New Zealand, such as Auckland's Metropolitan Urban Limits, but no known examples of local authorities seeking to actively limit the total amount of growth.

The following case studies examine the implementation of growth limiting policies in overseas towns and cities, focusing on mountain resort towns.

4.1 Whistler, British Columbia, Canada

Whistler has a number of similarities with Queenstown. Whistler is a thriving destination alpine resort community and by 2002 was reaching its capacity as dictated by its 1989 growth policy. Whistler has just under 10,000 permanent residents and 14,200 people working full or part-time, with 2 million visitors each year. Development is occurring faster than anticipated.

4.1.1 Development Cap

In order to maintain the natural environment in the Whistler area, the 1993 Official Community Plan of the Resort Municipality of Whistler capped future development. This cap, which appears to be mainly regulated by zoning constraints, density controls, and limits on bed units, combined with strong levels of development oriented to the high-end recreational market, resulted in soaring land and housing prices. For example, the average selling price of a home rose from $468,000 in 1996 to $818,000 in 1999.[3]

The Official Community Plan[4] and the Zoning Bylaw impose relatively strict controls on development in Whistler, mostly through relatively conventional controls relating to aspects such as density, building height, design and location of buildings and such like. The Official Community Plan states that proposed amendments to the OCP or Zoning Bylaw, especially those which would significantly increase the accommodation capacity within the existing

[3] http://www.cmhc-schl.gc.ca/en/imquaf/afho/afadv/pore/usdele/case2.cfm#

[4] http://www.whistler.ca/var/readingRoomFiles/ocp4-2002.pdf

Municipal boundaries, will only be approved under very special circumstances, and must comply with the criteria specified in the Plan, which are relatively specific, and relate to a range of concerns such as landscape and environmental sensitivity, infrastructure capacity, employee housing, community support for the proposal, design and appearance and others. These criteria were prepared to ensure that the goals and objectives of the Official Community Plan and the Comprehensive Development Plan are satisfied.

4.1.2 Community Planning Process

In June 2002, The Resort Municipality of Whistler launched *Whistler. It's our Future*, a planning process that grew out of discussions to develop a comprehensive sustainability plan for the community[5]. This process is intended to build on the Comprehensive Development Plan and Official Community Plan (similar to Queenstown's District Plan), and create an enduring vision for the future of Whistler, and to address a wide range of community issues, such as affordability, employee housing, growth, transportation, education and environmental concerns. In many respect this process is similar to the Tomorrow's Queenstown community planning process, but with greater resourcing and longer timeframes.

4.1.3 Worker Housing

Whistler also has an Employee Housing Service Charge by-law, enacted in 1990, which requires all developers of commercial, industrial and tourist accommodation in Whistler to contribute to the affordable housing stock. This was designed to overcome housing affordability problems, particularly for service workers. Developers can fulfill their obligations either through the construction of affordable housing for employees or through the contribution of cash-in-lieu of development to an employee restricted housing fund. Since its inception, the by-law and the housing fund have resulted in the development of approximately 1,000 affordable housing units. The Municipal Council has allowed the development of bed units to exceed the cap of 52,500 outlined in the 1993 Official Community Plan as long as the development is for employee-restricted housing.

The Whistler Housing Authority (WHA) oversees the development of employee restricted housing in Whistler using the Employee Housing Fund. The WHA, a wholly owned subsidiary of the Resort Municipality of Whistler, is legally responsible for employee-restricted housing developments. The WHA started as the Whistler Valley Housing Society, a charitable, volunteer, non-profit society.

---

[5] http://www.whistlerfuture.com

The Society was formed by local businesses and government, and was given a start up fund of $6 million from development levies collected by the Municipality.

Eligibility for the employee-assisted housing is determined using a point system. Those who have lived and worked in Whistler the longest are given priority. The other criteria applied are: being of a legal working age, having Canadian citizenship or landed immigrant status, and having worked at least 20 hours per week for the past twelve months in a business located within Whistler municipal boundaries.

Purchasers of employee-assisted housing cannot expect significant gains in the re-sale of their housing. A covenant is placed on the sale of the dwelling ensuring that the housing always remains employee restricted housing. Purchasers of WHA housing must resell to the municipality or a Whistler resident.[6]

4.2 Steamboat Springs, Colorado, USA

Steamboat Springs is a mountain resort town of a similar size to Queenstown (population of around 10,000, with approximately 20,000 in the wider Routt County area. Tourism is currently the mainstay of the Steamboat Springs economy, with an estimated 70% of the local economy attributed directly or indirectly to the tourism industry. Routt County's population grew by nearly 40% from 1990 to 2000[7].

4.2.1 Urban Boundaries

The City of Steamboat Springs and Routt County jointly adopted the Steamboat Springs Area Community Plan in 1995, which is currently undergoing the process of a five-year update. The Community Plan represents the long-term vision for the community addressing physical development, growth and conservation of resources within and outside the City.[8]

The 1995 Plan sets the delineation of a compact and defined urban area as one of its primary goals. As such, the plan puts a significant emphasis on infill

---

[6] http://www.cmhc-schl.gc.ca/en/imquaf/afho/afadv/pore/usdele/case2.cfm#

[7] http://www.steamboatchamber.com/comm/2003ataglance.pdf

[8] http://www.yampavalley.info/comm_plan0002.asp

within the existing urban area. It also defines urban boundaries, or areas where water, sewer, and other urban infrastructure could be made available. While the urban boundaries are not intended to be permanent, they are intended to reflect a specific area which should be largely built-out before the boundaries are adjusted. Outside of this area rural development patterns will be promoted and urban development discouraged. The boundaries reflect extensive community input. The boundaries were based on three primary criteria, including:

- © The desire to maintain the character of each planning area as development occurs,
- © The use of major natural or geographic features (e.g. ridges, rivers or streams) to define boundaries that could be maintained over time, and
- © The ability to provide urban services (e.g. water, wastewater, police protection, schools) cost effectively.[9]

4.3 Town of Banff, Alberta Province, Canada

Banff is a Canadian mountain resort town of 6,000 people, but has a key point of difference from Queenstown, in that it is located within a National Park. This means that Parks Canada, the federal government's parks authority, can set very strict limits on growth and development and is not answerable to private landowners.

4.3.1 Population Cap

The Banff National Park Management Plan 1997 set a number of policies relating to development of the Town of Banff[10]. These include:

1. The preparation of a community plan (Municipal Development Plan) for the Town of Banff.

2. The plan will provide for a balanced community with a residential capacity, including residences on commercial lands, of fewer than 10,000 permanent

[9] http://www.yampavalley.info/downloads/cplanduse.pdf

[10] http://parkscanada.pch.gc.ca/pn-np/ab/banff/plan/plan1f_e.asp

residents. The over-riding intent is that the town will never qualify for city status.

3. The boundary of the Town of Banff, as defined in the National Parks Act, will not be expanded.

4. Parks Canada and the Town of Banff are committed to the principle of Need-to-Reside (this limits home ownership in Banff is limited to those who either own businesses or are employed within Banff National Park).

The strict population cap and need-to-reside guideline is able to be achieved within this context of centralised control of land in Banff through its national park status. It is extremely doubtful that such policies would be successful in Queenstown, as most of the land in Queenstown is privately owned.

4.4 Boulder, Colorado, USA

Boulder City is located in Colorado, USA and with a population of just over 100,000 people it is significantly larger than Queenstown.

Since the 1970's, Boulder City has implemented controls on growth rates to protect its "small town" environment. A comprehensive paper on growth management in Boulder is published on the website of the Office of the City Attorney, City of Boulder[11].

4.4.1 Transferable Development Rights

In 1995 Boulder adopted a voluntary, incentive-based programme of Transferable Development Rights (TDR's). The programme provides bonus density beyond that for which the property would be otherwise eligible, as an incentive to persuade landowners of properties in the targeted "sending areas" to participate. The "sending areas" tend to be areas of conservation value or productive agricultural land, and conservation easements are applied to sending sites. Where the landowner has immediate cash requirements, the County occasionally purchases a conservation easement on some or all of the sending site and, sometimes, the County then makes available to the market some TDR units attributable to that site.

[11] http://www.ci.boulder.co.us/cao/x-bgmcs1.html

Site-specific sending areas adopted legislatively and designated by map and receiving areas are approved, based on individual applications, according to TDR standards. There is no “banking” of units by the County or other entity.

4.4.2 Open Space Acquisition

Open space acquisition as a significant growth management tool. By 1999, the City had acquired 24,000 ha of open space, funded via a local sales tax. Open space has been used to preserve recreational opportunities, contain urban expansion, prevent annexation by other authorities for urban growth, and to prevent new transport corridors being built.

4.4.3 Rationing Development Approvals

Since the late 1970’s the City has implemented “Residential Rate Control” which rations the supply of building permits to cap the growth rate at no more then 2% per year. The combination of these policies, and others that limit housing density, have succeeded in keeping population at around 100,000 and preserving aspects of the “small town” town environment and surrounding mountain setting. Over the past 5 years the average annual population growth rate has been under 0.5%.

Whilst many of its current residents are happy with the strategy, effects have included inflated house prices and problems with housing affordability for those in basic service industries; unbalanced growth with congestion due to workers commuting into the City; and growth being pushed out into surrounding communities.

5 Conclusions

The option of pursuing an active policy of slowing or limiting the rate of development or population growth of the District has been suggested by many members of the community through various consultation processes in recent years.

This discussion paper outlines a number of possible methods of slowing or limiting growth, and examines the possible implications and practicality of each.

The Local Government Act is permissive, and does not rule out methods of this nature. Any policy approach to slow or limit growth would need to be made in consultation with the local community, and would need to be explained in the Long Term Council Community Plan. A strong mandate from the local community would be essential to implementing any methods to slow or limit growth – without strong support from the local community, such interventions would be ill fated.

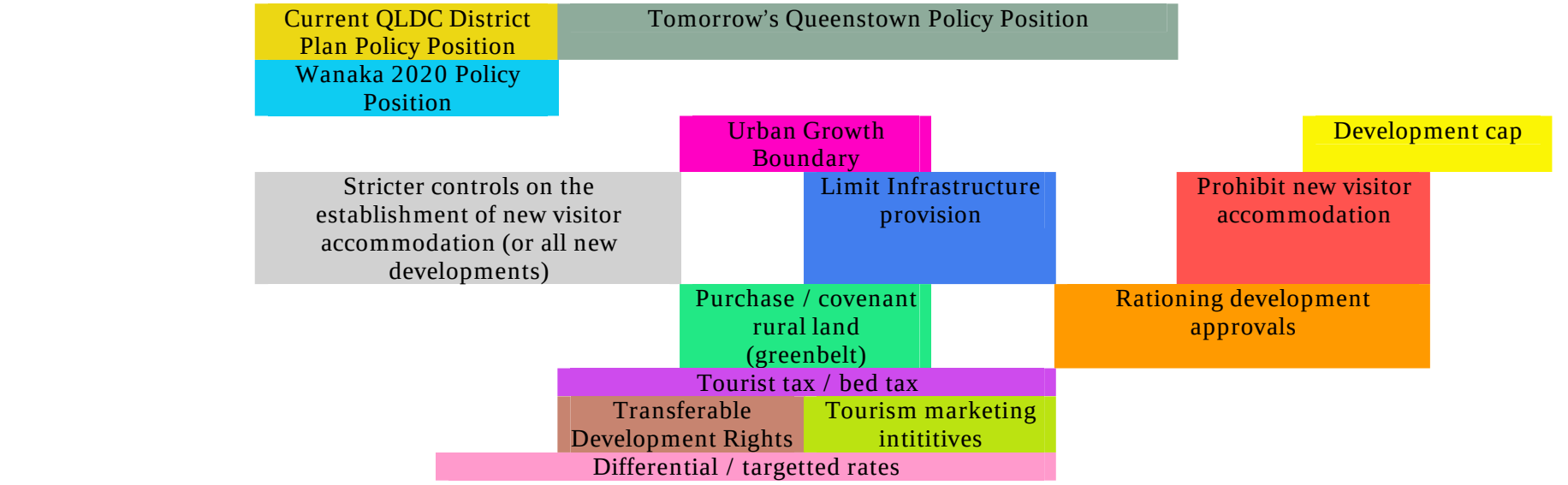
The Local Government Act does not provide specific provisions which enable local authorities to easily slow or limit growth. Some methods may rely partly on the Local Government Act for their implementation (e.g. development contributions, infrastructure connections), but generally any controls on development are imposed under the Resource Management Act 1991 (RMA), and implemented at a local level through the District Plan.

The purpose of the RMA is to promote sustainable management of natural and physical resources. It could potentially be argued (with adequate justification) in certain circumstances that slowing or limiting growth is necessary to achieve this purpose. The Act is not prescriptive on the methods to be used to achieve sustainable management, but leaves this discretion to Councils. Territorial local authorities can regulate land uses through a District Plan. This could potentially include methods to limit or slow growth, but would be subject to a public process which include the right of appeal to the Environment Court, and then potentially to the High Court on points of law. This necessitates very strong justification for any proposed regulation. Due to the high value of land in the District, and the intense interest in the District by land developers, it is almost certain that any new regulatory proposal to slow or limit growth in Queenstown would be appealed to the Environment Court (and possibly further). A high degree of analytical rigour and justification will therefore be required.

A range of possible methods are outlined in this report. Some are more related to managing growth, while others aim to actually slow or limit growth. The diagram overleaf places the methods outlined in this report along a philosophical continuum.

A Continuum of Philosophical Positions with respect to Growth and Development

Laissez faire, minimal or no controls	Manage effects of development, accommodate growth	Actively manage growth (e.g. control type, location and timing of development), but neutral on amount of growth	Slow the growth	Limit or cap growth



The coloured bars indicate where the various methods sit on the philosophical continuum, and relative to the current QLDC District plan position. The long bars indicate that some methods have a range of possible positions, depending on how they are used, or how strictly they are applied.

The methods closest to the left of the continuum (closest to QLDC's current policy position) would generally be the easiest to achieve, as they represent a comparatively minor shift from current policies. A major shift to the right of the continuum (towards slowing and limiting growth) would generally be much harder to achieve, and would require much more justification. Such a move would also be more politically volatile.

Ultimately, if QLDC decided, after consultation with the local community, that it wished to pursue a policy approach of more actively managing, slowing or limiting growth, it would require a toolbox of methods to achieve this. No single method on its own will be the "silver bullet". It will require a concerted effort to shift and re-align the policies and actions of Council and other allied organisations across a range of areas if such an approach is to be successful. For example, it would be foolish for Council to try to limit visitor beds if Destination Queenstown was agressively marketing Queenstown to the mass tourism market. Similarly, a limit on infrastructure provision is unlikely to be successful without a strong urban growth boundary in place.

Bibliography for Wanaka and Queenstown Growth Options

Subject	Document and contents	Author	Year
Statistics	Wanaka and Queenstown Lakes District – Vital Statistics 2001 – text and diagrams (no tables)	Civic Corp (CC)	2002
Capacity	Dwelling infill capacity under district plan – for TQ – tables	CC	2002
Population	Population and dwelling projections to 2021 – for TQ – tables	CC	2002
QT Entrances	Eastern entrance to Queenstown – prepared for TQ - presentation	CC	2002
QT entrances	Queenstown entrances study – background information for TQ	CC	2002
Growth directions for QT	Growth directions and strategy – for TQ – presentation	CC	2002
Rural living	Toolbox for future rural living development	CC	2002
QT airport	Queenstown airport – for TQ – presentation	CC	2002
Rural living	Development of rural living opportunities – for TQ	CC	2002
Growth management	Urban growth management for TQ	CC	2002
Statistics	Property Report 2001-2002	Robertson Valuations	2002
Market demand	Market demand for housing and development costs– for TQ – presentation, tables and calculations	Barry Robertson	2002
Visitor accommodation	Accommodation monitor - 1996-April 03 – Stats NZ – tables – for all NZ and QLDC	Statistics New Zealand	2003
Open Space	Notes on Parks and Open space – for Wakatipu Basin - tables and text	Ken Gousmett	2002
Infrastructure	Infrastructure Review – water, wastewater, stormwater, refuse, roading – for TQ – presentation	Chris Gregory	2002
Statistics	Snapshot of Queenstown – presentation to TQ	CC	2002
District plan	Potential deficiencies of the proposed district plan – paper for TQ	CC	2002
District plan	Proposed district plan – presentation for TQ	CC	2002
QT Airport	Queenstown airport passenger projections – report	McDermott Fairgray	1997

Subject	Document and contents	Author	Year
QT airport	Queenstown airport activity projections – report	P&D Aviation	1997
QT airport	Future Development of Queenstown Airport – report	P&D Aviation	1997
Maps	Specification of maps requested for TQ – tables	HYC	2002
Bibliography	Bibliography of reports for TQ - table	CC	2002
Plan	Tomorrow's Queenstown – the plan	HYC	2002
Planning Game	Instructions and templates for the planning game – for TQ	HYC	2002
Maps	Large scale maps of the TQ outputs	SKM	2002
Statistics	Population projections by area unit – 2006 – 2021	Statistics NZ	2002
Statistics	Dwelling capacity study	CC	2003
Transport	Integrated transportation Study – tenderers brief	QLDC	2003
Maps - Wanaka	Maps specifications for Wanaka 2020	CC	2002
Council report	Wanaka 2020 and TQ – report to Council	Helen Tait	2002
The Plan	Wanaka 2020 – report of the Workshop	Helen Tait	2002
Statistics	District Dwelling Capacity Report	CC	2003
Reference	Tourism statistics sites	QLDC	2003
CD	Tomorrow's Queenstown – draft plan and maps, last night presentation	HYC	2002
CD	TQ – feedback, presentations, photos 7th to 11th June 2002	McDougall Consulting	2002
CD	Queenstown photo library	Destination QT	2002