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# **Executive Summary**

The purpose of this Strategic Case is to explore the evidence to support further investment in transport within Wanaka and the immediate surrounds.

Wanaka is undergoing rapid change. More people are living and working in Wanaka than ever before, and it is increasingly popular with domestic and international visitors. A period of unprecedented growth across the district has led to pressures on existing infrastructure, such as parking and public toilets. Increasing growth has also led to undesirable outcomes that detract from the experience of visiting Wanaka, such as traffic congestion and delays especially when there are events on, such as Warbirds Over Wanaka. Traffic and parking demands on those days create accessibility issues for residents travelling to essential services such as the supermarket. Congestion and delays are compounded because there is a reliance on private vehicles for key journeys, limited route choice and growth in outlying settlements including Luggate, Cardrona, Hawea, Albert Town and Glendhu Bay, for which Wanaka acts as a service centre, providing supermarket, schools and medical services.

Wanaka's goods and services are primarily located in the town centre around Ardmore and Brownston Streets. These roads are used as through routes, but also form the heart of the public realm, in conjunction with the waterfront. The through route and place functions often conflict, leading to safety issues. The through route function also erodes the amenity of the centre, which is currently vehicle-dominated.

Two problems and five opportunities were identified at a faciliated Investment Logic Mapping workshop held with stakeholders in July 2018:

Problems	Opportunities	Benefits
Rapid population growth and the current approach to influencing new development is making it difficult to plan for the future, leading to disjointed infrastructure and creating barriers to accessing key destinations for residents and visitors (60%)	Preparing for future growth Connecting Great Rides Improved visitor and community satisfaction	Improve access Improve long term
Growth in travel demand and limited options for accessing key activities by different modes results in over reliance on certain routes, eroding level of service on those routes, and creating severance and conflict (40%)	Protect character of Wanaka Increase active transport participation	planning certainty Improve travel choice

The evidence showed that the most significant issue in Wanaka is accessibility. The main destinations are not well connected to residential areas, and this is true for all modes. There are limited route choices which is leading to eroding levels of service on those routes and increased severance. There are conflicts in the town centre reflected by a high personal risk. Two new centres are emerging at Three Parks and Northlake, of a different format and character to the Wanaka town centre. The location and land use within these centres has been primarily developer-led, and transport and land use planning are not comprehensively integrated across the wider network. These new centres will be destinations for all residents. They require enhanced connectivity with Wanaka's residential areas to improve access.

Going forward, the aim is to create an accessible and well connected town centre and wider urban area, with a choice of modes, where growth can be accommodated and does not erode levels of service on key routes or discourage active travel. The evidence supports immediate progression to develop a town centre masterplan and Programme Business Case for the wider urban area, particularly given the need to integrate with the Council's Future Development Strategy which must be delivered by the end of 2018.

This approach aligns with the GPS focus on creating accessible centres, by providing increased access to economic and social opportunities throughout Wanaka. The project is included in the Regional Land Transport Plan and the Council's Long Term Plan 2018-28.

An initial assessment against the Investment Assessment Framework for both the walking and cycling activity class and the regional, local road and state highway improvement activity class gives a **High** results alignment. This is because it will support increasing the uptake of children using active modes to get to and from school, it addresses a significant gap in access to new housing in a high growth urban area, it addresses a significant problem with the ability to use the existing facilities for walking and cycling, it will enable significant mode shift and addresses a high perceived safety risk for active modes as well as encompassing an area with four routes which have been assessed as having high personal risk.

# **Queenstown Lakes District Council**

# Wanaka Transport - Strategic Case

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# **APPENDICES**

Appendix A Background Report - Wanaka Transport Strategic Case Review Version 2 (updated 2018)

# Part A: Strategic Case

# 1. Introduction

# 1.1 Purpose

The purpose of this Strategic Case is to explore the evidence to support further investment in transport within Wanaka and the immediate surrounds. It explains the problems and opportunities determined by Queenstown Lakes District Council (QLDC) and its key stakeholders, examines available evidence, and makes recommendations.

## 1.2 Background

Wanaka is a town on New Zealand's South Island within the Queenstown Lakes District. It is located at the southern end of Lake Wanaka with views of snow-capped mountains. It is the gateway to the Southern Alps' Mount Aspiring National Park; a wilderness of glaciers, beech forests and alpine lakes.

The town is undergoing rapid change. More people are living and working in Wanaka than ever before, and it is increasingly popular with domestic and international visitors. A period of unprecedented growth across the district has led to pressures on existing infrastructure, such as parking. Increasing growth has also led to undesirable outcomes that detract from the experience of visiting Wanaka, such as traffic congestion and delays, especially during events such as Warbirds Over Wanaka. This is caused by reliance on private vehicles for key journeys, limited route choices, and excerbated by growth in outlying settlements including Luggate, Cardrona, Hawea, Albert Town and Glendhu Bay, for which Wanaka provides essential goods and services. Growth in these centres has been moderate but residents/visitors rely on Wanaka as a service centre.

Wanaka's goods and services are primarily located in the town centre around Ardmore and Brownston Streets. These roads are used as through routes, but also form the heart of the public realm, in conjunction with the waterfront. The through route and place functions often conflict, leading to safety issues on these routes. The through route function also erodes the amenity of the centre, which is currently vehicle-dominated.

Two new centres are also emerging, of a different format and character to the Wanaka town centre. The location and land use within these centres has been primarily developer-led, and transport and land use planing are not comprehensively integrated. These two new centres, located within the Three Parks and Northlake developments will be significant destinations for residents and will require enhanced connectivity with surrounding residential areas to provide access for all modes.

Wanaka airport is likely to become a more significant destination/origin for trips, with a masterplan currently under development, based on the assumption of future growth in services and passengers.

Between 2007 to 2009 a number of strategic transport and land use planning documents were developed. These included:

- Wanaka Structure Plan (2007) identifies a preferred growth option which included rezoning some land for residential and commercial development, as well as consolidation of existing rural residential zones through rezoning to allow for more intensive development. The Plan identifies new road network to service development areas. The Council carried out Wanaka 2020 visioning workshops in 2002, and this was the start of the process of developing a new Structure Plan for the town.
- Wakatipu Walking and Cycling Strategy (2008) and Wanaka Implementation Plan (2008) sets
  overarching objectives for walking and cycling in the District, and identifies existing and proposed off
  road trails and on road facilities in the form of cycle lanes or sealed shoulders. This document was
  developed to support the Structure Plan.
- Wanaka Transport and Parking Strategy (2008) focusses on improving the urban environment around Ardmore Street and the lake front, planning the future network and parking provision. This docment was also developed to support the Structure Plan.

Because of the rapid growth that has happened in Wanaka these documents have become out of date. The Council has been reviewing the District Plan, but no updates have been made to the transport documents. In response advocacy groups within the community have recently developed some planning documents themselves including:

- Chamber of Commerce Aspiration Plan (2016) includes a site analysis, assesses the redevelopment potential and provides a masterplan to coordinate future investment and development.
- Shaping Our Future Upper Clutha Transport Taskforce Report (2017) includes a vision for a functional, innovative, integrated, multi-modal and sustainable transport system, and an action plan which includes:
  - identifying and protecting land for key future routes and hubs for public transport and parking;
  - o a shared zone and progressive pedestrianisation of the Wanaka Lakefront and CBD
  - o a parking strategy and connected walking and cycling network.
- Wanaka Active Transport Collective (2018) produced a Masterplan for a \$6m cycle-walk network
  which included on and off road cycleways and three underpasses (at the Aubrey/Anderson Road
  intersection, the SH6/SH84 intersection and outside Three Parks on SH84). The plan has a focus on safe
  routes for children to get to school, the recreation centre and swimming pool.

Given these drivers, this Strategic Case will allow the Council to make an informed decision about future infrastructure investment in Wanaka.

#### 1.2.1 Previous Studies

The following studies have informed this Strategic Case:

- Wanaka Network Operating Framework (2018): Phase 1 of this work has been completed, identifying
  objectives and principles for each mode of transport, and identifying primary and secondary routes for
  each mode on a map.
- Ballantyne Road Strategic Case (2018): This report investigated the case for investment in Ballantyne
  Road following a series of loss of control crashes, including a fatality. It found there was a case for
  investment to address the safety risk over the 2.5km stretch where the loss of control crashes occurred.
  The report recommended that development of a preferred option consider the context and potential
  role of the road in the future network for Wanaka.
- Background Report Wanaka Transport Strategic Case Review version 2 (updated 2018): This document is part of the ongoing monitoring that the Council has completed. It presents the evidence relating to transport and parking issues in Wanaka, as well as evidence for growth. See Appendix A.

The Transport Agency have confirmed the following projects within the study area, but there is no certainty around timing or scope:

- Roundabout upgrade at intersection of SH6 and SH84, option to downgrade Ballantyne Road
- Improvements to Albert Town Bridge triggered by traffic volumes and delays and the need to cater for pedestrians

In addition there is developer activity on the network. For example planning is underway for a new roundabout on SH84 to provide access to the internal road network of Three Parks.

### 1.2.2 Business Case process to date

In 2015 the Council worked with stakeholders to develop a draft Strategic Case for transport in Wanaka. The strategic case identified three problems and three benefits as shown in Table 1Error! Reference source not found.

Table 1: Draft Strategic Case Problems and Benefits (2015)

Problems	Benefits
Increasing transport demands from residents and visitors are leading to parts of the network increasingly not being fit for purpose	Improved user experience of transport
Conflicting expectations of residents and visitors of the transport network will increasingly lead to negative experiences for users	network Increased safety
Key tourist routes are vulnerable to road closures which impacts on visitor number in Wanaka	<ul> <li>Improved reliability of key tourist routes</li> </ul>

A draft Programme Business Case was completed in 2016. This business case evaluated five programmes for walking and cycling, and four for parking, against the agreed benefits of investment. A preferred programme was developed which encompassed road network upgrades and planning, walking and cycling improvements, and parking changes.

In April 2016 the Transport Agency formally confirmed it did not support the Wanaka Transport Strategic Case. The evidence presented was insufficient to support a medium or high strategic fit (as defined by the Investment Assessment Framework at the time). The Transport Agency confirmed the assessment profile was Strategic Fit – Low, but noted the need for a watching brief. The project was subsequently put on hold.

In March 2017 the Council reviewed the evidence supporting the Wanaka Transport Strategic Case, in collaboration with the Transport Agency. At this time it was agreed that the parties would continue to keep a watching brief. The evidence was reviewed again in 2018, and further discussions held with the Transport Agency. A Point of Entry document was prepared proposing that an updated Strategic Case be lodged to reflect key changes, to proceed to a Programme Business Case. In July 2018 the Point of Entry document was approved by the Transport Agency, supporting the revision of the Strategic Case.

To provide certainty for residents and businesses, the Council are proposing to complete the Programme Business Case as part of an integrated land use and transport planning process for Wanaka. This will include developing a Town Centre Masterplan focussing on transport and public realm improvements. The Programme Business Case will focus on transport needs within the wider Wanaka area, as well as changes to support the Masterplan.

## 1.3 Study Area

The study area (Figure 1-1) for the Strategic Case includes the town centre and surrounding urban area and extends to the airport in the east. It encompasses the key arterial routes serving Wanaka and providing access to and from major tourist areas such as Mount Aspiring National Park and ski-fields, the West Coast, and Queenstown/Cromwell. These routes also provide for local trips by residents of the surrounding smaller centres of Albert Town, Luggate, Hawea, Cardrona and Glendhu Bay, which rely on Wanaka for goods and services.

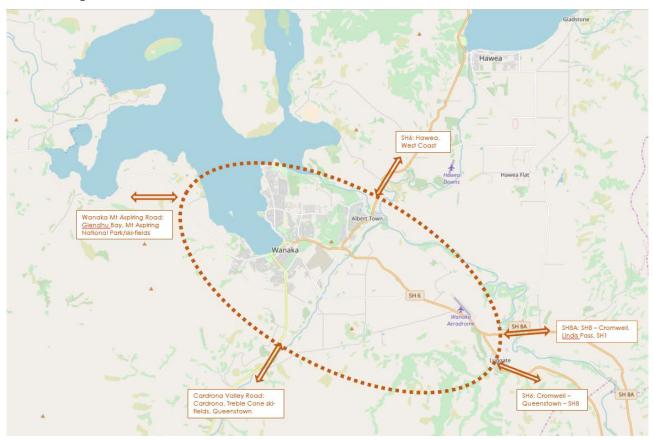


Figure 1-1 Study Area

# 2. Key Stakeholders

Table 2 shows the key stakeholders for the Strategic Case, and their area of interest. Representatives from these organisations attended an Investment Logic Mapping workshop on 2 July 2018. The purpose of the workshop was to discuss and agree on the problems and benefits of potential investment.

Table 2: Key Stakeholders

Key Stakeholders	Area of interest
Queenstown Lakes District Council: - Elected representatives - Staff	Lead organisation responsible for developing this Strategic Case. Responsible for strategic transport planning, managing/operating the local transport network, land use planning, recreation and placemaking.
NZ Transport Agency - Investment and Finance - System Design and Delivery	Responsible for managing/operating the state highway network. Regulates access to, and use of, the land transport system. Invests in the land transport system.
Otago Regional Council	Responsible for environment management, land management, public transport planning and funding, and Regional Land Transport Plan.
Wanaka Community Board	Elected representatives of the local community in Wanaka.
Lake Wanaka Tourism	Regional Tourism Organisation with membership of over 430 organisations. Local tourism advocacy and promotion of Wanaka.
Active Travel Wanaka	Active travel advocates in Wanaka.

There are other organisations that will have an interest in this project. These parties will be invited to be actively involved at the next stage. These include:

- Ignite Wanaka Chamber of Commerce
- Queenstown Airport Corporation operates Wanaka airport
- Department of Conservation
- Heritage NZ
- Local Residents' Associations
- Ngai Tahu
- NZ Police and Emergency Services
- Upper Clutha Trails Trust
- Upper Clutha Transport Taskforce
- Link Upper Clutha
- Grey Power
- Automobile Association

## Context

## 3.1 Transport

Wanaka is the primary service centre for the area and supports those living or staying in Albert Town, Glendhu Bay, Hawea, Luggate and Cardrona. It is also a popular destination for domestic and international tourists.

Wanaka is served by a number of State Highways that provide for inter-regional movement between the district and the West Coast, Central Otago and Southland, as shown in Figure 3-1. These highways are classed as Arterials in the One Network Road Classification (ONRC). State Highway 6 provides a route north to Hawea and on to the West Coast via the Haast Pass, and south to Cromwell, Queenstown and beyond. State Highway 8A connects to State Highway 8 to the Lindis Pass and beyond. Cardrona Valley Road is a local road classed as a Primary Collector in the ONRC. It provides an alpine link to Queenstown. State Highway 84 is also a Primary Collector and provides a short link from State Highway 6 into the town centre. Wanaka Airport is located to the south of the town adjacent to State Highway 6.

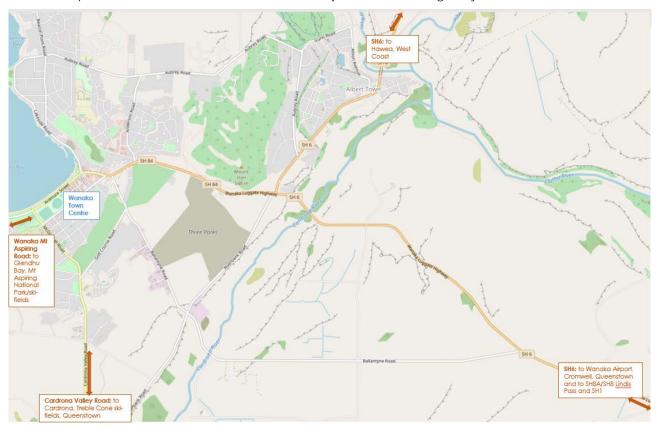


Figure 3-1: Wanaka transport network (Base map: Openstreetview)

Wanaka's goods and services are currently located in a compact town centre focussed on Ardmore and Brownston Streets, adjacent to Lake Wanaka. These streets are also the main through routes for access to the Lake and other tourist destinations such as Mount Aspiring National Park and popular ski-fields. However, these streets also perform a critical 'place' role for the town centre, providing access to central shops and services. This conflict between the through movement and place function detracts from amenity of the town centre and makes it difficult for pedestrians to cross the road, increasing the safety risk. This dual function also leads to delays for through traffic as people undertake parking manoeuvres and turning in and out of local side roads and driveways.

An annual average daily traffic volume of 4,458 vehicles per day was recorded on SH6 in 2016. Heavy vehicles make up around 8% of the traffic stream, comprising delivery and construction vehicles, tourist coaches and campervans, as well as trucks serving the industrial areas.

Modal split surveys of people travelling into Wanaka's central area on all main routes have been completed since 2010. The data is shown in Figure 3-2. In 2018, 89% of movements were motor vehicles, with 2% bus/coach, 7% pedestrians and 3% cyclists. This shows heavy reliance on cars for trips in Wanaka.

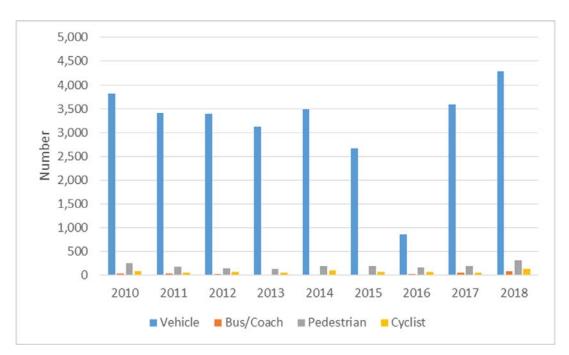


Figure 3-2: Modal split survey 2010-2018 (Source: Wanaka modal split survey, Stantec 2018. Note: vehicle volumes in 2016 were not recorded on all routes giving an incomplete total)

Looking in more detail at trends in active modes and bus/coach shows that there was a sharp increase in active mode use between 2017 and 2018, although this may be partly explained by the weather on the day. However, it does appear to be reflective of a longer-term trend, particularly for walking (refer Figure 3-3).

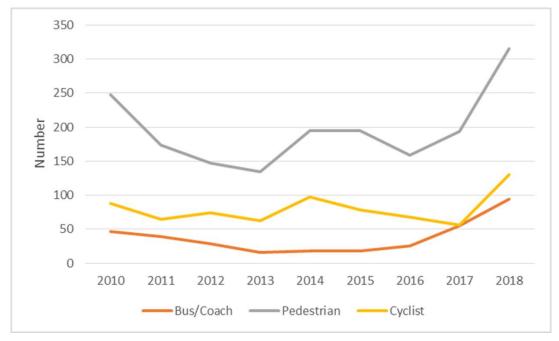


Figure 3-3: Trends in use of bus/coach and active modes (Source: Wanaka modal split survey, Stantec 2018)

Wanaka's cycle network consists primarily of mountain bike tracks and trails. Within the urban area these tend to be narrow gravel tracks within the road reserve primarily providing for recreational opportunities. Scurr Heights Track, Lakeside Track and the shared path between Puzzling World and the town centre provide routes that could be improved to support active transport journeys. Parts of the State Highway network provide shoulders of varying widths that are commonly used by on-road cyclists, but these are inconsistent and lack connectivity. Apart from these routes, there is no connected, signposted urban cycle

network, connecting residential areas to schools, town centre and other key destinations. There are no designated cycle lanes or separated cycleways within Wanaka.

There are footpaths on at least one side of most residential streets in Wanaka, and on both sides in the CBD. In the more established residential areas these footpaths tend to be reasonably narrow (≤ 1 metre wide). Some footpaths are gravel while others are hard surfaced. Footpaths are wider and of better, more consistent quality in the town centre. Pedestrian refuges and crossing points are available on SH84 between the town centre and Anderson Road. East of the Anderson Road roundabout there are no pedestrian crossing facilities despite tourist destinations being located on either side of SH84 (e.g. Puzzling World on one side, Mount Iron track on the other). The highway creates severance for pedestrians and cyclists due to volumes and speed of traffic.

Within the urban area, speed limits are mostly 50km/h. Traffic calming has been introduced on Ardmore Street in recognition of the high number of pedestrian crossing movements and in the interests of improving amenity and access to the Lake.

There are no public bus services in Wanaka however there are school buses and daily buses to other major centres. There are other types of shared travel provided by community organisations as well as tourist operators. Tourist buses/coaches are common and increasing in number, as are campervans, as shown in Figure 3-3.

In the town centre there is on-street parking on every street, and along the Lakefront. There are no fees for parking. Some of the parking is time restricted, ranging from 10 and 180 minutes. There are several public and private off-street, surface level car parks which are mostly unrestricted. Demand for parking at the boat ramps near the town is high at peak times, resulting in boat trailers and vehicles illegally parking on grass verges.

Wanaka Airport is located on SH6, 10km east of the town. Scheduled passenger planes do not currently land here, however Queenstown Airport Corporation have commenced a consultation process relating to future airport expansion and what this might mean for Wanaka, as well as how it might be accommodated. This will feed in to an Airport Masterplan being developed later in 2018. There is some uncertainty around how this will impact on the transport network.

The 2013 census provides a snapshot of how residents normally travel to work. Figure 3-4 shows the percentage of residents using each mode of transport to get to work, as well as the national average. Driving is by far the most popular choice, with 75% using this mode. Walking is more popular than the NZ average, with around 12% walking to work in 2013. Cycling has become more popular in 2013, reaching almost 8%, which is also higher than the NZ average.

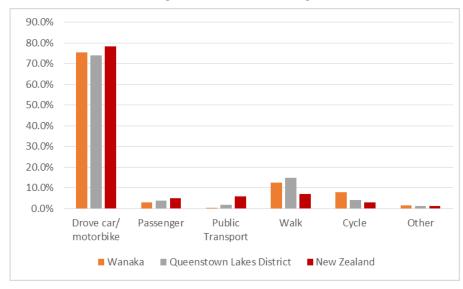


Figure 3-4: Percentage of Wanaka residents using each mode to travel to work, with district and national comparison (Source: 2013 Census)

The Council regularly undertakes school travel surveys to understand how children travel to school in Wanaka. Data from 2017 is shown in Figure 3-5. Overall 30% of students use active modes to get to school which is relatively high, however driving is still the predominant mode for primary school children. For high school students at Mount Aspiring College 36% travelled by car and 36% used active modes. There is a risk with increasing traffic volumes that this relatively high level of active mode use will decline and maintaining this mode split will be a focus in the future.

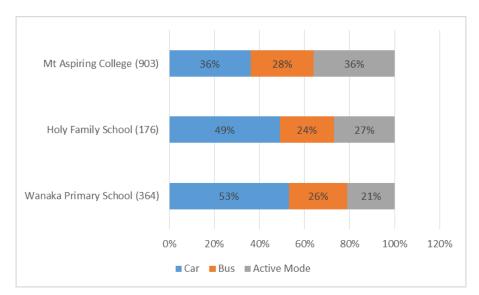


Figure 3-5: Percentage of children travelling to school by mode (Source: QLDC 2017)

Car ownership data (NZ Census data) revealed that in 2013, around half the households in Wanaka had access to two motor vehicles, and 18% had three or more. A third of households had access to one vehicle, and a small number (around 3%) did not own or have access to a motor vehicle.

#### 3.2 Social and Economic

The 2013 census shows that Wanaka is a relatively affluent area, with a median annual income of \$33,600 compared to the national average of \$28,500. The proportion of people aged over 15 with an annual income of less than \$20,000 is 28.5%, compared to the national average of 38.2%. Unemployment was exceptionally low at 1.9% (compared to 5.9% nationally), and 52.4% of the population had some form of post school qualification (12.5% above the national average). The population primarily identify as European (93.5%) with 5% identifying as Maori.

The socioeconomic deprivation index uses census data to reflect eight dimensions of deprivation to identify the least and most deprived areas in New Zealand. These dimensions include income, qualifications, employment, home ownership and access to communication and transport. In 2013, the index rated Wanaka Census Area Unit as a 2, where a score of 10 represents the most deprived areas in New Zealand, and a score of 1 the least deprived.

The main employment types in Wanaka and surrounds reflect the focus on tourism and the service sector, as well as the rapid period of construction that has been occurring to meet demand. In 2017, the main employment sector was rental, hiring and real estate services at 17.8%, construction at 11.8% and accommodation and food services at 8.6%<sup>1</sup>. There has been a significant increase in jobs in Wanaka and surrounds with 1,953 new jobs created between 2007 and 2017. The top three sectors that have achieved the highest growth are accommodation and food services (441 new jobs), retail trade (228) and construction (204). It is estimated that around one third of the dwellings in Wanaka are holiday houses.

There are three schools in Wanaka located very close to one another in the residential area to the north of SH84. A new recreation facility and swimming pool has opened within Three Parks subdivision and a new primary school is opening at Three Parks in 2018. There is a small 14 bed hospital in Queenstown providing medical and maternity services, but Dunedin Hospital is the nearest hospital providing comprehensive medical services. Wanaka has a health centre, two medical centres and smaller GP practices providing a range of services.

The surrounding centres for which Wanaka acts as a service centre include Hawea, Luggate, Cardrona, Glendhu Bay and Albert Town. The most significant of these is Hawea, which had a population of 2,532 (Census 2013), up 31% from 2006. Growth at Hawea is continuing, and a Special Housing Area has been identified, for 400 dwellings. Albert Town is no longer separate from Wanaka as infill growth has occurred. The other centres are smaller but growing, for example a new subdivision has been consented in Cardrona. There is one other school at Hawea Flat which accommodates some of the students from these townships, but the majority travel to Wanaka. The only supermarket is in Wanaka, as are the health facilities. Clearly growth in these settlements increases travel demand to and within Wanaka due to lack of

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<sup>&</sup>lt;sup>1</sup> Wanaka and Surrounds Economic Profile 2017, QLDC website

local services. Social issues include affordable housing and provision of social infrastructure to keep up with demand (e.g. health providers, community services).

#### 3.2.1 Land Use

Figure 3-6 shows Wanaka Structure Plan, which was adopted by the Council in 2007. This has been an important document and guided planning decisions in Wanaka.

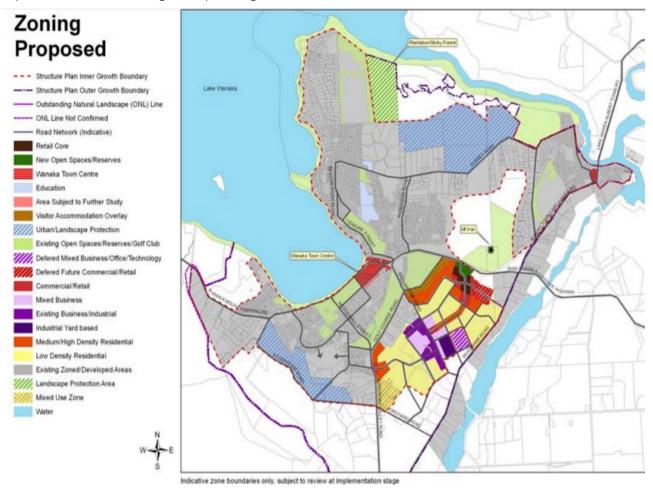


Figure 3-6: Wanaka Structure Plan (2007) (Source: QLDC)

Figure 3-7 shows the available dwelling capacity in the Operative District Plan, which allows for the development of 4,129 lots in Wanaka. This includes 1500 lots at Northlake, 1083 in North Wanaka and 750 at Three Parks.

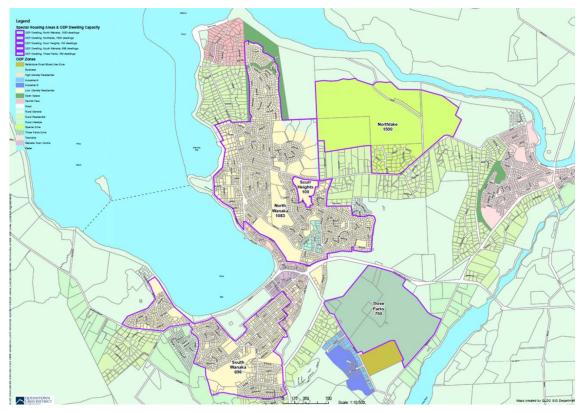


Figure 3-7 Operative District Plan Dwelling Capacity (Source: QLDC)

The Housing Accord, which is an agreement that QLDC has with the government to increase the supply of housing now applies to the whole District, recognising that Wanaka has similar pressures around housing affordability as the Wakatipu Basin. The Council have Housing Accord targets based on 2.6% per annum growth to 2028 (164 new households per annum). In 2017 there were 6,412 dwellings in Wanaka, and the projected additional dwellings required to meet the growth target would be 4,922 by 2048 (77% increase in dwellings).

The Council is part way through the process to develop its next District Plan – the 'Proposed District Plan' (PDP). The PDP provides the overarching strategic direction for the management of growth, land use and development in a manner that ensures sustainable management of the District's special features and qualities. The PDP sets out to achieve:

- Dramatic alpine landscapes free of inappropriate development
- Clean air and pristine water
- Vibrant and compact town centres
- · Compact and connected settlements that encourage public transport, biking and walking
- Diverse, resilient, inclusive and connected communities
- A district providing a variety of lifestyle choices
- An innovative and diversifying economy based around a strong visitor industry
- A unique and distinctive heritage
- Distinctive Ngai Tahu values, rights and interests.

For Wanaka, the proposed changes to zoning identify new areas for residential development and includes an urban growth boundary and a transitional Town Centre zoning to allow for growth of the Wanaka CBD. The focus on compact town centres and connected settlements provides scope for mode shift from single occupant vehicles to walking and cycling. Wanaka is particularly suited to travel by active modes, as distances to key destinations are relatively short and the town is reasonably flat.

Currently the majority of goods and services in Wanaka are located in the town centre. However, two new centres at Three Parks and Northlake are emerging, of a different format and character to the Wanaka Town Centre. These will be significant destinations for residents and will require enhanced connectivity with

Wanaka's residential areas to provide access for all modes (both local and cross suburb) and reduce reliance on single occupant vehicle trips.

By the end of 2018, the Council will produce a Future Development Strategy for the District. This is a requirement of the National Policy Statement on Urban Development Capacity for High Growth Urban Areas. The strategy will set out how sufficient development capacity will be provided across the District in the medium and long term. It will describe the location, timing and sequence of development capacity, and the infrastructure and implementation actions required to provide feasible areas for development. This will provide certainty to the community and stakeholders about where and when future urban development is likely to occur.

### 3.2.2 Population

Wanaka is undergoing rapid change, with unprecedented growth in the number of permanent residents over the last decade. Figure 3-8 demonstrates that between 2001 and 2013, the number of households in Wanaka and the resident population has doubled. In 2013 the Wanaka ward had a population of 6,471 people. This was a 28% increase over the population recorded in the 2006 census. Wanaka ward accounted for 23% of the District's population. The Statistics NZ population projection (medium scenario) for Wanaka is for 56% growth between 2013 and 2023.

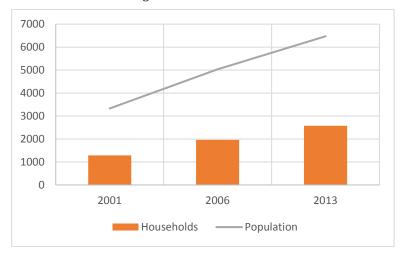


Figure 3-8: Growth in population and households in Wanaka Area Unit (2001-13) (Source: 2013 Census)

Wanaka is also a popular tourist destination. In line with the national picture, the number of visitors to Wanaka continues to grow each year, and this trend is forecast to continue in the future (see Figure 3-9). On an average day, there are currently around 8000 visitors to Wanaka; at peak times this climbs to nearly 35,000 visitors in a day. By 2058 the forecast peak visitor population is expected to reach around 56,000. The impact of this 'peak population' on core infrastructure and services in the town is enormous. When combined with growth in residents, as shown in Figure 3-10, it is estimated there will be 80,000 people in Wanaka on a peak day by 2058, approximately a third of which are usual resident and two thirds visitors. For more information refer to the Appendix.

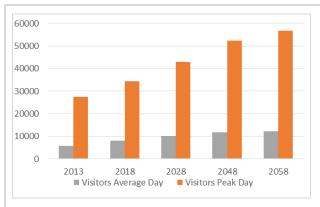


Figure 3-9: Forecast increase in visitors (Source: QLDC Growth Projections to 2058, Rationale, 2017)

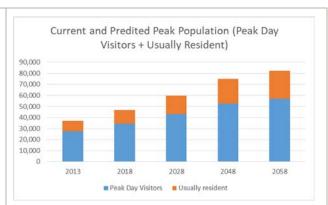


Figure 3-10: Peak day population forecast (combination of peak day visitors plus usually resident population) (Source: QLDC Growth Projections to 2058, Rationale, 2017)

### 3.3 Environmental

Wanaka is situated at the southern end of Lake Wanaka, surrounded by the Southern Alps. To the southwest is the Crown Range and Queenstown; to the north, Haast Pass provides the route to the West Coast. The town centre lies on flat land beside Roy's Bay. Parts of the town have expanded into the hills surrounding the centre and around Roy's Bay in both directions. The lakeside area of the town is prone to occasional flooding in spring, when heavy rain and snowmelt can cause the lake to rise quickly, as occurred in November 1999.

# 4. Problems and Opportunities

Key stakeholders participated in a facilitated Investment Logic Mapping workshop in July 2018 to identify the key problems, opportunities and benefits in relation to transport in Wanaka. Participants identified and agreed on two problems and five opportunities:

Problem 1: Rapid population and visitor growth and the current approach to influencing new

development is making it difficult to plan for the future, leading to disjointed infrastructure and creating barriers to accessing key destinations for residents and

visitors (60%)

Problem 2: Growth in travel demand and limited options for accessing key activities by different

modes results in over reliance on certain routes, eroding level of service on those routes,

and creating severance and conflict (40%)

Opportunities: Preparing for future growth

**Connecting Great Rides** 

Improved visitor and community satisfaction

Protect character of Wanaka

Increase active transport participation

Evidence to support each problem statement is presented below, as well as a description of the potential opportunities for Wanaka in relation to transport. Further information is provided in Appendix A.

# 4.1 Problem 1: Managing Growth

Problem 1: Rapid population and visitor growth and the current approach to influencing new development is making it difficult to plan for the future, leading to disjointed infrastructure and creating barriers to accessing key destinations for residents and visitors (60%).

#### 4.1.1 Growth in Wanaka

As discussed in section 3.2, Wanaka has been undergoing a period of rapid growth, and compelling evidence is presented to demonstrate growth in both resident and visitor numbers. Wanaka meets the Transport Agency criteria in the Investment Assessment Framework 2018 for a 'High Growth urban area', because it meets two of the required criteria as demonstrated in Table 3. This is important when it comes to completing the results alignment for investment.

Table 3: Assessment of Wanaka against High Growth Urban Area criteria (Source: Investment Assessment Framework, NZTA)

Criteria	Assessment for Wanaka
The resident population of the urban area is predicted to grow by more than 10% between 2013 and 2023, according to the most recent Statistics NZ medium urban area population projection	Using the most recent Statistics NZ urban area population projection (medium scenario), Wanaka is projected to grow by 56% between 2013 and 2023, from 6,800 residents to 10,600 respectively.
At any point in the year the urban area has a combined resident population and visitor population of over 30,000 people, using the most recent Statistics New Zealand urban area resident population estimates.	An estimate for visitors on the peak day is shown in Figure 4-1 which shows peak day population of residents plus visitors reaching 42,000 on 31/12/15 and over 30,000 for the 10 days around this time. The resident population estimates for Wanaka in that year were 10,350 in 2015 and 10,900 in 2016.



Figure 4-1: Population of Wanaka during the peak period (2015/16) (Source: QRIOUS data based on cell phone tracking, provided to Lake Wanaka Tourism and others)

Growth in the number of people living in Wanaka is reflected in growing school rolls as illustrated in Figure 4-2. In 2017 the Ministry of Education responded by announcing two new classrooms for Mount Aspiring College and construction of a new primary school catering for 600 students.

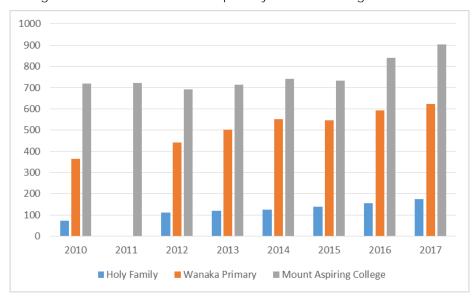


Figure 4-2: Growing school rolls 2010-17 (Source: QLDC)

An indication of the volume and speed of development is provided by Table 4, which shows the resource consents granted in the year to July 2016-17 and being processed in mid-2017. The main areas that have been developed to cater for residential demand are Northlake, Kirmoko and Scurr Heights subdivisions in the Aubrey Road area. There is significant construction activity in Wanaka.

Table 4: Resource consents for Wanaka for year ending July 2017 (Source: QLDC)

			•
Area	Development	Consents granted in last year	Currently being processed
Aubrey Road	Northlake	178 residential lots	75 residential lots
	Kirmoko	60 residential lots	
	The Heights		160 residential lots
Ballantyne Road		30 commercial lots	
Meadowstone		40 residential lots	43 residential lots

Area	Development	Consents granted in last year	Currently being processed
Total		278 residential lots 30 commercial lots	278 residential lots

### 4.1.2 Approach to influencing new development

The Council's approach to influencing new development is through the District Plan. This document identifies the land use activities that are permitted within each zone.

Ideally a Council will limit residential and commercial development to areas that are appropriate for these activities. From a transport perspective, this means through locating higher density development close to activity centres and potential future public transport nodes/routes and limiting the amount of larger lot residential development that is solely reliant on private motor vehicles to access essential goods and services such as education, employment, supermarkets and medical facilities. It also means making sure that pedestrian and cycle routes are continuous and connected, providing direct routes to key destinations.

The Plan Change process allows developers or the Council to make changes to the zoning in the District Plan without needing a full review. For example, a developer might seek a change in zoning from rural to residential, so that houses may be built. In Wanaka, most of the land released for new subdivisions has been a result of Private or Council Plan Changes. The Plan Change process itself along with the speed of change has limited the extent to which the Council has been able to influence development.

In order to understand and provide evidence for this problem, the planning process and resulting access issues have been considered for two major new development areas of Three Parks and Northlake, and briefly for Bright Sky Special Housing Area. There have been five Plan Changes which have had an impact on the land identified as Three Parks in the Structure Plan, or on the land on the other side of Ballantyne Road, and two for Northlake:

- North Three Parks (Plan Change 04) 46.8 hectares of land adjoining Three Parks, primarily residential.
- Three Parks (Plan Change 16) considered in more detail below, by way of example.
- Ballantyne Road Mixed Use Zone (Plan Change 32) for yard based industrial and business activities
- Wanaka Industrial Zoning Extension (Plan Change 36) change of zoning between Frederick and Gordon Street to industrial.
- Ballantyne Road Industrial and Residential Extension (Plan Change 46) enlarging the industrial area accessed from Frederick Street by 19 hectares.
- Northlake (Plan Change 45) considered in more detail below.
- Northlake (Plan Change 53) currently under way.

#### 4.1.3 Three Parks

The Three Parks Subdivision has a long history. In 2002 the Council ran 'Wanaka 2020' workshops which proposed a mixed-use development that will consist of up to 750 residential dwellings, plus commercial, business and tourism/community precincts. The site is located approximately 1.5 kilometres south-east of Wanaka Town Centre, and covers approximately 100 hectares between SH84, Riverbank and Ballantyne Road. The location of Three Parks within the transport network is shown in Figure 4-3.

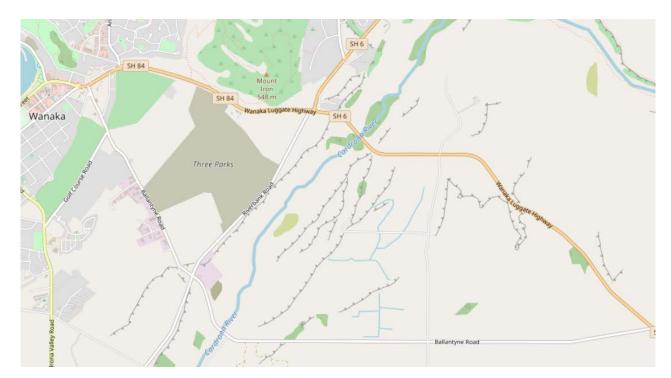


Figure 4-3: Location of Three Parks within wider transport network (Source: Openstreetmap)

The vision for Three Parks was carried through to the Wanaka Structure Plan, and a Three Parks discussion document was released by the Council for consultation in 2008.

#### 4.1.3.1 Planning Challenges

An Integrated Transport Assessment (ITA) was completed in 2008 for the Three Parks Plan Change. It recognised that Three Parks would provide for future growth in Wanaka, particularly given that it would be difficult to locate larger retail stores in the town centre and Three Parks would provide a suitable alternative location. The ITA noted incomplete cyclist, pedestrian and public transport considerations within the proposal. It stated the need for cycle provisions to tie in with an overall strategy that ensures connectivity between areas of Wanaka that needed to be considered at that time. It also identified the need to identify pedestrian networks and provide for future public transport access. The ITA identified that the arterial routes identified through the Three Parks development would conflict with adjacent land use, resulting in congestion and the likely use of parallel collector roads used as arterials within the development. It was recommended that the road hierarchy and location of land use be revisited. It noted that little information was available regarding intersection controls.

The Plan Change process, hearings and decision took place during 2009. Submitters raised concerns about access including safety of crossing Ballantyne Road in light of increased traffic generated by the development, and the effect of providing two access points from the development to Riverbank Road on the level of service on Ballantyne Road. Concerns about the requirement for provision of cycle parking and showers by employers was also highlighted.

The decisions were made by hearings committee, affecting the extent to which the Council could influence the outcome. The hearings committee decided that safety on Ballantyne Road was not able to be addressed by the Plan Change and was unlikely to be able to be attributed to any particular development but may worsen as a result of cumulative development. No mitigation was proposed. The requirement to provide cycle parking was retained, and so were the two access points on to Riverbank Road. The Transport Agency sought a financial contribution to upgrading the state highway, but the Committee did not think this was appropriate as the Transport Agency had other sources of funding available. No provision for external walking/cycling links was required.

The Plan Change rules include confirming the location of Collector Roads within the Structure Plan, but local roads, pedestrian/cycle links and public transport routes/stops would be fixed at the Outline Development Plan/Comprehensive Development Plan Stage. This approach brings a risk of ad hoc development of footpaths and cycleways, as they are completed at different stages and complete routes will not be available until construction is finished. In addition, the rules quite clearly focus on 'within' the zone, rather than connections outside the zone.

Since the Plan Change process was completed, additional facilities have recently been constructed in Three Parks. A community recreation centre was built in 2017, and a new aquatic centre opened in June 2018. In early 2018, the Ministry of Education announced that a new primary school for Wanaka would be located at Three Parks. The school is expected to open in 2019, and will initially accommodate 400 students, however the site and design will be planned to accommodate growth and cater for up 700 students in the future.

Clearly this is an emerging centre in Wanaka, providing essential goods and services for those who live within the subdivision and the surrounding residential areas, within easy walking distance. It is a sign of integrated land use and transport planning that these facilities will be provided so close to residential areas, and with a range of housing densities. However, the centre will also generate many trips from across the wider urban area, particularly because of the employment opportunities, the recreation centre, swimming pool and school. Residents of Three Parks will also need to access the town centre and other destinations.

An overview of the evidence relating to the process suggests:

- It is unclear who will address transport matters which fall outside the development area. This appears to be because:
  - The existence of the Wanaka Structure Plan and associated documents may suggest that Council
    are expecting growth to occur in the areas identified, and will provide for that growth by
    addressing wider network needs
  - some transport problems already exist
  - o it is difficult to apportion cumulative effects of development; and
  - it is difficult to attribute impacts to one development, when many developments are progressing at the same time.
- The school and aquatic centre have proceeded ahead of the residential development, which is not ideal staging, but is a result of residential development being market driven, while the Ministry of Education are driving the development of the new school. At no stage was an update of the ITA (2008) for Three Parks required to reflect these changing land uses and the fact that significant traffic generators are now located in an area with barriers to access by all modes.

#### 4.1.3.2 Barriers to accessibility and safety

Because of these limitations, a number of issues relating to disjointed infrastructure and barriers to access to/from Three Parks can be identified, including:

- Heavy vehicles accessing the industrial area at the corner of Riverbank/Ballantyne Road: many heavy vehicles use Riverbank Road to reach Three Parks from SH6, or the western section of Ballantyne Road which provides access from SH84/town centre. However, there is evidence that truck and general traffic volumes have increased on Ballantyne Road. This is not unexpected given that it provides a reasonably direct route for vehicles travelling to Wanaka from the east via SH6. However, Ballantyne Road is not suitable for increased growth particularly of heavy vehicles; it is a gravel road with challenging vertical alignment and has a history of run off road crashes including a fatality<sup>2</sup>.
- Motor vehicles accessing the industrial area and Three Parks: the options for motor vehicles accessing
  Three Parks and the industrial area are similar to heavy vehicles, with similar concerns relating to
  Ballantyne Road. The access from SH84 has not been constructed yet, despite the recreation centre
  opening, although it has been agreed that a roundabout will be built.
- Cyclists accessing Three Parks and the recreation centre and swimming pool: the community have raised concerns that there is no safe cycle route from the schools in the Aubrey Road area to the new swimming pool. This would be a feasible cycling distance of less than 5km. No facilities are provided. In addition, SH6 and SH84 create severance for this mode, making it less attractive and raising perceptions of risk. Also, there is currently no cycle access into Three Parks from SH84, with primary access routes being via Riverbank and Ballantyne Road. For cyclists this adds considerable distance. This will be addressed by the new proposed roundabout on SH84 and access road into the north part of Three Parks, but ideally would have formed part of the developers requirements for the subdivision and constructed prior to the opening of the recreation centre and new primary school.
- Pedestrian access to Three Parks: Access on foot is reasonable for mobile adults but could be a challenge for children and the elderly due to inadequate crossing points. For mobility impaired people there may also be challenges due to lack of consistent footpath surfacing, crossing points, drop kerbs

<sup>&</sup>lt;sup>2</sup> Ballantyne Road Strategic Case (Stantec, 2018)

and narrow widths, which would make it difficult for people using wheelchairs, or other walking aids, as well as pushchairs. Of particular concern is the need to cross SH6 or SH84, and the distance from the northern suburbs, which creates severance for the main residential areas to the north.

There are some positive aspects to the Three Parks development in that it provides goods and services within walking/cycling distance of residents in the vicinity, and that it provides for a range of housing densities. However, it is not well connected to the rest of Wanaka and this creates barriers for all modes.

#### 4.1.4 Northlake

Northlake is a 220ha residential development, with capacity for up to 1500 dwellings (Figure 4-4). It is located to the north of the town centre, near the head of the Clutha River. This development together with the adjacent Hikuwai development, consists of low to medium density residential sections, and includes an activity centre that is expected to include a child care centre, medical centre, cafés and convenience stores, leisure centre, two tennis courts, communal office spaces, playground and swimming pool. A supermarket may also be provided within the development, subject to the outcome of a Plan Change hearing. The location of Northlake is shown in Figure 4-4.

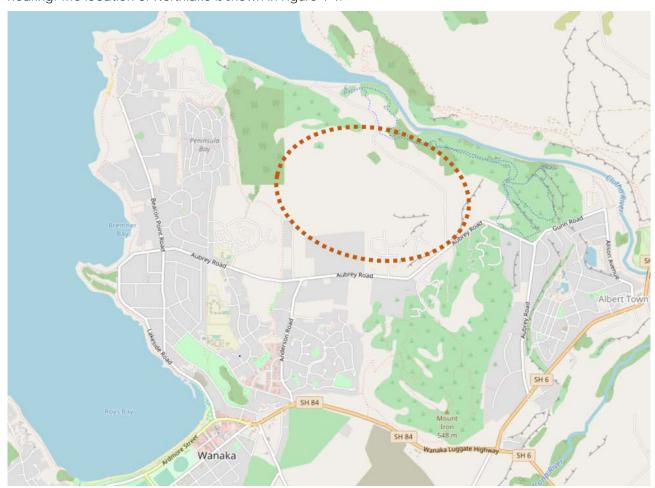


Figure 4-4: Location of Northlake Subdivision within wider transport network (Base map Source: Openstreetmap)

#### 4.1.4.1 Planning Challenges

The provision of a local activity centre supports the use of active modes for residents within the development. An Integrated Transport Assessment was prepared for the Private Plan Change for Northlake development, in 2013. The focus of the ITA was on the capacity of intersections in the vicinity, but public transport, walking and cycling were also covered briefly. The ITA identified the SH84/Anderson Road roundabout would exceed capacity, but the ITA stated this would happen as a result of the Three Parks development, which was already permitted, and was therefore not attributable to the proposed Northlake subdivision.

A peer review of the ITA identified deficiencies particularly relating to the consideration of and provision for active and public transport mode infrastructure. For example, it was noted the ITA stated the proposal did

not contradict any of QLDC's active mode aspirations but did not positively support or encourage use of active modes either, when it had the potential to do so. The ITA also noted that walking and cycling facilities were considered within the site, but no consideration was given of the ability for future residents to walk and cycle to key destinations such as the local schools or town centre. The peer review recommended that Plan Change rules be introduced to address these deficiencies. Rules were recommended to require an upgrade to the cycle facilities on Aubrey Road including sealing the surface. The peer review also recommended a potential future bus route and bus stop be identified within the site and protected from development. The ITA suggested walking and cycling links be upgraded as part of subdivision consents, but the peer review noted the risk of this would be a 'piecemeal and disjointed solution'.

The Plan Change was appealed in the Environment Court in 2015. The final Northlake Special Zone Plan Provisions included the requirement for a Structure Plan to establish the primary roading network and required walking and cycling connections. To ensure integration of lot layout, street design, recreational areas including walkways/cycleways and landscaping, Outline Development Plans are required through the resource consent process. Connectivity is a stated objective, but the provisions for walking and cycling relate to requiring trails through the zone that link to existing and potential trails outside the zone. Improvement of the quality of the Aubrey Road footpath is not required. There is a requirement to enable public transport to efficiently service the area, now and in the future, but details are not provided of how this should be achieved, and no potential routes or protected bus shelter areas are shown on the Structure Plan. There is a focus throughout on minimising meandering cul de sacs and promoting a well-connected grid road network within the subdivision, which minimises travel distances and makes the subdivision more walkable.

The process for Northlake demonstrates:

- A time delay between initial Private Plan Change application (2013) and Environment Court decision (2015) of at least two years, by which time conditions had somewhat changed e.g. growth in visitor numbers, other subdivisions and plan changes, making the initial ITA out of date.
- A peer review of the ITA identified several issues relating to transport infrastructure, with only some recommendations included in the final Northlake Special Zone rules.
- Of the issues which were identified but not included in the final rules, the most relevant to the problem statement are those relating to upgrading existing walking/cycling facilities on Aubrey Road including hard surfacing and considering access to destinations beyond the development such as local schools and the town centre.
- It is difficult to attribute the responsibility for upgrading transport links beyond the development itself. In part this is due to the cumulative effects of multiple developments which makes it difficult to determine a trigger and seek investment in the wider network. There is also an expectation that the Council will provide these wider network improvements through Development Contributions. Council documents like the Wanaka Walking and Cycling Implementation Plan identify walking and cycling routes and it is assumed that because this is a Council document, the Council will provide these routes.

#### 4.1.4.2 Barriers to accessibility and safety

The issues relating to disjointed infrastructure and barriers to access to/from Northlake include:

- Was not part of the original Structure Plan but the Environment Court ruled it would proceed.
- Poor quality footpath which the ITA noted had cycle tracks indicating use by cyclists on Aubrey Road, which does not connect safely to nearby schools, the town centre or Three Parks.
- Additional traffic at the Anderson Road/SH84 roundabout as a result of the development, but no recognition that a portion of this may be attributable to the development.

## 4.1.5 Bright Sky Special Housing Area

Other examples include the Bright Sky Special Housing Area located adjacent to the Ballantyne Road industrial area. The proposal is for 363 dwellings and a childcare centre for 60 children (15 staff). Five accesses are proposed, with two accesses via Frederick Road, which is within an Industrial zone. The other three access are from Gordon Road. As it is designated as a Special Housing Area, accelerated planning provisions apply. The ITA considered capacity of proposed intersection and local road network, but not the impacts of the mix of industrial and residential traffic on safety and active mode use.

#### 4.1.5.1 Barriers to accessibility and safety

The location of the Bright Sky SHA is expected to create barriers to access as follows:

- The location adjacent to the industrial area is expected to create a barrier for active mode use due to industrial traffic on Ballantyne and Frederick Roads, and may create safety issues.
- There is no buffer between residential and industrial activities which may result in reverse sensitivity effects and potential safety issues as a result of the mix of traffic, which will include a high percentage of heavy vehicles.

## 4.1.6 Suppressed Demand

The evidence presented in Section 4.1.3 highlights some specific safety and access deficiencies that have arisen from the current approach to planning using the available tools to influence development. These relate to barriers to access by motor vehicle and active modes. In general, the difficulties accessing destinations by motor vehicle tend to result in driver frustration and longer travel times, and in some cases safety issues. The difficulties accessing destinations by active modes tend to result in a low uptake of those modes, as routes may be indirect and the lack of facilities discourages use and causes safety concerns. In fact, for Wanaka, active mode use is relatively strong for the journey to work and school, compared to national averages. The concern is that with increasing traffic on the network, this higher mode share will decline, as severance increases and, with inadequate cycling/footpath facilities, people feel less safe.

Although active mode use for school travel is higher than the national average, there is evidence of supressed demand for active travel (particularly cycling and scootering). Figure 4-5 shows the number of students who would like to travel by bicycle or scooter but currently do not. There will be a variety of reasons for this, including distance to travel, but it is likely that one of the factors will be parental concern about safety. The data are compelling and show that 29% of primary school students and 16% of high school students want to use active travel rather than their current mode (in most cases being driven, but for high school students also using the bus is not so desirable).

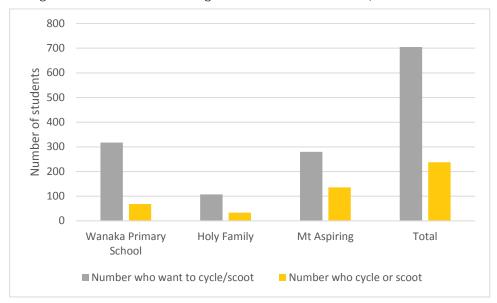


Figure 4-5: Latent demand for active travel amongst Wanaka school students (Source: QLDC Student Surveys 2017)

Given that many journeys are relatively short and would be feasible for many people to undertake using active modes, and many in the community participate in active recreational opportunities around Wanaka, such as mountain biking, skiing and tramping, it is reasonable to assume if there was investment in active mode infrastructure a significant mode shift could be achieved, both for the journey to work, school and other every day activities. This view is also supported by the proactive steps taken by the Wanaka community, who, through the Active Transport Wanaka have developed a Masterplan for Cycling, identifying the routes where they would like to see cycle facilities located.

## 4.2 Problem 2: Effective Access

Growth in travel demand and limited options for accessing key activities by different modes results in over reliance on certain routes, eroding level of service on those routes, and creating severance and conflict (40%).

#### 4.2.1 Travel Demand

Travel demand in Wanaka has grown because of the population growth and increased visitor numbers, combined with reliance on private motor vehicles for most trips. Traffic volume data from three permanent traffic in/near Wanaka is shown in Figure 4-6. The data shows steady growth since 2012, with traffic volume growing by 22% at Mount Iron between 2014 and 2015.

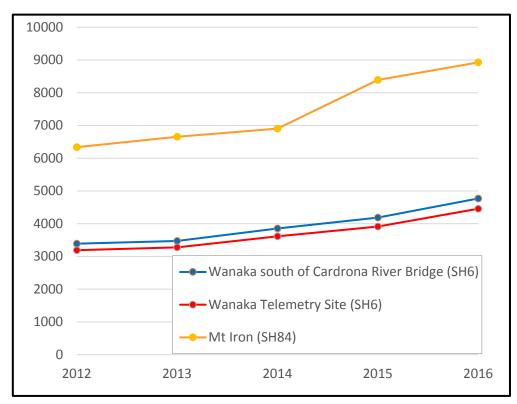


Figure 4-6: Wanaka average daily traffic volumes (Source: NZTA website 2018)

The Wanaka Telemetry site on SH6 provides data on the number of heavy vehicles in the traffic stream. Between 2012 and 2014 there was a 10% per annum increase in the volume of heavy vehicles. However, freight volumes increased by around 30% between 2015 and 2016; a sharp increase on previous years and may reflect increases in tour buses and construction vehicles.

The monthly data for SH6 show a seasonal pattern with the highest traffic volumes in December, January and March, and lower traffic volumes in May and June, before the start of the winter ski season. Daily data shows there is little variation in traffic volume across the week, with weekend volumes being like weekday volumes. There are fewer heavy vehicles at the weekend. Hourly data shows there is only a weak 'rush hour'. However, traffic volumes are generally sustained throughout the day from 9am to 6pm, with the peak at 6pm. The regular events in Wanaka such as Warbirds Over Wanaka are the trigger for significantly higher traffic volumes resulting in delays. For example, the peak traffic volume recorded at the Wanaka count site on SH6 in 2016 was on 25 March (Warbirds Over Wanaka weekend), with a daily total of 9,147 vehicles, which is more than double the annual average. The highest hourly traffic volume for 2016 was recorded at 4pm on the same day, at 1,215 vehicles. This traffic displaces residents and creates accessibility issues for people going about their everyday business.

#### 4.2.2 Route Choices and Destinations

Figure 4-7 shows the road network in and around Wanaka, as well as illustrating the location of the main tourist destinations that are further afield. Route choices are limited. With no public transport or cycle network, mode choice is also limited.



Figure 4-7: Wanaka road network and tourist destinations

The layout of this network means that there is an over-reliance on a few key regional routes. A description of the issues that are occurring on key routes are described in Table 5. Examples of the issues in Table 5. Refer to Figure 4-4 for location of roads identified in the table.

Table 5: Examples of routes where there is over-reliance and loss of level of service.

Route	Functions	Issues
Ardmore Street	Used by residents and visitors as well as through traffic, with 6000vpd. Provides access to lakefront parking and town centre shops and services, as well as destinations further afield such as the Mount Aspiring National Park and skifields. High numbers of pedestrians crossing between the lakefront and the town centre. Placemaking and amenity are very important.	The conflict between through traffic and placemaking has been lessened since the Council introduced traffic calming on Ardmore Street and made changes at the Brownston Street intersection to encourage vehicles to use Brownston Street instead. However, there are still amenity issues affecting active mode users as there is a reasonably steady flow of vehicles, and there is a medium-high personal risk <sup>3</sup> .
Brownston Street	Similar function to Ardmore Street, with 9,000 vpd. Only route, aside from Ardmore Street, to connect the west site and the east site of Wanaka. This route is the edge of the CBD, which means there is conflict between vehicles entering and existing the town centre and vehicles by passing the town centre to get to destinations further afield.	Numerous access and turning bays add to complexity and delays. Brownston Street is a primary route for traffic, freight and pedestrians. Conflicts have resulted in a high personal risk, with crash clusters at the intersections with Dungarvon and Helwick Streets and SH84, although these crashes have been minor or non-injury in the last five years.
SH6, SH84 and Ardmore Street	This is the main arterial route to Wanaka from the east. The residential area to the north of SH84/Ardmore Street is large and growing. Wanaka's three schools are all	The road is often congested at peak times. The high traffic volumes and speeds combined with limited at grade crossing points causes severance

<sup>&</sup>lt;sup>3</sup> Urban KiwiRAP

Route	Functions	Issues
	located north of this primary arterial route. Most local traffic exiting the area to the north of SH84/Ardmore Street passes through either the SH84/Anderson Road roundabout or uses Lakeside Road. Three Parks and the recreation and aquatic centre, primary school and other proposed community facilities is located to the south. QLDC have in recent years improved pedestrian crossing points on Ardmore Street.	between areas to the north and south. This can deter people from using active modes and can make turning movements difficult especially if the flows on the arterial are not interrupted e.g. by traffic signals. With growth in population this route will become progressively more congested, as forecast by the transport model, which expects level of service C and D on SH84 by 2025
SH6A Albert Town Bridge (connecting to SH6/SH84)	Wanaka functions as a service centre for satellite towns which are growing and currently provide minimal local services for residents, such as Albert Town and Hawea. Residents and visitors staying in these locations will frequently travel to Wanaka for food and other shopping, using SH84 to get to the centrally located facilities. The main campground is on the north side of Albert Town bridge and many people stay here because of the access to Wanaka's facilities.	At busy times, the single lane bridge at Albert Town acts as a pinch point on the network creating delays, and the Transport Agency have identified a need to reduce delays as well as provide for pedestrians, with investment triggered by traffic volumes and delays. There is a crash cluster at the Albert Town bridge.

### 4.2.3 Levels of Service

All roads in Wanaka have been classed according to the Transport Agency's One Network Road Classification (ONRC). The map showing the classes for each road is provided in Figure 4-8.

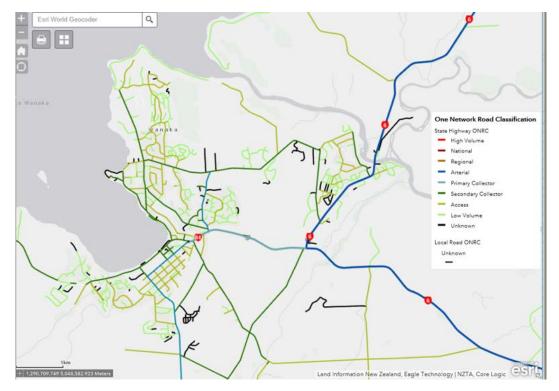


Figure 4-8: Wanaka One Network Road Classification map (Source: NZTA website)

The State Highway network provides arterial connections to the wider network via SH6, and SH84 performs a primary collector function, along with Anderson Road, Brownston Street and Cardrona Valley Road. The ONRC describes the desired customer levels of service benchmark for four different criteria. A comparison

of the benchmark level of service for each criterion, along with a brief assessment of SH6 and SH84 in the study area is shown in Table 6. This shows that there is an identified gap in the customer level of service for travel time reliability, which is expected to become significant as visitor and resident numbers grow. The other area with a significant gap is speeds and provision for pedestrians and cyclists, plus parking at Mount Iron. Refer to Appendix A for further supporting information.

Table 6: ONRC Gap Analysis SH6 and SH84

Criteria		Arterial level of service benchmark	SH6, SH84
Mobility	Travel time reliability	Generally, road users experience consistent travel times with some exception in urban heavy peak, holiday or during major events	Generally aligns with the customer level of service, but the exceptions are becoming more frequent with growth.
	Resilience	Route is nearly always available except in major weather events or emergency event and where no other alternatives are likely to exist. Clearance of incidents affecting road users will have a high priority. Road users may be advised of issues and incidents.	Routes are nearly always available.
	Optimal speeds	Higher speeds depending on assessed level of risk. Lower if mixed use, high intersection density, schools, shopping, and concentrations of active mode users.	The 50km/hr zone starts east of Anderson Road. Prior to this the speed limit is 80km/h. There are attractions on both sides of the road, but speeds create severance and risk.
Safety		Variable road standards, lower speeds and extra care required on some roads/sections, particularly depending on topography, access, density and use. Road user safety guidance provided at high risk locations. Some separation of road space for active road users in urban areas.	The speeds are higher than desirable in the vicinity of Mt Iron/Puzzling Road. A narrow shared path is provided on one side.
Amenity		Good level of comfort, occasional areas of roughness. Urban arterials reflect urban fabric and contribute to local character. Some separation of road space for active road users for amenity outcomes in urban areas.	Provision for active modes could be improved on SH6 and SH84.
Accessibility		Some separation of road space for active road users in urban areas to provide network access and journey continuity. Parking for all modes and facilities for mobility impaired at activity centres, and some shared spaces. Extra care required around activity centres due to mixed use, including goods vehicles.	Parking for all modes could be improved at Mt Iron especially at peak times.

A similar exercise was completed for the primary and secondary collector roads within Wanaka. This is shown in Table 7. This analysis is intended to give a general overview only as many roads are incorporated into the table and vary in nature. However, the assessment shows a similar picture to the arterials, and also suggests speed limits may need to be reviewed.

Table 7: ONRC Gap Analysis - Primary and Secondary Collector Roads

Criteria		Primary and Secondary Collector level of service benchmark (same or similar)	Primary: Brownston, Anderson, McDougall-Cardrona Valley Rd Secondary: Ardmore, Lakeside, Ballantyne, Plantation, Aubrey, Riverbank, town centre, Beacon Point Rd.
Mobility	Travel time reliability	Generally, road users experience consistent travel times except where affected by other road users (all modes) or weather conditions.	Reliability is inconsistent primarily due to demand at peak times.
	Resilience	Route is nearly always available except in major weather events or emergency event and alternatives may exit. Clearance of incidents affecting road users will have a moderate priority. Road users may be advised of issues and incidents.	Routes are nearly always available.
	Optimal speeds	Travel speeds depend on assessed level of risk and recognise mixed use, schools, shopping strips and concentrations of active road users.	There may be need for some speed limits to be reviewed, particularly around schools and the town centre.
Safety		Variable road standards and alignment. Lower speeds and greater driver vigilance required on some roads/sections, particularly depending on topography, access, density and use. Active road users should expect mixed use environment with some variability in the road environment including vehicle speed. Road user safety guidance provided at high risk locations.	The roads generally meet this standard.
Amenity		Moderate level of comfort with occasional areas of roughness, Urban collectors reflect urban fabric and contribute to local character. Specific provision where active road users present.	Provision for active modes could be improved substantially on some of the collector roads.
Accessibility		Active road users should expect mixed use environments with some variability in the road environment, including vehicle speed. Parking for all modes and facilities for mobility impaired at activity centres.	Parking for all modes and facilities for mobility impaired drivers could be improved in Wanaka centre.

## 4.2.4 Network Operating Framework

The Council recently completed a draft Network Operating Framework for Wanaka<sup>4</sup> with stakeholders. The purpose of the Network Operating Framework is to provide a foundation for planning and assessing the transport network. During the first phase, strategic objectives are set for each mode. This is followed by an assessment of networks and places, to allow primary and secondary routes for each mode to be mapped.

The key objectives for Wanaka's Network Operating Framework were confirmed by stakeholders as:

- Make Wanaka less car-centric by improving active mode facilities
- Provide connectivity between the schools and the pool at Three Parks
- Provide access routes between residential catchments, community facilities, schools and commercial areas
- Improve connectivity between Wanaka, Queenstown and Airports.

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<sup>&</sup>lt;sup>4</sup> Wanaka Network Operating Framework - draft for comment (GHD 2018)

The Network Operating Framework Report provides further information to support the modal conflicts identified in Table 5. A series of maps have been produced identifying primary and secondary routes for all modes. This information will be used in the next stage, being the development of the Programme Business Case and Masterplan.

## 4.2.5 Travel times and delays

In 2017 QLDC started a new travel time survey. Data is available for July 2017 and January 2018. The daily profile for travel times on between Brownston/McDougall Street intersection and Ardmore Street/Lakeside Road intersection is shown in Figure 4-9. This shows the slowest travel times are at 2pm and 7pm.

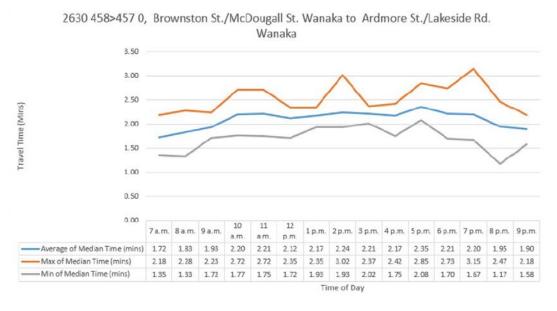


Figure 4-9: Daily Profile - Travel times, July 2018

Figure 4-10 shows the change in travel time in the inter peak period between winter and summer. The most significant increases in travel time were around the shopping centre and Lakefront, which shows that this area is more congested in summer than it is in winter.



Figure 4-10: Change in travel time July 2017 to February 2018

The transport model for Wanaka is another way in which levels of service across the network can be better understood. The Tracks model for Wanaka provides forecasts for 2025 and 2045 (refer Figure 4-11), which show levels of service in the evening peak becoming progressively worse. By 2023, the model forecasts that the stretch of SH84 between Brownston Street and Anderson Road will be at level of service D. By 2045, this extends further along Ardmore Street to the intersection with Helwick Street, and levels of service at that intersection have degraded to E. Also, at level of service E is the approach to the SH84/Anderson Road roundabout. Also, in 2045, other parts of the network are at level of service D, such as the SH6/SH84 roundabout, and the section of Sir Tim Wallace Drive from SH84 south. The model reflects a typical day and does not include the cumulative impact of event traffic on top of general traffic growth.

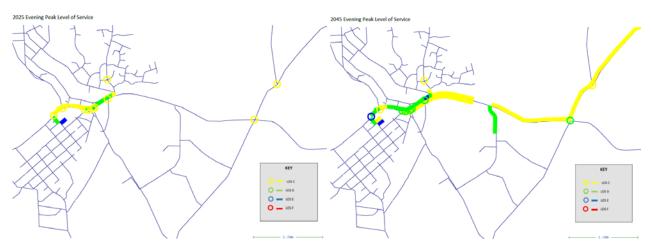


Figure 4-11: Evening peak level of service 2025 and 2045 (Source: QLDC tracks model)

## 4.2.6 Parking

Anecdotal evidence of parking problems at peak times is common in the documents reviewed. Data is available through annual parking surveys as shown in Figure 4-12. This graph shows that parking occupancy is highest at midday, and lowest at 7am. At midday on the day of the survey, there are still 30% of spaces available. The parking survey area includes in the streets around the centre, and these findings reflect anecdotal comments that usually if you drive around you can find a space, if you know where to look. 'Hunting' for spaces like this adds to congestion and reduces amenity in the centre and can also lead to minor/non-injury crashes as drivers focus on finding a space.

Figure 4-13 shows the change in average parking occupancy from 2017 to 2018. This showed that for the 10am, midday and 3pm surveys, average occupancy increased by 10%. This is a significant increase for a one-year period.



Figure 4-12: Wanaka centre on and off-street parking availability (Source: Wanaka Parking Survey Report, Stantec 2018)

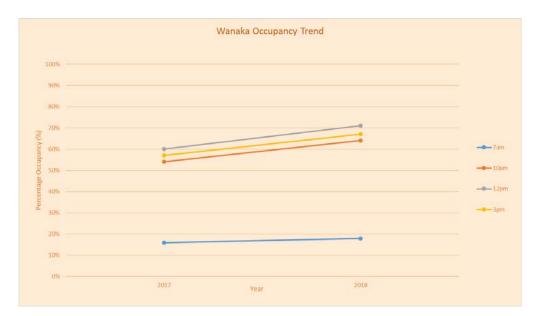


Figure 4-13: Trend in parking occupancy for Wanaka Centre 2017 to 2018 (Source: Wanaka Parking Survey Report, Stantec 2018)

There is an ecdotal evidence of poor parking provision around the three boat ramps for Roys Bay, with many people with boat trailers parking on the grass verges in summer.

#### 4.2.7 Severance and conflict

All crashes recorded in the Transport Agency Crash Analysis System for the study area, between 2013 and 2017 are shown in Figure 4-14<sup>5</sup>. This graph shows that there was a drop in reported crash number in 2017 after the three previous years all recorded increases. A review of crash severity since 2014 shows that the increase in crash numbers can be attributed to a rise in non-injury crashes. The rise in non-injury crashes has been significant. The reasons for this are not clear and this should be further investigated in the Programme Business Case. It may be partly due to the rise in tourists which will have introduced more rental vehicles into the traffic stream. Many rental agreements require damage only incidents to be reported to the police for insurance purposes. The rise in tourism may have therefore led to rise in reporting of these non-injury crashes. In terms of where and when these non-injury crashes occurred, the data showed:

- 70% of the non-injury crashes were on the open road, and 30% were in the urban area.
- 32% of the non-injury crashes occurred in May and June, which is more than would be expected.

Crashes resulting in death and serious injury (DSI) are now a commonly used metric. In the study area the number of DSI crashes in 2017 halved on the previous year and was a third of that recorded in 2014.

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<sup>&</sup>lt;sup>5</sup> For more detail refer to Background Report - Wanaka Transport Strategic Case Review Version 2.0 (Stantec 2018)

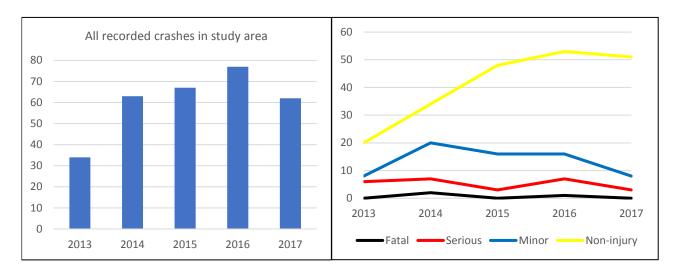


Figure 4-14: Crash totals in the study area per year and by Severity (2013-2017) (Source: NZTA Crash Analysis System)

Wanaka has two peak seasons, over the Christmas/Summer holiday period and the winter ski season. The two peak months for crashes are February and July. The summer months see the most non-injury crashes and the winter sees the most crashes that result in injuries. There is no real 'off season' when looking at the crash data.

There have been three fatalities and 26 serious injury crashes that occurred during the five-year period. There is a clustering of crashes in the town centre, on the main arterials (e.g. SH6, Cardrona Valley Road, Ballantyne Road) and around the Albert Town bridge. Looking in more detail at Wanaka the intersection of SH6 and SH84 stands out. In central Wanaka there are clusters along Ardmore Street and Brownston Street, although many of these are non-injury crashes. When considering high risk sites only one intersection has recorded more than one DSI crash and that is the intersection of SH6 and SH8A.

The Safer Journeys Assessment Tool provides maps showing risk on parts of the network. The KiwiRAP Personal Risk map is shown in Figure 4-15. It provides compelling evidence of the conflicts on Brownston Street and part of Ballantyne Road, which have a high personal risk. Medium-high personal risk is apparent on several town centre streets including Ardmore, Helwick and Dungarvon Streets. There is also high personal risk on Crown Range Road and Cardrona Valley Road.

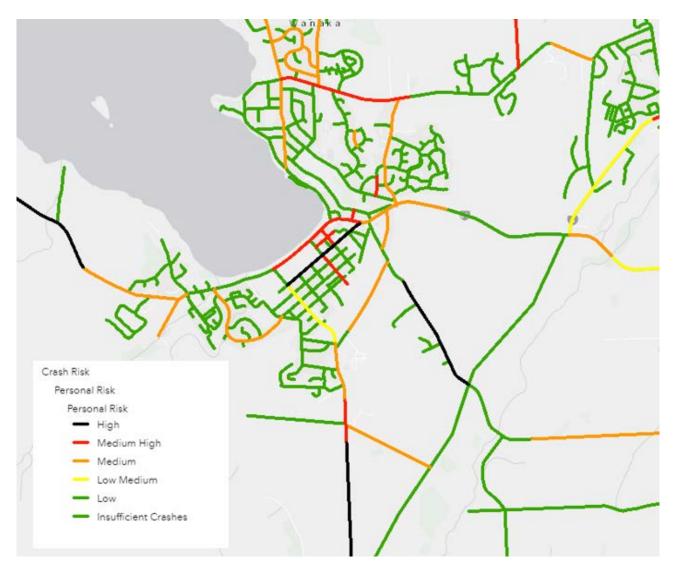


Figure 4-15: Personal Risk Map - Wanaka Town Centre (2018)

The Communities at Risk register highlights a Medium Concern for Cyclists and Older Road Users within the District.

# 4.3 Opportunities

### 4.3.1 Preparing for future growth

The Council have an opportunity to be proactive and prepare Wanaka for the growth which is anticipated. This preparation will include consideration of future network needs for all modes of transport. Work has already started on a Network Operating Framework, identifying primary and secondary routes for freight, motor vehicles, cycles, pedestrians and public transport. Missing network links will be identified as well as conflicts between modes. It is proposed that the next step is to develop a Masterplan for Wanaka Town Centre, and a Programme Business Case identifying investment needs for transport within the wider Wanaka area. A Future Development Strategy is also being prepared during 2018, which will focus on identifying areas where development will be accommodated in the future, and the infrastructure requirements to ensure development is feasible. Completing these four pieces of work will ensure that Wanaka can accommodate growth without further deterioration in the ability for residents to travel easily by any mode to access goods and services, or in the visitor experience.

### 4.3.2 Connecting Great Rides

The NZ Cycle Trail website and others promote a Cycle Touring route between Wanaka and Ross on the West Coast. The route advice directs people from the West Coast to a track that ends just to the north of the Albert Town bridge. Cyclists must then cross the bridge and then continue on a path by the river which takes riders around the lake an in to the town. The route advice notes that this path is narrow and bumpy.

There is an opportunity to consider improvements to the quality of this route within Wanaka, and also wider cycle touring connections from Wanaka, for example to the Central Otago Rail Trail or Old Ghost Road near Arrowtown. The RLTP notes there is demand for an interconnected network of medium to long distance walkways and cycleways, and there is potential to expand and connect the Great Rides by creating a national network. It identifies priorities which include a new trail connecting Queenstown, Wanaka and Cromwell with the Central Otago Rail Trail as shown in Figure 4-16.

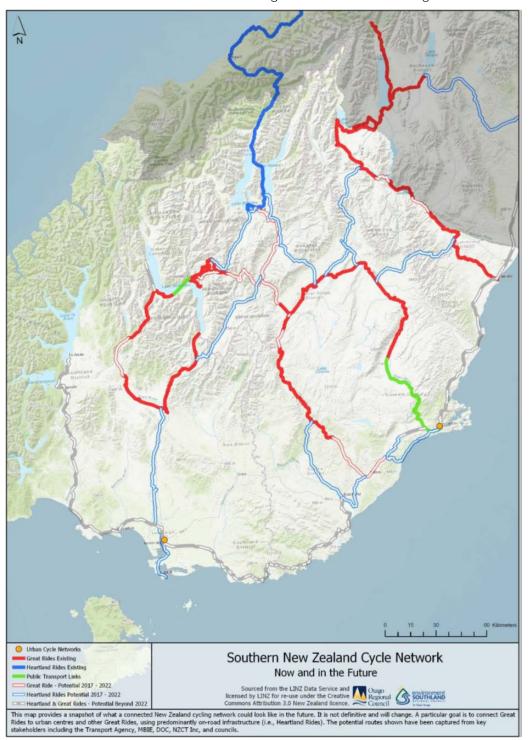


Figure 4-16: Southern New Zealand Cycle Network Map (Otago Regional Land Transport Plan 2018)

Cycle tourism is a growth area and it is expected that numbers of cycle tourists in Wanaka will increase as a result of the promotion of the Wanaka-Ross route. It is important that other road users anticipate cyclists and react safely to their presence on the road network.

### 4.3.3 Improved visitor and community satisfaction

There is an opportunity to improve visitor and community satisfaction through investment in Wanaka's transport network. Being able to easily access the places you need to go contributes to quality of life and liveability outcomes. Visitors who may only come on a 'peak day' will have a better experience and are more likely to return and recommend Wanaka to friends and family if they have a positive experience and are not delayed in traffic or struggling to find somewhere to park.

#### 4.3.4 Protect character of Wanaka

The local community are concerned that the character of Wanaka will continue to be eroded by unmanaged growth. There is an opportunity to define, in partnership with the community, the character of the town, as part of the Council's proposed Masterplanning process. The Masterplan can then ensure the aspects that the community want to retain are protected. This is important because it will mean that the town will remain attractive to future residents and visitors alike.

### 4.3.5 Increase active transport participation

By investing in the transport network, there is an opportunity to facilitate a more active community, where people regularly walk and cycle to school, work and other key destinations. Wanaka is relatively flat and the majority of residential areas are well within 5km distance of the town centre.

Given the active lifestyles of many in Wanaka, many of whom take advantage of mountain biking, skiing and tramping opportunities in the vicinity, it is highly likely that investment in enhancing walking and cycling networks to provide direct links between residential areas, activity centres, schools and workplaces would lead to an even more active community.

## 5. Benefits of Investment

Stakeholders agreed on three benefits of investment.

## 5.1 Benefit 1: Improve access

One of the primary benefits of investment in Wanaka's transport network is to improve access. The evidence demonstrates barriers to using active modes, erosion of levels of service on some routes leading to delays, conflicts and severance. Improving access between residential areas and essential goods and services (supermarkets, education, health and cultural activities), visitor accommodation areas and tourist destinations both within and beyond Wanaka. Direct connections will ensure a socially inclusive community.

## 5.2 Benefit 2: Improve long term planning certainty

Investment in the transport network will provide certainty for long term planning. This will support the Council's Future Development Strategy, which will identify future growth areas and the infrastructure required to enable the areas to be developed.

## 5.3 Benefit 3: Improve travel choice

Improved travel choice benefits everyone in a community. When active modes or public transport become attractive and viable mode shift begins to occur. Increased use of these modes takes the pressure off the transport and parking network and means investment to expand capacity can be delayed. It also leads to a healthier, more connected community. The environmental benefits of reduced greenhouse gases and fuel consumption are widely recognised.

# 6. Investment Logic Map and Objectives

An Investment Logic Map was developed following a stakeholder workshop in June 2018. The workshop focussed on agreeing the problems that could be addressed by investment in the transport network, and the benefits and opportunities that the investment would enable. The Investment Logic Map is shown in Figure 6-1.

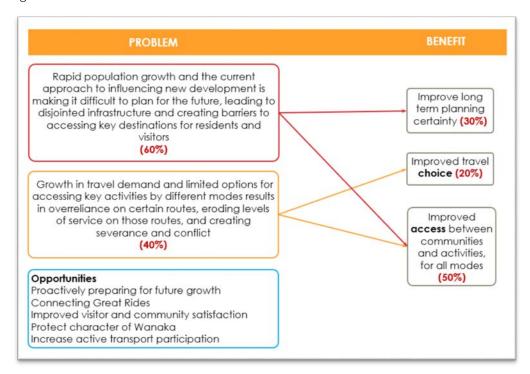


Figure 6-1: Investment Logic Map

The benefits of investing are further developed in the Benefit Map in Figure 6-2 which shows the investment benefits, and possible measures of success. These will be developed into Investment Objectives and key performance indicators during the Programme Business Case.

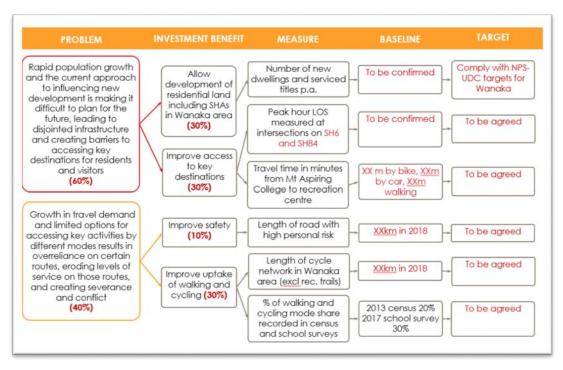


Figure 6-2: Benefit Map

# 7. Strategic Alignment

Table 8 describes how the proposed investment aligns with national, regional and local strategies, policies and plans. Overall, addressing the problems and realising the benefits aligns closely with all relevant documents. There is strong alignment with the Government Policy Statement on Land Transport (GPS) given its focus on improving access to essential goods and services to create thriving and liveable communities.

Table 8: Strategic Alignment

Document	Alignment	
Government Policy Statement on Land Transport 2018-28	The Transport Agency is responsible for giving effect to the Government Policy Statement (GPS), which sets out the Government's strategic direction for investment in the land transport network.	
	<b>Strong</b> alignment with all three objectives under the access priority, by providing increased access to economic and social opportunities throughout Wanaka and providing an improved town centre environment, a more resilient network, and improved transport choice and access by all modes.	
	<b>Strong</b> alignment with the safety priority, by addressing high personal risk on Brownston Street and Ballantyne Road, and medium-high personal risk on Ardmore, Helwick and Dungarvon Street, as well as providing facilities for active modes and reducing risk related to traffic speeds and severance.	
	<b>Strong</b> alignment with <b>value for money</b> by using the evidence-based business case approach to decision making, and by collaborating with investment partners to realise efficiencies.	
	<b>Strong</b> alignment with the <b>environment</b> priority, by investing in active modes and potentially public transport to increase their use, resulting in reduced greenhouse gas emissions and improved public health.	
NZTA Safer Journeys	Moderate alignment with Safer Journeys. Investment in the network will reduce risk on routes such as Ballantyne Road and Brownston Street. Providing a high quality cycling and walking network will improve safety for vulnerable road users.	
ORC RLTP 2015-21 (updated	Strong alignment with all policies:	
2018)	Supporting carriage of freight and exporting	
	Supporting and enabling tourism and visitor travel	
	Minimising road trauma	
	<ul> <li>Providing for mode choice including walking, cycling and public transport</li> </ul>	
	Ensuring community resilience	
	Fostering integrated transport and land use planning	
	Includes following projects for Wanaka:	
	Ballantyne Road Seal Extension - \$2.1m in 2018	
	• Wanaka Master Plan - \$500,000 in 2019	
QLDC Long Term Plan 2018-28	Identifies the Wanaka Masterplan as 'Big Issue 4', explaining it will deliver a strategic and connected approach to existing projects such as the Wanaka Active Travel Plan, Lakefront Development Plan and Parking Projects, using an integrated planning approach.	

Document	Alignment	
QLDC Transport Activity Management Plan 2018-28	States that the Council will review the Wanaka Transport Strategy to ensure the challenges are addressed proactively. It proposes that a Masterplan and Programme Business Case will be developed which is expected to cater for growth, provide for a town centre/waterfront space, including development of a parking strategy, active transport network and other improvements identified by the business case.	
QLDC Proposed District Plan 2017	Provides the overarching strategic direction for managing growth, land use and development:  1. Dramatic alpine landscapes free of inappropriate development  2. Clean air and pristine water  3. Vibrant and compact town centres  4. Compact and connected settlements that encourage public transport, biking and walking  5. Diverse, resilient, inclusive and connected communities  6. Variety of lifestyle choices  7. Innovative and diversifying economy based around a strong visitor industry	
	<ul><li>8. Unique and distinctive heritage</li><li>9. Distinctive Ngai Tahu values, rights and interests.</li><li>This project will help achieve objectives 3, 4 and 5.</li></ul>	
QLDC Wanaka Lakefront Development Plan	Provides a vision for the Lakefront as a park environment that interfaces with the town centre. Focuses on the strip of recreational reserve adjacent to Roy's Bay. A key feature of the design is a continuous pedestrian and cycle promenade along the lakefront, enhancing access between the town centre and the lake. The Plan aspires to reduce vehicle use in the town centre and seeks to remove parking at the lake's edge. Concept plans propose traffic calming and angled on-street parking along Ardmore Street. The aspirations of this Plan have impacts on transport and need to be considered at the Programme Business Case stage.	

# 8. Key Findings/Conclusions and Next Steps

The strategic case found evidence that:

- There has been rapid growth in Wanaka and this is expected to continue. There has been growth in both the number of people living in Wanaka as well as the number of visitors.
- There is compelling evidence that the key transport issue for Wanaka is accessibility, and the need to provide a well-connected network for all modes, that encompasses existing and emerging origins and destinations, and which allows people to access economic and social opportunities. The network needs to be able to provide for, and accommodate, future growth.
- Changes in land use have been rapid and it has been difficult for the Council to respond using the planning tools available. The Plan Change process focusses on managing transport effects and connectivity within the proposed new zone, rather than across the wider network. It is difficult to deal with cumulative effects of development, and locations where there is an existing problem. This one of the main causes of poor accessibility and limited route choice and has resulted in poor transport outcomes. This demonstrates a need to develop a detailed land use/transport and public realm Masterplan for the Town Centre, and a Programme Business Case for the town's transport network considering wider travel needs within the community.
- Walking and cycling networks are poorly developed, lack connectivity, and do not provide direct access between residential areas and key destinations such as schools, the town centre, and some new development areas. Compared to national averages, there is a reasonably high level of active mode use for the journey to work and school. However, mode split surveys show the routes in to Wanaka are dominated by vehicles. There is evidence of supressed demand for cycling and given the active lifestyles of many residents in Wanaka, the relatively short distances and reasonably flat topography, it is likely that provision of connected, high quality networks will lead to significant mode shift with multiple benefits. With rising traffic volumes and higher percentages of freight in the traffic stream, there is a risk that active mode use may decline without provision of safe facilities.
- The stand out safety issue in Wanaka is the high personal risk on Brownston Street, part of Ballantyne Road, Crown Range Road and Cardrona Valley Road. Within the town centre this is likely to be due to the conflict between its through route function with relatively high pedestrian volumes, parking and access movements. For the rural roads it is likely to be due to speeds and alignment. Further investigation of safety issues will form part of the Programme Business Case. Reducing the high personal risk in the town centre will need to be a focus of the Masterplan.
- There has been a significant increase in the number of non-injury crashes within the study area. This should be investigated further in the Programme Business Case.
- Traffic volumes have grown by 10% per annum since 2013 and this has increased severance along the SH6/84 corridor, leading to poor outcomes for walking and cycling, loss of amenity and delays at peak times. Freight volumes increased by 30% between 2015 and 2016 which is indicative of growth, construction activity, campervans and tour buses. There is a risk that left unmanaged, this growth will lead to decline in active mode use.
- Increasing traffic volumes and limited route choices are leading to erosion of customer levels of service for highways and local collector roads. There are gaps for speed, active mode provision, delays at peak times (especially when there are events) and parking at destinations. There are also safety gaps where there is a high personal risk identified.
- The rise in parking pressure (10% increase in occupancy from 2017 to 2018 in the town centre) and increased delays are indicative of growth and loss of accessibility. These issues detract from the visitor experience as well as residents' quality of life. Delays and parking pressure are particularly prevalent when there are events in Wanaka during the peak seasons.
- There is a requirement to act now to align with the Future Development Strategy which is to be completed by the end of 2018. The Programme Business Case and Future Development Strategy need to be developed in tandem and align with one another, because the former will identify a programme of interventions for Wanaka and the latter must include provision of infrastructure to proposed development areas.
- The Tracks model is being updated to reflect changes in traffic volumes and land use. This will be a critical tool for the Programme Business Case.

- Airport expansion is anticipated, but the exact form and impact is uncertain.
- Wanaka's role as a service centre for surrounding townships such as Hawea, which lack basic services, is likely to continue, and add to travel demands on the wider Wanaka network, as well as within the town centre.

Based on the problem statements and evidence presented, it is recommended that a Masterplan be developed for Wanaka Town Centre, providing closer integration between land use and transport planning and an overall vision for the centre that ensures the character of Wanaka is enhanced. This should be supported by a Programme Business Case that covers a wider area and aims to improving access between all key destinations and residential areas. This should consider all modes and incorporate the outputs from the Network Operating Framework. The Future Development Strategy is critical in defining the location of future development in Wanaka and ensuring appropriate infrastructure links are provided.

# Part B: Project Plan for the Next Phase

# 9. Scope

Based on a review of the evidence, it is recommended that the Council initiate an integrated planning project for Wanaka. The key outcome of this project is to establish a single, clear vision for the future of Wanaka, and develop a consolidated transport and land use integration plan for the town. There will be two main outputs from the project:

- 1. Wanaka Town Centre Masterplan: A 30 year Masterplan for the town centre focussed on public land use integration and public realm improvements. The Masterplan will incorporate high quality urban design and an active interface with the waterfront, whilst maximising access by all transport modes and review the supply and management of parking.
- 2. Wanaka Integrated Transport Programme Business Case: A preferred programme of transport and public land use integration improvements that support both the preferred Masterplan and the transport needs of the wider Wanaka urban area.

A similar process has been used to progress the development of a Masterplan for the Queenstown Town Centre. The project commenced in 2017, and to date has been a well received, positive collaboration with key partners, stakeholders and the community.

It is proposed to develop the Masterplan in parallel with the Integrated Transport Programme Business Case. This is because the two projects will be closely linked and develop iteratively, with each project influencing and impacting on the other. This approach will ensure key outcomes and decisions align and contribute to the overarching vision for Wanaka. It will allow the Council to make robust, well-informed decisions, guide the scope of long term and annual plans, and secure investment to support and manage the needs and aspirations of the Wanaka community.

The development of the Masterplan and Programme Business Case will need to be preceded by an initial community engagement activity to gauge community opinions.

The Council's Future Development Strategy work will be developed alongside in an iterative process to ensure consistency and integrated transport and land use planning outcomes. At this stage, changes to the existing urban boundary are not expected to be required.

## 9.1 Preliminary Work

### 9.1.1 Initial Community Engagement (scheduled for Aug/Sept 2018)

To inform the initial Master planning exercises, there will be a period of community engagement to seek the community's views on their vision for Wanaka. This will also be an opportunity to explain the project scope, milestones, timeframe and outcomes. This initial engagement activity will be organised by Council communications and transport officers.

### 9.1.2 Modelling and Network Operating Framework

To inform the following stages it is recommended that the Wanaka Tracks model be updated and calibrated to ensure that the outputs are based on the most up to date land use and traffic count information.

It is expected that the Network Operating Framework draft will be finalised prior to commencement of the next stages. The objectives for each mode, and primary and secondary route definition will be invaluable in shaping the Masterplan and Programme Business Case. It is possible that certain options may require a change to the routes identified – the map is a 'live' document and can both inform the next stages as well as be amended to reflect any desired changes.

## 9.2 Wanaka Town Centre Masterplan

The Masterplan will build upon the existing documents identified above and should have a 30 year planning horizon. The Masterplan will be design-led, with a visioning workshop at the outset. It is proposed that a community engagement exercise is run prior to the start of the Masterplan project, in August/September 2018, to provide community inputs that will feed in to the visioning workshop.

The aim of the Masterplan will be to identify a holistic and unified aspiration and vision for Wanaka Town Centre, collaborating with key stakeholders and partners to agree on a desirable future state for the Town. The Masterplan process will consider various options and opportunities, and develop a feasible plan that encompasses multiple aspects such as:

- enhancing the quality of the public realm through its look and feel (eg paving, planting, street furniture, etc)
- placemaking opportunities
- maximising connectivity and managing the interface with the waterfront
- providing access by all modes of transport
- reviewing the supply and management of parking to support access by both residents and visitors.

The Masterplan will consider the multiple roles of the town centre; as a tourist destination, commercial centre and community hub. The Masterplan will also consider opportunities to enhance these existing roles whilst addressing known and anticipated problems arising from growth in the number of residents and visitors.

It is likely that the Masterplan will see a move away from the current vehicle-dominant town centre, towards a more people-focussed centre. This desire has been articulated clearly in previously developed documents and aligns well with the Government's focus on mode neutrality, and encouraging walking, cycling and public transport.

The components of the Masterplan will be co-ordinated through a Spatial Framework document. The Spatial Framework is to present a compelling vision for the future of the town centre of Wanaka that reflects and enhances the Wanaka identity through sound planning, design and placemaking principles. It would seek to build upon and enrich the vibrancy, environmental qualities and heritage character of the Wanaka Town Centre. The document would describe and identify the public realm network and how it would integrate with proposed key catalyst projects and opportunities for re-development.

The document would outline the key moves and strategies that will have informed the Masterplan and vision for the town centre. It would include an Implementation Plan explaining how the strategy and actions should be coordinated and delivered. The Spatial Framework would also drive Public Realm Design Guidelines to guide the design strategy and coordinate the material palette for any future open space, pedestrian and cycleway upgrades in the town centre. The guidelines would tie into the Lakefront Development Plan and applicable Reserve Management Plans.

The study area of the Masterplan is focused on the Town Centre, Lakefront and surrounding area. It encompasses the Town Centre and Town Centre Transition zones as defined in the Proposed District Plan. It also includes the area between Lismore Park and the Lakefront, Pembroke Park, Wanaka Recreational Reserve and adjacent residential/commercial areas. This area is broad enough to provide many opportunities to enhance the form and function of Wanaka Town Centre.



Figure 9-1: Masterplan Study Area

The Town Centre Masterplan study area incorporates the area covered by the Lakefront Development Plan. The Council already have a commitment to deliver the Lakefront Development Plan, and implementation is underway. The Masterplan will need to consider and respond to the Lakefront Development Plan, focusing on the interface between the Masterplan area and the Lakefront area to ensure a high degree of connectivity and visual harmony. The Masterplan will also need to consider overall parking needs but specifically explore the effects of, and response to, Lakefront parking that will be displaced as a result of the Lakefront Development Plan.

## 9.3 Wanaka Integrated Transport Programme Business Case

The focus of the Wanaka Integrated Transport Programme Business Case will be to respond to the problems and opportunities identified in the Strategic Case, and support and enable the changes identified in the Masterplan. The development of the Programme Business Case will follow the initial Master planning exercises, but there will be an overlap to test options for both workstreams.

It is expected that the scope of the Programme Business Case will include access to key destinations such as schools, centres and employment areas by all modes, as well as public realm and placemaking initiatives. Several programmes will be tested and are likely to include both hard (infrastructure) and soft (e.g. policy, behaviour change, etc) measures. The preferred programme will identify where further work is required, costs/benefits and next steps.

For the business case workstream, the study area is substantially larger than the Masterplan area to capture the transport and land use impacts of the wider area. This area has been defined to incorporate all development areas included in the PDP for Wanaka and includes links to the Airport and Luggate. The business case study area does not encompass surrounding townships such as Hawea, Glendhu Bay, Cardrona and Luggate, but will broadly include transport options to and from these centres, as transport flows from these areas influence demands within the study area. The business case may consider tourist routes to Treble Cone, Mount Aspiring and Queenstown; this will be ascertained at the Strategic Case stage, based on a review of the evidence.

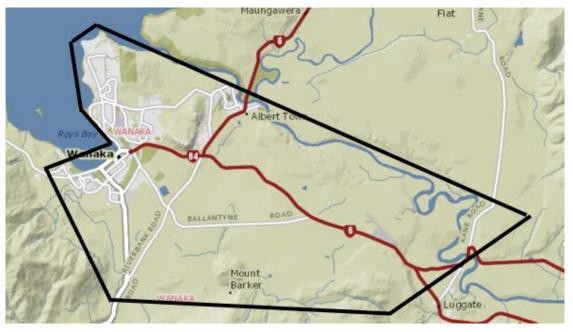


Figure 9-2: Wanaka Integrated Transport Programme Business Case Study Area

# 10. Results Alignment

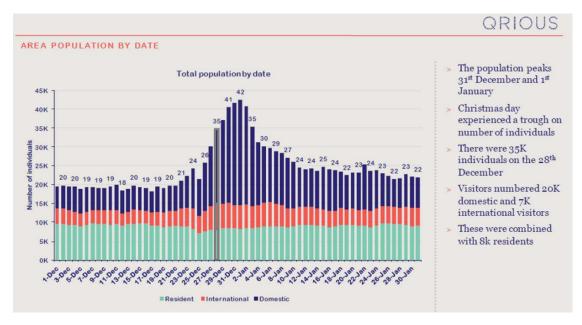
The Investment Assessment Framework has been used to assess the significance of the case for change against the desired results of the GPS, to ascertain whether further investment is in the public interest. The improvements are likely to fall under two separate activity classes:

- Walking and cycling improvements activity class
- Regional, local road and state highway improvements activity class

## 10.1 High Growth Urban Areas

For the purposes of the IAF assessment, Wanaka is classed as a high growth urban area, as it meets two of the required criteria:

At any point in the year a combined resident population and visitor population of over 30,000 people, using the most recent Statistics New Zealand urban area resident population estimates. The Wanaka Community Board Area resident population estimate was 11,600 in 2017. An estimate for visitors on the peak day is provided by the QRIOUS graph (Ref) which is for 2015/16 and shows peak day population of residents plus visitors reaching 42,000 on 31 Dec 2015 and over 30,000 for the 10 days around this time. The resident population estimates for Wanaka in that year were (10,350 2015 or 10,900 2016).



In which the resident population of that urban area is predicted to grow by more than 10% between 2013 and 2023, according to the most recent Statistics NZ medium urban area population projection for 2013 (base) – 2023. Wanaka is projected to grow by 56% between 2013 and 2023, from 6,800 residents to 10,600 in 2023.

## 10.2 Results alignment

### 10.2.1 Walking and cycling improvement activity class

Against the walking and cycling activity class, investment in Wanaka's walking and cycling network has a High results alignment as the activity addresses the criteria shown in Table 9.

Table 9: Walking and Cycling Improvements Activity Class - Results Alignment

'High' Results Alignment Criteria	Wanaka's walking and cycling network
Supports increasing the uptake of children using walking and cycling especially to and from school	Evidence shows numbers walking and cycling to school above national average, and surveys show X% children want to walk or cycle but are not allowed due to perceived risk. Current routes to school are poor quality narrow gravel tracks with inadequate crossing points and difficult to use

'High' Results Alignment Criteria	Wanaka's walking and cycling network
	for people identifying as disabled due to surface, width and lack of drop kerbs/tactile pavers. Cycle routes are not promoted by signs and/or markings. There is no safe walking/cycling route to the new recreation centre which is 3.5km from the Mount Aspiring High School in Wanaka by an indirect road route, but around 2km as the crow flies. Children using active modes must cross SH84 at grade. A refuge is provided but there is a perception of risk.
Addresses significant gap in access to new housing in high growth urban area	There is no cycle network connecting new housing areas to key destinations such as the town centre, employment areas, the recreation centre, the four schools and the new facilities at Northlake and Three Parks. The walking network is continuous, but paths are variable in quality, many being on one side of the road, gravel and narrow.
Addresses a significant problem with the ability to use existing facilities including promotion, and use by people who identify as disabled and young people	Much of the footpath network is poor quality, narrow and gravel surfaced. It is not suitable for use by people who identify as disabled. The lack of regular crossing points makes it challenging for use by young people.
Enables a significant modal shift from private motor vehicles to active modes	Investment in a high quality, connected walking and cycling network is likely to lead to a significant mode shift as the community is relatively active in other outdoors activities such as mountain biking, tramping and skiing. There is evidence of latent demand from school surveys, distances are relatively short and reasonably flat, and there is already a higher than national average rate of children walking/cycling to school, and in people walking/cycling to work. Also, the community took the initiative in developing their own network map, also demonstrating a strong desire to see investment in this area.
Addresses a high perceived safety risk to use of the mode	There is only anecdotal evidence of this, with the main issue cited as severance created by SH84. This severance is real as the road corridor is wide, traffic is free flowing with few gaps, and limited crossing points particularly east of the Anderson Road roundabout.

### 10.2.2 Regional, local road and state highway improvements activity class

For the Regional, local road and state highway improvements activity class, the results alignment is High as shown in Table 10.

Table 10: Results Alignment - Regional, Local and State Highway Improvements activity class

'High' Results Alignment Criteria	Wanaka's regional, local and state highway network
Addresses safety issues presenting a high crash risk, affecting communities subject to high safety risk, and/or in Safer Journeys area of high concern	Sections of Ballantyne Road, Brownston Street, Crown Range Road and Cardrona Valley Road have a high personal risk rating (KiwiRAP <sup>6</sup> ).
Addresses significant gap in access to new housing in high growth urban areas	Some of Wanaka's new housing areas are well provided for by the existing urban network however there is a need to identify additional routes to ensure network connectivity and resilience. For example, Three Parks is being developed and this has led to more traffic on Ballantyne Road as it provides a direct route from SH6. This road is unsealed and there have been 7 run-off road crashes including one fatality. On a map it appears to provide a good connection but in reality, it is not suitable for increased traffic. However,

<sup>&</sup>lt;sup>6</sup> https:\\nzta.abley.com\megamaps

\_

'High' Results Alignment Criteria	Wanaka's regional, local and state highway network
	the increased volumes demonstrate there is demand for this route to be part of the wider network.

## 11. Timeframe

The key stages for the project are shown in Figure 4-3. The Masterplan and Programme Business Case workstreams will progress in parallel, starting in October 2018. Preliminary work to complete the initial community engagement exercise will be completed by the end of September whilst the Council procures professional services for the project. The target date for completion of the Masterplan and Programme Business Case is June 2019. After that time, it is expected that various Detailed Business Cases will be completed for separate aspects of the Programme Business Case. The purpose of the Detailed Business Case phase is to further develop and assess the options and complete detailed designs. This process will include continued conversations with stakeholders and community consultation. In parallel, preparations will be made to include specific improvements in the Draft Long-Term Plan 2021-31, and Regional Land Transport Plan.

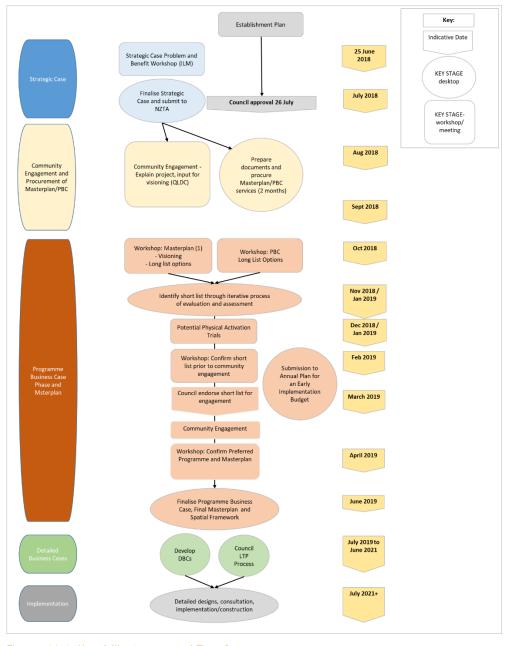


Figure 11-1: Key Milestones and Timeframes

## 12. Financial

The estimated cost of the Town Centre Masterplan and Programme Business Case would be in the order of \$900,000. Individual components have been estimated as follows:

- Town Centre Masterplan (including Spatial Framework): \$300,000
- Transport Programme Business Case: \$600,000

An allocation of \$900,000 has been committed within the adopted 2018-28 Long Term Plan, in 2018/19 and 2019/20.

Co-investment from the Transport Agency will be sought, given the **high** results alignment. It is possible that some elements may attract an enhanced Financial Assistance Rate due the high results alignment. Funding for some elements may be sought from the Provincial Growth Fund.

# Quality Management

A quality management plan will be developed as part of the next phase of work.

# Organisation and Governance

The proposed programme governance structure is similar to the structure used to progress the Queenstown Town Centre Masterplan. A key difference is the role of the Council's key partners, the Transport Agency and the Otago Regional Council (ORC). Representatives from these organisations have been included within the Programme Control Group. The Programme Governance structure is illustrated in Figure 14-1).

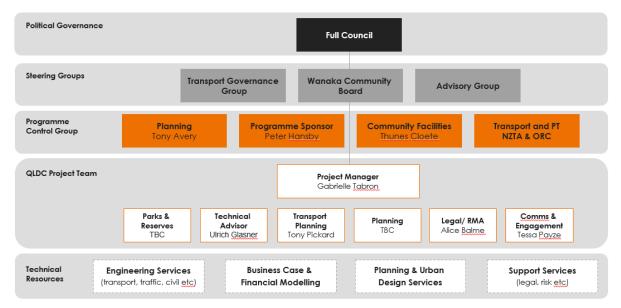


Figure 14-1: Proposed Programme Governance Structure

The role and function of each governance group is summarised below:

- Political Governance: This will be provided by the Council and is the main gateway for financial and community engagement approvals. The preferred option will be presented to the Council for endorsement prior to community engagement.
- Steering Groups:
  - Wanaka Community Board: As local experts and with a strong connection to the local community, the Community Board will play a key role in the development of the project.
  - Advisory Group: This group consists of six individuals that bring a wide range of experience to the Master planning and business case process. Members will be chosen based on their knowledge and represent key sectors including urban design, transport planning, place making, tourism and local business. While this group has no delegated authority and is advisory only, they will guide and influence decisions.

- Transport Governance Group: Regular updates will be provided to the Transport Governance Group at their normal meetings, so they can provide feedback or comment as required, and to ensure they are informed about the progress of the project.
- The project team will provide regular presentations to the Community Board and Advisory Group as a single group. This will allow these two groups to provide input at all stages, and their feedback will be considered by the design team immediately. These two groups will act as a sounding board for the project and provide strong local knowledge and input.
- Programme Control Group: This level provides a review and integration forum to ensure that wider
  implications are considered across the organisation. This group will provide close oversight of the
  project, to ensure that it is on track and on budget, and to deal with any day to day issues. There will
  be monthly meetings with this group.
- QLDC Project Team: This group will be involved in the day to day running of the project and participate in meetings and workshops as required throughout the process. Officers will provide local knowledge and expertise to the wider team.
- Technical Resources: These specialist resources will be procured through a competitive tender process. They will work closely with the core QLDC Project Team and will lead the development of the Town Centre Masterplan and the Integrated Transport Programme Business Case. There will be a high level of interaction between these technical specialists and the QLDC Project Team.

## 15. Communication

Undertaking timely and effective engagement with key partners, stakeholders and the community is a critical element of any project and can significantly influence the success of delivering a project. Council's Communication Team have confirmed that they will dedicate a staff member to coordinate targeted consultation activities for the project.

A Communications and Engagement Plan will be developed at the outset of the project to identify the methods and degree of engagement, intended audience, and the proposed programme of events and activities. The Communications and Engagement Plan will include an engagement register that provides a record of the date, audience and scope of engagement activities that have been undertaken.

The Wanaka Community Board will play a key role in the project, both in providing input at key programme milestones that can influence the outcomes, and through their day-to-day interactions with the wider community. The Community Board have considerable local knowledge that will be invaluable to the project. The Wanaka Community Board are invested in the community and are integral to the success of this project.

### 15.1 Partners and Stakeholders

The business case process, Master planning exercises, and the proposed governance structure ensure that partners and stakeholders are involved throughout the process. This will provide input from a variety of sources resulting in more robust outputs, as well as allowing stakeholders to be part of the process from the outset. A preliminary stakeholder matrix that assesses the partner investors, external stakeholders and government ministers has been created for the project, as shown in Figure 15-1.

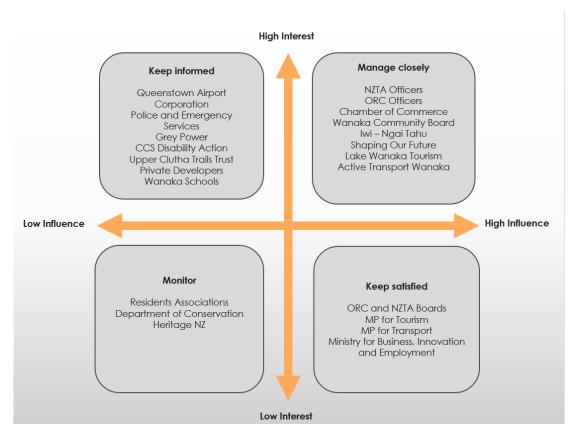


Figure 15-1: Partner and Stakeholder Matrix

Representatives from high interest stakeholder organisations will be invited to attend the workshops that are planned as part of this project, as appropriate. They will also be encouraged to participate in the wider community engagement activities.

## 15.2 Wider Community Engagement

The main purposes for engaging with the community are to:

- Gather feedback
- Define and manage project scope and expectations
- Understand reactions and implications of a proposal
- Generate support and 'buy-in' for actions.

Initial engagement with the community is proposed for September 2018. The scope and format of this process is still to be confirmed but is likely to be a combination of an interactive session with the community (either informally in a public/ open air setting, or more formally through a public workshop or drop-in session), and via online platforms such as websites and social media.

There is the potential for physical activation trials to be held during the summer of 2018/19, to stimulate discussion and feedback on possible options.

The second period of engagement will be to confirm the preferred option(s), proposed for April 2019. This will allow the community to have their say on the short-listed option(s) and allow their input to be considered in determining the preferred option(s).

There will be formal consultation on the preferred option(s) through either the Annual Plan or Long-Term Plan process in late 2019/2021.



Appendix A Background Report - Wanaka Transport Strategic Case Review Version 2 (updated 2018)



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## **REVISION SCHEDULE**

			Signature or Typed Name (documentation on file)			
Rev No.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by
1	28/7/2017	Version 1	S Connolly	M Flatters	M Flatters	M Flatters
2	2/5/2018	Version 2	S Connolly	M Flatters	M Flatters	M Flatters

# **Executive Summary**

The purpose of this report is to present the evidence collected as part of the Wanaka Transport Strategic Case review, to document the subsequent discussion between QLDC and NZ Transport Agency staff, and to present the recommended next steps.

The key findings from a review of the evidence were:

- In 2018 it was estimated that on the peak day combined resident and visitor numbers are 48,000. Visitor numbers are projected to almost double by 2058, and the usually residential population is expected to double by 2058. This is supported by the airport, which has a long term future and potential growth.
- In 2017 the Housing Minister signaled a change in the growth environment in Wanaka. In 2014 the Housing Accord just covered Queenstown, but in 2017, the Housing Accord was extended to apply to the whole District, recognising that Wanaka has the 'same sorts of pressures around housing affordability [as the Wakatipu Basin]', and the substantial growth in the Northlake and Three Parks subdivisions.
- The peak day total of 34,000 (2018) and predicted residential growth rate of 34% between 2018 and 2028 mean that Wanaka meets the criteria for 'high growth' as defined in the National Policy Statement Urban Development Capacity. High growth urban areas are given priority for transport improvements, with High or Very High ratings being given to public transport, walking and cycling, transport planning and demand management programmes in the draft 2018 Investment Assessment Framework. However, although Wanaka meets the definition for 'High Growth' under the National Policy Statement, it is not listed in the Investment Assessment Framework under Appendix 2. For QLDC, only Queenstown is identified.
- There are limited route choices from new development areas to the centre (e.g. Anderson Road, Lakeside Drive), for through traffic, and in to and out of Wanaka, leading to delays and risk taking.
- The resident and visitor population are highly reliant on private vehicles for their journey to work, and modal split surveys for the centre cordon in 2018 showed that motor vehicles made up 89% of recorded movements, bus/coach 2%, pedestrians 7% and cyclists 3%. There is no public transport in the study area, although there are school buses. The actual number of cars owned by people living in Wanaka has doubled between 2001 and 2013.
- On and off street parking areas are under pressure. There was evidence of an increase in parking demand from 2017 to 2018, with the average parking occupancy at 10am, midday and 3pm increasing by 10%. Parking provision should be improved in line with customer levels of service as outlined in the One Network Road Classification.
- Traffic volumes have been growing at a rate of 10% per annum between 2012 and 2016. There was a 30% increase in heavy vehicle volumes from 2015 to 2016. The transport model shows a decline in levels of service in the evening peak in 2025 and worsening by 2045.
- Crash totals are fluctuating, and there are some crash hotspots, and crashes involving vulnerable road users. Crashes are year round, they are not limited to a particular time of year.
- Walking and cycling are already more popular ways to get to work in Wanaka compared to New Zealand averages, and the modal split survey for the centre cordon in 2018 showed a 62% increase in pedestrians compared to 2017, and a 132% increase in cyclists, although this could be partially attributed to the weather on the day of the survey. More cyclists may be expected as a result of the NZ Cycle Trail route between Ross and Wanaka. Growth in cycle tourists offer an economic opportunity. There are gaps in the existing walking and cycling networks. Improving these networks offers an opportunity for mode shift, and safety improvements will assist in realising latent demand for these modes.

- The community have aspirations to improve the connection between the retail area and the waterfront, by progressive pedestrianisation and amenity improvements on Ardmore Street.
- The Council have a Lakefront Development Plan aimed at improving the look, feel and operation of the reserve strip adjacent to Lake Wanaka.

A meeting was held in 2017 with Transport Agency representatives to discuss the evidence. It was agreed that the evidence for growth in Wanaka was compelling, but evidence to show that the transport network and customer levels of service are affected as a result were not compelling. The next steps were confirmed as:

- Consider developing a masterplan for Wanaka;
- Develop a forward works programme for Wanaka, to be primarily funded through minor improvements;
- Any projects on the forward works programme that exceed the threshold for minor improvements to be progressed as Single Stage Detailed Business Cases (such as the upgrade to Ballantyne Road);
- Develop and implement a monitoring plan to address evidence gaps and support future business cases;
- Complete a Point of Entry form for Wanaka Transport to document the way forward;
- Inclusion of funding, against Work Category 151 in the asset management plan, to cover evidence collection.

Version 2 of this report updates information where available in April 2018. The Council have considered the next steps listed above and are now preparing to:

- Develop a Network Operating Framework for Wanaka, identifying primary and secondary routes for general traffic, freight, future public transport, cycling and walking.
- Redevelop the Strategic Case for Wanaka, leading to an updated Programme Business Case and a new Masterplan for the town centre.

This work will be completed during 2018/19, and will lead to an evidence based, future focussed programme of transport and public realm improvements. Further detail will be developed between 2019/21, and the projects included in the Council's next Long Term Plan with implementation expected from 2021 onwards.

# Queenstown Lakes District Council

Background Report - Wanaka Transport Strategic Case Review Version 2 (Updated 2018)

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# Review of the Strategic Case

### 1.1 Introduction

The purpose of this report is to present the evidence collected as part of the Wanaka Transport Strategic Case review, to document the subsequent discussion between QLDC and the Transport Agency staff, and to present the recommended next steps.

## 1.2 Background

In early 2016 QLDC submitted the following to the Transport Agency:

- Wanaka Transport Strategic Case
- Queenstown Town Centre Strategic Case
- Queenstown Town Centre Programme Business Case

In April 2016 the Transport Agency formally confirmed its support for both Queenstown Business Cases, but did not support the Wanaka Transport Strategic Case, as their assessment was that the evidence presented was insufficient to support a medium or high strategic fit (as defined by the Investment Assessment Framework applicable at that time). The Transport Agency agreed that at that time, the assessment profile for Wanaka Transport was Strategic Fit – Low, but noted the need for a watching brief.

In March 2017 work commenced to review the Wanaka Transport Strategic Case, in collaboration with the Transport Agency. Direct and detailed feedback was sought from the Transport Agency, a review of available evidence completed, and the evidence discussed in a meeting with Transport Agency representatives. A way forward was discussed and agreed. This report presents the results of this review and explains the agreed next steps.

This report (Version 2) includes updated information available as of April 2018. This update has been completed to inform the development of a Network Operating Framework and Establishment Report to quide investment in Wanaka.

## 1.2.1 Study Area

The study area for the evidence review is shown in Figure 1-1. It includes the urban area of Wanaka, and extends north to include Hawea, and west to include the airport, Luggate and the intersection of State Highway 6 and 8A.



Figure 1-1: Study Area

## 2. The Evidence

A wide variety of sources of evidence were consulted. A summary of findings is presented below.

### 2.1 Growth

There is ample evidence relating to historic and projected growth in Wanaka. This includes growth in the number of permanent residents, combined with growth in visitor numbers.

## 2.2 Population Growth

Historic population growth and projections for Wanaka to 2058 are provided in Figure 2-1. The usually resident population growth rate is steady until 2048, with a slight slowing after 2048. Growth in the number of households shows a similar pattern.

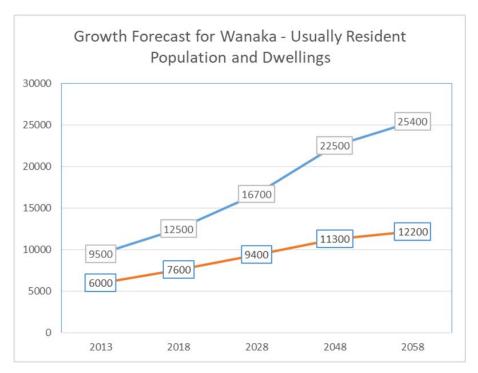


Figure 2-1: Historic and projected growth population for the district (Source: QLDC Growth Projections to 2058, Rationale, 2017

Prior growth in the number of households in the Wanaka census area unit is illustrated in **Error! Reference source not found**.. A comparison of the number of households in 2001, 2006 and 2013 shows continued and significant historic growth, with approximately double the number of households between 2001 and 2013.

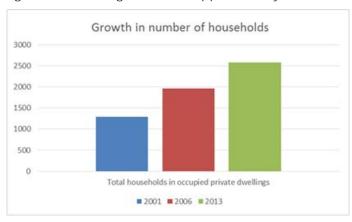


Figure 2-2: Growth in Households - Wanaka (Source: Census 2013)

The number of resource consents processed or being processed for Wanaka shows that residential and commercial growth is continuing, with consents granted for 278 residential lots and 30 commercial lots in the last year, and consents for another 278 residential lots currently being processed (refer Table 2-1).

Table 2-1: Resource Consents processed for Wanaka (Source: QLDC, June 2017)

Area	Development	Consents granted in last year	Currently being processed
Aubrey Road	Northlake	178 residential lots	75 residential lots
	Kirmoko	60 residential lots	
	The Heights		160 residential lots
Ballantyne Road		30 commercial lots	
Meadowstone		40 residential lots	43 residential lots
Total		278 residential lots 30 commercial lots	278 residential lots

The Operative District Plan (ODP) provides dwelling capacity as illustrated in Table 2-2, which allows for the development of 4,129 lots in Wanaka. In addition, the Housing Accord, which is an agreement that QLDC has with the government to increase the supply of housing, now applies to the whole District. When the Housing Accord was originally agreed in 2014 council staff and councillors agreed that 'Wanaka did not have the supply and affordability problems that the Wakatipu Basin had' <sup>1</sup>. In 2017 however, the Minister stated that Wanaka has the 'same sorts of pressures around housing affordability [as the Wakatipu Basin] <sup>2</sup>′. This shows how the housing situation has changed in Wanaka.

The Council have based Housing Accord targets on an expected 2.6% per annum growth to 2028. In 2017 there were 6,412 dwellings in Wanaka, and the projected additional dwellings required to meet the growth target would be 4,922 by 2048 (77% increase in dwellings).

Table 2-2: Dwelling capacity under Operative District Plan

Area	Number of dwellings
North Wanaka	1083
Northlake	1500
Scurr Heights	100
South Wanaka	696
Three Parks	750
Total	4129

In 2016, QLDC notified its Proposed District Plan. This supports further growth in Wanaka by proposed rezoning of additional areas for residential and commercial development in Wanaka as shown in Figure 2-3.

<sup>&</sup>lt;sup>1</sup> http://www.oag.govt.nz/2015/queenstown-housing/part2.htm

<sup>&</sup>lt;sup>2</sup> 'Nick Smith says Queenstown and Wanaka's housing supply to grow', 16 May 2017, stuff.co.nz

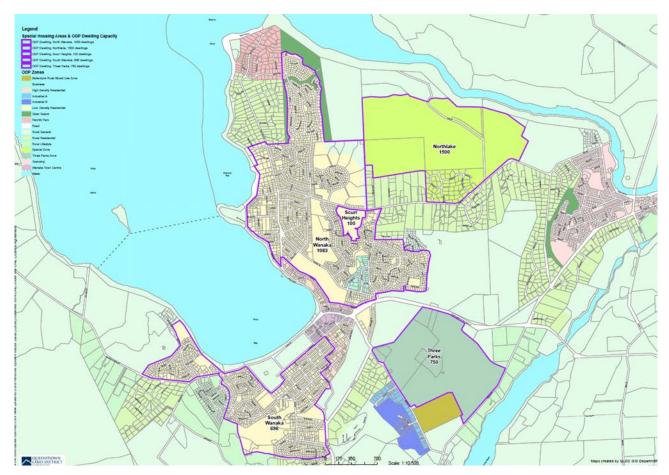


Figure 2-3: Wanaka Proposed District Plan Map 2017 (Source: QLDC Staff 2017)

A further sign of growth is the increase in school rolls at Wanaka schools (refer Figure 2-4). All three schools have seen significant roll growth since 2010, particularly in the last two years. This is reflective of the population increase, and demonstrates that there is a growth in permanent residents in Wanaka.

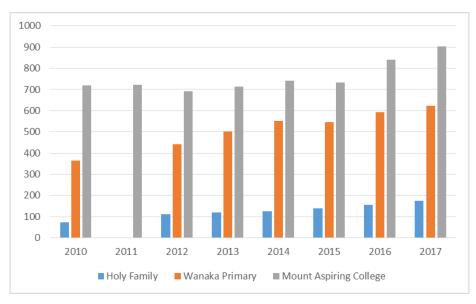


Figure 2-4: Growth in School roll – Wanaka School student numbers (Source: QLDC)

In 2017 the government announced \$16m for construction of a new primary school in Wanaka, with capacity for 800 students. This will be located at Three Parks. It was also announced that six new classrooms would be added to Mount Aspiring College, building on previous additional classrooms provided in 2016 for both the College and Wanaka Primary School.

#### 2.2.1 Growth in Visitor Numbers

As well as growth in the residential population, visitor arrival numbers to the District have been growing, and this growth is forecast to continue (refer Figure 2-5).

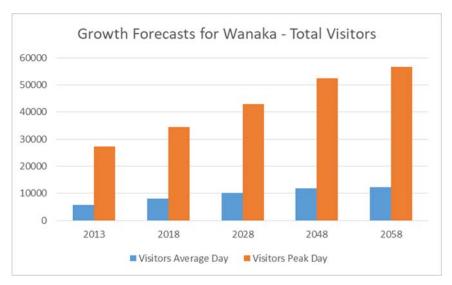


Figure 2-5: Actual and projected growth in visitor numbers to Wanaka (Source: QLDC Growth Projections to 2058, Rationale 2017)

Statistics from Colliers International for the year ending March 2017 (Figure 2-6) show that there have been significant increases in guest nights, stay length, and occupancy rates compared to the year ending March 2016.

Annual Guest Nights YE March 2017
820,703
4.9% increase on previous year
International Guest Nights YE March 2017
508,508
9.9% increase on previous year
Occupancy Rate YE March 2017 (excl Holiday Parks)
65.8%

Average Length of Stay YE March 2017
2.24 nights

Source: Stats NZ Commercial Accommodation Monitor March 2017

Wanaka Tourism Statistics

Figure 2-6: Visits to the Wanaka region (Wanaka Region: Upper Clutha and Wanaka area) (Source: Colliers International Queenstown, Wanaka and Dunedin Market Review and Outlook 2017)

The Lake Wanaka Tourism Strategic Plan 2012-22 contains a vision and targets shown in Figure 2-7. It identifies that the visitor economy is the key economic driver for the Wanaka area. In the 2015/16 period, visitor spending increased by 20% to contribute just under \$400 million to economic wellbeing, creating the majority of jobs in Wanaka and the surrounding area. Supply constraints are more evidence at peak periods (December to April) with commercial accommodation occupancy at 70-80%, and infrastructure like car parks and toilets under pressure.

Through innovative marketing and storytelling, the Wanaka region will be recognised as a leading destination that delivers an outstanding visitor experience.

### By 2022 the Wanaka region will receive 1,045,000 guest nights,

- generated from a 24% increase in visitor arrivals
- and a 23% growth in average stay length
- resulting in a 35% increase spend

#### Figure 2-7: Lake Wanaka tourism vision and targets (Source: Lake Wanaka Tourism Strategic Plan 2012-22)

Lake Wanaka Tourism's focus is on spreading visitor demand to the shoulder seasons, increasing visitors' stay length, and targeting value over volume, until further capacity is developed. This approach shows that transport and parking capacity are starting to constrain future growth. Spreading visits into the shoulder season is an approach that will help to make more efficient use of existing capacity and still allow for growth.

The Colliers Projections in 2017, for the next 12 months, highlight property development and expansion in Wanaka in the short term, with tourism and population growth driving the property market (refer Figure 2-8). It is likely that the forecasts for Queenstown will have a knock on effect for Wanaka. For example, the acute shortage of rental housing and visitor accommodation, combined with high value housing in Queenstown will mean some people will seek to live or stay in Wanaka instead, furthering demand in Wanaka.

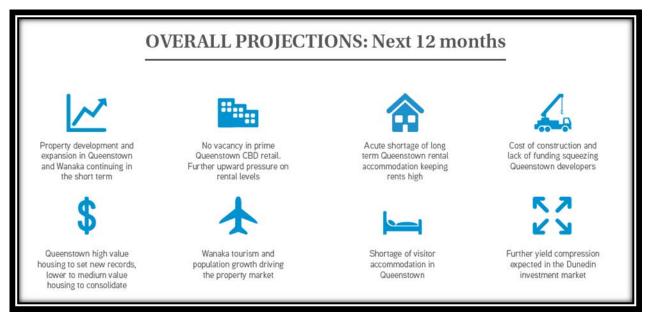


Figure 2-8: Projections for Queenstown, Wanaka and Dunedin, 2017 (Source: Colliers International)

#### 2.2.2 Overall Growth

The combined effect of increasing numbers of residents and visitors puts pressure on transport infrastructure such as parking. Figure 2-9 shows the current and forecast peak population for Wanaka – illustrating that the peak population on any one day is the sum of usually resident population and peak day visitors. Currently the peak day population is around 48,000. The expectation is that by 2028 the peak day population will be around 60,000 people, and by 2058, the peak day population will be around 80,000 people. Approximately two-thirds of the population present in Wanaka on the peak day will be visitors. This is a significant increase in the maximum number of people in Wanaka on the peak day, and the implications for the transport network are substantial.

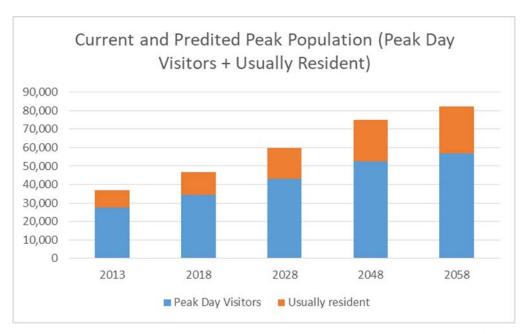


Figure 2-9: Wanaka ward average day and peak day population projections (Source: QLDC Growth Projections to 2058, Rationale, 2017

The pattern of visitor activity in Wanaka over the New Year peak period is shown in Figure 2-10. The graph demonstrates the influx of domestic visitors during the period 27 December to 8 January. Domestic visitor numbers then stay at a higher level through January. The numbers of residents and international visitors are reasonably static through the period. This is important in terms of the capacity of the transport network and provision of parking, because the peak period is relatively short, lasting approximately two weeks. However there are other peak periods such as during the Warbirds Over Wanaka event which occurs every other year in March/April, Wanaka A&P Show in March and Challenge Wanaka in February.

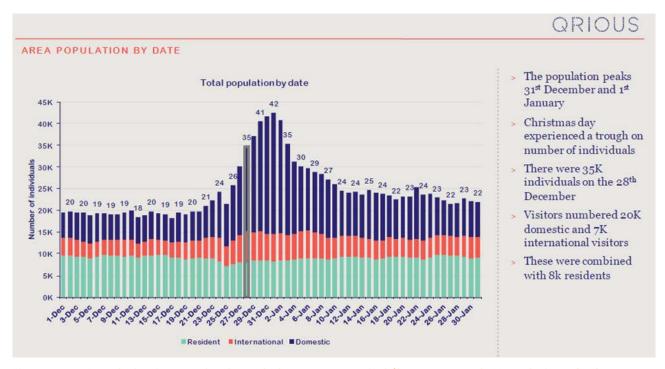


Figure 2-10: Population in Wanaka through the summer period (Source: Wanaka Population 1/12/15-31/1/16, QRIOUS)

#### 2.2.3 Discussion

The high growth context has implications for transport and parking in Wanaka. Also, because growth is forecast across the entire District, this will put added demands on Wanaka's transport network for example from people visiting for the day, or from residents of small surrounding towns such as Hawea and Luggate which are also growing but do not yet offer key services.

Over time, as growth occurs, any problems that are seen today will become gradually worse. The community's experience and observations of the impacts of growth in neighbouring Queenstown mean that there is a drive to understand the 'lessons learnt' and not make the same mistakes, but ensure that rigorous planning and investment in transport occurs ahead of growth.

## 2.3 Planning for Transport

Planning for an improved transport system for Wanaka has been an ongoing role for QLDC. A summary of the key planning documents is provided in this section.

### 2.3.1 Wanaka Structure Plan (2007)

The Wanaka Structure Plan was developed in 2007, and identified a preferred growth option which was to provide for some new development in new urban zones, whilst promoting consolidation of new dwellings into existing rural residential zones through rezoning of land for more intensive development where achievable and appropriate. Figure 2-11 shows the proposed zoning, and also identifies new roads to service the development areas.

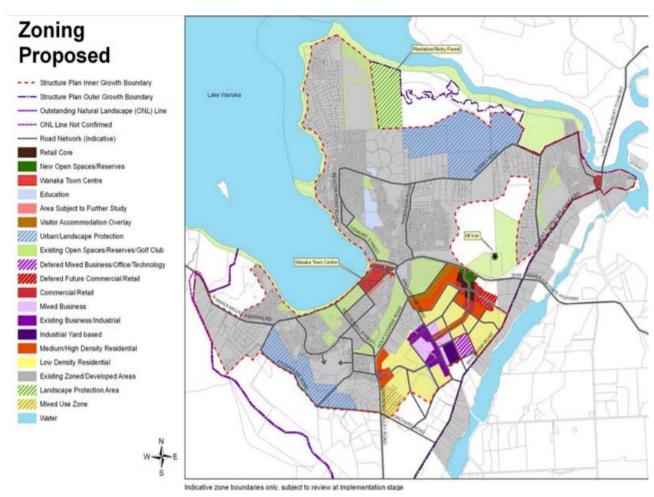


Figure 2-11: Wanaka Structure Plan proposed zoning (Source: Wanaka Structure Plan 2007)

The Structure Plan identified the following transport improvements:

• Construct east/west distributor route - new road parallel to Riverbank and Golf Course Roads.

- Slow traffic on Ardmore Street and the town centre, redesign Ardmore Street to increase amenity and pedestrian safety.
- Reduce traffic volumes on Lakeside Drive.
- New and improved pedestrian walking routes.
- Identify opportunities for more on street parking and defined parking areas.
- Bus route/services linking key destinations.

It did not list the new roads to be constructed within proposed development areas. It is assumed these were to be built by developers or utilising development contributions as the rezoned land was subdivided. Since 2007, the aspirations for slower traffic and more amenity on Ardmore Street have been achieved, as well as some pedestrian improvements.

### 2.3.2 Wanaka Transport and Parking Strategy (2008)

The Wanaka Transport and Parking Strategy focuses on:

- 1. Improving the urban environment around the town centre and lake front.
- 2. Planning an appropriate transport network to cater for future growth, whilst maintaining the character of Wanaka and encouraging the use of sustainable modes. This included the staged development of an arterial road network, and addressing a key problem at the time which was the cross town traffic using Ardmore Street in conflict with efforts to improve the visitor, recreational and retail functions of the centre.
- 3. Planning for appropriate parking provisions, particularly in and around the centre.

A summary of the improvements is provided in Figure 2-12. As a result of the strategy Ardmore Street was downgraded as a cross town through route with traffic calming and an upgrade of Brownston Street to provide the through route function.

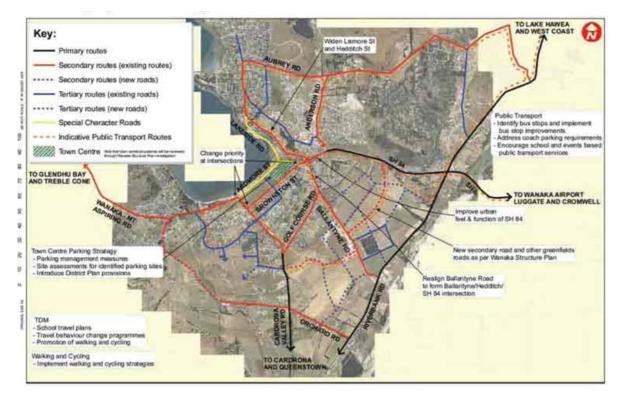


Figure 2-12: Wanaka Transport and Parking Strategy Summary Map (Source: Wanaka Transport and Parking Strategy 2008)

### 2.3.3 Walking and Cycling Strategy (2008)

Cycling and Walking route planning for the study area was completed by QLDC as part of the Walking and Cycling Strategy (2008). The cycle map identifies off road trails as well as on road facilities, in the form of cycle lanes or sealed shoulders.

### 2.3.4 Draft Wanaka Transport Programme Business Case (2016)

In 2015-16, QLDC commenced development of a Programme Business Case for Wanaka Transport. This document is still a draft, but identifies a forward programme of works as shown in Table 2-3.

Table 2-3: Draft Programme of Works (Source: Wanaka Programme Business Case 2015-16)

Projects	
Ballantyne Road Corridor Upgrade	Intersection improvements:
<ul> <li>Ballantyne/Riverbank Road Safety Improvements</li> <li>Ballantyne Road (Riverbank to SH84)</li> </ul>	<ul><li>Ballantyne Rd/Riverbank Rd</li><li>SH84/Anderson Rd</li><li>SH84/SH6 (NZTA)</li></ul>
Cross town/SH connection (Ballantyne – Hedditch)	Anderson Road Corridor Improvements
Town Centre Shared Space	Transport Communications Plan Signage and Wayfinding
Road network review	Parking Programme, new off street parking areas
Cycling and Walking Catchment Audits	Cycling and Walking Minor Improvements
Develop main school bike/walk routes (4 named)	School Travel Planning
Develop main commuter bike/walk routes (6 named)	Business Travel Planning
Crown Range Road route safety study	Grey spot study

These projects are consistent with previous planning work completed for Wanaka, with a number of recurring themes. This is the most comprehensive list of improvements that has been identified however, and could form the basis of a forward works programme.

#### 2.3.5 Shaping Our Future Upper Clutha Transport Taskforce Report (2017)

In 2017, the Shaping Our Future Upper Clutha Transport Taskforce identified an overall vision to 2050 and beyond:

'The Queenstown Lakes District has a functional, innovative, integrated, multi-modal and sustainable transport system that supports a thriving, healthy community and enhances the visitor experience. Implementing this vision, the Upper Clutha will be open to change and new technologies, giving priority to initiatives that enhance connectivity and the character of the area'.

The Taskforce also identified an air transport sub vision: 'Wanaka airport is a destination for high yielding innovative business creating a sustainable aviation hub for the region'.

The action plan includes:

- Identifying and protecting land for key future routes and hubs for public transport and parking
- There is a focus on creating a shared zone and progressive pedestrianisation of the Wanaka Lakefront and CBD.
- A long term Wanaka Parking Strategy.
- Connected walking and cycling networks.

Again, the priorities identified tell a consistent story with other planning work that has been completed. It is clear that there is likely to be a long term future for the airport and potential growth, which will support and enable the expected growth in visitor numbers. Queenstown airport is constrained and in the future Wanaka airport may provide a more important regional role in providing additional capacity for flights.

### 2.3.6 NZ Transport Agency Planned Projects

In June 2017, the Transport Agency confirmed the following projects within the study area:

- Roundabout upgrade at intersection of SH6 and SH84, option to downgrade Ballantyne Road
- Improvements to the Albert Town Bridge, triggered by traffic volumes and delays, need to cater for pedestrians

There is not yet certainty around the timing and scope of these improvements.

# 2.3.7 Transport Activity Management Plan, Long Term Plan and Infrastructure Strategy (2018)

The QLDC Transport Activity Management Plan was updated in 2017, and has informed the draft Long Term Plan and Infrastructure Strategy expected to be adopted by the Council in 2018. For transport in Wanaka, the focus is on a review of the Wanaka Transport Strategy to ensure challenges are addressed proactively, before they become problems. The Strategy will be reviewed every three years starting in 2018/19, with initial review supported by a network review and development of a Network Operating Plan. This will inform the development of a Wanaka Masterplan. A Programme Business Case will be developed in parallel to the Masterplan, and is expected to:

- Cater for growth in travel demand as a result of increases in resident and visitor numbers, as well as providing access to planned residential, commercial and industrial developments.
- Provide for town centre shared space and connections to/along the waterfront
- Include development and implementation of a:
  - Parking Strategy (\$11.3m 2019/20-2023/24)
  - Active Transport Network
  - Other Transport improvements as identified in the Programme Business Case (\$26.6m 2021/22-2037/38)

As a stopgap measure in the short term, the Council will fund small, low risk/low cost projects in Wanaka e.g. investment in Ballantyne Road.

#### 2.3.8 Discussion

It is clear from this summary that there are a number of recurring themes relating to improvements to transport in Wanaka. The Council have responded to this by outlining a clear plan for transport in Wanaka which will allow the issues to be identified and a masterplan developed in consultation with the community. Indicative sums have been included in the Long Term Plan to allow for development and implementation of the Masterplan/Transport Strategy.

### 2.4 Mode Choice

Trips in Wanaka are primarily made by motor vehicle. The choice to travel by car is partly influenced by car ownership, which is very high, as shown in Figure 2-13, with 97% of households having access to a motor vehicle. The percentage of households with one, two or more motor vehicles has been relatively static over the period 2001-2013.

Because the population has been growing, the actual number of motor vehicles has been growing, as shown in Figure 2-13. In 2001, residents of Wanaka owned approximately 2124 motor vehicles, whereas in 2013, they owned more than double, at 4527. This increase in the number of cars in the centre means there is increased demand for network space and parking.



Figure 2-13: Actual number of cars owned – Wanaka Census Area Unit (Source: NZ Census) (NB Figures may be slightly lower than actual as 'three' has been used for the 'three or more category')

The census also provides information about how people travel to work on census day, and how this has changed since 2001. Although this data can be influenced by the weather on the day of the census, the general pattern is illustrated in Figure 2-14. Both actual numbers and percentages are shown. The actual numbers show that more than twice as many people are driving to work in Wanaka compared with 2001. However the percentages using each mode have barely changed. The number cycling in 2013 was noticeably higher however, from a very low base. The mode choice for the work trip in Wanaka is very similar to the national picture, but with more people walking and cycling, as would be expected for a smaller centre, where distances tend to be shorter and therefore more suitable for active travel.

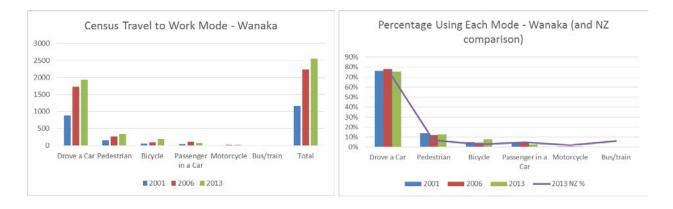


Figure 2-14: Actual numbers and percentages - Travel to work mode - Wanaka Census Area Unit and NZ comparison (Source: NZ Census)

Modal split surveys of people travelling into Wanaka's central area have been completed since 2010. The data is shown in Figure 2-15. In 2018, 89% of movements were motor vehicles, with 2% bus/coach, 7% pedestrians and 3 % cyclists. This shows heavy reliance on cars for trips in Wanaka.

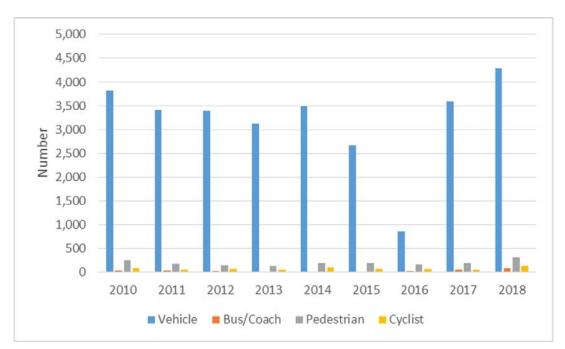


Figure 2-15: Modal split survey 2010-2018 (Source: Wanaka modal split survey, Stantec 2018. Note: vehicle volumes in 2016 were not recorded on all routes giving an incomplete total)

Looking in more detail at trends in active modes and bus/coach shows that there was a sharp increase in active mode use between 2017 and 2018, although this may be partly explained by the weather on the day. However it does appear to be reflective of a longer term trend, particularly for walking (refer Figure 2-16).

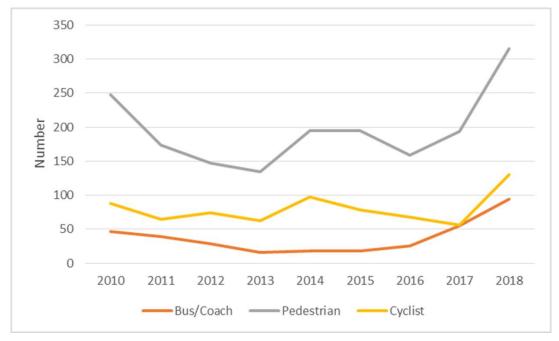


Figure 2-16: Trends in use of bus/coach and active modes (Source: Wanaka modal split survey, Stantec 2018)

Data on journeys to school is collected by QLDC. Figure 2-17 shows the modes that students used to get to school in 2017. For the primary schools, it is noticeable that approximately half travel to school by car, but this drops to a third for the high school. The main difference between the primary schools is that significantly more students use active modes to get to Holy Family when compared to Wanaka Primary School. For Mount Aspiring College, 20% of the students walk and 15% cycle, which means that over a third are using active travel.

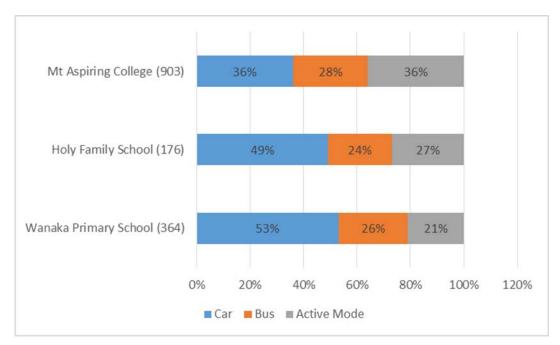


Figure 2-17: Mode of travel to school 2017 (Total students indicated in brackets) (Source: QLDC School Travel Surveys)

Set against a backdrop of growth, a preference for driving means that trips are increasing. However numbers walking and cycling are higher than the national average, and it is likely that there is latent demand which is currently suppressed by the quality of the facilities for active modes, or by a perception of risk.

#### 2.4.1 Discussion

Data on travel to work show that the car is the preferred mode, but walking and cycling rates are higher than national figures. In 2013 the decline in cycling to get to work was reversed, and an increase was evident. Car is also the preferred mode of travel to primary schools in Wanaka, but students attending Mount Aspiring College use a range of modes, with around a third using active transport.

### 2.5 Traffic Growth

The combination of population growth and growth in visitor numbers, combined with the preferred mode choice for trips, which is the private motor vehicle, has led to growth in traffic volumes across the network. The Transport Agency have permanent traffic counters at three sites in/near Wanaka. Average daily traffic volumes for each counter are shown in Figure 2-18. The data show a steady growth in average daily traffic volume since 2012, with a very significant increase at the Mount Iron site (SH84) between 2014 and 2015.

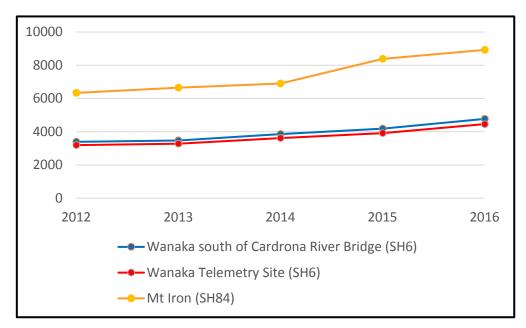


Figure 2-18: Wanaka average daily traffic volumes (Source: NZTA: website)

More detailed information is available from the Wanaka Telemetry site on SH6, as shown in Figure 2-19. This also provides data on the number of heavy vehicles in the traffic stream. The annual data reflect what is shown in Figure 2-18 with a 10% per annum increase in the volume of vehicles from 2012 to 2016. Freight volumes increased by around 30% between 2015 and 2016, which was a sharp increase on previous years.

The monthly data show a seasonal pattern with the highest traffic volumes in December, January and March, and lower traffic volumes in May and June, before the start of the winter ski season. Daily data shows there is little variation in traffic volume across the week, with weekend volumes being similar to weekday volumes. There are fewer heavy vehicles at the weekend. Hourly data shows there is only a weak 'rush hour' – traffic volumes are sustained throughout the day from 9am to 6pm, with the peak at 6pm.

The report also listed the highest daily traffic volume of 9147 vehicles on 25 March 2016, and the highest hourly traffic volume of 1215 vehicles at 4pm on the same day. This was Warbirds Over Wanaka weekend.

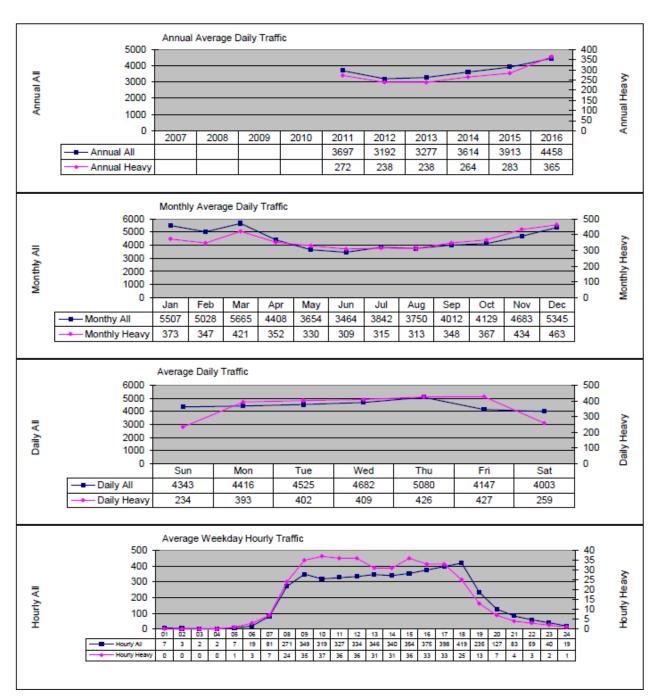


Figure 2-19: Wanaka SH6 Telemetry Site (Source: NZTA website)

#### 2.5.1 Discussion

There is evidence of 10% growth in traffic per annum between 2012 and 2016 on State highway 6, and 30% increase in heavy vehicles between 2015 and 2016. There is a need for analysis of local road volumes, for some key Wanaka streets, to understand trends in volumes.

#### 2.6 Route Choices and Land Use

Figure 2-20 shows the road network in and around Wanaka, as well as illustrating the direction of the main tourist destinations aside from the centre itself, which is a popular tourist destination particularly at certain times of year. Route choices are limited, with much tourist traffic using Ardmore or Brownston Streets to get to destinations that are further afield, such as the Mouth Aspiring National Park and popular ski-fields. These streets also perform a critical role of residents and visitors staying locally by providing access to central shops and services.



Figure 2-20: Wanaka road network and tourist destinations

Wanaka also functions as a service centre for satellite towns which are growing and currently provide minimal local services for residents, such as Albert Town, Luggate, and Hawea. Residents and visitors staying in these locations will frequently travel to Wanaka for food and other shopping, using SH84 to get to the centrally located facilities. At busy times, the single lane bridge at Albert Town acts as a pinch point on the network creating delays. The main campground is on the north side of the bridge and many people stay here because of the access to Wanaka's facilities.

The residential area to the north of SH84/Ardmore Street is large and growing. Wanaka's three schools are all located north of this primary arterial route, and this causes severance for those living to the south of the road. Similarly, for those living to the north, the route creates severance with the town centre and facilities. Severance caused by high speeds and traffic volumes can deter people from using active modes. QLDC have in recent years improved pedestrian crossing points on Ardmore Street in recognition of this, and these have helped to improve active mode connectivity.

The residential area to the north is growing further and there are limited direct connections between this area and the rest of the centre. For example, most local traffic exiting that area passes through either the SH84/Anderson Road roundabout, or uses Lakeside Road. With growth in population these parts of the network are likely to become progressively more congested, as illustrated by the transport model (refer Figure 2-23).

In the future, it is anticipated commercial development at Three Parks subdivision will relieve some of the pressure on Wanaka centre and surrounding road network, by providing alternative shops and supermarket.

## 2.7 Traffic Delays

In 2017 QLDC started a new travel time survey. Data is available for July 2017 and January 2018. The daily profile for travel times on between Brownston/McDougall Street intersection and Ardmore Street/Lakeside Road intersection is shown in Figure 2-21. This shows the slowest travel times are at 2pm and 7pm.

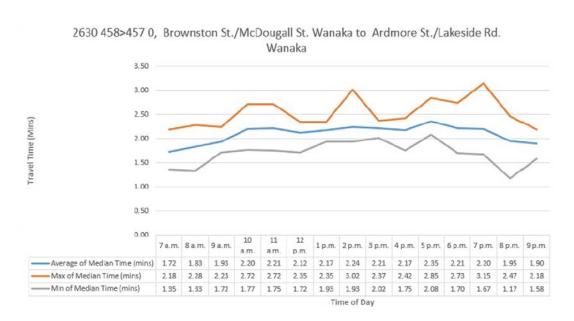


Figure 2-21: Daily Profile - Travel times, July 2018

Figure 2-22 shows the change in travel time in the inter peak period between winter and summer. The most significant increases in travel time were around the shopping centre and Lakefront, which shows that this area is more congested in summer than it is in winter.

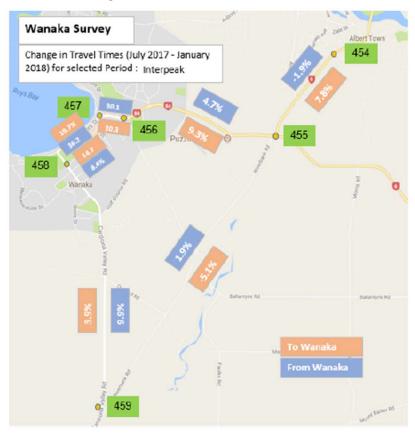


Figure 2-22: Change in travel time July 2017 to February 2018

The transport model for Wanaka is another way in which levels of service across the network can be better understood. The base model and the 2045 projection shows that in the morning peak, there are already some links and intersections which are level of service C. This indicates the network can continue to function reasonably well despite the forecast increase in traffic volumes as a result of growth. However it is a different story in the evening peak, as illustrated in Figure 2-23. This aligns with the 6pm peak in traffic, which is likely to be due to people driving home from work, as well as day trippers returning from their day's

activities. Already part of Helwick Street (Ardmore to Dunmore) and part of Dunmore Street (Helwick Street to Wanaka Library) are experiencing level of service D and E caused by congestion in the evening peak.

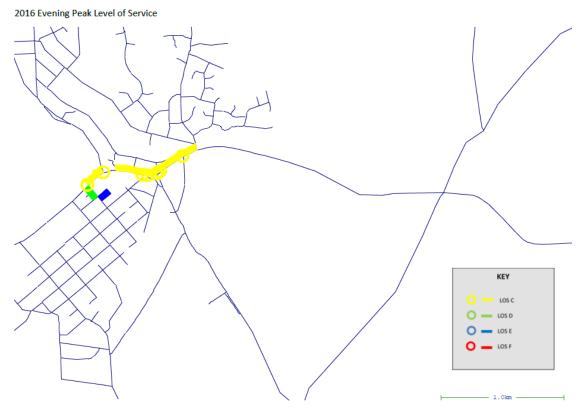


Figure 2-23: Evening peak level of service 2016 (Source: QLDC tracks model)

The Tracks model for Wanaka provides forecasts for 2025 and 2045 (refer Figure 2-24), which show levels of service in the evening peak becoming progressively worse. By 2023, the model forecasts that the stretch of SH84 between Brownston Street and Anderson Road will be at level of service D. By 2045, this extends further along Ardmore Street to the intersection with Helwick Street, and levels of service at that intersection have degraded to E. Also at level of service E is the approach to the SH84/Anderson Road roundabout. Also in 2045, other parts of the network are at level of service D, such as the SH6/SH84 roundabout, and the section of Sir Tim Wallace Drive from SH84 south. This indicates that further exploration of the level of service E on Dunmore Street should be completed now, and options considered for the other locations identified by the transport model. It is also recommended that the model be updated with land use information from the Proposed District Plan.

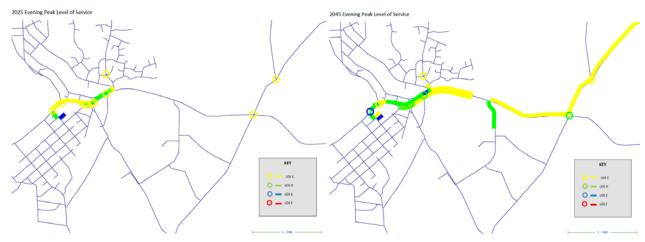


Figure 2-24: Evening peak level of service 2025 and 2045 (Source: QLDC tracks model)

### 2.8 One Network Road Classification Customer Levels of Service

All roads in Wanaka have been classed according to the NZ Transport Agency's One Network Road Classification (ONRC). The map showing the classes for each road is provided in Figure 2-25.

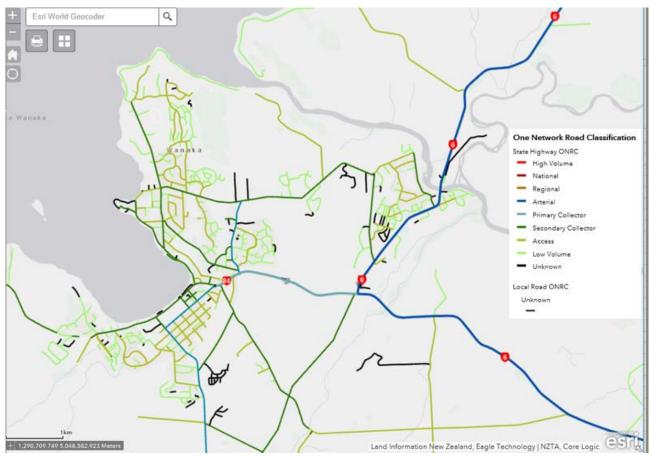


Figure 2-25: Wanaka One Network Road Classification map - Local roads only (Source: NZTA website)

The state highway network provides arterial connections to the wider network via SH6, and SH84 performs a primary collector function, along with Anderson Road, Brownston Street and Cardrona Valley Road. In the ONRC, customer levels of service are described for four different criteria. A comparison of the benchmark level of service for each criteria, along with a brief assessment of SH6 and SH84 in the study area is shown in Table 2-4. This shows that there is the start of gap in customer level of service for travel time reliability, as exceptions are expected to become more frequent as visitor and resident numbers grow. The other area that could be improved is provision for pedestrians and cyclists, and parking at Mount Iron.

Table 2-4: ONRC Gap Analaysis SH6 and SH84

Criteria		Arterial level of service benchmark	SH6, SH84
Mobility	Travel time reliability	Generally road users experience consistent travel times with some exception in urban heavy peak, holiday or during major events	This is generally the standard, but the exceptions are becoming more frequent.
	Resilience	Route is nearly always available except in major weather events or emergency event and where no other alternatives are likely to exist. Clearance of incidents affecting road users will have a high priority. Road users may be advised of issues and incidents.	Routes are nearly always available.

Cr	iteria	Arterial level of service benchmark	SH6, SH84
	Optimal speeds	Higher speeds depending on assessed level of risk. Lower if mixed use, high intersection density, schools, shopping, and concentrations of active mode users.	The state highway stops prior to the start of the activity centre.
Safety		Variable road standards, lower speeds and extra care required on some roads/sections, particularly depending on topography, access, density and use. Road user safety guidance provided at high risk locations. Some separation of road space for active road users in urban areas.	The roads generally meet this standard.
Amenity		Good level of comfort, occasional areas of roughness. Urban arterials reflect urban fabric and contribute to local character. Some separation of road space for active road users for amenity outcomes in urban areas.	Provision for active modes could be improved on SH6 and SH84.
Accessibility		Some separation of road space for active road users in urban areas to provide network access and journey continuity. Parking for all modes and facilities for mobility impaired at activity centres, and some shared spaces. Extra care required around activity centres due to mixed use, including goods vehicles.	Parking for all modes could be improved at Mt Iron.

A similar exercise was completed for the primary and secondary collector roads within Wanaka. This is shown in Table 2-5. This shows a similar picture to the arterials, and also suggests speed limits may need to be reviewed.

Table 2-5: ONRC Gap Analysis and Secondary Collector Roads)

Criteria		Primary and Secondary Collector level of service benchmark (same or similar)	Primary: Brownston, Anderson, McDougall-Cardrona Valley Rd Secondary: Ardmore, Lakeside, Ballantyne, Plantation, Aubrey, Riverbank, town centre, Beacon Point Rd.
Mobility	Travel time reliability	Generally road users experience consistent travel times except where affected by other road users (all modes) or weather conditions.	Reliability is inconsistent primarily due to demand at peak times.
	Resilience	Route is nearly always available except in major weather events or emergency event and alternatives may exit. Clearance of incidents affecting road users will have a moderate priority. Road users may be advised of issues and incidents.	Routes are nearly always available.
	Optimal speeds	Travel speeds depend on assessed level of risk and recognise mixed use, schools, shopping strips and concentrations of active road users.	There may be need for some speed limits to be reviewed, particularly around schools and the town centre.
Safety		Variable road standards and alignment. Lower speeds and greater driver vigilance required on some roads/sections, particularly depending on topography, access, density and use. Active road users should expect mixed use environment with some variability in the road environment including vehicle speed. Road user safety guidance provided at high risk locations.	The roads generally meet this standard.
Amenity		Moderate level of comfort with occasional areas of roughness, Urban collectors reflect urban	Provision for active modes could be improved quite

Criteria	Primary and Secondary Collector level of service benchmark (same or similar)	Primary: Brownston, Anderson, McDougall-Cardrona Valley Rd Secondary: Ardmore, Lakeside, Ballantyne, Plantation, Aubrey, Riverbank, town centre, Beacon Point Rd.
	fabric and contribute to local character. Specific provision where active road users present.	substantially on some of the collector roads.
Accessibility	Active road users should expect mixed use environments with some variability in the road environment, including vehicle speed. Parking for all modes and facilities for mobility impaired at activity centres.	Parking for all modes and facilities for mobility impaired could be improved in Wanaka centre.

### 2.9 Safety

All crashes recorded in the NZ Transport Agency Crash Analysis System between 2013 and 2017 are shown in Figure 2-26. This graph shows that there was a drop in reported crash number in 2017 after the three previous years all recorded increases. While still above the 2013 low the number has dropped to be the lowest since then. Looking at crash severity it would appear that since 2014 the increases in crash numbers can be attributed to the rate of non-injury crashes however, like all other severities, these fell in 2017. Crashes resulting in death and serious injury (DSI) are now a commonly used metric. In the study area the number of DSI crashes in 2017 halved on the previous year and was a third of that recorded in 2014.

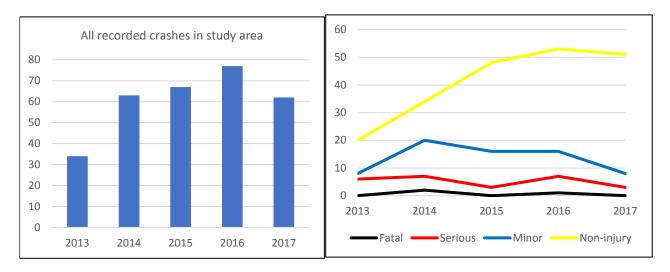


Figure 2-26: Crash totals in the study area per year by Severity (2013-2017) (Source: NZTA Crash Analysis System)

Figure 2-27 investigates whether there is a seasonal pattern to crash numbers. Wanaka has two peak seasons, the summer holiday and the ski season, and these are reflected in this data. The two peak months for crashes are February and July. The summer months see the most non-injury crashes and the winter sees the most crashes that result in injuries. There is no real 'off season' when looking at the crash data, as shown below.

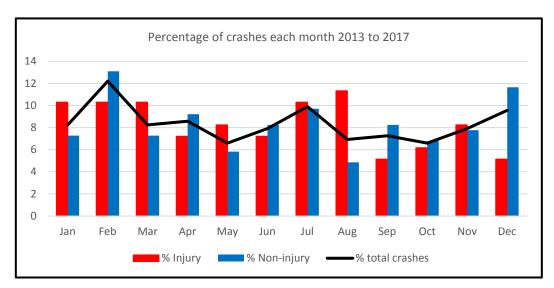


Figure 2-27: Crashes by month in the study area (Source: NZTA Crash Analysis System)

Injury crash locations are shown in Figure 2-28. This shows the location of three fatalities and 26 serious injury crashes that have occurred during the five year period. The map shows a clustering of crashes in the town centre, on the main arterials (e.g. SH6, Cardrona Valley Road, Ballantyne Road) and around the Albert Town bridge.

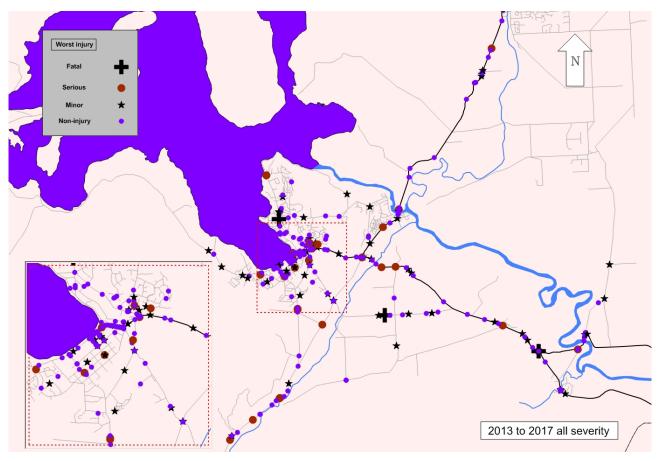


Figure 2-28: All reported crashes in the study area (Source: NZTA Crash Analysis System)

Looking in more detail at Wanaka and Albert Town, crashes in the vicinity of the one way Albert Town Bridge stand out as does the intersection of SH6 and SH84. In central Wanaka there are clusters along Ardmore Street and Brownston Street, although many of these are non-injury crashes. When considering high risk sites only one intersection has recorded more than one DSI crash and that is the intersection of SH6 and SH8A.

Figure 2-29 provides a closer view of crash numbers in central Wanaka showing actual numbers and severity. This highlights risk at the following intersections:

- Intersection of Brownston Street and Dungarvon Street (3 minor, 10 non-injury)
- Intersection of SH84 and Anderson Road (1 serious, 7 non injury)
- Intersection of Brownston Street and Helwick Street (3 minor, 4 non-injury)
- Intersection of SH84 and Brownston Street (7 non-injury)

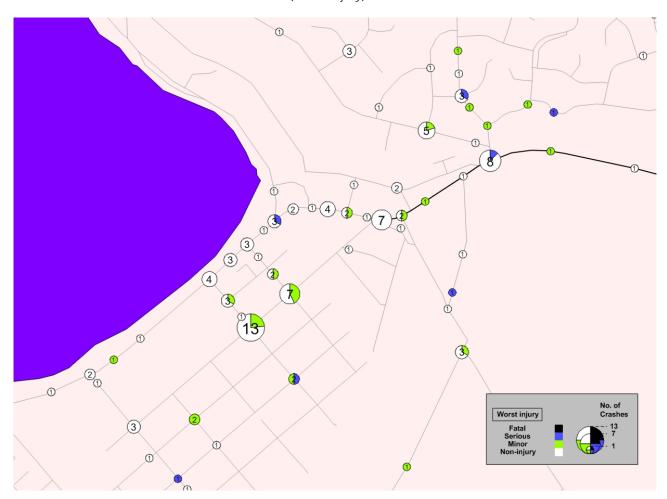


Figure 2-29: Number and severity of crashes in central Wanaka 2013 to 2017

Figure 2-30 shows the location and severity of crashes involving pedestrians and cyclists over the last five years. While the number of DSI crashes was equal at four for each group in total 70 percent of the reported crashes involved cyclists.

All of the crashes involving cyclists occurred at intersections while all but one of the crashes involving pedestrians were midblock. The one intersection crash involving a pedestrian occurred when they stepped out in front of a cyclist.

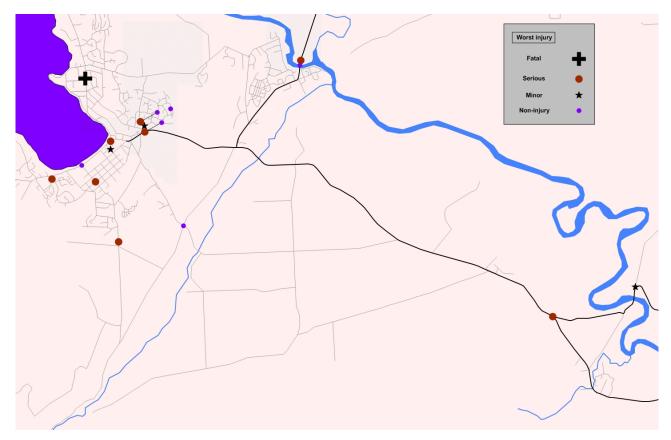


Figure 2-30: Reported crashes in study area involving pedestrians and cyclists

The Communities at Risk register highlights a Medium Concern for Cyclists and Older Road Users within the District. This means that road policing programmes that comprise activities for reducing the crash risk will have a medium strategic fit and be considered by the Transport Agency for funding.

# 2.10 Cycling

A cycling route from Ross to Wanaka has been identified as part of the NZ Cycle Trail, as shown in Figure 2-31. Route improvements that are a link to complete connections to the NZ Cycle Trails can be given a medium strategic fit. Improving this route could be further explored as a standalone project. The route is already advertised, and may result in growth in cyclist numbers within Wanaka and the surrounding area, bringing economic benefits and opportunities.

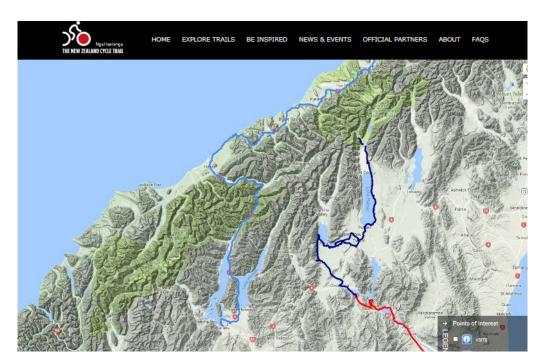


Figure 2-31: NZ Cycle Trail - proposed route Ross to Wanaka

It is notable that cycling numbers are increasing as evidenced by the journey to work census data in 2013. The on-road routes follow the main roads in Wanaka. The gap in provision for cyclists was also identified in the ONRC gap analysis. Where high demand can be demonstrated, facilities can be invested in to provide a link to an employment centre. This could be explored further as currently there are gaps in provision for cyclists in Wanaka, and this can lead to risk as cyclists use the road network to access existing facilities.

## 2.11 Parking

Anecdotal evidence of parking problems at peak times is common in the documents reviewed. Data is available through annual parking surveys as shown in Figure 2-32. This graph shows that parking occupancy is highest at midday, and lowest at 7am. At midday on the day of the survey, there are still 30% of spaces available. The parking survey area includes in the streets around the centre, and these findings reflect anecdotal comments that usually if you drive around you can find a space, if you know where to look. 'Hunting' for spaces like this adds to congestion and reduces amenity in the centre, and can also lead to minor crashes as drivers are focussed on finding a space.

Figure 2-33 shows the change in average parking occupancy from 2017 to 2018. This showed that for the 10am, midday and 3pm surveys, average occupancy increased by 10%. This is a significant increase for a one year period.



Figure 2-32: Wanaka centre on and off street parking availability (Source: Wanaka Parking Survey Report, Stantec 2018)

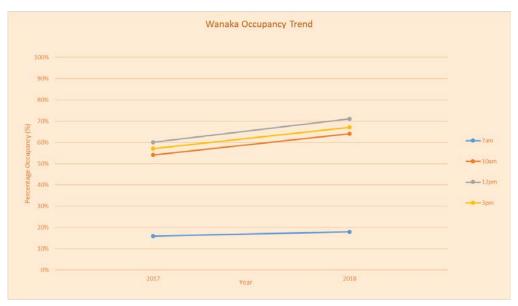


Figure 2-33: Trend in parking occupancy for Wanaka Centre 2017 to 2018 (Source: Wanaka Parking Survey Report, Stantec 2018)

There is anecdotal evidence of poor parking provision around the three boat ramps for Roys Bay, with many people with boat trailers parking on the grass verges in summer.

#### 2.12 Resilience

Table 2-6 shows routes that were identified as vulnerable in the Wanaka Transport Strategic Case. Their economic value is shown, along with the destinations that they provide access to, and comments about alternative routes and vulnerability. Of most concern is SH6 to Haast. This was closed due to the Diana Falls slip in 2013, which took 14 months to stabilise. It was initially closed for 11 days. The Transport Agency recognises that the West Coast regional economy is heavily dependent on tourism, contributing approximately 10% of regional GDP. Because of the lack of alternatives and long detours, any closure on SH6 is likely to have a disproportionately high impact on the local economy as tourists choose to take alternative routes between Queenstown and Christchurch. As Wanaka is on the route to or from the West Coast, the Wanaka economy is similarly vulnerable and it was reported that there was a negative impact on the tourism industry in Wanaka as a result of the Diana Falls slip.

Table 2-6: Vulnerable routes

Route (including ONRC, Economic Value)	Destinations	Comments
Crown Range Road Primary Collector (\$93m)	Queenstown Cardrona Ski field	Alternative route to Queenstown via SH6 Cromwell High vulnerability – snow and ice, rock fall
Mount Aspiring Road Secondary Collector (\$388m)	Mount Aspiring National Park Treble Cone Ski field	No alternative route  Medium vulnerability - rock fall
SH6 Wanaka – Haast (\$739m)	Makarora West Coast	Alternative route Wanaka-Haast via Arthurs Pass (950km instead of 142km) High vulnerability – rock fall, lesser extent snow and ice eg Diana Falls slip 2013, 14 months to stabilise (closed for 11 days).

# 3. Summary of Evidence

In summary a review of the evidence shows:

- In 2018 it was estimated that on the peak day combined resident and visitor numbers are 48,000. Visitor numbers are projected to almost double by 2058, and the usually residential population is expected to double by 2058. This is supported by the airport, which has a long term future and potential growth.
- In 2017 the Housing Minister signalled a change in the growth environment in Wanaka. In 2014 the
  Housing Accord just covered Queenstown, but in 2017, the Housing Accord was extended to apply to
  the whole District, recognising that Wanaka has the 'same sorts of pressures around housing
  affordability', and the substantial growth in the Northlake and Three Parks subdivisions.
- The peak day total of 34,000 (2018) and predicted residential growth rate of 34% between 2018 and 2028 mean that Wanaka meets the criteria for 'high growth' as defined in the National Policy Statement Urban Development Capacity. High growth urban areas are given priority for transport improvements, with High or Very High ratings being given to public transport, walking and cycling, transport planning and demand management programmes in the draft 2018 Investment Assessment Framework. However, although Wanaka meets the definition for 'High Growth' under the National Policy Statement, it is not listed in the Investment Assessment Framework under Appendix 2. For QLDC, only Queenstown is identified.
- There are limited route choices from new development areas to the centre (e.g. Anderson Road, Lakeside Drive), for through traffic, and in to and out of Wanaka, leading to delays and risk taking.
- The resident and visitor population are highly reliant on private vehicles for their journey to work, and modal split surveys for the centre cordon in 2018 showed that motor vehicles made up 89% of recorded movements, bus/coach 2%, pedestrians 7% and cyclists 3%. There is no public transport in the study area, although there are school buses. The actual number of cars owned by people living in Wanaka has doubled between 2001 and 2013.
- On and off street parking areas are under pressure, with parking demand increasing by 10% from 2017 to 2018.
- Traffic volumes have been growing at a rate of 10% per annum between 2012 and 2016. There was a 30% increase in heavy vehicle volumes from 2015 to 2016. The transport model shows a decline in levels of service in the evening peak in 2025 and worsening by 2045.
- Crash totals are fluctuating, and there are some crash hotspots, and crashes involving vulnerable road users. Crashes are year round, they are not limited to a particular time of year.
- Walking and cycling are already more popular ways to get to work in Wanaka compared to New Zealand averages, and the modal split survey for the centre cordon in 2018 showed a 62% increase in pedestrians compared to 2017, and a 132% increase in cyclists, although this could be partially attributed to the weather on the day. More cyclists may be expected as a result of the NZ Cycle Trail route between Ross and Wanaka. Growth in cycle tourists offer an economic opportunity. There are gaps in the existing walking and cycling networks. Improving these networks offers an opportunity for mode shift, and safety improvements will assist in realising latent demand for these modes.
- The community have aspirations to improve the connection between the retail area and the
  waterfront, by progressive pedestrianisation and amenity improvements on Ardmore Street. The
  Council have a Lakefront Development Plan aimed at improving the look, feel and operation of the
  reserve strip adjacent to Lake Wanaka.

# 4. Evidence Gaps

There a number of evidence gaps. It is recommended that a monitoring plan is developed and implemented as soon as possible so that these gaps can be filled. This information will provide evidence to support future business case work. Gaps include:

- More detailed safety analysis;
- Trends in traffic volumes on key local roads;
- Updated Tracks model to include all development proposed in the Proposed District Plan to understand fully the effects of new development on levels of service;
- SIDRA modelling for key intersections to better understand current levels of service;
- Further analysis of the economic impact of road closures on Wanaka;
- Updated structure plan or master plan.

# 5. Next Steps

A meeting was held between QLDC and the Transport Agency representatives on 12 June 2017. The evidence and original problem statements were reviewed. At this stage it was agreed:

- that the evidence for growth was compelling, but that the transport network was adequate for the foreseeable future, aside from the need for a forward works programme
- QLDC to consider developing a masterplan for Wanaka;
- QLDC to develop a forward works programme for Wanaka, to be primarily funded through the Minor Improvement Budget;
- Any projects on the forward works programme that exceeded the threshold for minor improvements should be progressed as Single Stage Detailed Business Cases (such as the upgrade to Ballantyne Road);
- QLDC to develop and implement a monitoring plan to address the evidence gaps. This will allow more robust analysis and evidence for future business cases;
- Complete a Point of Entry form for Wanaka Transport, to document the way forward.
- Inclusion of funding, against Work Category 151 in the asset management plan, to cover evidence collection

Version 2 of this report updates information where available in April 2018. The Council have considered the next steps listed above and are now preparing to:

- Develop a Network Operating Framework for Wanaka, identifying primary and secondary routes for general traffic, freight, future public transport, cycling and walking.
- Develop an Establishment Report to guide new investment in Wanaka's infrastructure. This will include redeveloping the Strategic Case for Wanaka, which is expected to lead to an updated Programme Business Case and a new Masterplan for the town centre.

This work will be completed during 2018/19, and will lead to an evidence based, future focussed programme of transport and public realm improvements. Further detail will be developed between 2019/21, and the projects included in the Council's next Long Term Plan with implementation expected from 2021 onwards.

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