



Queenstown Transport Taskforce Report

“The Queenstown Lakes District has an innovative, functional, integrated, multi-modal and sustainable transport system that supports a thriving, healthy community and enhances the visitor experience”

Final Report February 2017



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Executive Summary

There is no single immediate solution to the current transportation issues within the Wakatipu Basin. By looking long-term we can manage the transport infrastructure into the future and become proactive in developing and supporting transport solutions. Traffic congestion¹ and its impact on the Wakatipu Basin as a place to live and visit are huge concerns for residents and businesses. Projections for growth in resident population and visitor numbers mean that a bold plan for our future is essential if these concerns are to be addressed successfully.

Queenstown Lakes District is unique in NZ in three main ways:

- The daily population of visitors exceeds the resident population of 30,000 by 60% (48,000 people) on average and 215% (94,500) during peaks ².
- Local topography limits the ability to extend/expand current road transport corridors, which constrains accessibility and spreads growth over a wide area.
- The local ratepayer base is inadequate to maintain or extend/expand existing key infrastructure.

The Queenstown Lakes District Council expects the total resident population to reach approximately 150,000 by 2045. Planning must start now on developing an integrated multi-modal approach to transport solutions.

Summary of Key Recommendations

In 2016, multiple agencies and organisations are working on transport solutions, focused on their particular area of responsibility. The recommendations included in this report need strong leadership and a co-ordinated, multi-agency/organisation, district-wide, long term approach.

1. QLDC to lead the establishment of a single Transport Entity made up of the primary transport infrastructure providers (QLDC, NZTA and ORC) to oversee the planning, funding and implementation of future improvements to the transport system within the Queenstown Lakes District. The Transport Entity is designed to cut through the various bureaucracies to ensure timely action towards the vision outlined.

The entity will require the necessary independence, authority, expertise, funding and accountability towards achieving a long-term desirable outcome for the district.

Examples of clear governance structures with high level expertise leading a long-term strategy for their regions include Vancouver 2040, Marlborough Roads and Auckland Transport. See [Appendix 1](#) for more examples of governance and entity structures. See also Diagram 1, pg. 10.

The Transport Entity will work closely and collaboratively with other key stakeholders including (but not limited to) Queenstown Trails Trust, Queenstown Airport Corporation, DOC, Ministry of Education, SDHB, Regional Tourism Offices, Chambers of Commerce, Downtown QT, Public Transport providers, community groups and developers (as required).

¹ See Glossary for definition of terms

² QLDC Martin Jenkins Economic Development Report 2014

2. The Transport Entity to implement the following summarised recommendations. The recommendations cross multiple agencies. The Transport Entity should be a vehicle for the combination of resources and establishment of co-ordinated long-term goals and planning (further details included in the Recommendations section pg. 8).
 - a. Integrated Strategic Planning – future development, creative transport solutions, efficient connectivity and allowing for mixed land use to enable residents to live, work and access recreation in their community.
 - b. Spatial planning that shall include clean, convenient, safe³ and accessible solutions in all plans for future urban and rural development, including mixed-use zones and densification within existing urban boundaries.
 - c. Mandate for the Transport Entity to take a leadership role in the use of new technology and provision of a proactive, efficient and flexible transport system that embraces change in order to find the best solutions.
 - d. Development of an integrated district wide long-term transport strategy that provides for transport within and between Frankton, the Queenstown CBD, and the Wakatipu Basin’s major residential areas, as well as catering to commuters from the wider Central Otago Region, e.g. Wanaka, Cromwell, Alexandra, Glenorchy, and Kingston. The plan to include but not limited to:
 - i. A Master Plan for the Wakatipu basin area following the principles of recommendations 1 and 2, identifying key public transport, walking and cycling corridors within and connecting to the Frankton Flats area
 - ii. Identification, protection and development of key public transport corridors and transport hubs needed now and into the future⁴.
 - iii. A fundamental transformation from the use of private/rental cars and campervans to public transport and innovative forms of transport, e.g. automated shared vehicles, e-bikes, water taxis, gondolas, monorail, etc.
 - iv. Provision of safe and efficient commuter cycling and walking corridors between key destinations and major residential areas, linking with the trails network in the Wakatipu basin.
 - e. The Queenstown CBD should be progressively pedestrianised, any new town centres should be pedestrian friendly.
 - f. Explore and secure collective sources of additional funding, e.g. visitor levy, congestion charging, central government funding to help provide transport (and other) infrastructure.
3. Shaping our Future Steering Group to present the Transport Report to the Minister of Transport.

³ Safe Systems Approach – see Glossary for definition of terms

⁴ The taskforce noted a new paper road along Queenstown Hill to Queenstown Central above the housing line as an example.

Introduction

In May 2015 Shaping our Future held public forums in Wanaka and Queenstown on transportation for the Queenstown Lakes District. A total of 103 people attended, 83 in Queenstown and 20 in Wanaka. Taskforces were established in Wanaka and Queenstown in July 2015. Shaping our Future provided Terms of Reference for the Taskforce (Appendix 2).

A second public forum was held in November 2016 to discuss the draft report. Over 90 people participated at the forum or online. The feedback received had been incorporated into the final report. Overall the recommendations and vision were agreed to by our community.

The Transport Taskforce is made up of volunteers from a broad range of local industry representatives and residents who desire to see the transport network within Queenstown become sustainable over the next 30 years. The Upper Clutha, although it has its own Transport Taskforce, has actively worked with Queenstown's Transport Taskforce in preparing this report for the community.

The Taskforce appreciate that transport solutions cannot be dealt with in isolation. Transport is an integral and interdependent component of overall spatial planning as our community contemplates its vision of the future and the steps necessary to bring the vision to reality.

Scope

- The Queenstown forum reviewed transport in the Wakatipu Basin. This report applies to transport within the Wakatipu basin, Glenorchy, Arrowtown and Kingston.
- Many aspects of this report are relevant to the Upper Clutha as they face similar issues.
- The taskforce focused on four main areas identified at the public forum - Integrated Spatial Planning, Public Transport, Community Culture and Funding.
- Each of these sub groups also looked at the impact of funding and sustainability on transport challenges and solutions.
- Air and water transport were considered in terms of traffic flows, public transportation and accessibility as part of overall transport solutions.

Overview

The key objective of the Transport forum was to prepare a report and recommendations embracing: -

- Accessible and affordable public transport options that meet the needs of visitors and residents.
- Improved spatial planning, allowing for better connectivity and accessibility and reducing the need for private vehicle trips.
- A long-term plan for the Wakatipu basin that can support continued tourism, diversification of the economy and population growth.
- An innovative, functional, safe, attractive, affordable and sustainable transport network.
- Provision of more opportunities for alternatives to the private vehicle, such as by water, walking and cycling (spatial planning and connectivity).
- Greater use of existing, emerging and future technologies, e.g. video conferencing to save travel, supporting mobile workforces, automated vehicles, ridesharing, e-bikes etc.

To achieve the desired outcomes for the Wakatipu basin this report includes a long-term vision and recommendations to achieving that vision. The report has been developed on the basis of the information gathered at public forum.

Vision for 2046 – Queenstown Transport

“The Queenstown Lakes District has an innovative, functional, integrated, multi-modal and sustainable transport system that supports a thriving, healthy community and enhances the visitor experience”

This vision has been developed for the Wakatipu basin and encompasses the following elements: -

Innovative:

- A transport system that embraces new technology and processes.
- Looks towards early adopter cities around the world for transport solutions that are proving successful.
- Wherever possible, discards technologies and concepts that become outdated and no longer best practice.

Functional:

- A transport system that meets the needs of residents and visitors and provides an acceptable level of service.
- Paved commuter cycling routes and end-use facilities (showers and storage) that support and encourage the use of multi-modal transport options.
- Accessible and convenient options and parking for those who need to use private vehicles, e.g. the elderly, families etc.
- A transport system that is integrated with the Safe System⁵ philosophy.

Integrated and Multi-modal:

- Multi-modal transport system that encourages the use of a range of options for travel including connectivity between public transport (road, air and water) with trails (cycling and walking), end destinations, retail, educational and recreational needs.
- Planning for and implementation of infrastructure for a public transport system that is accessible, affordable and convenient for visitors and residents, e.g. bus priority measures, wharves for lake and river use, disincentives for car use, e.g. parking availability and parking charges, congestion acts as a disincentive.
- An integrated planning and transportation approach that considers the Safe System as a whole.

Sustainable:

- Innovative and clean connectivity solutions to provide better public transport connecting main centres of public and tourist interests in Queenstown.
- Congestion managed through reduced car use by commuters and visitors, planning for sustainable land use and road network improvements.
- Encourage commercial deliveries e.g. supermarket deliveries to make using public transport more convenient.
- Ability to fund transport solutions and ongoing maintenance and operation of the transport system.
- Timely implementation of transport solutions – proactive rather than reactive.

⁵ See Glossary for definition of terms

Thriving, healthy community:

- A community that embraces the natural environment and actively utilises alternative transport options for everyday life.
- Residents that have the ability to work, recreate and live within their community.

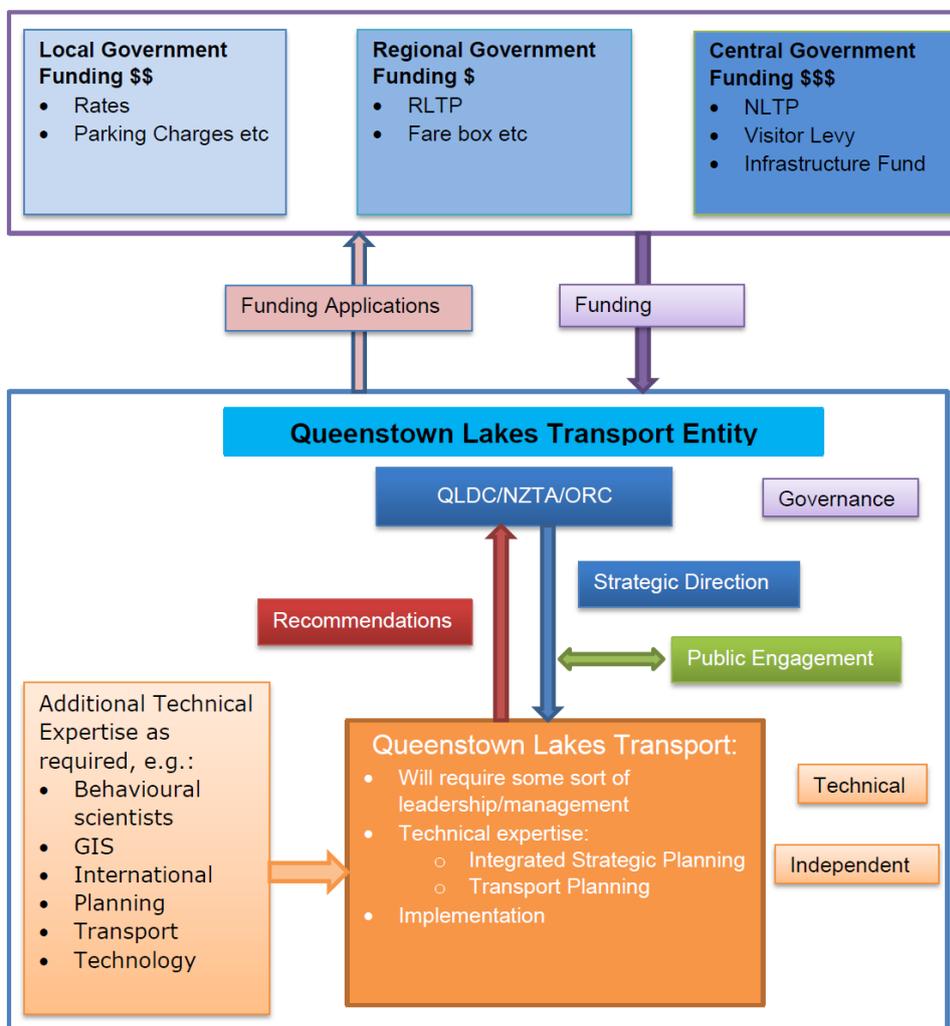
Recommendations

QLDC to lead the establishment of a single Transport Entity made up of the primary transport infrastructure providers (QLDC, NZTA and ORC) to oversee the planning, funding and implementation of future improvements to the transport system within the Queenstown Lakes District. The Transport Entity is designed to cut through the various bureaucracies to ensure timely action towards the vision outlined.

The entity will require the necessary independence, authority, expertise, funding and accountability towards achieving long-term desirable outcomes for the district.

Vancouver 2040, Marlborough Roads and Auckland Transport are examples of clear governance structures with high level expertise leading a long-term strategy for their regions.⁶ An example of how the entity might be structured is included below:

Diagram 1: Example Queenstown Lakes Transport Entity Structure



⁶ See Appendix 1 for more examples

QLDC and the Transport Entity to work closely and collaboratively with other key stakeholders including (but not limited to) Queenstown Trails Trust, Queenstown Airport Corporation, DOC, Ministry of Education, SDHB, Regional Tourism Offices, Chambers of Commerce, Downtown QT, Public Transport providers, community groups and developers (as required).

QLDC and the Transport Entity will be responsible for further investigation and action on the following recommendations:

Strategic Planning - development of an integrated strategic plan which includes: -

- Integrated Strategic Plan for the Wakatipu basin, with an initial focus on the Frankton Flats as a priority, and long-term transport planning across the district to improve connectivity of trails, public transport, ferry terminals and air access.
- Evaluation of current single use zones and provision of future mixed land use to provide better access and connectivity to reduce the need/distance to travel, e.g. office, commercial and educational space within residential areas.
- Establishing pedestrian friendly zones e.g. pedestrianising Queenstown CBD, Arrowtown Main Street, new town centres designed to be pedestrian friendly.
- Integration of planning (District Plan zoning) and transport (multi-modal) and identification and protection of transport corridors and hubs that provide for future use/connectivity. Including analysis of future key routes into Frankton, pressures on bridges – Edith Cavell, Kawarau River Bridge, Shotover River Bridge, current rural roads that may become high use, e.g. Lower Shotover
- Provision of affordable worker accommodation close to place of employment, e.g. Gorge Road initially but also Frankton.
- Safe Systems approach in planning to achieve a safe transport system that is not inherently unsafe for all users and future generations.
- Scenario planning/sensitivity analysis. Identification of triggers for various growth scenarios to allow for better forward planning, especially for funding.

Research and Analysis - behavioural study of residents and visitors: -

- To better understand what determines people's current travel patterns, i.e. where they are going, why and what influences their travel mode choice and external factors influencing mode use, e.g. cost (fares, petrol price), accessibility, connectivity, congestion, weather, etc.
- Understand visitors' current perceptions of transport in and around the Queenstown Lakes.
- Undertake an analysis of Queenstown growth and transport network (current and future growth) to understand the critical areas of congestion and opportunities to address these via alternative modes.

Public Transport: -

- Identification and development of bus priority measures (or dedicated public transport corridor where possible), initially Frankton – CBD but medium to long term the wider basin, e.g. Lower Shotover, Arrowtown – Queenstown, CBD/Frankton loop, Frankton Flats loop.

- Encourage the use of public transport and connectivity e.g. free public transport days/free public transport, go by bike day, free Wi-Fi, coffees, rewards for using public transport.
- Build high tech educative support that provides real time, useful and relevant information, i.e. Intelligent Transport Systems
- In the short term focus on key routes and markets. Launch and celebrate 1 or 2 key routes, e.g. Airport/Frankton to CBD.
- Long-term focus on visitor perceptions, work with Tourism NZ and Destination Queenstown on messaging about rental vehicles in Queenstown.
- Public transport solutions need to be as/or more convenient, affordable, accessible and timely than private vehicles for residents and visitors to change behaviour.
- Target the people who will be thinking about different transport choices (visitors, seasonal workers) or who have less choices (school children).
- Create public transport hubs that are safe, sheltered and attractive⁷ for both bus and water transport, lead the way in trialling solutions e.g. 'pop- up' park n ride facilities.

Cycling / Walking: -

- Provide a framework of direct, clearly signed and safe⁸ commuter cycling facilities on main routes between key destinations, main residential areas and the Queenstown trails network.
- Provide end-of-trip facilities (secure parking/storage, toilets, showers and charging facilities).
- Seek subsidised funding to support commuter facility development.

Parking: -

- Manage parking, and provide new parking facilities, for cars and bikes (including park and ride) that complement and support public transport use.
- Development of off-street parking facilities for residents and visitors that reduce the need for traffic to enter and circulate around the town centre or for visitors to need a vehicle in the Wakatipu basin.
- Provision of an integrated parking management system that directs traffic to the available parking facilities, e.g. apps showing parking availability.
- Progressive reduction in availability of on-street parking to reallocate road space for better use, e.g. walking & cycling.

Community Culture: -

- Build community and visitor awareness of existing public transport services, walking and cycling routes and also of our commitment to delivering an efficient, reliable service that doesn't rely on fare box takings (i.e. subsidised and inexpensive - gold coin).

⁷ CPTED - Crime Prevention Through Environmental Design

⁸ Safe – includes separation/barriers where necessary from cars/buses and takes into account new and emerging technologies, e.g. hoverboard - type technology, segways.

- Promote Public Transport sub links to get people to the main 'transport hubs'.
- Master plan to improve connectivity of commuter trails, bus stops and ferry stops.
- Plan for and encourage new innovative and emerging ideas - e.g. carpark sharing (like air bnb for carparks), yourdrive.co.nz, carpooling, hitchhiking apps, temporary trials of transport solutions.
- Engage the community in developing solutions and alternatives, provide incentives for change, e.g. car free days, free or subsidised public transport, subsidise taxis for pensioners.

Funding: -

- Investigate funding solutions for public transport, e.g. subsidies, parking fees pool, visitor levy, congestion charging.
- Co-ordination of projects to ensure best use of available infrastructure funding.
- Develop an alternative integrated funding model that recognises the limitations of the district's ability to provide its local share for co-funded local road improvements.
- Investigate opportunities for wider use of third party funding agreements where there are significant benefits to developers for the provision of lead transport infrastructure.

Overall Baseline Analysis (current situation)

In developing this report, the Queenstown Transport taskforce had access to a range of information provided by NZTA, QLDC and interested parties. The transport scenario in 2015/16 is rapidly changing and therefore we acknowledge gaps within our data. To view more of the expanded information, please see Appendix 3. The current baseline situation is summarised below.

Queenstown is unique in NZ in terms of daily population with visitors exceeding the resident population by 60% on average and 215% during peaks, i.e. approx. 30,000 permanent residents equates to 48,000 total people on average and 94,500 total people during peaks. It is therefore difficult for permanent residents to provide for the infrastructure needs of visitors.

Car Travel and Congestion: -

- Between 7-11am (March 2014), over 5000 cars enter the town centre.
- Around 2500 people travel to work in the town centre, and 1600 people travel through the town centre to work.
- People's proximity to the town centre and the size of the resident population influence the numbers of people traveling from different parts of the Wakatipu basin, and from outside the basin, to work in the town centre.
- Central Queenstown has high proportions of people arriving by bike, and on foot, while car travel accounts for almost all work trips from other areas.
- Traffic around the Frankton area has experienced significant growth with the area northeast of Frankton Junction experiencing traffic growth of up to 12% during 2016, and an average daily growth of 11% in 2015, on top of 7% in 2014. Average annual traffic growth for the five-year period to 2011-2015 has been 29%, an average annual growth of approximately 6%. The national average is 0-2%. Five Mile, Mitre 10 Mega

and further planned retail and residential developments will put further pressure on this area.

- At the end of 2015 traffic on SH6 in Frankton was an average of 20,000 vehicles per day, this had grown to an average of 24,000 in early 2016 with a peak of 28,500 vehicles.
- People's travel patterns in and around Queenstown are not well understood and especially the changes in daily travel patterns, e.g. weather and ski field conditions, which are unique to Queenstown.

Parking: -

- Approximately 1000 cars park all day in the town centre and periphery.
- Approximately 80% of the 458 on-street short stay parks (within the town centre) are occupied during the day.
- Most on and off-street parking is 80% occupied during the day, including Man Street carpark.
- QLDC on-street parking survey in the mid 2000's showed greater than 100% usage, i.e. people leaving parks before parking charge had expired.

Visitors: -

- Traffic volumes are seasonal - they are highest in the winter pm peak and, coinciding with the ski season and mid-summer and lowest in the visitor shoulder seasons (April & May and October & November).
- Visitor surveys indicate 40-50% of visitors arrive in Queenstown Lakes District by air and growing.

School travel: -

- Around 1300 students travel to schools on the town centre periphery. Wakatipu High School is moving to Frankton Flats in 2018, which will change traffic flows.
- The schools do not have residential areas within close walking and cycling distance.
- Most children travel to school by car or bus (over 80% at St Josephs, Remarkables Park and Queenstown Primary). Shotover Country and Arrowtown Primary have higher rates of walking and cycling which can be attributed to proximity and safe routes for getting to school. 2015/16 schools survey is available in the appendix.

Public Transport: -

- The Wakatipu Basin currently has a public bus transport option, which is poorly utilised by residents with timing, reliability, cost and convenience affecting numbers. Queenstown Water Taxis provide a taxi service taking in Kelvin Heights and Frankton to town. This service is mostly used by visitors.

Integrated Strategic Planning

Vision

“The Queenstown Lakes District is a leader in spatial planning achieving functional, attractive and sustainable transport solutions that allow for future urban living and increased population density. A plan that provides for mixed land use, and integrates alternative modes of transport.”

Definition of Integrated Strategic Planning: Town Planning, Urban Design/Planning, Integrated Planning, Spatial Planning – the integration of landscape architecture, architecture, civil engineering (roads, sewer, water supply, storm water and communications systems), and public administration within a technical and political process concerned with the use of land, protection of the environment and public welfare for the process of designing and shaping cities, towns and villages with the goal of making urban areas functional, connected, attractive and sustainable.

Current Situation (Baseline Analysis): -

The Resource Management Act (RMA) 1991 is currently⁹ before parliament for reform. The reform proposal still has a gap between strategic planning and infrastructure planning. The Queenstown Lakes proposed District Plan (10 yr. review) Part 1 was released for public consultation in 2015. The goal of the review includes trying to address high growth projections, pressure on transport and roading networks, tourism growth, high demand on services, and a lack of or poor quality housing.

The Plan also relates to the *strategic and integrated management of urban growth*. The objective is to *ensure urban development occurs in a logical manner*:

- *To promote a compact, well designed and integrated urban form, managing the form of urban development within existing Urban Growth Boundaries ensuring:*
 - *Connectivity and integration with existing urban development;*
 - *Sustainable provision of Council infrastructure; and*
 - *Facilitation of an efficient transport network, with particular regard to integration with public and active transport systems.*
- *To manage the cost of Council infrastructure; and*
- *To protect the District’s rural landscapes from sporadic and sprawling growth.*

There have also recently been amendments to the Local Government Amendment Act 2012 that has refocused local government (Councils) back to their core business (including infrastructure) and greater efficiency. The Amendment Act 2012 has a requirement for Councils to provide a long-term, 30-year plan for infrastructure, and more focus on spatial planning.

This has been followed up by the Local Government Act 2002 Amendment Bill (No 2), currently¹⁰ before Parliament, which looks to improve Council's service delivery and infrastructure provision arrangements.

For more information, see Appendix 4.

⁹ 2015

¹⁰ 2016

Integrated Strategic Planning

What success looks like

- Good spatial planning through mixed land use that takes into account form, function, connectivity/accessibility, transport and other infrastructure (sewer, water supply and storm water), that requires less reliance on private vehicle use with provision for the elderly and families with young children.
- Strategic Planning that is:
 - Flexible to future changes, allowing for multiple outcomes and adaptability.
 - Pedestrian friendly
 - Safe and follows the Safe System principles.
 - Has established transport hubs
 - Encourages shared work and living space, e.g. mixed use (integrated planning)
 - Encourages early adoption of new and emerging technologies e.g. self-drive cars, electric/hydrogen powered vehicles
- Integrated planning, lead by QLDC in collaboration with multiple agencies, e.g. Queenstown Airport Corporation, NZ Transport Agency, Ministry of Education, developers, Ngai Tahu, ski field operators, Central Government.
- An efficient transport system i.e. inefficiencies in existing road networks will be utilised.

Potential issues in delivering the vision

- District Plan/Resource Management Act process - resource consents and cumulative consequences, appeals and Environment Court (e.g. Frankton Flats), e.g. the District Plan is not fixed and is open to change through the subjective Resource Consent process

The gap with today

- Historic and current land use planning/zoning has had little integration, with transport coming as a secondary consideration.
- Reliance on private car use and low percentage use of public transport and walking and cycling for transport.
- Poorly integrated planning:
 - Between land use zoning and transport needs,
 - Mixed land use,
 - Access and connectivity,
 - Looking at the wider network and accumulative effect of independent development, and
 - Between various agencies and stakeholders - requires partnership.

KPI's

- Travel time reliability, i.e. travel times consistent at the same time each day
- Decreasing unit of travel distance, i.e. people needing to travel less distance to work, live and play.

- Existing (and proposed) District Plan zoning.
- Willingness of people to change habits, e.g. modal shift.
- Balancing options of cycling/walking with those that need to use private transport.
- Timeframe to achieve change.
- Lack of coordination between agencies and stakeholders (partners).
- Funding.
- The right people resource to drive/implement integrated strategic planning.
- Inaction/implementation

- Reduced vehicle traffic and an increase in pedestrianisation of the CBD areas.
- Reduced pollution (air and noise).
- Rezoning of current single land use zones for mixed use, e.g. Jacks Point/Hanley Downs to include study/shops.
- Cycling and walking tracks linking major hubs of home/work/study.

Public Transport

Vision:

“Our public transport system is the transport mode of choice for ourselves and our visitors alike. It’s as much a part of the “Queenstown experience” as the Remarkables and Lake Wakatipu. It matches our lifestyles; responding to our changing needs while providing effective, modern transport solutions that we can rely on, at a cost that we can afford.”

Current Situation (Baseline Analysis)

Traffic congestion and the impact this has on the Wakatipu Basin as a place to live and visit are huge concerns for residents and businesses. Projections for growth in resident population and visitor numbers mean that a bold plan for our future is necessary if these concerns are to be addressed successfully.

What success looks like	The gap with today
<ul style="list-style-type: none">● Queenstown has a safe, affordable, reliable and efficient public transport on key routes that services visitors and local residents travelling to key destinations.● Our destinations and suburbs don't rely on cars:<ul style="list-style-type: none">● Pedestrianised retail areas and town centre streets● Major outer public transport stops that are integrated with other modes.● Served by commuter cycling and walking networks to homes● Park'n'ride provided for people that have to drive● Home and work locations with easy access to public transport.● Public transport is convenient and affordable.● Land is secured for future corridors, wharves, park'n'ride and hubs.● Public Transport has priority over cars to allow for reliable and quick services● Public Transport is considered more convenient than private car due to car parking availability/affordability.	<ul style="list-style-type: none">● Private car use is the preferred method of transport.● Car parking is affordable and convenient, especially in the CBD.● Lack of connectivity between PT options e.g. buses/water taxis/walking and cycling tracks.● No central hubs for PT options e.g. park n ride, central exchange for transport with parking available for cars, bikes etc.● Public transport is not considered affordable or convenient.● Lack of reliability due to changes in traffic flows during the day.● Limitations in routes and times so public transport doesn't serve the population working early in the morning or late at night.● Public transport options limited for certain sectors e.g. provision for bikes or buggies. Connectivity between schools/events centre etc.

- Queenstown adopts technological advances and provides the facilities to encourage alternative transport modes e.g. electric transport/self-drive cars.
- Innovative, high tech information delivery through apps and bus stop signage

Potential issues in delivering the vision

- Culture of private vehicle use by both visitors (Tourism NZ promotes NZ as a touring destination) and residents.
- Visitors to the region are often travelling by car around the country.
- Securing/funding of land for use as a park n ride.
- Funding for enhanced public transport options.
- Space/land available for a key transport corridor between Frankton and Queenstown and around the basin.
- Balancing the needs of residents with visitors.
- Agencies working in isolation without consideration for a truly multi-modal approach e.g. NZTA, QLDC, Trails Trust, Water Taxis, bus providers

KPI's

- Increased use of public transport, walking and cycling.
- Public transport patronage on selected routes exceeds the use of the privately owned vehicles
- Awareness of Queenstown's high quality public transport is positive and high amongst those who don't live in the district but are planning to visit
- Satisfaction with the quality of public transport amongst those who live in the district (both users and non-users of public transport) is high

Community Culture

Vision:

“A Community cultural shift has occurred that accepts the need for communally based multi model transport. Housing density has increased and transport hubs and services are safe, efficient, socially desirable and integrated into day to day life.”

Current Situation (Baseline Analysis)

- The Queenstown Basin (and NZ) is set up for the private vehicle.
- Culturally individuals dislike leaving cars behind and dislike the current bus system.
- Necessity isn't yet great enough to push the change for alternatives to the private car.
- Network not extensive enough for people to make change. Our network is unsafe for pedestrians and cyclists of all ages and it doesn't have the appropriate journey end facilities.
- Development still focused on greenfields and large sections.

What success looks like

- A community actively engaged in utilising public transport and alternative modes of transport e.g. cycling and walking, subsidized taxis for the elderly, ill or those with small children.
- Community views public transport as the preferred mode of travel to/from key destinations/homes/work/recreation
- The community adopts and embraces new and emerging e.g. car pooling apps, Yourdrive.co.nz

The gap with today

- Public Transport – viewed as expensive and lack of connectivity between places people want to get to at the right time.
- Trails are not expansive enough to connect.
- Lack of facilities along main/commuter trails and at end destinations.
- Lake not viewed as a viable/convenient transport option.
- Conditions of trails is not always fit for purpose e.g. accommodating cycling and pedestrian, commuter friendly.
- Safety – difficulties crossing roads/roundabouts

- Multi modal transport is safe and fit for purpose - good connections, good tracks (heavy usage bike and pedestrian commuter tracks need to be divided and sealed)
- Visitors to Queenstown are well informed and choose public transport as their preferred method of travel.
- The community advocates for and supports subsidization of the public transport system.
- Local businesses support alternative work practices – working from home/business hubs/ flexi time, reducing the need to travel.
- A healthy- thriving community that is active and engaged.

- Urban spread – development in outlying areas, residential, commercial and retail means it's difficult to get between where you live, work and play
- Lack of motivation to change, get out of private vehicles.
- Private car viewed as the most convenient way of travel.
- Visitors encouraged and view private vehicles as the most convenient way to travel around the district.
- Lack of community understanding of options available/timings and alternative options.

Potential issues in delivering the vision

- Capital cost
- Public backlash – stalling, lack of motivation to change, understanding that there is a full range of options not just cycling/walking.
- FIT tourism expectations, Tourism NZ policy towards independent travel
- Difficulty connecting networks and communities because of distance between them and favouring of suburban communities
- Need to develop secondary Public Transport links to main hubs

KPI's

- High understanding (90%) of public transport services - routes, timetables, stops and services.
- Cycle/pedestrian routes are well known and used (90% of people know how to get to their places of work and play without using the road).
- 80% of people can find the time of the next bus on their device.
- People are proud of NOT using a car and recommend other modes
- 90% of people believe biking and walking from home to work to recreation is safe.
- 60% of school children ride, walk, scoot or travel on public or school provided transport.

Glossary of Terms as they relate to Transportation

Accessibility¹¹ - people's overall ability to reach service, activities, and destinations... The quality of accessibility has tremendous direct and indirect impacts.

Several general factors can affect accessibility:

- Motor vehicle travel conditions. Automobile travel speeds, affordability and safety.
- Quality of other modes. Walking, cycling, public transit, telework, delivery services speeds, convenience, comfort, affordability and safety.
- Transport network connectivity. Density of paths and roadway connections, and therefore the directness of travel between destinations, plus the quality of connections between modes, such as the ease of walking and cycling to public transport stations.
- Land use proximity. Development density and mix, and therefore distances between activities.

CPTED¹² - Crime prevention through environmental design (CPTED), is a multi-disciplinary approach to deterring criminal behaviour through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts.

Congestion¹³ - **Traffic congestion** is a condition on transport networks that occurs as use increases, and is characterized by slower speeds, longer trip times, and increased vehicular [queueing](#). The most common example is the physical use of roads by vehicles. When traffic demand is great enough that the interaction between vehicles slows the speed of the traffic stream, this results in some congestion.

As demand approaches the capacity of a road (or of the intersections along the road), extreme traffic congestion sets in. When vehicles are fully stopped for periods of time, this is colloquially known as a **traffic jam** or **traffic snarl-up**.

¹¹ Evaluating Accessibility for Transportation Planning, Measuring People's Ability to Reach Desired Goods and Activities, 23 March 2016, Victoria Transport Policy Institute

¹² Wikipedia

¹³ Wikipedia



Congestion is often linked to a Level of Service (LOS). This is the LOS that the transport network provides and is normally rated A-F. The LOS is generally set by the transport authority at a level that society will tolerate.

Connectivity¹⁴ - *Connectivity* refers to the density of connections in path or road networks, and the directness of links. A well-connected network has many short links, numerous intersections, and minimal dead-ends. As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more [Accessible](#) and [Resilient](#) transport system that reflects [Complete Streets](#) (multi-modal) principles. Connectivity can apply both internally (streets within that area) and externally (connections with arterials and other neighbourhoods).

Functional - designed to be practical, useful and safe for **all** users.

Mobility¹⁵ - mobility refers to the movement of people or goods. Mobility is how far you can go in a given time, as opposed to accessibility, which is how many useful or valuable things you can do.

Mobility has substitutes such as telecommunications or delivery services.

Accessibility, Connectivity and Mobility are often interchanged and have different meanings. They are complementary to each other and conflicting at the same time, e.g. people in NZ have easy access to private motor vehicles, however this easy access to private vehicle sometimes limits access to the places we want to go through resulting congestion.

¹⁴ Victoria Transport Policy Institute, Transportation Demand Management Encyclopaedia

¹⁵ Human Transit, How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives, Jarrett Walker

Safe System Approach¹⁶ - in a roading context a Safe System approach has the objective of eliminating deaths and serious injuries to all road users (motorists, motorcyclists, cyclists and pedestrians), through shared responsibility for creating a safe road system. *Good planning and design sets the foundation of a safe road environment*¹⁷.

The Safe System approach to road safety was first adopted by the Netherlands in 1990, Sweden's "Vision Zero" in 1997, and United Nations Tylosand in 2009 and the subsequent 2010 United Nations "Decade of Action for Road Safety 2011 - 2020".

The Safe System Approach is based on a number of principles:

1. **People make mistakes** - Some crashes are unavoidable. The transport system must accommodate these so that when they do occur, they do not result in death or serious injury.
2. **Our bodies are vulnerable** - There are limits to the amount of force our bodies can be subjected to before we are injured. In a Safe System, crash forces are managed such that they do not lead to death or serious injury.
3. **All parts of the system work together to provide a 'forgiving' road transport system** - Aiming to ensure that the forces in collisions do not exceed the limits of human tolerance must be considered when planning, designing and maintaining road, vehicles and speeds. Road users should be alert and compliant when interacting with a road network.
4. **Responsibility for road safety is shared by all** - Those who plan, design and manage the road, as well as road users, share responsibility for road safety.

The Safe System model consists of four pillars around human tolerance to crash forces:

- Safe road (transport) infrastructure - planning and design of roads and transport systems that minimise the risk of crashes occurring, and when crashes do occur, ensure that death or serious injury are minimised.
- Safe speeds - that suit the function and environment of the road, so that crash impact forces are managed within human tolerances impact speeds for different users and types of crashes that are survivable and don't result in death or serious injury.
- Safe vehicles - that incorporate design features and technology that minimise the likelihood of crashes and protect road users (vehicle occupants and other road users, including pedestrians and cyclists), when crashes do occur. Development of vehicle safety, e.g. star ratings.
- Safe road users - should be alert, comply with road rules and engage in safe behaviour. They are supported through education, information, legislation and enforcement relating to road and vehicle use.

New Zealand's *Integrated Planning Strategy* defines integrated planning as:

“...[bringing] land-use planning, and transport planning and investment together, to deliver an affordable transport system that supports a growing economy, safe and vibrant communities and a healthy environment, now and into the future.”

¹⁶ Austroads Research Report AP-R488-15 Safe System in the Planning Process, June 2015.

The relationship of the Safe System Approach to planning practices is in dealing with the built form and transport, planners play a pivotal role in influencing the road network, e.g. strategic and statutory planning and both affect land-use decisions, which in turn affects the road and transport network. It follows that land-use planning has direct influence on the transport network, with the potential to influence the design of roads, how the road network is used, and what infrastructure safety investments are required in the future. Planning plays a critical role in providing a Safe System.

Safe System principles in planning to provide healthy, safe and sustainable travel within and between communities:

1. Interaction with land use:

- Provide for mixed-use communities that will reduce travel distances to help minimise safety risks when people travel to access services, facilities and social networks.
- Consider different mix of road users and their specific needs in different types of developments, e.g. strip shopping centres, residential neighbourhoods.
- Provide connected, attractive and pleasant public spaces to encourage people to walk and cycle for short trips away from roads.
- Promote subdivisions and local development patterns that contribute to a safe low-speed interaction between all road users. This promotes liveable communities and reduces the road footprint.
- Limit the number of access points onto roads with speeds higher than 60km/h.
- Require road safety audits for all scales of land development proposals. Ensure that the audits consider Safe System principles and interaction with the broader road network.
- Develop planning scheme objectives and acceptable outcomes aligned with the Safe Systems principles to promote safe road environments for pedestrians, cyclists, public transport, and commercial and private vehicles.

2. Different road users:

- Where possible, design spaces such that vehicular traffic is separated from pedestrian and bicycle traffic, and maximise this separation in high-speed areas. In addition, separation of pedestrians from bicycle traffic is desirable where possible, particularly in area of high bicycle traffic. This minimises exposure of vulnerable road users to road safety risks.
- Consider pedestrian and cyclist desire lines as well as visibility and locate crossings where road safety risks are minimised.
- Where road use is mixed, design roads to encourage low speeds. Traffic speeds below 40km/h, preferably 30km/h, are desirable in areas of high pedestrian and cycling activity. Road design and landscaping features can be used to encourage lower speeds.
- Incorporate convenient public transport options to reach new developments, e.g. bus stop, train station, given public transport is safer than travelling by car, bicycle, or motorcycle.

3. Road infrastructure:

- Establish and communicate a clear hierarchy with functional transport routes, e.g. link (arterial) roads, collector road, and local access roads. 'Self-explaining' roads help users understand different kinds of road environment, what speeds are appropriate for different kinds of roads, and which transport mode have priority within each route. This clarity promotes safer behaviour and fosters more liveable communities.
- advocate for a high level of safety features and planners work with designers and engineers to ensure speed management and speed limit decisions reflect the function and use of spaces, e.g. lower speeds in built-up environments may improve safety of, and encourage, active travel modes while separation of conflicting flows and movements can help improve safety on high speed roads (>60km/h) such as link roads or arterials. Appropriate speed management limits the chance and severity of crashes.

- Limit intersection through speed to 50km/h, e.g. through the use of roundabouts to reduce the number of conflict points and the severity of collisions, taking due cognisance of vulnerable road users such as pedestrians and cyclists.
 - Avoid visual and roadside clutter to improve visual amenity and minimise roadside hazards such as power poles, trees and street furniture that can kill and maim errant drivers and riders.
 - Choose appropriate tree species by considering the mature height in relation to sightlines and trunks that are flexible on impact (no greater than 100mm dia. at full maturity).
 - Plan of emergency service access, safe stopping and pull-over areas where applicable to minimise vehicle conflict points.
4. Planning ahead:
- Understand and plan for new safety technologies and road-vehicle communication systems.
 - Plan and promote future public transport developments to encourage modal shift.
 - Set aside road space for future transport needs to accommodate the safety requirements for multiple modes and increasing traffic demands.

Sustainability - a sustainable transport system is able to be sustained on an economic, social and environmental basis.