
Appendix A – QTT Trail Counts



**QUEENSTOWN
TRAILS TRUST**

Trail Count Report

For period: Oct 18 2012 – March 31 2017



By: Mandy Kennedy for the Board of Trustees

Date: 03 April 2017

Executive Summary

A total 1,294,144 trail journeys and 5,758,941 total trail movements (clicks) since opening in October 2012, this includes 114,982 journeys so far in 2017, compared to 109,538 in the same period in 2016, a nice 5% increase year on year so far.

NB: The data for Arrowtown's Millennium Track counter is not adding up, hence we have moderated the data for 2017 and we will investigate the problem and report back next month.

When comparing 2016 versus 2017 total journeys year to date we are seeing some strange trends, a bizarre 69% decrease at Billies Bridge tells us they may have been a problem with the counter in 2016 or an event we didn't know about (Jan 2016 saw 5178 journeys compared to Jan 17's 1115). Trail journeys are also substantially down on the Kelvin Peninsula trail with a 29% decrease on same period last year, with Jan and March in particular showing much less traffic in 2017. However on the plus side Morven Ferry (Edgar Bridge) is showing a 44% increase in journeys and Gibbston River Trail a whopping 229%, the latter could be down to a faulty counter (I'm not convinced the PTC3 counters work that well). Otherwise we are seeing a nice steady increase on all other trails.

When we split the Queenstown Trail into the individual rides and look at % proportion of trail use, Millennium Track in Arrowtown receives the biggest share of use with nearly 20%, Frankton Track receives 16% and both the Gibbston River Trail and Lake Hayes Circuit both see 11% of all traffic (with Gibbston up from 3% in 2016!).

As of 31st March, QLDC have installed a new Eco-Visio counter at the Horne Creek Bridge, Marine Parade, this will capture data for the Queenstown Trail (and the QT Masterplan) and already the numbers are impressive (3,199 movements on first day!). We will look forward to boosting our numbers by adding this counter into our next report.

Introduction

The Queenstown Trail is a 120km walking and cycling trail connecting the communities of Queenstown, Frankton, Arrowtown, Gibbston and Jack's Point.

The trail was officially opened on October 18, 2012 - this report provides an indication on the total number of movements also known as trail movements or 'clicks' recorded as a trail user passes one of the counting sites. Research to travel patterns has been collected via limited survey data on travel patterns which indicate a rider passes an average of 4.45 counter stations. Assuming this is the case, there were some **1,294,144** unique trail journeys completed since the opening of the Queenstown Trail.

Methodology

10 "Eco-Counters" are located at key entrance points and structures along the trail network. The counters consist of a heat sensitive sensor and data logger. Each sensor is hidden within a timber post or similar at a point of constriction to count people as they pass on foot or bike. For each count the time and day is recorded and with the new technology we can report on either pedestrian or cycle traffic and direction there-of. With the original counters (installed September 2012), the data was wirelessly uploaded in the field to a laptop and then uploaded to a cloud based application that analyses the data and provides reports. The new counters (four in total) distinguish between walkers and cyclists and report on the direction of movement. The software now offers an auto-upload into Eco Counter software which enables us to read the data at any time we wish, which is presently on a quarterly basis. These four new counters were installed on June 26th and October 7th, 2014. The new software and counters are considered to be more accurate and are able to be monitored online. Any apparent false data can be moderated by the software application and this is now monitored on a monthly basis to ensure we quickly see and amend any anomalies. Since July 2015 we have been able to access data for both Jack's Point and the Lake Hayes Track via the Department of Conservation (DoC) trail count technology. The counter technology utilised for these two trails is based on a 'click' each time a person passes the counter, there is no methodology applied to these trails as they are both linear. PTC3 counter technology has been purchased by QTT and installed at two additional sites, Arrowtown's Millennium Track and the new Gibbston River Trail. From March 2016, data from these two new sites will be included in the overall trail count. Total number of counters on the Queenstown Trail is now 14.

Summary of Trail Counts from October 2012 – March 31 2017

Summary of Counts	Billies Bridge	Frankton Track	Kawarau Falls Bridge	Kelvin Peninsula (new)	Monven Ferry (formerly Edgar Bridge)	Old Lower Shotover Bridge	Old School Road	Riverside Road (New)	Speargrass Flat Road	Swain Bridge	Jack's Point (DoC)	Lake Hayes Circuit (DoC)	Millennium Track (PTC3)	Gibbston River Trail (PTC3)	TOTALS
Total Journeys (2012-2017)	47,852	279,619	108,537	83,799	46,609	108,028	57,991	50,410	31,402	53,173	66,491	166,576	157,705	109,929	1,294,144
Total Movements (clicks) (2012-2017)	212,941	947,589	482,990	372,906	207,410	480,725	258,060	224,325	139,739	236,620	66,491	166,576	157,705	109,929	5,758,941
Total Journeys (2016)	21,066	75,733	31,352	29,089	11,218	31,365	15,286	13,499	9,689	16,206	18,522	47,517	135,240	97,585	553,367
Total Journeys Year to date (Jan - Mar 2016)	8,136	18,269	9,169	8,051	3,131	7,439	3,389	3,197	2,026	4,334	4,452	12,374	21,819	3,752	109,538
Total Journeys Year to date (Jan - Mar 2017)	2,539	18,570	9,443	5,701	4,520	8,292	3,489	3,186	2,118	4,769	5,071	12,475	22,465	12,344	114,982
YOY Trail Journey Growth % (Jan-Mar)	-69%	2%	3%	-29%	44%	11%	3%	-0.38%	5%	10%	-2%	4%	3%	229%	
Peak Day (Journeys) 2017	Tue 10 Jan (126)	Mon 2 Jan (345)	No Data	Wed 29 Mar (548)	Wed 8 Mar (212)	Sat 25 Mar (192)	No Data	Mon 2 Jan (67)	Mon 2 Jan (58)	Thur 5 Jan (127)	No data	No data	No data	No data	No data
Busiest Day of the Week (Journeys)	Saturday	Monday	No data	Wed	Saturday	Saturday	No Data	Saturday	Saturday	Saturday	No data	No data	No data	No data	No data
Daily Average (Journeys)	28	206	No Data	63	50	92	No Data	35	24	53	No data	No data	No data	No data	No data
Peak Time Weekdays (Journeys)	11AM	5.30PM	No Data	2PM	11AM	3PM,	No Data	5PM	5PM	11AM	No data	No data	No data	No data	No data
Peak Time Weekends (Journeys)	11.30AM	10.30AM	No Data	2.30PM	11AM	11AM	No Data	9AM	2PM	11AM	No data	No data	No data	No data	No data

-2016-

**TOTAL TRAIL
JOURNEYS TO DATE**

(Jan – Mar)

109,538

-2017-

**TOTAL TRAIL
JOURNEYS TO DATE**

(Jan – Mar)

114,982

Total Trail Journeys - Year on Year Increase %

**2013 compares Oct/Nov/Dec data (months trail was open in 2012)*

***2016 data excludes the PTC3 counters in Arrowtown and Gibbston*

****2017 data compares the year to date (Jan-Mar)*

Year	% Increase
2013*	17%
2014	-3%
2015	3.2%
2016**	11%
2017***	5%

Results

A total of 5,758,941 trail movements ('clicks') or 1,294,144 trail journeys of the Queenstown Trail were recorded since the opening of the Trail on October 18, 2012. The peak usage day so far in 2017 was Wednesday 29 March with 548 trail movements on the Frankton Track (Lake Wakatipu Ride). Generally, the busiest days on the Trail occurs over the weekend – Saturday predominantly.

The Frankton Track and Riverside Road counters show high levels of usage during week days around 5pm, showing that the trail offers a level of local commuting use beyond recreational riding and walking.

The Millennium Track is still leading the way with the greatest number of trail journeys with 12,344 in 2017 so far, taking the largest share of total trail traffic (19.5%), followed by Frankton Track with 18,570 trail journeys so far in 2017, taking 16% share of all trail traffic and pretty much neck and neck third place, Lake Hayes Circuit saw 12,475 trail journeys so far this year with 11% share of trail traffic and Gibbston River Trail saw 12,344 trail journeys equating to 11% share of all traffic (up from 3% last year when comparing same period Jan-Mar2016). Please bear in mind Millennium Track figures have been moderated this year due to an issue with the counter. We will review this once we have rectified the issue.

Data for the reporting period from the following sites – Kawarau Falls Bridge and Old School Road have been moderated as data has been missing from some of the months; the moderation is based on historical and present data when the counters were performing adequately. As we now have access to DoC counter information for Jack's Point and Lake Hayes Trails and we have incorporated this data best we can into the overall report, in particular graphed reports. We are currently undergoing research with regard to the weighting (of 4.45 clicks) used to moderate the trail movements in order to ensure we are producing the most accurate data we possibly can.

TOP 5 TRAILS 2017

January 01 – March 30 2017

Trail Counter / Section	2017 Trail Journeys	% of Total Trail Traffic
1. Millennium Track, Arrow River Bridges Ride	22,465	19.5%
2. Frankton Track, Lake Wakatipu Ride	18,570	16%
3. Lake Hayes Circuit	12,475	11%
4. Gibbston River Trail	12,344	11%
5. Kawarau Falls Bridge (moderated)	9,443	8%

Proportion of Trail Use by Counter – 2017 (year to date Jan – Mar)

% Proportion of Trail Use



Queenstown Trail Total Journeys October 01, 2012 to December 31, 2016

Fig1. Includes data from new PC3T counters

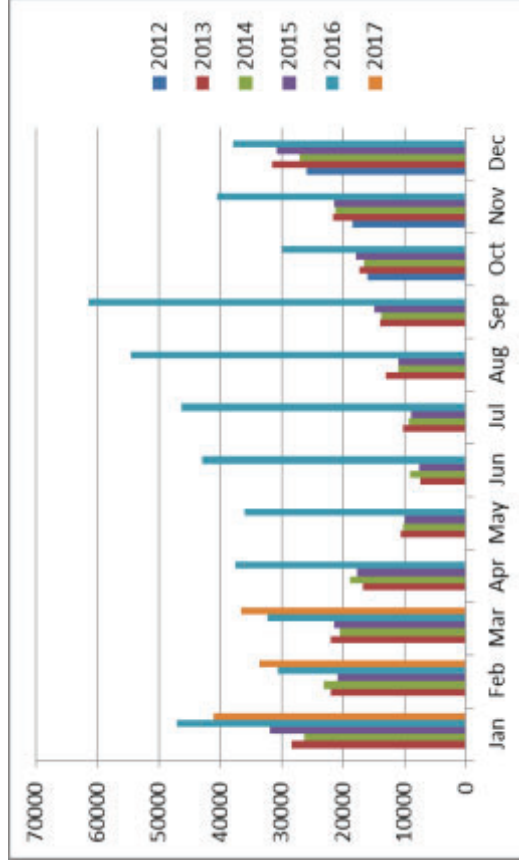
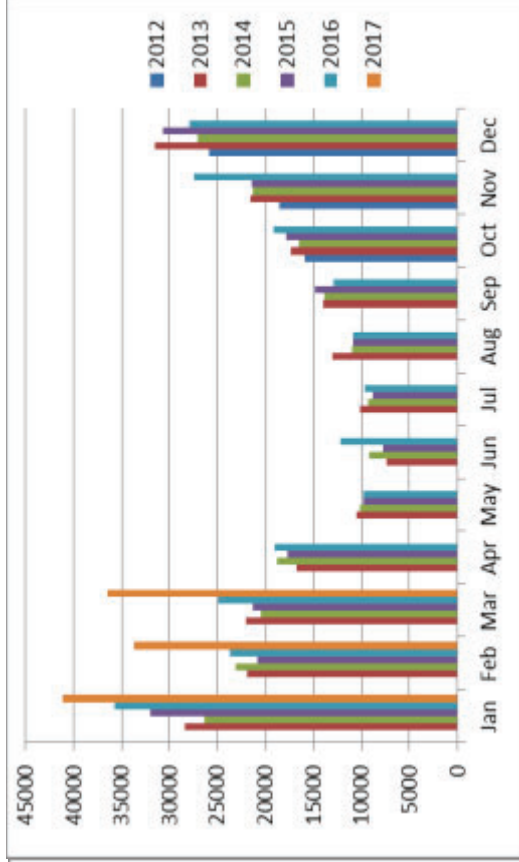


Fig2. Shows data without PC3T Counters



Appendix B – Strategic Context

Wakatipu Active Transport Strategic Context

Introduction

This document presents the Strategic Planning context for the Wakatipu Active Transport Network project at the national, regional and district scales.

1.1. National

Government Policy Statement on Land Transport 2018/19 – 2017/28

The 2018 GPS on Land Transport (GPS 2018) for the period 2018/19 – 2017/28 outlines the Government’s strategy to guide land transport investment over the next 10 years. This guidance provides for investments in:

- Maintaining our existing transport network to ensure we can get where we need to go;
- Improving our land transport network so that it functions better; and
- Delivering specific objectives including improving safety, improving access and contributing to environmental policies.

In adopting the GPS, the Government has confirmed the following strategic priorities for the land transport system:

- Safety – a safe system, free of death and serious injury;
- Access – a system that provides increased access to economic and social opportunities, enables transport choice and access, and is resilient;
- Environment – a system that reduces greenhouse gas emissions, as well as adverse effects on the local environment and public health; and
- Value for money – a system that delivers the right infrastructure and services to the right level at the best cost.

These strategic priorities are supported by objectives and themes.

Problems and benefits identified in this Business Case are aligned to the strategic priorities described above of:

- Safety in addressing the lack of safe infrastructure;
- Access in addressing the informal and incomplete cycle and walking trails, which leads to low usage; and
- Environment in addressing congestion, health and other effects.

The relevant strategic priority of “value for money” is concerned with delivering the right solution to the right level at the best cost, which is achieved through following a Business Case process.

NZ Transport Agency Statement of Intent (2018)

The NZ Transport Agency’s Statement of Intent responds to the new GPS and sets a new outcomes

framework for the transport sector. The framework describes five long term outcomes for the transport system:

- Inclusive access;
- Economic prosperity;
- Resilience and security;
- Environmental sustainability; and,
- Healthy and Safe people.

Mode neutrality is a guiding principle of the framework which means considering all modes when planning, regulating and funding transport, and basing decision on delivering positive social, economic and environmental outcomes.

National Land Transport Programme (NLTP)

The National Land Transport Programme (NLTP) provides the Transport Agency's three-year programme of planned activities and a 10-year forecast of revenue and expenditure prepared by the NZ Transport Agency to give effect to the GPS.

Developing a multi-modal approach to keeping Queenstown moving is identified in the NLTP. The NLTP refers to *"investigations are looking at various transport improvements within the town centre, to meet projected increases in the population and visitors."* Consideration is being given to activities that will improve access including infrastructure for walking and cycling. Specific reference is made to *"pedestrianisation of the town centre and new on-road/off-road shared walking/cycling opportunities"*.

1.2. Regional

Otago Regional Land Transport Plan 2015 - 2021

The Regional Land Transport Plan (RLTP) reflects strategic direction from the GPS. The long-term goal of the RLTP is *"achieving a safer and more sustainable transport system that supports and enhances regional development."*

The following long-term results have been identified:

- The network is reliable and resilient;
- Major externalities are reduced (including road risk and the resultant trauma, and carbon emissions);
- Exporting is supported;
- Tourism is enabled and supported;
- Growth is enabled;
- Non-traditional economic sectors are enabled;
- There is an increased choice in travel modes;
- Community resilience has been enhanced (including climate change adaptation).
- Decision-making is timely and relevant;
- There is sufficient support and choice of funding to realise the strategy outlined in these plans; and
- Increased value for money delivered by transport infrastructure investments.

These intended long-term results are important because, collectively, they will enable our regions to achieve the goal, by ensuring the following three factors that are critical to success in achieving the goal are realised:

- Transport enables and supports economic activity and growth;
- The transport system adequately meets social needs; and
- Transport helps to positively shape the future of Otago and Southland.

The benefit of an Integrated Active Travel Network and associated KPIs in the ILM align with the RLTP priority of improving network access for all modes and establishing a reliable and resilient network.

ORC's framework provides the case for transport investment in active travel improvements.

Otago Regional Council 10-year Plan 2018

The benefits identified in the ILM for this SSBC include positive community and environmental effects, which aligns with the ORC's vision from the 10-year Plan 2018 of providing "*A Prosperous and Sustainable future for Otago*".

1.3. District

QLDC Long Term Plan 2018-2028

This plan sets out QLDC's vision and objectives as well as identifying infrastructure projects and their funding streams.

The vision for the plan is *vibrant communities, enduring landscapes and bold leadership*.

The community outcomes for this plan are:

- Efficient and effective community facilities;
- Communities have a good standard of living and wellbeing;
- Communities are inclusive for all;
- Strong cultural landscape that inspires, preserves and celebrates our heritage, arts and culture;
- Appropriate public access;
- Efficient and effective infrastructure;
- Environmental sustainability and low impact living is highly valued;
- Quality built environments that meet local needs and respect the local character;
- World class landscapes are protected;
- Sustainable growth management;
- Partnering for success;
- Investing strategically;
- Enabling diversification;
- A responsive organisation;
- An organisation that consults effectively and makes sound decisions;
- Communities are resilient and prepared for civil defence emergency events;
- An organisation that demonstrates leadership; and
- An organisation that considers the district's partnership with Mana Whenua.

Specific to active travel, QLDC is planning to:

“improve the on/off road cycle/pedestrian network across the Wakatipu, additional crossing of the Shotover river, a cycle hire scheme, marketing, promotion and education, cycle storage facilities, lockers and showers.”

The KPIs for Benefit two as defined in the ILM for this SSBC seeks improved active mode usage and is closely aligned with QLDC’s outcomes of appropriate public access and environmental sustainability. Increased active mode usage also aligns with the vision of seeking vibrant communities.

The focus on alternative transport options aligns with QLDC’s outcome of developing efficient and effective infrastructure.

Queenstown Town Centre Transport Strategy – The Next Steps (2016)

The Queenstown Town Centre Transport Strategy states its strategic direction as *“Preserve and improve resident and visitor enjoyment of the Town Centre by reducing congestion and leading a necessary shift away from reliance on private cars.”*

This strategy includes a series of initiatives towards reducing congestion and reliance on private cars, such as parking initiatives and traffic demand management measures.

Problem statement 3 outlines the limited alternative options and current modal preferences are leading to congestion, poor health and other effects. Benefit statement 3 seeks positive community and environmental effects with KPIs for mode share and health benefits. These statements support the strategic direction stated in the Queenstown Town Centre Transport Strategy by improving resident and visitor enjoyment of the Town Centre by reducing congestion and a shift away from private cars.

QLDC District Plan

The Strategic Direction chapter of the QLDC District Plan (decisions version) outlines QLDC’s strategic direction for the management of growth, land use and development in a manner that ensures sustainable management of the Queenstown Lakes District’s special qualities. Objective 3.2.1.9 of the Strategic Direction chapter is relevant to this Business Case:

Objective 3.2.1.9 Infrastructure in the District that is operated, maintained, developed and upgraded efficiently and effectively to meet community needs and to maintain the quality of the environment.

Benefit two prepared for this SSBC aligns with Objective 3.2.1.9 of the District Plan in that it seeks an integrated Active Travel Network, which increases the level of service this infrastructure provides.

The Transport chapter of the QLDC District Plan as notified outlines QLDC’s strategic direction for transport in the district. Objectives 2 and 6 of the Transport chapter are relevant to this Business Case:

Objective 2 Maintenance and improvement of access, ease and safety of pedestrian and vehicle movement throughout the District

Objective 6 Recognise, encourage and provide for the safe movement of cyclists and pedestrians in a pleasant environment within the District

Benefit two aligns with Objective 2 of the Transport chapter in that it provides for better safety and security. Benefits two and three align with Objective 6 in seeking an integrated Active Travel Network and positive community and environmental effects.

Queenstown Trails Trust Strategic Plan – Queenstown Trails for The Future 2015-2025

Queenstown Trails for the Future 2015 -2025 identifies three goals that will drive a sustainable trail network and encourage more people to use it:

- Developing a world class network for residents and visitors;
- Increased use and stewardship of trails; and
- Sustainable financing for trails.

Queenstown Trails for the Future 2015 -2025 aims to ensure a network of sustainable trails that will:

- Encourage greater participation and contribute to healthier lifestyles for residents and visitors;
- Improve the connectivity of Queenstown and surrounding communities; and
- Encourage growth in visitor numbers and yield to Queenstown.

The benefit of positive community and environmental effects, and associated KPIs (mode share and health benefits) align with the Queenstown Trails for the Future 2015 -2025 strategy regarding greater participation and contribution to healthier lifestyles for residents and visitors. Also, the Business Case benefit of an integrated Active Travel Network and associated KPI of connection rating for key travel nodes aligns with the Queenstown Trails for the Future 2015 -2025 strategy to improve connectivity of Queenstown and surrounding communities.

Queenstown Lakes District On Foot, by Cycle Strategy

The purpose of this Business Case strategy is to revisit the proposed 'On Foot, by Cycle' strategy by QLDC. The original document's broad outcome was to see more people walking and cycling and greater satisfaction within the community with the ease, safety and security of walking and cycling in the district.

The vision and objectives are illustrated in Figure 1.



Figure 1: QLDC On Foot, By Cycle Strategy

The Business Case aligns with the vision and objectives of this strategy to provide an attractive and safe environment for cyclists and pedestrians. The benefits of an integrated Active Travel Network and positive community and environmental effects aligns with the strategy’s objective to encourage and enhance walking and cycling as healthy and active activities.

Queenstown Future Development Strategy

A Future Development Strategy (FDS) is being prepared for the urban areas of the Queenstown Lakes District, including Queenstown, Wanaka and the smaller townships in accordance with the National Policy Statement on Urban Development Capacity.

The FDS is to define the location, timing and sequencing of land identified to accommodate growth in housing and business over the short (0-3 years), medium term (3-10 years) and long term (10+ years). An integrated approach is to be achieved with the planning and delivery of infrastructure.

Options are being investigated for the future urban form of Queenstown, Wanaka and the smaller townships including the status quo of consolidation and containment, an option of greater intensification around nodes, and an option of outward expansion. The evaluation and engagement on these options will inform the Draft FDS.

This Business Case seeks to improve links between nodes, enabling recreational, tourist and commuter trips and a mode shift i.e. increase in proportion of trips taken by active modes. The land use pattern promoted through the FDS will be integrated with planning for the transport network, such that land use patterns contribute to greater uptake of active modes.

The New Zealand Cycle Trail (NZCT) Queenstown Great Ride

The Queenstown trail is one of 22 great rides within New Zealand, which covers 120km of cycle trails within the Wakatipu Basin. The Queenstown Trail is a joint initiative of the Queenstown Trails Trust, the QLDC, and the New Zealand Cycle Trail project. The Queenstown Trail network is seven standalone (but connected) rides. A portion of the trail network is also connected to the Tour Aotearoa route which extends from Cape Reinga to Bluff. The route traverses the Queenstown Trail network along the Kawarau and Shotover Rivers before connecting onto the Queenstown to Frankton Trail to central Queenstown (Figure 2).



Figure 2: Tour Aotearoa route within the Queenstown Trail Network

As part of Stage 1, a Business Case was completed by Martin Jenkins & Associates Limited (Martin Jenkins) for the Queenstown Trail Realignment Project to assess trail links between Arrowtown and Arthurs point, connecting into Tucker Beach. The proposed trails can be seen in Figure 3. Stage 2 will address the southern part of the Trails network, creating a return loop from Jack's Point to Frankton, and along the south bank of the Kawarau Rive to Gibbston, with pedestrian overbridges linking to Remarkables Park and Lake Hayes Estate. WSP Opus have been commissioned by QLDC to assess the feasibility of the Stage 2 proposal, which is currently complete.



Figure 3: Queenstown Trail Realignment Project - Stage 1

As part of this Business Case, predicted user growth and economic benefits were presented. The growth rates presented in this Business Case were reviewed and considered reasonable by Ministry of Business Innovation and Employment's (MBIE) Great Ride Enhancement and Extension Fund team. It states that

over ten years (2021 to 2030), total riders of the new trail (excluding commuters) are expected to increase by an average of 2.8% per year, predominantly driven by projected growth in multi-day riders (3.8% per year). The projected trail users can be seen in Figure 4.

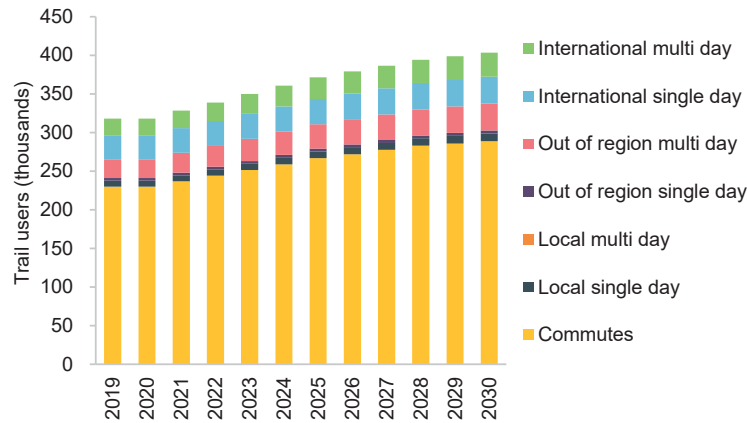


Figure 4: Projected trail users by type

An economic review of the proposed trails was also completed. At a cost of \$3.75 million (NZD), the project provided a benefit of \$35 million (NZD), resulting in an economic Benefit to Cost Ratio (BCR) of 9.3 and an Internal Rate of Return (IRR) of 63%. The majority of benefits came from anticipated visitor spend due to the increase in users, as well as health benefits for all users. The breakdown can be seen in Figure 5.

Summary metrics	Base case
Net economic benefits (NPV)	31,280,000
Benefit:Cost ratio, Regional	9.3
Internal rate of return (IRR)	63%

Net benefit summary	Base case
	NPV (\$)
Total benefits	35,027,692
Total costs	3,751,110
Net economic benefits	31,276,582

Cost summary	Base case
	NPV (\$)
Central government costs	Not included
Locally funded costs	3,751,110
Total cost of projects	3,751,110

Benefits summary	Base case
	NPV (\$)
Visitor spend	31,996,060
Safety	0
Health	2,827,274
Traffic displacement	0
Consumer surplus	204,358
Total benefits	35,027,692

Figure 5: Cost Benefit Analysis (CBA)

This study aligns with this strategic case as it shows the significant economic benefits of providing attractive active travel links between key destinations within the Wakatipu Basin.

Central Otago Queenstown Trail Network

The Central Otago Queenstown Trail Network is a \$26-30 million-dollar (NZD) initiative to implement 500km of trail network to link the Queenstown Trail, Proposed Kawarau Gorge Trail, Proposed Cromwell Gorge Trail, Roxburgh Gorge Trail, Clutha Gold Trail and the Otago Central Rail Trail. The route can be seen in Figure 6.

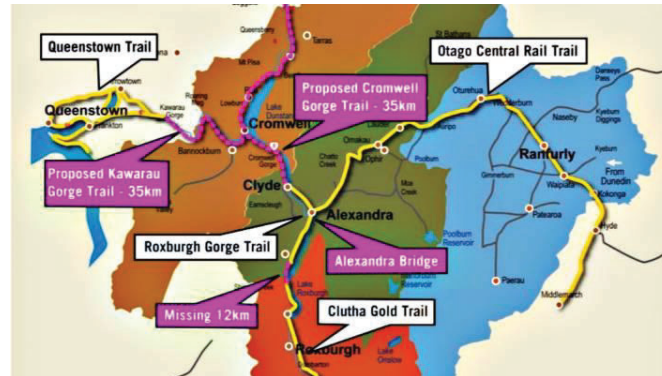


Figure 6: Central Otago Queenstown Trail Network

To secure the funding from central government, the Central Lakes Trust and Otago Community Trust, a Business Case process was completed. This Business Case aligns with the proposed Central Otago Queenstown Trail network as it builds upon the existing Queenstown Trail, promoting links into the wider area.

Frankton Masterplan (In Progress)

A transport Master plan is being prepared for Frankton, being a major centre in the Wakatipu Basin that is attracting a growing number of residents and visitors for services, amenities and employment. The Master plan process will result in a preferred programme of transport improvements to ensure good access both to, within and through Frankton. The study area is shown in Figure 7.

Frankton is a key destination on the trails network with a number of routes considered as part of the Active Travel Network SSBC providing access to Frankton. Consideration is also to be given as part of the Active Travel Network SSBC to how these routes will connect within the Frankton Area.

¹ This includes but is not limited to the following activities: Community facilities, recreation areas, education facilities including Wakatipu High School, commercial activities as part of the Queenstown Central, Five Mile and Remarkables Park developments, visitor accommodation, residential activities, Queenstown International Airport, and industrial activities including airport related activities.



Figure 7: Frankton Masterplan Study Area

Queenstown Town Centre Detailed Business Case (In Progress)

This Detailed Business Case (DBC) is focussed on the Queenstown Town Centre. This will build upon the interventions identified in the Queenstown Town Centre PBC and Indicative Business Case (IBC). The options being developed and evaluated include:

- Optimisation of the existing transport network, including the role of technology and supporting network management infrastructure;
- Testing of the QLDC parking strategy and the level of parking infrastructure (spaces and management) required to deliver the wider transport system outcomes sought (including supporting intelligent transport systems (ITS), etc.);
- Network operation items including ITS and other management interventions;
- Required public transport services and interchange infrastructure for bus and ferry services; and,
- Development of the arterials.

The Active Travel SSBC is to confirm the routes through the town centre that were previously identified in the Queenstown Town Centre Master Plan. Outside the Business Case, designs are being prepared for facilities along Beach Street, Rees and Breacon Street (Mall Street to Skyline) and Park Street (from the Queenstown Garden via Hotops Rise Earl Street). The implementation of these designs is subject to funding.

Frankton to Queenstown Single Stage Business Case (In Progress)

This SSBC is focussed on SH6A from SH6 through to Ballarat Street. This will build upon the interventions identified in the Queenstown Integrated Transport PBC, which are being developed and evaluated further to define a preferred option, including:

- Increased capacity of SH6A (4 or 3 lanes);
- Localised widening;
- Bus priority and supporting measures (e.g. signal prioritisation); and
- Intersection improvements.

Also, within the scope of the Business Case is the identification of potential High Capacity Water Transport and mass rapid transit (MRT) options. This is to ensure that the SH6A interventions are appropriately sized and whether the long-term solution for the corridor is to provide either of these solutions. This project opened for public consultation early in 2019 and closed on the 10 February 2019. The purpose of this consultation was to understand the problems people are facing on their journeys from Queenstown Airport and Frankton via SH6 and around Queenstown Town Centre (relating to the Queenstown Town Centre Detailed Business Case (DBC)).

The Active Travel SSBC has considered the most appropriate route for active travel between Frankton and Queenstown and will also need to consider the linkages from the Frankton Track (as the emerging preferred option) to SH6 and the residential areas on Queenstown Hill. Without appropriate connections, there could be a reduced uptake of the proposed facilities.

Grant Road to Kawarau Falls Bridge Detailed Business Case (In progress)

This DBC is focussed on improving traffic flows on SH6 between Grant Road and the Kawarau Falls Bridge and developing a preferred option for achieving better connectivity, whilst improving the network for public transport, walking and cycling.

The connectivity across the river and connections between the main active travel routes within Frankton is an important consideration as part of the Active Travel SSBC.

Lake Wakatipu Public Water Ferry Service Detailed Business Case (In progress)

This DBC is focussed on the Lake Wakatipu public water ferry service and will determine the viability of a ferry service to attract commercial operators and a potentially subsidised service. The water ferry is among several options being considered to provide improved travel choices for users, and form part of the wider programme that looks to reduce reliance on private vehicles. This project will also consider the potential connections. The draft DBCe is set for completion in late-April.

Appendix C – Engagement and Communications Report

Wakatipu Active Travel Network: Engagement and Communication Report

Prepared for Queenstown Lakes District Council
Prepared by Beca Limited

15 August 2019



**make
everyday
better.**

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Appendices

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Revision History

Revision N°	Prepared By	Description	Date
A	Nicolle Vincent / Kristina Mead	Preparation of draft report	08/05/2019
B	Kristina Mead	Final report for Client review	04/07/2019
C	Fiona Blight	Final report following Client review	15/08/2019

Document Acceptance

Action	Name	Signed	Date
Prepared by	Nicolle Vincent Kristina Mead		08/05/2019
Reviewed by	Fiona Blight		15/08/2019
Approved by	Dave Aldridge		15/08/2019
on behalf of	Beca Limited		

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1 Introduction

Queenstown Lakes District Council (QLDC), the New Zealand Transport Agency (NZ Transport Agency), and Otago Regional Council (ORC) are working collaboratively as part of the Wakatipu Way to Go initiative, to create an active travel network in the Wakatipu Basin that is reliable, resilient and connects communities that encourages residents and visitors of all ages and abilities to walk and cycle.

Beca Ltd (Beca) has been commissioned to undertake a Single Stage Business Case (SSBC) to help inform the preferred network options. There are approximately 190km of existing trails for walking, hiking and cycling in the Wakatipu Basin. While these are popular for recreational use and with tourists, the routes are incomplete and do not currently form a comprehensive network that connects people to where they live, work and play.

Together with the Queenstown Trails Trust, a list of options was created for each of the proposed routes. Meetings with key stakeholders, including local schools, Iwi and the Department of Conservation allowed for feedback to be gathered, which alongside technical research, allowed for each of the options to be tested against a range of social, environmental and economic criteria to come up with the draft preferred network.

Following this, consultation and engagement with the community was undertaken as part of the wider Wakatipu Way to Go project. Feedback from the community is crucial in understanding how and why people choose to travel around the Wakatipu Basin, what can be done to increase active modes of travel and how the preferred network might facilitate this. Engagement was also undertaken with key landowners whose land may be required for the Active Travel Network.

The Wakatipu Way to Go consultation sought to introduce the project and gain community insights, primarily by way of community engagement events, a project website and various group presentations. The community engagement events in the form of three market stands and additional targeted pop-up events were held at different times and various locations in March/April 2019. Two pop-up events were led by the Active Travel team.

This report provides a high-level overview of the community and stakeholder engagement on the Wakatipu Active Travel Network project, as well as a summary of the feedback received.

2 Community Engagement

Community engagement was largely coordinated by QLDC as part of the Wakatipu Way to Go initiative. The key community engagement period ran from 1 April to 19 April, although limited engagement did occur outside of this period. A range of different channels were used to introduce the project, invite attendance at one of the community engagement events and seek feedback. Feedback was sought through a number of methods including:

- In person
- Online Survey (survey monkey)
- Email Submissions
- Social Media

The below sections provide an overview of the engagement methods used, focusing on those particularly relevant to the Wakatipu Active Travel Network project.

2.1 Advertising

Appendix A sets out the Wakatipu Way to Go advertising and promotional campaign. In summary, project awareness was raised via radio and print advertising, print and online newsletters, social media, direct emails, and media releases.

In addition to this, addressed letters were dropped into mailboxes of residents in Kelvin Peninsula and around Lake Hayes, who may be directly affected by the project, to invite them to attend one of the market stands or Active Travel led pop up events.

2.2 Collateral

Wakatipu Way to Go information panels were developed, which included key information on the Active Travel project. These panels were present at all community engagement events and the same information was presented on brochures which were distributed at the events and on display at QLDC's offices, libraries and event centre. Business cards and the Wakatipu Way to Go brochure were handed out at all events directing people to the project webpage and online survey.

2.3 Project Website

QLDC's Lets Talk website hosted pages on the Wakatipu Way to Go initiative. In relation to the Active Travel project, the website includes an overview of the project, a summary of the progress so far, and an interactive map of the preferred network of trails.

2.4 Community Engagement Events

The key community engagement events took the form of stands at three markets; four targeted pop up (two specifically for Active Travel); and information panels at Queenstown Events Centre and Queenstown Library over Easter. The Information Panels provided information on the Wakatipu Way to Go initiative, including the Active Travel project, and people were encouraged to ask questions of the team present and provide feedback by way of post it note comments or in person to the team or via the online survey. Appendix B provides the Debrief Reports for the markets and pop ups.

To complement the Wakatipu Way to Go market stands, two pop up events were led by the Active Travel team. These were held at the Motatapu Race and at the Frankton Marina. The locations for the pop up events were chosen to attract those who may use the existing network of trails or who might be interested in doing so. A summary of these pop-up events is provided below.

Motatapu

Location: Motatapu Finish Line

Date: 9th and 10th March 2019

The pop-up event at the finish line of the Motatapu Race attracted a number of people and allowed early feedback prior to the main consultation and engagement period. However, the main focus of the event was to raise awareness of the project. The Active Travel team shared a stand with the Queenstown Trails Trust and a map of the preferred network of trails was provided.

In depth conversations were had with a number of people and the event was helpful for gaining an understanding of the barriers to using active modes of travel, with safety being identified as one of the key barriers.

Key themes that emerged included:

- There are barriers preventing people from cycling, including poor lighting, safety concerns, difficulty wayfinding, and track surfacing.
- International tourists are used to sealed tracks but come here for an 'adventure' holiday and sealing tracks would detract from the adventure.
- Additional toilet and drinking water facilities would be beneficial.
- The trails should integrate with public transport.
- Workplaces (particularly where parking is limited) should encourage walking and cycling by providing facilities (such as showers).
- Separated cycle ways would encourage kids to cycle. School programmes are needed to increase both kids and parent's confidence on the roads.

Frankton Marina

Location: Frankton Marina

Date and Time: Thursday 11th April, 3:45-6:00 pm

The pop up event at Frankton Marina was targeted at those cyclists and walkers who already use the trail so the event was scheduled to capture commuters heading out of Queenstown and other local users. The pop up attracted a mixture of both local residents and visitors, with a number of attendees mentioning they had received advertising for the event in advance. There was a good cross section of users on the Frankton Track including cyclists, pedestrians and e-scooters.

The Wakatipu Way to Go Active Travel information panel provided information on the project, and business cards and the Wakatipu Way to Go brochure directing people to the website to find more information and fill in the online survey were handed out.

Those in attendance were generally positive about the Active Travel project and interested in possible upgrades to the tracks. Discussion was mainly focussed on the Frankton Track with many people supporting the track remaining gravel and only being asphalted if absolutely necessary. There was concern that sealing the track could cause issues with ice in winter. The Kelvin Heights track was also mentioned a number of times, with attendees noting that ferry connections to this route are important and that it is currently used predominantly for recreational purposes.

Key themes that emerged included:

- People value the unsealed tracks, as they enjoy the walking and cycling experience.
- Commuters to and from a destination valued the ability to be completely separate from traffic.

- Concerns include lack of signage and concern around sealing of tracks allowing e-scooters to travel at faster speeds.
- Concern about sealed tracks increasing e-mobility users speeds on the trails.
- The width of the Frankton track is considered 'adequate' except during peak season (Jan/Feb) with some cyclists noting they avoid the trail during that period.

Queenstown Events Centre and Library Panel Feedback 18-22nd April 2019

Over the Easter period the Wakatipu Way to Go Information Panels were placed at Queenstown Library and a number of comments were made using post it notes. The comments included possible locations for new facilities along the routes and mixed feedback on which routes should be sealed and which should be gravel.

2.5 Survey Results

The Wakatipu Way to Go Survey (hosted by Survey Monkey) on QLDC's Lets Talk website received 194 responses. Questions 10 through to 17 related to Active Travel and a summarised below.

We asked:

What are your main reasons for using the trails?

Here's what you said:

- Most respondents use the trails for fitness or fun (60%) followed by getting to or from school or work (26%), getting to or from another destination (11%) and other (3%).
- 'Other' responses included dog walking and avoiding the road if biking to work.

We asked:

Check out the proposed Active Travel Network Plan and let us know if there are any particular trails that should be sealed with asphalt? And which should have a gravel surface? (Note that this question appears twice, as Q12 and Q16. However, respondents were only asked the question once. For ease, responses to both questions have been combined for this question)

Here's what you said:

- There was a relatively even split for the preferred surface of the tracks lakeside or rural tracks should remain gravel, those trails used as main commuter tracks should be sealed, as this will help to get residents out of their cars to get to work, and school children to school.
- Routes that are primarily for fitness or fun should stay gravel. Gravel tracks must be well maintained and graded. Gravel also serves to keep speed down.
- The feel of the tracks is very important, with users enjoying the feel of being on a rural/gravel track, especially when they are by the lakes and in nature, rather than feeling like they are on a road.
- Respondents were concerned with ice on asphalted surfaces in the winter. Gravel is considered by many to be safer in the winter.
- Routes for substantial commuting purposes and areas that are hilly should be sealed. Important to users is that paths are widened and the steepness of them is sorted out to increase usability.

"Route 1 [SH6 Kingston Road] must be a priority, existing highway shoulder / road reserve is un-rideable in many places and very few cars will give legal passing distance, so riding in the land feels almost suicidal".

"No asphalt. Too many issues with ice in winter. Speed of bikes of sealed cycle paths with runners, walkers, dogs etc is too dangerous. This is from the opinion of a road cyclist who would love more cycle lands. But not at the shortcut expense of our beautiful trails"

“Frankton to Queenstown CBD should be sealed. The rest are fine as they are. Leave them alone. These are special, keep them as natural as possible”.

We asked:

What improvements would make it easier and more appealing to walk or cycle along Frankton Road or other key commuter routes, including accessing the Queenstown Town Centre i.e. protected cycle lanes, shared paths, bike storage at bus stops, etc.

Here’s what you said:

- Protected cycle lanes, especially those that are direct, are noted as being increasingly important, both to allow to cyclists safely travel while avoiding cars, but also to separate cyclists and walkers, adding to the safety of everyone using the trails.
- Bike storage / parking is considered necessary, as it happens in other cities. This is requested both along tracks and in town.
- The Shotover Bridge is frequently noted as being unsafe for cyclists and pedestrians and that increased safety measures be implemented to avoid cyclists using the main bridge.
- Other safety measures suggested including mirrors on blind corners.
- Reference to the Copenhagen Bicycle Strategy and the connection with public transport and cyclists.

“Key routes need to be better maintained and have a much better surface. The track to Arthurs point is a case in point where the current surface is only manageable by wide tyres on a mountain bike and is simply not suitable for a commuter bike”.

“Cycle lanes should be sealed with asphalt and not have a high incline otherwise it will be a workout to cycle which is not attractive going into town or to work.”

We asked:

What facilities would make you walk or cycle more often, or start? i.e. toilets, bike racks, water fountains, bike maintenance stands, seating etc.

Here’s what you said:

- Facilities people would like to see include seating, toilets, water fountains, bike maintenance stands and maps along the routes.
- Some respondents considered that the barriers (e.g. distance, poor weather) to walking or cycling cannot be overcome by additional facilities.
- For commuting purposes, quick and safe routes are wanted, that are sealed with separate pedestrian tracks.
- Some also said it would be good if the Frankton Walkway around the Frankton Arm was paved and lit.

“Nothing. I have bought a bike and will ride it recreationally, but I don’t think there’s anything extra needed to promote cycling. People either want to or they don’t”.

“The climate here just isn’t conducive to cycling or walking all year round. It’s too dark, cold and icy for a good third of the year. It’s not Auckland!”

“I used to use the Kelvin Heights track daily as a trail runner. Now it has been ruined due to dumbing it down. The cyclists travel too fast and I am in fear of being run down by them. It used to be a lovely technical little trail and has been ruined. There is nowhere around where cyclist have not been given priority”.

We asked:

What stops you from walking or cycling to and from school, work, the shops, or for recreation?

Here's what you said:

- Typically, people noted the distance and incline as being two of the major barriers to walking or cycling, as well as age. Weather and daylight hours are also determining factors for some.
- It is noted that it is quite dangerous to walk on the roads as there is a large amount of traffic travelling at speed.

"Trails around Arthurs Point are also terrible for commuting. There is no way I would let my children bike to school when they are older if no changes are made - no trail through Arthurs Point and narrow road shoulders - too dangerous".

"Having to double back on myself by going over the old bridge".

2.6 Places tool

One respondent provided location-based feedback using the Bang the Table places tool.

This feedback noted that a direct cycle bridge across the Shotover River and a direct cycle lane alongside the road to Five Mile and Frankton was necessary, as the current cycle links are considered dangerous and there is a lack of pedestrian connectivity. The BP roundabout was considered to be dangerous and requires a cycle connection across it and a safer way to cross the state highway. Additionally the respondent considered a park and ride facility beside the ferry terminal and a fully sealed cycleway were necessary.

2.7 Email Submissions

A number of people provided feedback via email. The preferred network was generally considered positively, however a number of respondents mentioned that crossings on busy roads need improvements. Specific suggestions were made about a number of routes. In relation to the Kelvin Heights to Frankton trail, one respondent sought that the track be upgraded without being sealed as this would avoid this route becoming a 'race track.' One respondent suggested creating a commuter trail adjacent to Peninsula Road to allow for the potential higher use from population growth in the area. Overall, there is support for an on-road route along Peninsula Road and retention of the existing lake front path to ensure the safety of those using the cycle routes as well as maintaining the natural form and beauty of the lake side trail.

3 Stakeholder Engagement

The Active Travel team held meetings with the following key stakeholders in early 2019:

- The Department of Conservation
- Ritchies Queenstown
- Porter Group regarding the proposed Gondola and trails alongside Kawarau River
- Southern District Health Board
- Wakatipu High School
- Remarkables Primary School
- Shotover Primary School
- QLDC's Parks Team.

These meetings sought to introduce the Active Travel project, seek feedback on the draft preferred network and establish / cement positive working relationships for further stages of the project. Meeting minutes were taken.

QLDC led presentations on the Wakatipu Way to Go project to the following groups:

- Wakatipu Senior Citizens Association
- Chamber of Commerce
- Community Associations.

4 Iwi Engagement

QLDC led a Hui with representatives from Aukaha and Te Ao Marama to provide an overview of the Wakatipu Way to Go projects and to discuss opportunities for working together moving forward. A short presentation was given on the Active Travel project which discussed how Iwi inputs could add value to the project.

Subsequently, Auhuka has provided further information on the potential issues and opportunities for ngā Rūnaka. A key recommendation for the next stage of the project is close collaborative working with Aukaha and Te Ao Marama on key aspects of the project, but particularly:

1. Kāi Tahu requirements for the management of physical works across the network, but particularly for the northern end of the Jacks Point to Frankton trail which traverses the traditional settlement of Tititea, including prior to construction any particular construction methodologies or cultural monitoring to be implemented; and
2. Identifying and implementing any opportunities to create and reflect cultural narrative within the network of trails, including and particularly bridge structures, through both the detailed design and construction stages of the project.

¹ The Consent Strategy for the Active Travel SSBC also contains recommendations around the requirement for archaeological assessments in conjunction and agreement with Kāi Tahu.

6 Land Owner Engagement

The project team, including QLDC and QTT representatives, has met with 11 landowners during the SSBC phase relating to portions of three routes, being: Jacks Point to Frankton; the trails along the north and south sides of the Kawarau River between Lake Hayes Estate and the Kawarau Bridge; the connection from the Old Shotover Bridge to Five Mile, and the northern end of the of the trail that runs between Frankton and Tucker Beach Road via Lake Johnson.

The meetings provided information on the project and options for the trails, where the SSBC process sat within the overall project delivery programme, and how these landowners could be directly affected by the proposed network.

As part of discussions information was received from landowners on the proposed works and impacts (or not) on their properties. It was discussed and relayed at these meetings that engagement will continue with them through the next phases of the project, and that during detail design (pre-implementation phase), more specific matters affecting their properties would be investigated and progressed. Because meetings with landowners potentially directly affected by the works are commercially sensitive and confidential no further specific detail is included in this summary report given it may become a publicly available document. Overall all landowners were supportive of an active travel network being implemented. A couple of landowners had specific issues that will need to be addressed in the pre-implementation phase of the project. Landowners who are proposing development on their land relayed the importance of continuing conversations to align works.

7 Summary

The Wakatipu Active Travel Network project aims to create a network that encourages residents and visitors of all ages and abilities to walk and cycle around the Wakatipu Basin. Engaging with the community is crucial in understanding why people do and do not use active travel networks, and what can be done to increase the usage of these trails.

This report has summarised the feedback received so far and outlined the key themes that have appeared throughout the community feedback. Typically, these relate to the surface, widths and locations of the proposed tracks and the preferred network. Feedback has also been received via key stakeholder engagement; and landowner engagement is on-going.

Overall, the feedback gathered from the community and stakeholders will help to inform the next stage of the project.



Appendix A – Wakatipu Way to Go: Advertising and Promotional Campaign

B

Appendix B – Debrief reports for the markets and pop ups

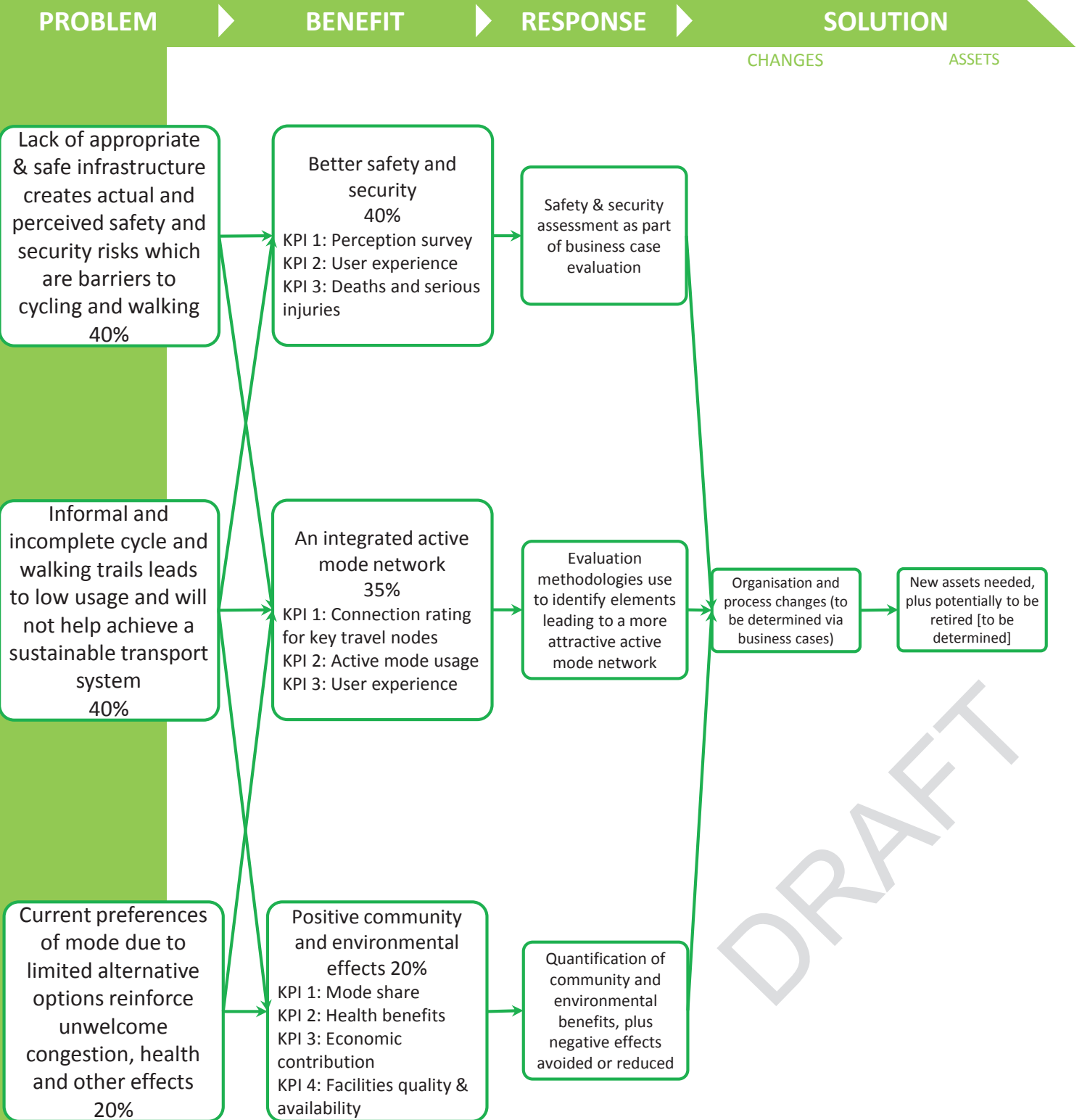
Appendix D – Investment Logic Mapping Process

Developing a Wakatipu Basin Active Travel Network

Supporting communities and our economy through an integrated, legible, attractive and safe walking and cycling network

INVESTMENT LOGIC MAP

Program



DRAFT

Appendix E – Levels of Service Assessment

Austrroads LoS Metrics for Network Operations Planning

Austrroads (2015) presents a LoS framework for network operations from the perspective of all road users, including motorists, public transport users, freight, pedestrians and cyclists. This framework is recommended by the NZ Transport Agency as the default for network operating frameworks for New Zealand localities. It uses the standard scale from A to F, but is rated subjectively according to written criteria arrived at by a consensus of transport professionals. It deliberately does this to keep the assessment simple. Austrroads has been used to assess the LoS of the active travel network.

Footpath that is unpaved, or paved with significant defects Significant debris on path.	C	Paved with good drainage with minor defects. Some debris on path. Tactile indicators not provided.	E	Footpath that is unpaved, or paved with significant defects Significant debris on path.	E	Footpath that is unpaved, or paved with significant defects Significant debris on path.	E	Footpath that is unpaved, or paved with significant defects Significant debris on path.	E
N/A – The measure is not applicable to the site.	N/A	N/A – The measure is not applicable to the site.	N/A	N/A – The measure is not applicable to the site.	N/A	N/A – The measure is not applicable to the site.	N/A	N/A – The measure is not applicable to the site.	N/A
Poor wheelchair access and does not meet DDA requirements.	E	Poor wheelchair access and does not meet DDA requirements.	F	Poor wheelchair access and does not meet DDA requirements.	F	Poor wheelchair access and does not meet DDA requirements.	F	Poor wheelchair access and does not meet DDA requirements.	D
Information is inadequate/missing. Limited or non-existent route signposting.	D	Information is inadequate/missing. Limited or non-existent route signposting.	D	Information is inadequate/missing. Limited or non-existent route signposting.	F	Information is inadequate/missing. Limited or non-existent route signposting.	F	Information is inadequate/missing. Limited or non-existent route signposting.	E
Sealed with fair to good drainage, and slightly uncomfortable to walk on Unsealed but well maintained.	D	Sealed with fair to good drainage, and slightly uncomfortable to walk on Unsealed but well maintained.	E	Sealed with significant defects, drainage problems and uncomfortable to walk on Unsealed and poorly maintained.	D	Sealed with fair to good drainage, and slightly uncomfortable to walk on Unsealed but well maintained.	D	Sealed with fair to good drainage, and slightly uncomfortable to walk on Unsealed but well maintained.	F
Poor to fair comfort and convenience features.	D	Poor to fair comfort and convenience features.	D	Poor to fair comfort and convenience features.	D	Poor to fair comfort and convenience features.	D	Poor to fair comfort and convenience features.	E
Poor to fair level of security.	D	Poor to fair level of security.	D	Poor to fair level of security.	D	Poor to fair level of security.	D	Poor to fair level of security.	D
Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	B	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	B	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	B	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	B	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	C
Low speed, shared environment which permits unhindered travel by bicycle. Typical cyclist operating speeds are constrained Significant delay at intersection	B	High quality, high priority links which permit quick, unhindered travel by bicycle. Typical cyclist operating speeds are largely unconstrained No or minimal delay at intersections	A	High quality, high priority links which permit quick, unhindered travel by bicycle. Typical cyclist operating speeds are largely unconstrained No or minimal delay at intersections	A	High quality, high priority links which permit quick, unhindered travel by bicycle. Typical cyclist operating speeds are largely unconstrained No or minimal delay at intersections	A	High quality, high priority links which permit quick, unhindered travel by bicycle. Typical cyclist operating speeds are largely unconstrained No or minimal delay at intersections	C
Cyclists are somewhat impeded in their choice of speed.	B	Cyclists are unimpeded or only slightly restricted to choose their speed.	A	Cyclists are unimpeded or only slightly restricted to choose their speed.	A	Cyclists are unimpeded or only slightly restricted to choose their speed.	A	Cyclists are unimpeded or only slightly restricted to choose their speed.	B
Flat grades (e.g. 0 to 2%).	A	Flat grades (e.g. 0 to 2%).	C	Flat to steep grades (e.g. 2 to 5%).	E	Flat to steep grades (e.g. 2 to 5%).	E	Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	D
High risk, crashes can result in several upstream cyclists to brake abruptly or crash. Poor line of sight (e.g. blind curves). Speed differential high (e.g. mixture in cyclist type)	E	High risk, crashes can result in several upstream cyclists to brake abruptly or crash. Poor line of sight (e.g. blind curves). Speed differential high (e.g. mixture in cyclist type)	C	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians. Good to fair line of sight. Speed differential medium (e.g. some mixture in cyclist type).	C	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians. Good to fair line of sight. Speed differential medium (e.g. some mixture in cyclist type).	C	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians. Good to fair line of sight. Speed differential medium (e.g. some mixture in cyclist type).	C
Unsealed pavement or sealed pavement with significant defects. Significant debris on path. Poor drainage.	E	Unsealed pavement or sealed pavement with significant defects. Significant debris on path. Poor drainage.	E	Unsealed pavement or sealed pavement with significant defects. Significant debris on path. Poor drainage.	E	Unsealed pavement or sealed pavement with significant defects. Significant debris on path. Poor drainage.	E	Unsealed pavement or sealed pavement with significant defects. Significant debris on path. Poor drainage.	E
Occasional or a low density of stationary hazards on the path or adjacent to the path Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	B	No or limited stationary hazards on the path and adjacent to the path	C	Occasional or a low density of stationary hazards on the path or adjacent to the path Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	C	Occasional or a low density of stationary hazards on the path or adjacent to the path Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	C	Occasional or a low density of stationary hazards on the path or adjacent to the path Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	C
Exclusive bicycle facility in a low to medium risk road environment	A	Exclusive bicycle facility in a low risk road environment	A	Exclusive bicycle facility in a low risk road environment	A	Exclusive bicycle facility in a low risk road environment	A	Exclusive bicycle facility in a low risk road environment	F
		No crossings of motor vehicles or fully separated crossings (including no or limited driveways)		No crossings of motor vehicles or fully separated crossings (including no or limited driveways)		No crossings of motor vehicles or fully separated crossings (including no or limited driveways)		No crossings of motor vehicles or fully separated crossings (including no or limited driveways)	

Footpath that is unpaved, or paved with significant defects	Footpath that is unpaved, or paved with significant defects	Footpath that is unpaved, or paved with significant defects	Footpath that is unpaved, or paved with significant defects	Footpath that is unpaved, or paved with significant defects	Footpath that is unpaved, or paved with significant defects
Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.
The measure is not applicable to the site.	N/A	N/A	N/A	N/A	N/A
Poor wheelchair access and does not meet DDA requirements.	Poor wheelchair access and does not meet DDA requirements.	Poor wheelchair access and does not meet DDA requirements.	Poor wheelchair access and does not meet DDA requirements.	Poor wheelchair access and does not meet DDA requirements.	Poor wheelchair access and does not meet DDA requirements.
Information is inadequate/missing.	Information is inadequate/missing.	Information is inadequate/missing.	Information is inadequate/missing.	Information is inadequate/missing.	Information is inadequate/missing.
Limited or non-existent route signposting.	Limited or non-existent route signposting.	Limited or non-existent route signposting.	Limited or non-existent route signposting.	Limited or non-existent route signposting.	Limited or non-existent route signposting.
Sealed with significant defects, drainage problems and uncomfortable to walk on.	Sealed with fair to good drainage, and slightly uncomfortable to walk on	Sealed with fair to good drainage, and slightly uncomfortable to walk on	Sealed with fair to good drainage, and slightly uncomfortable to walk on	Sealed with fair to good drainage, and slightly uncomfortable to walk on	Sealed with significant defects, drainage problems and uncomfortable to walk on.
Unsealed and poorly maintained.	Unsealed but well maintained.	Unsealed but well maintained.	Unsealed but well maintained.	Unsealed but well maintained.	Unsealed and poorly maintained.
Poor to fair comfort and convenience features.	Poor to fair comfort and convenience features.	Poor to fair comfort and convenience features.	Poor to fair comfort and convenience features.	Poor to fair comfort and convenience features.	Poor to fair comfort and convenience features.
Poor to fair level of security.	Good to high level of security	Good to high level of security	Good to high level of security	Good to high level of security	Poor to fair level of security.
Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	Clean and aesthetically pleasing (e.g. greenery, view, design, artwork, etc.).	Clean.
High quality routes with seamless connections that permit somewhat unhindered travel by bicycle.	High quality routes with seamless connections that permit somewhat unhindered travel by bicycle.	High quality routes with seamless connections that permit somewhat unhindered travel by bicycle.	High quality routes with seamless connections that permit somewhat unhindered travel by bicycle.	High quality routes with seamless connections that permit somewhat unhindered travel by bicycle.	High quality, high priority links which permit quick, unhindered travel by bicycle.
Typical cyclist operating speeds are largely unconstrained	Typical cyclist operating speeds are somewhat constrained	Typical cyclist operating speeds are somewhat constrained	Typical cyclist operating speeds are somewhat constrained	Typical cyclist operating speeds are somewhat constrained	Typical cyclist operating speeds are largely unconstrained
No or minimal delay at intersections	Some delay at intersections	Some delay at intersections	Some delay at intersections	Some delay at intersections	No or minimal delay at intersections
Cyclists are unimpeded or only slightly restricted to choose their speed.	Cyclists are unimpeded or only slightly restricted to choose their speed.	Cyclists are unimpeded or only slightly restricted to choose their speed.	Cyclists are unimpeded or only slightly restricted to choose their speed.	Cyclists are unimpeded or only slightly restricted to choose their speed.	Cyclists are unimpeded or only slightly restricted to choose their speed.
Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	Steep grades; steps or stairs (e.g. > 5% sustained for 50 to 100 m).	Flat grades (e.g. 0 to 2%).
Medium risk.	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians.	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians.	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians.	Medium risk, some platooning of cyclists and cyclists slowing down for pedestrians.	No to limited risk.
Good line of sight.	Good to fair line of sight.	Good to fair line of sight.	Good to fair line of sight.	Good to fair line of sight.	Good line of sight.
Differential low (e.g. similar cyclist	Speed differential medium (e.g. some mixture in cyclist type).	Speed differential medium (e.g. some mixture in cyclist type).	Speed differential medium (e.g. some mixture in cyclist type).	Speed differential medium (e.g. some mixture in cyclist type).	Speed differential low (e.g. similar cyclist type).
Unsealed pavement with good drainage but significant defects.	Unsealed pavement or sealed pavement with significant defects.	Unsealed pavement or sealed pavement with significant defects.	Unsealed pavement or sealed pavement with significant defects.	Unsealed pavement or sealed pavement with significant defects.	Unsealed pavement or sealed pavement with significant defects.
Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.	Significant debris on path.
Poor drainage.	Poor drainage.	Poor drainage.	Poor drainage.	Poor drainage.	Poor drainage.
Occasional or a low density of stationary hazards on the path or adjacent to the path	Occasional or a low density of stationary hazards on the path or adjacent to the path	Occasional or a low density of stationary hazards on the path or adjacent to the path	Occasional or a low density of stationary hazards on the path or adjacent to the path	Occasional or a low density of stationary hazards on the path or adjacent to the path	Occasional or a low density of stationary hazards on the path or adjacent to the path
Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.	Occasional parked cars or cars coming off parking that can block or hinder the natural path of cyclists.
Exclusive bicycle facility in a high risk road environment	Exclusive bicycle facility in a medium to high risk road environment or no bicycle facility in a low to medium risk road environment	Exclusive bicycle facility in a medium to high risk road environment or no bicycle facility in a low to medium risk road environment	Exclusive bicycle facility in a medium to high risk road environment or no bicycle facility in a low to medium risk road environment	Exclusive bicycle facility in a medium to high risk road environment or no bicycle facility in a low to medium risk road environment	No bicycle facility in a high risk road environment
Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossings at low volume, low speed roads
Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Uncontrolled motor vehicle crossing at	Fully controlled crossings of motor vehicles at

Appendix F – Multi Criteria Assessment Rationale

MCA – Rationale for Scores

This document provides further commentary and explanation for the relevant multi-criteria assessment scores utilised to assess the shortlisted options within the SSBC.

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
Stakeholders and community	Opposition from community/larger number of residents.	Known opposition from a landowner(s).	Potential opposition from landowners.	Potential opposition from landowners Balanced by other factors incl. improved access.	No issues identified.	Improved access.	Enhancements to existing trail and support anticipated.
Effects on the Natural and Cultural environment	Within an ONL with significant works e.g.new bridge).	Creation of a new trail through ONL.	Within an ONL (where existing trail).	Existing trail with assumption that extent of works is limited. Works near water but capable of mitigation.	Minimal effect.		
Resilience			Fault line through the route amongst other hazards. Moderate risk of hazards (where known)	Low risk of hazards (where known) OR Fault/moderate risk but counter balanced by the route providing an alternative in			

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
Property	<p>Large number of properties likely to require purchase in part.</p> <p>Known opposition to a route.</p>	<p>Multiple properties likely to require purchase in part (Not a large number).</p> <p>Level of opposition known.</p>	<p>Land anticipated to be required, namely where widening is proposed.</p>	<p>Possible need for land, particularly where widening is proposed.</p> <p>No property required.</p>			
Consentability	<p>More complex consenting e.g. where crossing is required.</p>		<p>Greater consenting requirement with works near a stream.</p>	<p>Consent required for earthworks/ stormwater.</p>			
Directness and coherence	<p>Multiple long diversions, which are perceived to be away from the desire line. Will likely be difficult to make coherent.</p>	<p>Multiple diversions, which are perceived to be away from the desire line.</p>	<p>Significant diversion and less coherent.</p>	<p>Minor diversion, however a coherent route is still possible.</p>	<p>Neutral improvement to the existing situation.</p>	<p>Mostly direct with high perception of directness.</p>	<p>Direct route without any diversions.</p>
Connectivity / integration		<p>Minimal access to key services,</p>	<p>Low level of access to key services,</p>	<p>Some connectivity to key services</p>	<p>Neutral improvement</p>	<p>Connects point to point strongly and</p>	<p>Ease of access to key services,</p>

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
		amenities and development along the route and away from road corridors/ public transport routes.	amenities and is lacking a key connection to development.	and reasonable access to a smaller residential catchment.	to the existing situation.	however less connectivity due to slightly more isolated nature of corridor.	has numerous key amenities along the route. Well connected to some housing and/or commercial developments.
Attractiveness		Extended length of route is adjacent to high speed roads and isolated from development and activity	Extended length of the route is adjacent to and exposed to high speed rural roads.	Adjacent to a high-volume road reduces attractiveness.		Proportion of the route is attractive, however some areas along the route are less attractive, reducing the overall score (i.e. proximity to infrastructure/ roads).	Highly attractive with connectivity to the trail network. However, longer distances or grade may reduce the attractiveness for commuters.
Social Safety / CPTED		Significantly remote pathway isolated from passive surveillance, decreasing the perception of	Remote pathway with high proportion of route isolated from any passive surveillance,	Pathway is perceived remote with passive surveillance from mainly neighbouring		Pathway is partly remote with adequate passive surveillance from adjoining reserves, commercial	Passive surveillance from adjoining roads and properties throughout the route.
							High amenity values - attractive route away from high speed traffic, and with iconic views along the route. Likely to attract tourism and recreational trips

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
Safety	Route runs adjacent to a high speed, busy road environment without proper separation from traffic with crossings at intersections and driveways.	social safety particularly after dark.	decreasing the perception of social safety particularly after dark. Route predominantly runs adjacent to a busy road environment with several crossings at intersections and accesses.	properties only.		development and neighbouring properties. Mostly separated (i.e. outside clear zone or physically protected) from traffic along a majority of the route. Route may cross a road at some point where a conflict point will exist.	Fully separated (i.e. outside clear zone or physically protected) from traffic along the entirety of the route. Relatively Flat grades. Available width suitable for proposed facility with minimal or no requirement
Usability	Significant grade issues restricting ability for all user groups to use the facility. Significant width		Some areas with challenging gradients. Widths generally acceptable for proposed facility with			Generally acceptable grades with some small sections with steep grades. Available width is generally	

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
	constraints requiring widening, benching and/or clearing.		potential for some widening.			acceptable with some sections where it may be constrained.	for significant widening.
Operational and Network Impacts	No or limited integration with public transport (ferries, bus or other). Mixing cyclists and traffic on-road for majority of the route or significant interaction with live traffic (e.g. and accesses). Won't promote modal shift.		No or limited integration with public transport (ferries, bus or other). Mixing cyclists and traffic on-road for some of the route. Unlikely to promote modal shift.			Some integration with public transport (ferries, bus or other). Mostly separated facilities, therefore limited interaction with traffic (including driveways). Likely to promote modal shift.	Good integration with public transport (ferries, bus or other). All separated facilities, therefore no interaction with traffic. Highly likely to promote modal shift.
Ease of Construction and Costs	Significant land requirement .		Some land required.			No land required.	No land required.

Score	-2	-1.5	-1	-0.5	0	+1	+1.5/ +2
	<p>High costs due to constrained road reserve with steep batter slopes.</p> <p>Associated high traffic management costs.</p> <p>High cost of infrastructure required (bridges, tunnels etc).</p>		<p>Costs associated with constrained width and steep batter slopes.</p> <p>Likely associated traffic management costs.</p>			<p>Route generally runs off-road and predominately on existing track with limited constraints.</p> <p>Limited traffic management costs.</p>	<p>Route runs entirely off-road and requires minimal work (e.g. sealing and line marking).</p> <p>No traffic management costs.</p>

Appendix G – Multi Criteria Assessment

Route	Assumptions		Safety		Usability		Directness and Coherence		Connectivity/Integration		Attractiveness		Social Safety		Score		Effects on the natural and cultural environment		Resilience		Operational and Network Impacts		Ease of Construction and Costs (Estimated)		Property (Land Requirements, Easements and Encroachments)		Conventiability		Score					
	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Base Score	Weighting	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Base	Total Score	No	Weighting		
1a	- Utilise existing narrow road adjacent to SH6. - Existing unsealed shared cycle/pedestrian path. - New work to provide continuous path. - Separated from traffic.	-2.0	Unprotected and narrow width shoulders on high speed road	-2.0	Limited or no existing facility for pedestrians and cyclists.	0.0	High perception as the most direct route because it is via SH6.	0.0	High perception of direct route given this is common route for all vehicles.	1.5	Reasonable level of passive surveillance along SH6 corridor.	-2.0	Existing route - no issues.	0.0	Route runs over fault.	3.00	-4.00	None within area of moderate liquefaction risk.	-1.0	Route within area of moderate liquefaction risk.	0.0	No direct public transport connection to route with respect to future four lane project.	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.500	0.0	7.500	
1b	- Mixed sealing pedestrian path. - Mixed cyclists/vehicles on road. - Woodshed road easement corridor with multiple closely spaced driveways, narrow driveway width.	-1.0	Direct route, easily accessible to all user groups. But connections to new subdivisions onto SH6, is connectivity onto SH6 route starting the eastern boundary which has no connectivity except at the main Jacks Point entrance.	1.0	High perception as the most direct route. Opportunity to connect into all areas of South Frankton.	0.0	Lowest scoring due to connection between Jacks Point and Frankton (from between Jacks Point centre and Section 1 & 2 crossing).	1.5	High perception of direct route given this is common route for all vehicles.	1.5	Reasonable level of passive surveillance along SH6 corridor.	-0.5	Route adjacent to SH and therefore minimal effect (reflected in score of 0).	0.0	Route runs over fault.	2.00	-1.0	Route within area of moderate liquefaction risk.	-1.0	Route within area of moderate liquefaction risk.	0.0	Need to consider state of road with respect to future four lane project.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.000	0.0	2.000	
1c	- New shared cycle/pedestrian path. - New work to provide sealed, widened, stream corridor. - Separated from traffic.	-2.0	Further from development and key destinations. Wayfinding will be important to achieve a legible route.	1.0	Direct route, easily accessible to all user groups. But connections to new subdivisions onto SH6, is connectivity onto SH6 route starting the eastern boundary which has no connectivity except at the main Jacks Point entrance.	1.5	High perception as the most direct route. Opportunity to connect into all areas of South Frankton.	0.0	High perception of direct route given this is common route for all vehicles.	1.5	Reasonable level of passive surveillance along SH6 corridor.	0.0	Route adjacent to SH and therefore minimal effect (reflected in score of 0).	0.0	Route runs over fault.	4.50	-0.5	Route within area of moderate liquefaction risk.	-1.0	Route within area of moderate liquefaction risk.	0.0	Need to consider state of road with respect to future four lane project.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.500	0.0	2.500	
1d	- Utilises new Kawarau Fall Bridge path (no loading on road shoulder). - Grade separation of SH6. - New work to provide full separated and safe path. - Sealed, continuous.	-2.0	Route will utilise existing bridge footpath (no traffic). Route therefore a conflict point with road. No protection for users adjacent to SH6.	-1.5	Need for safety grade/separations as part of design, but generally appears flat with minimal curvature. Full seal should be considered.	1.0	High perception as the most direct route. Opportunity to connect into all areas of South Frankton.	0.0	High perception of direct route given this is common route for all vehicles.	1.0	Reasonable level of passive surveillance along SH6 corridor.	-1.0	Route adjacent to SH and therefore minimal effect (reflected in score of 0).	0.0	Route runs over fault.	5.00	-1.0	Route within area of moderate liquefaction risk.	-1.0	Route within area of moderate liquefaction risk.	0.0	Need to consider state of road with respect to future four lane project.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.000	0.0	3.000	
1e	- New shared cycle/pedestrian path connecting to new bridge. - New Kawarau Fall Bridge path (no loading on road shoulder). - New work to provide sealed, widened, stream corridor. - Separated from traffic and does not cross SH6.	-2.0	Route will utilise existing bridge footpath (no traffic). Route therefore a conflict point with road. No protection for users adjacent to SH6.	-1.5	Need for safety grade/separations as part of design, but generally appears flat with minimal curvature. Full seal should be considered.	1.0	High perception as the most direct route. Opportunity to connect into all areas of South Frankton.	0.0	High perception of direct route given this is common route for all vehicles.	1.0	Reasonable level of passive surveillance along SH6 corridor.	-1.0	Route adjacent to SH and therefore minimal effect (reflected in score of 0).	0.0	Route runs over fault.	6.00	-1.0	Route within area of moderate liquefaction risk.	-1.0	Route within area of moderate liquefaction risk.	0.0	Need to consider state of road with respect to future four lane project.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.000	0.0	5.000

Route	Assumptions		Safety		Usability		Directness and Coherence		Connectivity/Integration		Attractiveness		Social Safety		Stakeholders and Community		Effects on the natural and cultural environment		Resilience		Operational and Network Impacts		Score		Ease of Construction and Costs (Estimate)		Property (Land Requirements, Easements and Agreements)		Conventability		Score				
	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score			
1f Old (pedestrian/cycle) bridge	- New shared cycle/pedestrian path. Utilises existing bridge structure. Modes only permitted if safe. - New work to provide sealed, widened, and clear path. - Separated from SH16 and does not cross SH16.	1.0	Reasonable width and gradient along route.	1.0	Less direct route due to crossing bridge.	1.0	Attractive option which separates active transport users from traffic.	1.0	Good level of passive surveillance when crossing the old Kawarau Falls bridge.	1.0	Existing bridge with improved access by walking/cycling. No need for support.	1.0	Works near river pose a risk to natural values e.g. water quality, during construction but only approaches to the existing bridge.	0.5	Existing crossing.	0.0	All off-road facilities so no network impacts. No public transport integration.	1.0	Good access via existing SH. Likely associated traffic management costs.	-1.0	Potentially affected properties on approaches to the widening is required. Works near water likely to trigger additional consents.	-0.5	Score reflects greater requirements with works near water likely to trigger additional consents.	-1.0	Score reflects greater requirements with works near water likely to trigger additional consents.	1.0	Base Score	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	-1.0	Score reflects greater requirements with works near water likely to trigger additional consents.	-2.5	5.00
1a-2 Existing waterway OTT Trail on water front	- Existing shared cycle/pedestrian path. - New work to provide sealed, widened, and clear path. - Separated from SH16 and does not cross SH16.	1.0	Constrained width in certain locations (rock walls).	1.0	Direct route, easily legible.	1.0	Adjacent to lakefront, high amenity values. Higher growth on track may discourage users in future due to safety/visibility concerns.	0.5	Passive surveillance from some neighbouring properties with overlook. Reserve areas may reduce the perception of social safety for users.	1.0	Further user growth on the track without improvement may lead to public backlash.	1.0	Works near river pose a risk to natural values e.g. water quality, during construction but only approaches to the existing bridge.	0.0	Existing crossing.	0.0	All off-road facilities so no network impacts. Strong connections to future ferry terminals. Accessibility is currently an issue due to grades. Lack of widening to track may prevent desired modal shift.	2.50	Good access via existing SH. Likely associated traffic management costs.	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	0.0	Base Score	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	0.0	Score reflects greater requirements with works near water likely to trigger additional consents.	0.0	1.000		
2a via Existing OTT Trail on water front	- Existing shared cycle/pedestrian path. - Work will be undertaken to even out some of the gradients, sealed, widened, and clear path. - Work to upgrade trail connection points	1.0	Reasonable width and gradient along route.	1.0	Direct route, easily legible.	1.0	Adjacent to lakefront, high amenity values.	2.0	Good level of passive surveillance when crossing the old Kawarau Falls bridge.	1.5	Further user growth on the track without improvement may lead to public backlash.	1.5	Works near river pose a risk to natural values e.g. water quality, during construction.	0.0	Existing crossing.	0.5	All off-road facilities so no network impacts. Strong connections to future ferry terminals. Accessibility is currently an issue due to grades. Most likely route to encourage modal shift, construction with a number of stopovers.	1.50	Good access via existing SH. Likely associated traffic management costs.	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	1.0	Base Score	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	-1.0	Score reflects greater requirements with works near water likely to trigger additional consents.	-1.5	6.000		
2b via Peninsula Road	- Widened existing shared cycle/pedestrian path. - Work to provide sealed, widened, and clear path. - Work to upgrade trail connection points	1.0	Constrained width in certain locations (rock walls).	0.5	Indirect route, easily legible.	1.0	Less desirable option due to being adjacent to narrow road.	-1.0	Good level of passive surveillance when crossing the old Kawarau Falls bridge.	2.50	Potential opposition from community, who may be sought from for widening of the road corridor.	2.0	Works near river pose a risk to natural values e.g. water quality, during construction.	0.0	Existing crossing.	0.0	All off-road facilities so no network impacts. Strong connections to future ferry terminals. Accessibility is currently an issue due to grades. Most likely route to encourage modal shift, construction with a number of stopovers.	4.00	Good access via existing SH. Likely associated traffic management costs.	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	1.0	Base Score	0.0	Existing trail.	0.0	Consent for stormwater and works near the lake.	-0.5	Score reflects greater requirements with works near water likely to trigger additional consents.	-4.5	6.000		
3a Existing lakeside trail	- Existing separated pedestrian and cyclist paths. - Existing separated pedestrian and cyclist paths. - Work to provide sealed, continuous path for both modes. - Work to upgrade trail connection points from Frankton Road.	1.0	Some pinch points and surfacing issues as windier points along route.	1.0	Existing main route is direct.	2.0	Lakeside, separated from traffic and predominantly flat makes this a very comfortable and attractive route.	0.5	Some areas of the track have passive surveillance from neighbouring properties. However, a number of areas are not well surveilled therefore reducing the score.	7.50	Future volume growth may lead to increased conflicts and path and community complaints.	0.5	Works near river pose a risk to natural values e.g. water quality, during construction.	0.0	Existing crossing.	-0.5	Good connections to future ferry terminals. Potential connections to future bus network impacts. Unlikely to promote significant modal shift.	1.00	Good access via existing SH. Likely associated traffic management costs.	0.0	Existing trail.	0.0	Assumption that no property is required.	0.0	Base Score	0.0	Existing route.	0.0	Consent for stormwater and works near the lake.	0.0	Score reflects greater requirements with works near water likely to trigger additional consents.	0.0	8.500		
3b SH16A	- Cyclists are not with vehicles (separated bike lane or shared with bus lane). - Utilise existing sealed path. - Upgrade where required. - Upgrade of existing intersection to better pedestrian/cyclists.	1.0	Constrained width in several locations.	0.5	Perceptible that this is a direct route due to being adjacent to main access corridor.	2.0	This route is adjacent to both sides of SH16, makes this option less attractive.	0.5	Good level of passive surveillance from both sides of the street with views of the street from neighbouring properties. Appropriate road lighting illuminates pedestrian/cycle pathways.	5.50	Access to businesses/services via SH16 improved. Assumed that there is no removal of parking.	1.5	Works near river pose a risk to natural values e.g. water quality, during construction.	0.0	Existing crossing.	0.0	Good connections to future ferry terminals. Potential connections to future bus network impacts. Unlikely to promote significant modal shift.	0.50	Good access via existing SH. Likely associated traffic management costs.	0.0	Existing trail.	0.0	Land required for walking and cycling with potentially a large number of properties reflected in the scoring.	0.0	Base Score	0.0	Existing route.	0.0	Consent for stormwater and works near the lake.	-0.5	Score reflects greater requirements with works near water likely to trigger additional consents.	-4.5	1.500		

Route	Assumptions	Safety		Usability		Directness and Coherence		Connectivity/ Integration		Attractiveness		Social Safety		Score		Stakeholders and Community		Effects on the natural and cultural environment		Resilience		Operational and Network Impacts		Ease of Construction and Costs (Estimate)		Property (Land Requirements, Easements and Agreements)		Conventability		Score	
		IDI, ID2	Comments	Score	IDI, ID2	Comments	Score	IDI, ID2	Comments	Score	IDI, ID3	Comments	Score	IDI	Comments	Base Score - No Weighting	Score	IDI	Comments	Score	IDI	Comments	Score	Base Score - No Weighting	Score	Comments	Score	Base Score - No Weighting	Score		
3c Local streets	<ul style="list-style-type: none"> - Mixed existing pedestrian and cyclist traffic - Mixed cyclists/Vehicles on road 	<p>Busy, narrow residential environment with cyclists required to mix with traffic</p> <p>Risks associated with driveways parking and intersections.</p>	-1.0	<p>All user groups are not catered for due to accessibility/grades.</p> <p>Width constrained along route due to parking, access and intersections.</p>	-1.0	<p>Only direct for users reading higher up on Queenstown Hill.</p> <p>Not direct for users coming from SH6 or below - hilly, not legible</p>	-1.0	<p>Connectivity for the streets above SH6 only. Very difficult to access by all users having to commute up hill.</p> <p>Does not connect well to public transport. Provides a good pedestrian connection for users living above SH6 on the hillside.</p>	0.0	<p>Due to the steep grades, narrow streets and high number of conflict points this is a less attractive street for pedestrians and cyclists.</p>	-1.0	<p>Street lighting along the streets and some passive surveillance provided from neighbouring premises along the route. Low volume of parked cars on the route. Low vehicle volume and high number of parked cars on the route. Potential to reduce social safety.</p>	1.0	-4.00	<p>Removal of on-street parking required.</p> <p>Potential for opposition from residents on local roads.</p>	-2.0	<p>Existing urban environment with less impact on the natural and cultural environment than score of 01.</p>	0.0	<p>Low risk of liquefaction. Alluvial fans present. Alternative route to SH6 in the event of closure.</p>	-0.5	<p>No clear connection to public transport. Highway to promote mode change (not most direct routes).</p> <p>Mix of cyclists/traffic in areas with high on-street parking.</p>	-1.0	<p>Constrained widths, grades, traffic management, and assumptions required to widen paths will result in moderately high costs.</p>	-1.0	<p>Land required to provide for walking and cycling, with potentially a large impact on properties reflected in the scoring.</p>	-2.0	<p>Consent likely for earthworks, stormwater.</p>	-0.5	-3.5	-11.000	

Route	Assumptions	Safety		Usability		Directness and Coherence		Connectivity/Integration		Attractiveness		Social Safety		Score		Effects on the natural and cultural environment		Resilience		Operational and Network Impacts		Ease of Construction and Costs (Estimate)		Property (Land Requirements, Easements and Agreements)		Conventability		Score	
		Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Base Score	- No Weighting	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Base Score	- No Weighting
6c Fermill Road and Glenorchy - Queenstown Road	<ul style="list-style-type: none"> New shared cycle/pedestrian paths New work to provide sealed, widened, continuous path Separated from traffic (protection - physical protection) Intersection crossing required at Glenorchy - Fermill Rd intersection 	Physical protection required to enhance user safety in a corridor of high speed.	0.5	10%+ average gradient on Fermill Road therefore not a viable option for most users.	-1.5	Route less direct to Queenstown due to Bay side of Fermill.	-1.0	Route provides less connectivity and attachment within Fermill. Non-liable connectivity to transport connections.	-0.5	High volume traffic along Queenstown Road reduces the attractiveness. Laterfront connection will provide amenity for users.	1.5	Least CPTED issue, due to being adjacent to higher volume roads which provide passive surveillance.	3.00	Potential opposition if used to support Fermill Road (if feasible)	-1.0	Within Outstanding potential effects, particularly given the location adjoining the sea edge (reflected in score of -1). Works near water pose a risk to natural values e.g. water quality, during construction.	-1.0	Low liquefaction risk. Alluvial fan. Route runs over fault.	-1.0	Need to consider impact of crossing at Fermill/Glenorchy Road intersection. Solution will likely result in increased vehicle speeds in constrained locations on Fermill Road.	-1.5	Very constrained with steep gradient. Construction cost likely to be high due to being on or off road.	-1.0	Possible need for land where widening may be affected through built up areas. This will be reflected in the score.	-2.0	Consent likely for earthworks and stormwater.	-0.5	-3.5	-11.000
6d Lakeside walkway	<ul style="list-style-type: none"> Existing shared cycle/pedestrian path New work to provide sealed, widened, continuous path Intersection crossing required at Glenorchy - Queenstown Rd/Fermill Rd intersection 	Full separation from traffic until Fermill Rd/Glenorchy Road intersection crossing.	0.5	Narrow footpath with challenging grades and many adjacent to the route.	-1.5	Route less direct to Queenstown due to Bay side of Fermill and also below Glenorchy - Queenstown Road.	-1.5	Route provides less connectivity and attachment within Fermill. Non-liable connectivity to public transport connections. Away from the road.	1.5	Highly attractive route appealing to tourists and cyclists for location adjacent to the lake. More scenic than route rather than reverse due to grades. Proximity to existing amenity.	3.50	Good passive surveillance for either end of the route. Queenstown Rd between Glenorchy - Queenstown Rd and One Mile. Proximity to existing amenity.	-1.0	Potential opposition if used to support widening of Fermill Road (if feasible).	-1.0	Within Outstanding potential effects, particularly given the location adjoining the sea edge (reflected in score of -1). Works near water pose a risk to natural values e.g. water quality, during construction.	-1.0	Low liquefaction risk. Alluvial fan. Route runs over fault. Alternative route in the event of closure of the Glenorchy Road.	-1.0	Need to consider impact of crossing at Fermill/Glenorchy Road intersection. Accessibility issues to be addressed as part of final design. Solution will likely result in mix of traffic and cyclists in constrained locations on Fermill Road.	-1.5	Significant gradients and with constraints will add to costs, along with improvements to ensure the track is to an acceptable standard.	-1.0	Existing trail. Assumption that no land is required.	0.0	Consent for earthworks and works near the lake. Some existing works near water likely to require additional consents.	-1.0	-2.0	-10.000

Route	Assumptions	Safety		Usability		Directness and Coherence		Connectivity/ Integration		Attractiveness		Social Safety		Score		Stakeholders and Community		Effects on the natural and cultural environment		Resilience		Operational and Network Impacts		Ease of Construction and costs (Estimate)		Property (Land Requirements, Easements and Agreements)		Conventability		Score	
		IDI_102	Comments	Score	IDI_102	Comments	Score	IDI_101	Comments	Score	IDI_103	Comments	Score	IDI_102	Comments	Score	Base Score - No Weighting	Comments	Score	Base Score - No Weighting	Comments	Score	Base Score - No Weighting	Comments	Score	Base Score - No Weighting	Comments	Score	Base Score - No Weighting		
10a	<ul style="list-style-type: none"> - Utilise existing QTT trail route and provide new path for a short section adjacent to Malaghans Rd. - Upgrade existing road on Malaghans Road. - New work to provide sealed, widened, separated from traffic. 	<p>Short section of route runs adjacent to Malaghans Road (high speed/one way road). Some of the route is off-road, but a crossing is required at one location.</p> <p>0.0</p>	<p>Relatively flat reasonable widths along towards Arthur's Point for river and therefore a dam is required back up.</p> <p>0.0</p>	<p>Direct route along full length (14km). On road transport route enhances perception of directness</p> <p>0.5</p>	<p>Connectivity to Millbrook Resort. Currently no connection to public transport along this route. Future route is reintroduced.</p> <p>2.0</p>	<p>Views of the surrounding large proportion of the high speed roads so more comfortable.</p> <p>1.5</p>	<p>More remote option and therefore a lower level of social safety. Attractive daytime route.</p> <p>-1.0</p>	<p>Improved access to business (paragliding/paraputing). No parking at present.</p> <p>1.0</p>	<p>Potential effects of Malaghans Road and River pose a risk to quality during construction.</p> <p>-0.5</p>	<p>Option has least operational and network impact. Short section runs adjacent to the base of Comer Naik. Need to consider impact of route on existing accesses.</p> <p>1.0</p>	<p>Low liquefaction risk. Alluvial fans.</p> <p>-0.5</p>	<p>Less costs in comparison with other options as route through short portion adjacent to SH6 with associated traffic management costs. Potential costs associated with upgrading QTT to acceptable standard for commuting.</p> <p>0.5</p>	<p>Queenstown Trails Trust proposing to construct unsealed trail with handover near the river. There is a need to revisit this if the extent of work differs.</p> <p>-0.5</p>	<p>Consent by stormwater and works near the river. Score reflects greater requirements with consent. Works near water likely to trigger additional consent.</p> <p>-1.0</p>	1.00	-1.0	0.500														
10b	<ul style="list-style-type: none"> - New shared cycle/pedestrian path. - Shared road code sealed, widened, continuous path. - Separated from traffic. 	<p>Route runs adjacent to a high volume and high speed road with a shared road code required to protect pedestrians/cyclists from errant vehicles. Some crossings of intersecting roads required along route.</p> <p>-1.0</p>	<p>Relatively flat with reasonable widths along corridor. Some sections with reasonable grades.</p> <p>0.5</p>	<p>Direct route along full length (14km). On road transport route enhances perception of directness</p> <p>2.0</p>	<p>Connectivity to Millbrook Resort. Currently no connection to public transport along this route. Future route is reintroduced.</p> <p>2.0</p>	<p>Proximity to high speed rural roads reduce the route's attractiveness. Views of the surrounding ranges.</p> <p>-0.5</p>	<p>Proximity to roads will decrease OPED concerns.</p> <p>1.5</p>	<p>2.50</p>	<p>Large outside Outstanding Natural Landscape. Route follows existing road corridor and being a modified environment, it is expected to have more than minor effects given.</p> <p>0.0</p>	<p>Most roads separated from low traffic, but will need to consider impact of route on existing intersections and accesses.</p> <p>0.5</p>	<p>Low liquefaction risk. Alluvial fans.</p> <p>-0.5</p>	<p>Challenges associated with construction on SH6 corridor. Traffic management associated with road.</p> <p>-1.0</p>	<p>Land requirements where some private accessways is required.</p> <p>-0.5</p>	0.00	-2.0	0.500															

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		IDI, ID2	Comments	Score	IDI, ID2	Comments	Score	IDI, ID2	Comments	Score	IDI, ID3	Comments	Score	IDI	Comments	Score	Base Score - No Weighting	Comments	Score	IDI, ID1	Comments	Score	IDI, ID2	Comments	Score	Base Score - No Weighting	Comments	Score	IDI	Comments	Score
12a	- New widened/ sealed path on Robertson Street Underpass via Robertson St	Low risk of conflicts with traffic. Some safety risks to cyclists due to narrowing of road at intersection and retaining wall on the corner of Southberg Ave. Two-way cycle facility not desirable.	1.0	Route climbs a relatively steep gradient and is narrow at the top point on the corner of Southberg Ave.	1.0	View direct route with reasonable coherence although the legibility is low given the number of corners across short distance.	1.0	Equal connectivity	1.0	Route provides direct connection and will be visible from the intersection with traffic.	1.0	Lack of passive surveillance into the underpass. Surveillance along the street portion of the route	1.0	4.50	No issues anticipated.	0.0	Route adjacent to SH and is not visible (reflected in score of 0).	0.0	Low risk of liquefaction. Landslide Area	-0.5	No impacts as route is separated from traffic. Very minor impacts to property access.	2.0	1.00	Lower costs as it is separated from traffic and has already been constructed.	2.0	Assumes no property required.	0.0	Consent likely for barhtworks and stormwater.	-0.5	1.5	7,500
12f	- Minor improvements to unsealed new sealed track. Underpass via new track	Full separation from traffic. Conflicts between users due to lack of available width for two way flow.	0.0	Limited width path 1.5m in width. Not suitable for two way flows.	2.0	Very direct route with good coherence. Visual connection to the	2.0	Equal connectivity	1.0	New track and underpass would provide complete separation of the two open views to the river and a direct route with less grade.	2.0	Lack of passive surveillance along the structure and along portion adjacent to the river. Perception of isolated route	0.0	1.00	No issues anticipated.	0.0	Route over through Kawarau Park Scenic Reserve. However, the score reflects the route being an existing trail.	0.0	Low risk of liquefaction. Landslide Area	-0.5	No impacts as route is separated from traffic.	2.0	1.50	Only minor improvements so very little cost.	2.0	Existing trail, assumes no property required.	0.0	Consent likely for barhtworks and stormwater.	-0.5	1.5	4,000