Public and Active Transport Committee
22 February 2023

Meeting will be held in the Council Chamber at Level 2, Philip Laing House
144 Rattray Street, Dunedin
ORC Official YouTube Livestream

Members:

Cr Alexa Forbes (Co-Chair)	Cr Tim Mepham
Cr Andrew Noone (Co-Chair)	Cr Gretchen Robertson
Cr Gary Kelliher	Cr Bryan Scott
Cr Michael Laws	Cr Alan Somerville
Cr Kevin Malcolm	Cr Elliot Weir
Cr Lloyd McCall	Cr Kate Wilson

Senior Officer: Pim Borren, Interim Chief Executive

Meeting Support: Liz Spector, Governance Support Officer

22 February 2023 09:30 AM

Agenda Topic — Page

1. WELCOME

2. APOLOGIES

Cr Bryan Scott has submitted apologies for this meeting.

3. PUBLIC FORUM

Requests to speak should be made to the Governance Support team on 0800 474 082 or to governance@orc.govt.nz at least 24 hours prior to the meeting, however, this requirement may be waived by the Chairperson at the time of the meeting. No requests to speak were made prior to publication of the agenda.

4. CONFIRMATION OF AGENDA

Note: Any additions must be approved by resolution with an explanation as to why they cannot be delayed until a future meeting.

5. DECLARATION OF INTERESTS

Members are reminded of the need to stand aside from decision-making when a conflict arises between their role as an elected representative and any private or other external interest they might have. Councillor interests are published on the ORC website.

6. MATTERS FOR CONSIDERATION 3

6.1 PUBLIC TRANSPORT PATRONAGE REPORT 3

To update the Committee on year-to-date performance of the public transport (bus and ferry) and total mobility services for the first six months of the 2022/23 financial year.

6.2 PALMERSTON ROUTE PATRONAGE REPORT 28

To update the Committee on the success of the route 1 changes implemented in May 2022.

6.3 UNIT 5 PUBLIC TRANSPORT CONTRACT EXTENSION 32

The purpose of this report is to seek a recommendation to Council for approval to vary the existing passenger transport service contract Unit 5 Southern Routes.

6.4 QUEENSTOWN PUBLIC TRANSPORT BUSINESS CASE PROGRESS 39

To inform Councillors of progress and status of the Queenstown Public Transport Business Case including scope, timeframes and engagement approach.

6.5 QUEENSTOWN PUBLIC TRANSPORT BUSINESS CASE - ENGAGEMENT PLAN 43

The purpose of this report is to seek the Committee's recommendation to Council for approval of the Stage 2 Engagement Plan for the Queenstown Public Transport Business Case currently underway.

6.5.1 Draft Engagement Material 48

7. CLOSURE

6.1. Public Transport Patronage report

Prepared for:	Public and Active Transport Comm
Report No.	OPS2259
Activity:	Transport: Public Passenger Transport
Author:	Julian Phillips, Implementation Lead, Transport Gemma Wilson, Operations Analyst, Transport
Endorsed by:	Pim Borren, Interim Chief Executive
Date:	22 February 2023

PURPOSE

[1] To update the Committee on the year-to-date (YTD) performance of its public transport (bus and ferry) and total mobility services, for the first 6 months of the 2022/23 Financial Year (FY), 1 July 2022 to 31 December 2022.

[2] NOTE: FY refers to the 12-month Financial Year, being 1 July to 30 June. This report compares performance to date in the current FY with previous years.

EXECUTIVE SUMMARY

[3] In Dunedin, FY 2022/23 patronage is higher, at 1,307,531 trips (+14% overall), than for FY 2021/22.

[4] Comparing FY 2022/23 with pre-COVID FY 2018/19, Dunedin patronage has increased by 3%. Every month since July 2022 has seen an increase in patronage when compared to FY 2018/19, demonstrating a string recovery from COVID disruption and continued popularity of the network despite reduced service levels.

[5] FY 2022/23 fare revenue for Dunedin is higher (+16%) than for FY 2021/22, a result of the higher patronage.

[6] For Queenstown FY 2022/23, patronage is significantly higher, at +45% overall, compared to FY 2021/22. This figure demonstrates a recovery, driven primarily by the return of tourism.

[7] Comparing FY 2022/23 with pre-COVID FY 2018/19, Queenstown patronage has decreased by 18%. The Queenstown network is significantly affected by driver shortages, which is hampering full recovery to pre-Pandemic levels.

[8] Reduced timetables were introduced across the network in July 2022. Statistics for missed trips are included in this report.

[9] From 1 July 2022 to 31 December 2022, the Dunedin network experienced an average of 22 missed trips per day across 126,717 trips.

[10] The number of missed trips has substantially declined since the beginning of the financial year: In July 2022, an average of 77 missed trips per day was recorded. This has declined to 6 trips per day in December 2022.

[11] The total number of missed trips for Dunedin during this period was 4,052, or 3.2% of trips operated.

[12] A new weekend Waitati / Karitane / Waikouaiti / Palmerston service was introduced in June 2022, in response to a request from the Waikouaiti Coast Community Board. This is the subject of a separate report to the Public and Active Transport Committee.

[13] From 1 July 2022 to 31 December 2022, the Queenstown network experienced an average of 37 missed trips per day across 38,430 trips.

[14] The number of missed trips has increased since the beginning of the financial year: In July 2022, an average of 40 missed trips per day was recorded. This has increased to 62 trips per day in December 2022.

[15] The total number of missed trips was 6823, or 9.95% of trips operated.

[16] At December 2023, Otago has 88,870 registered Bee Card users. This is an increase of 5,538 cards since August 2022.

[17] 188,445 Bee Cards have been issued and distributed in Otago, which equates to more than three-quarters of the combined population of Dunedin and Queenstown.

[18] The accuracy of Real Time Tracking (RTI) has been increased with the data feed now being derived from a hierarchy of on-bus devices, with the primary source now being the Bus Driver Console (RITS ticketing device), followed by E-Road and Wi-fi hardware.

[19] The Queenstown Ferry service is also included in this report, comparing FY 2022/23 to FY 2021/2022. Fare revenue has increased by 187% to $365,602. Patronage has increased by 88% to 47,524. The reason for the revenue increase being more substantive than the patronage is a revised fare/concessions structure.

[20] For Total Mobility, there has been an increase of 18.8% in Otago patronage for FY 2022/23, with 54,716 trips (compared to 46,061 trips through to December 31 in FY 2021/22).

RECOMMENDATION

That the Committee:

1) ***Notes** this report.*

BACKGROUND

[21] Council (ORC) contracts public transport services in Dunedin and Queenstown to two transport operators; Ritchies and Go Bus. Network coverage is shown in Figures 1 and 2 (larger versions are in Attachments).

[22] Each Transport Operator is contracted to operate 'PTOM Units' (each unit being a collection of routes contracted to an operator, as defined by the 2014 Regional Public Transport Plan. PTOM stands for Public Transport Operating Model).

[23] There are 7 Units in total, 2 in Queenstown, both operated by Ritchies; and 5 in Dunedin, operated by both Ritchies and Go Bus.

[24] As can be seen in Figure 1, the Dunedin network comprises 23 routes that extend to Palmerston in the north and Mosgiel in the west.

[25] In FY 2021/22, the Dunedin network carried 2,367,099 passengers. This is 13% lower than FY 2020/21 (2,706,470) and 7% lower than the last pre-COVID period FY 2018/19 (2,548,330).

[26] In 2022/23, YTD patronage is higher, at 1,307,531 trips (+14% overall), than for FY 2021/22. The LTP has a target for Dunedin to increase patronage in 2022/23.

[27] The Queenstown network comprises five routes that extend to Arrowtown in the east to Jack's Point in the south (see Figure 2).

[28] In FY 2021/22, the Queenstown network carried 806,820 passengers. This is 9% lower than FY 2020/21 (889,063) and 45% lower than the last pre-COVID period FY 2018/19 (1,468,057).

[29] In FY 2022/23, YTD patronage is significantly higher, at +45% overall, compared to FY 2021/22. As for Dunedin, the LTP has a target for Queenstown to increase patronage in 2022/23.

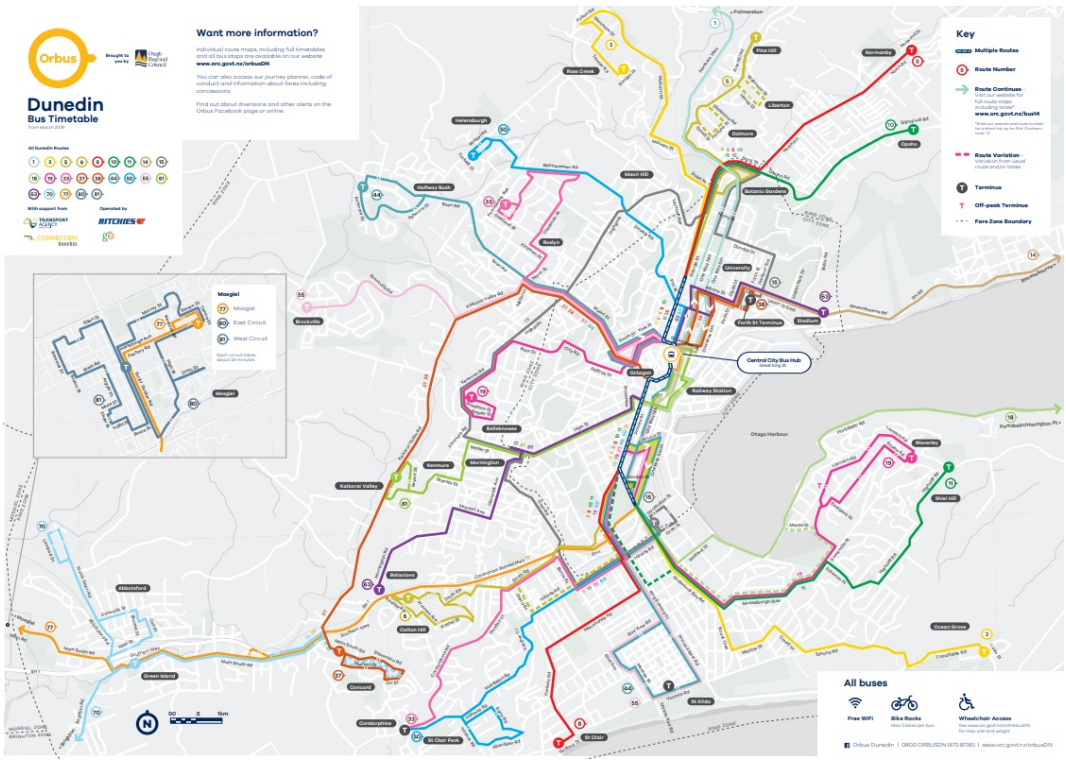


Figure 1: Dunedin network

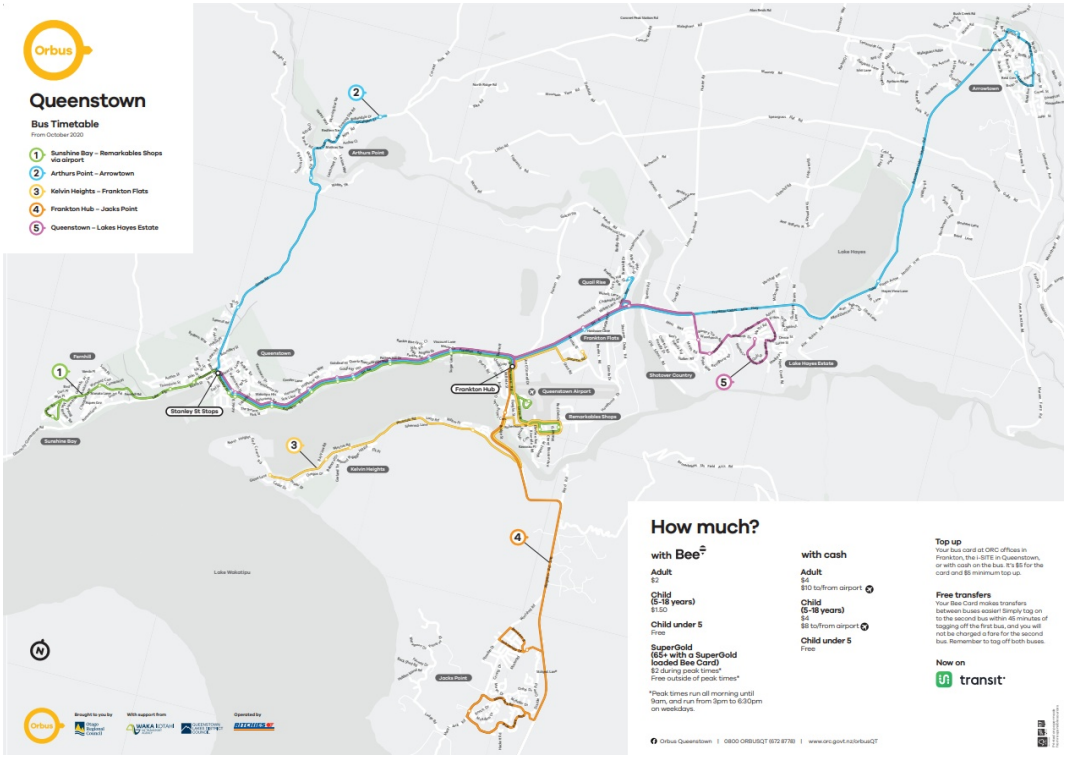


Figure 2: Queenstown network

[30] The following report summarises patronage trends across both networks, comparing the FY 2022/23, being the YTD period 1st July 2022 to 31st December 2022, to FY 2021/22 - with a comparison to the last pre-COVID period, which is FY 2018/19. Monthly statistics comparing the previous years are also provided. It also addresses customer complaints and provides information on the Total Mobility scheme and use of the Real Time information system. Trip cancellation data is also reviewed, in the context of increased levels of missed trips caused by staff absence due to driver shortages.

DISCUSSION

PUBLIC TRANSPORT – DUNEDIN

[31] In Dunedin, the impacts of driver shortages, and to a lesser extent COVID-19, continue to affect patronage, although it is recovering.

[32] Patronage data for the months prior to November 2021 impact the overall FY comparison. These preceding months were affected by the Level 2, 3 and 4 restrictions. Level 3 continued to 7 September 2021 and Level 2 until 1 December 2021, superseded by the COVID-19 Protection Framework which remains in place at the time of writing.

[33] For FY 2022/23, Dunedin is tracking at 114% of patronage levels when compared to FY 2021/22.

[34] Comparing FY 2022/23 against FY 2018/19 (the last pre-COVID-19 period), Dunedin is tracking at 103% patronage levels.

[35] Notably, August, September, October, November and December 2022/23 patronage are all higher than the equivalent pre-COVID period of 2018/19.

Dunedin	July	August	Septembe	October	November	December	January	February	March	April	May	June	Totals
2018/19 Patronage	195,272	235,930	221,438	212,965	223,894	177,520	172,142	213,992	246,593	198,745	245,477	204,362	**2,548,330**
2019/20 Patronage	220,652	235,666	230,329	224,285	226,692	182,910	181,525	228,477	175,526	26,802	68,709	197,681	**2,199,254**
2020/21 Patronage	293,294	278,162	209,278	224,799	223,263	190,821	160,848	201,611	250,266	195,795	243,550	234,783	**2,706,470**
2021/22 Patronage	231,082	144,505	170,397	196,538	223,952	185,219	156,857	190,746	213,639	185,831	246,438	221,895	**2,367,099**
2022/23 Patronage	194,544	242,825	229,954	213,011	237,385	189,812							

Figure 3: Dunedin patronage statistics Financial Year 2018/19 to date

[36] Increasing levels of missed trips have been experienced across the network, a nationwide issue due primarily to increased levels of driver absence caused by COVID-19 and seasonal illnesses, exacerbated by the current national driver shortage.

[37] From 1 July 2022 to 31 December 2022, the Dunedin network experienced an average of 22 missed trips per day across 126,717 trips.

[38] The number of missed trips has substantially declined since the beginning of the financial year: In July 2022, an average of 77 missed trips per day was recorded. This has declined to 6 trips per day in December 2022.

[39] The total number of missed trips for Dunedin during this period was 4,052, or 3.2% of trips operated.

[40] Figure 4 tracks daily missed trips, which trend from a peak in early July 2022, prior to the introduction of reduced timetables in mid-July 2022.

[41] The Dunedin network is returning to full timetables on 1st February 2023.

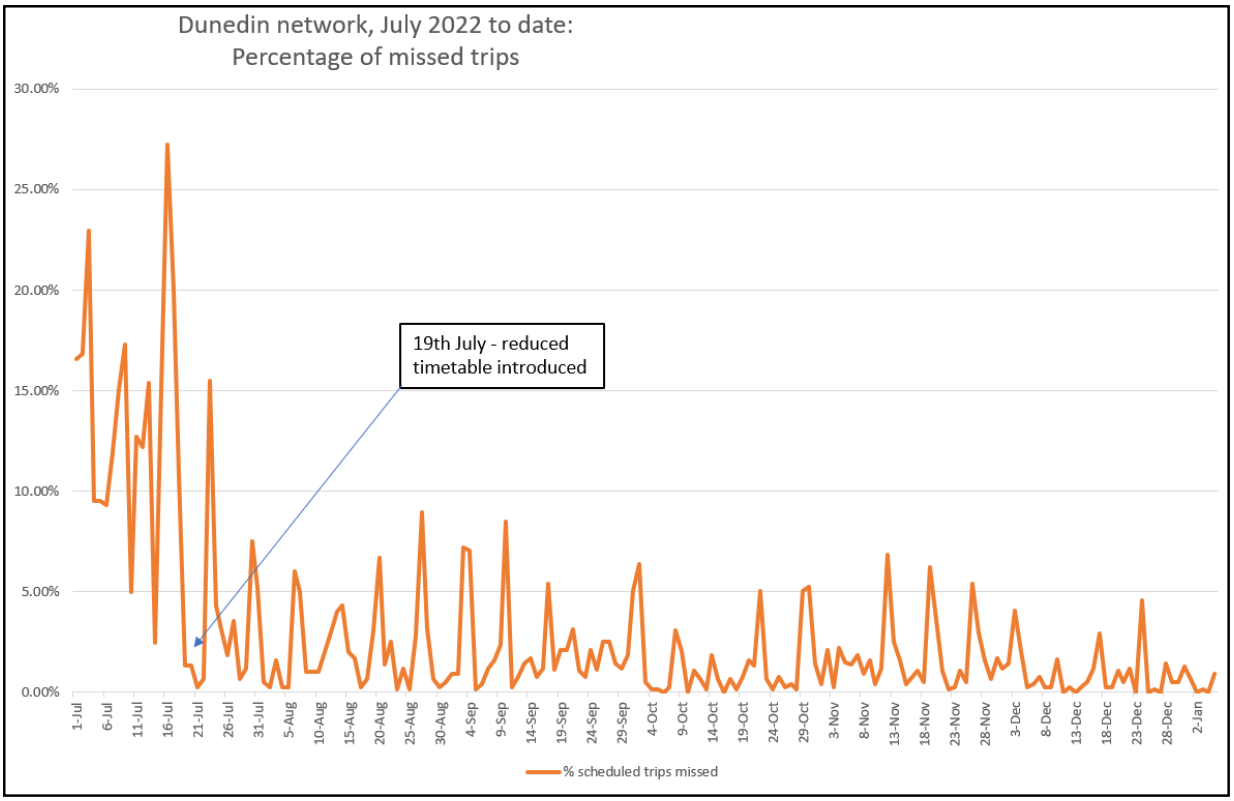


Figure 4: Dunedin missed trips, 1 July 2022 to 30 December 2022

[42] Figure 5 shows the annualised relationship between the varying COVID-19 alert levels on patronage for Dunedin, together with the increases in patronage associated with pre-Bee Card fare-free travel:

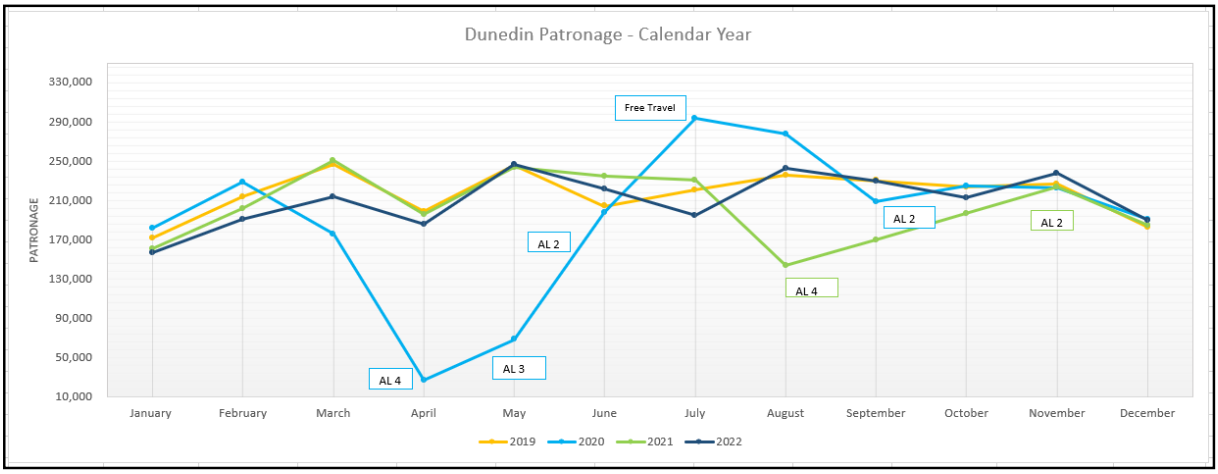


Figure 5: Relationship between COVID-19 alert levels and patronage

[43] Figures 6 to 8 chart FY unit revenue and patronage, as well as detail on the most recent month's data.

[44] Revenue and budgeting assumptions for the Dunedin network are impacted by COVID-19 and the ongoing $2 fare trial in Dunedin.

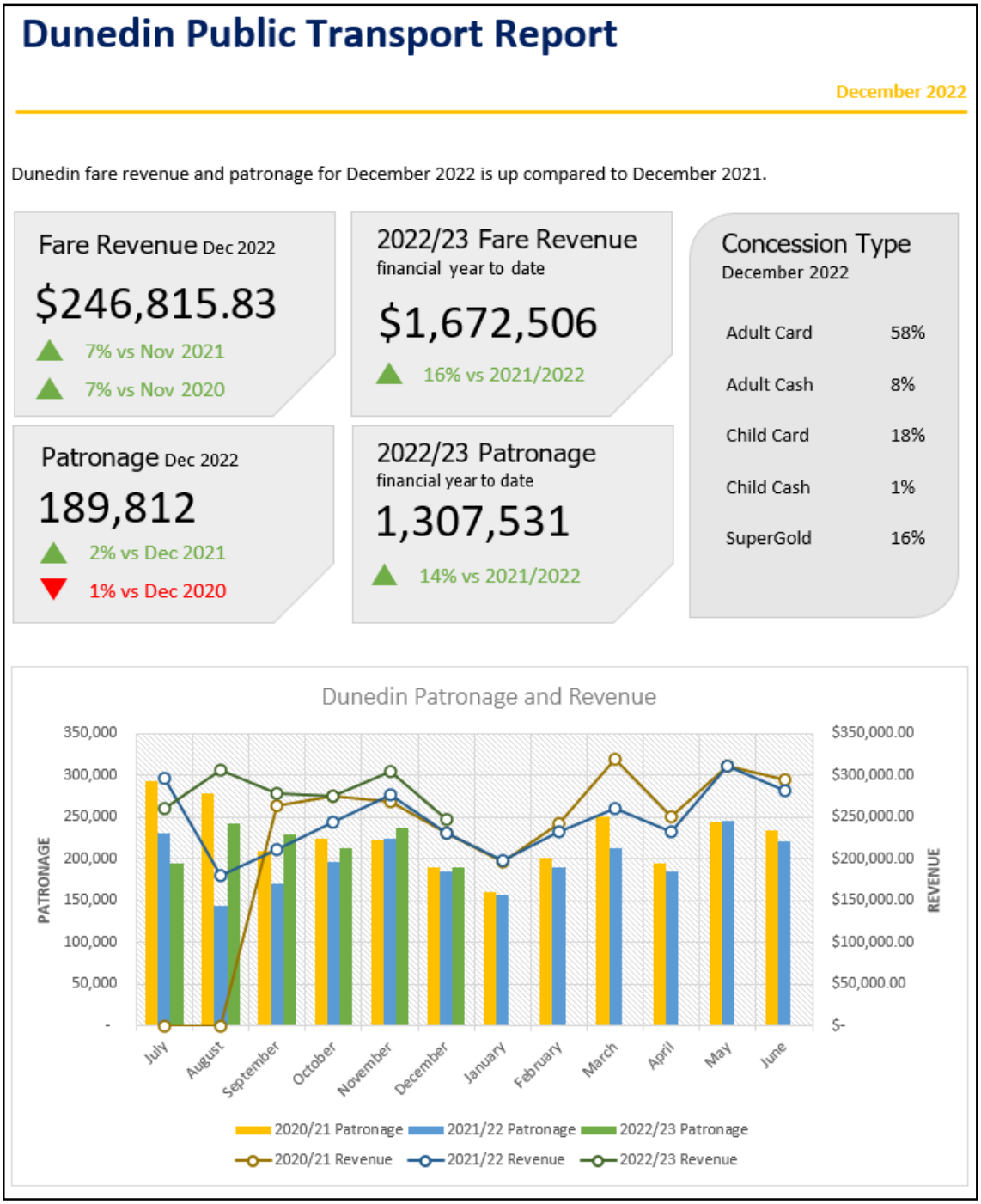


Figure 6: Dunedin Patronage and Revenue, FY 2022/23

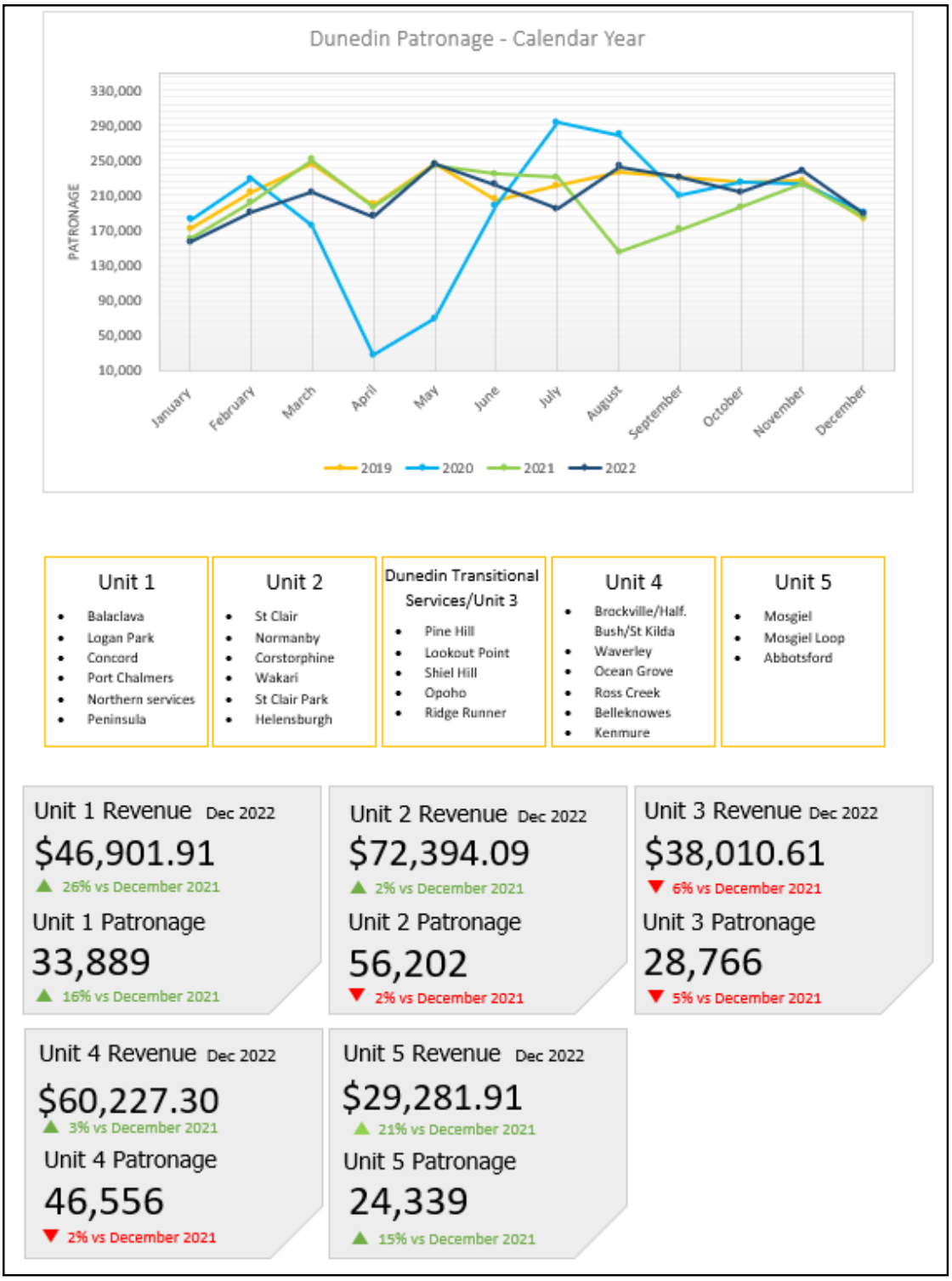


Figure 7: Dunedin weekly patronage, Unit Revenue and Unit Patronage

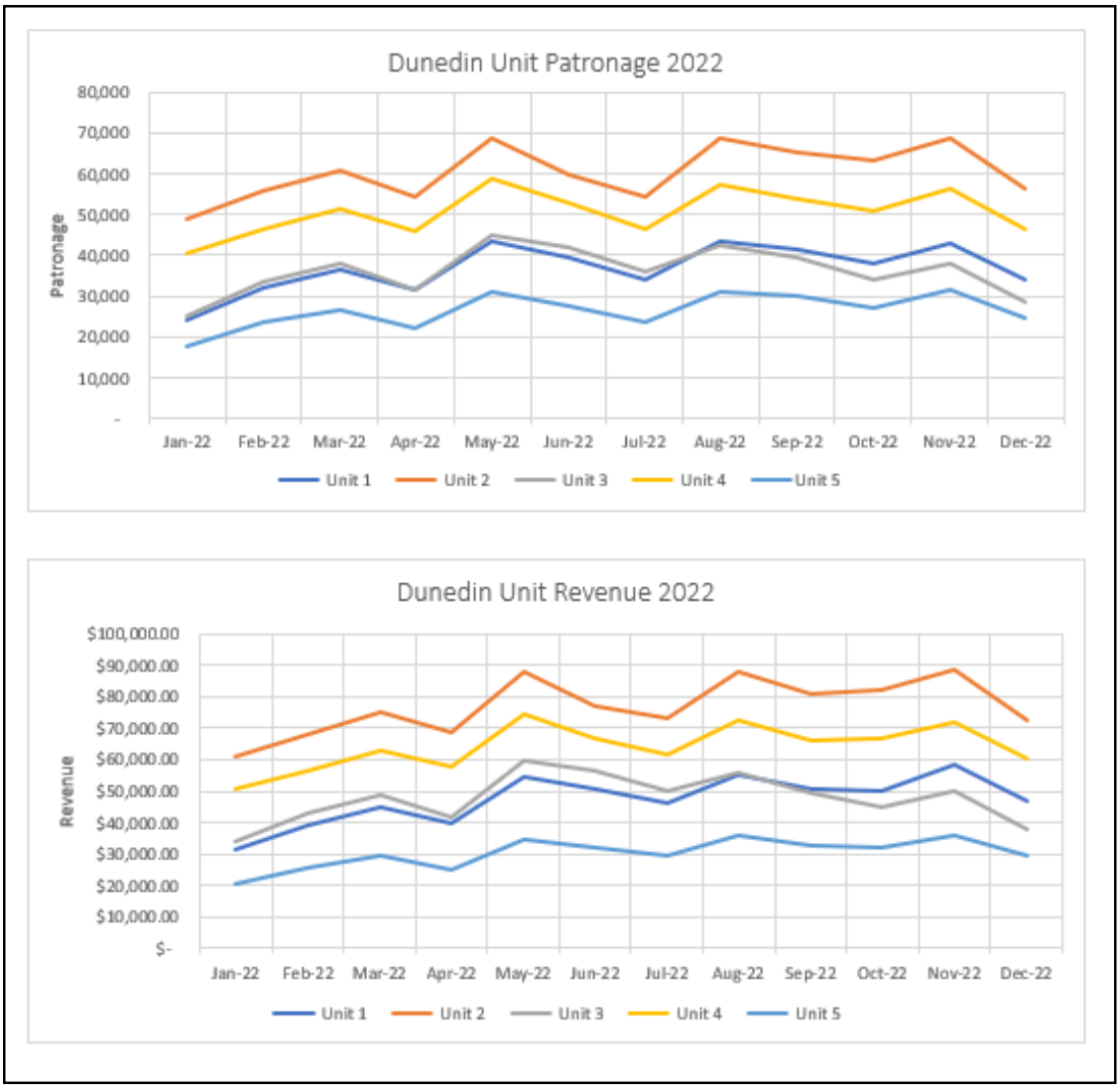


Figure 8: Dunedin Unit revenue and patronage

DUNEDIN SCHOOL SERVICES

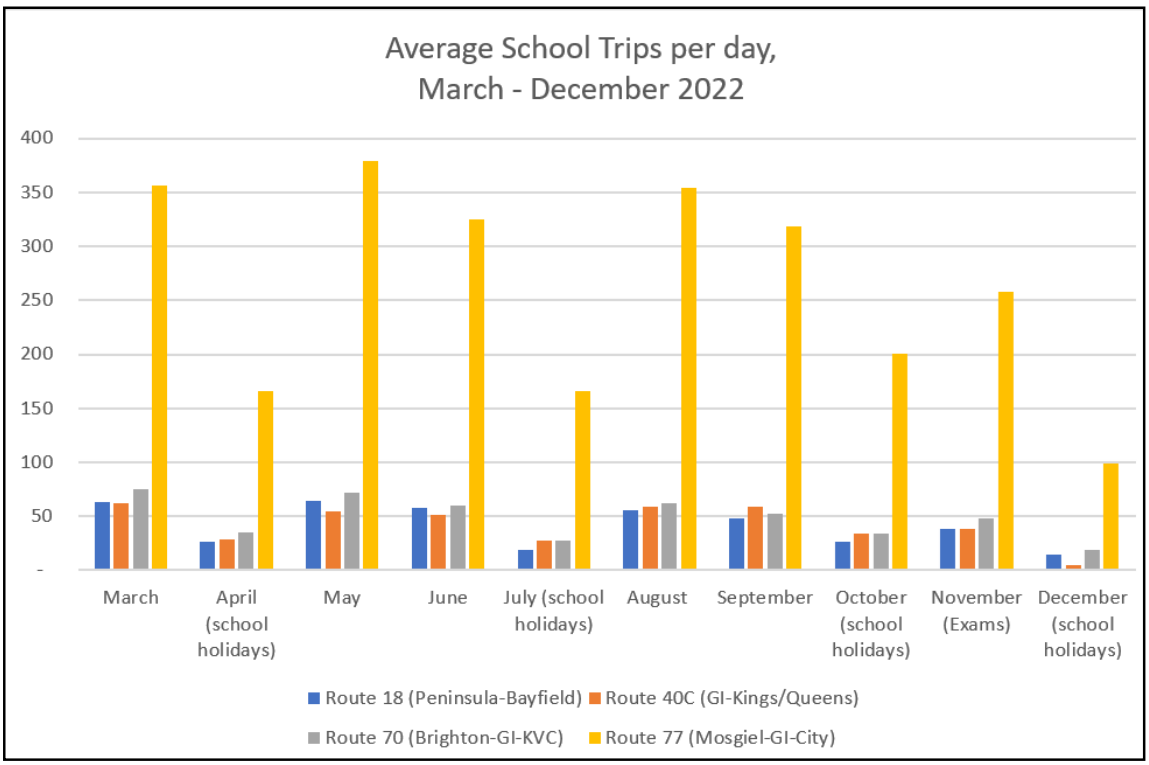
[45] As previously advised to Council, towards the end of 2021, Otago Road Services (ORS) decided to cease operating its commercial Dunedin school bus services. Many of the services enabled students to attend a school of choice, rather than the closest school to their home. In recognising that would have an impact on the community, in December 2021, the Council authorised the Chief Executive to approve minor changes to the Dunedin bus network to address resulting school connectivity issues. Solutions that have been put in place to date are:

a. A variation to the Unit 3 contract which provides a service from Green Island to Kings and Queens High Schools (Route 40C).
b. A variation to the Unit 5 contract for a service from Green Island to Kaikorai Valley College (route 70).
c. Additional overflow buses at peak times as required.

d. An additional morning service is operating from the Bus Hub to Mosgiel via Green Island on weekdays, introduced on 18th August 2022 in response to passenger feedback. This service departs the Bus Hub at 8:12am and provides an extra connection at Green Island for school pupils traveling to Mosgiel, in addition to increased commuter capacity at peak times.

[46] In combination with pre-existing routes 18C and 18D, which provides a direct connection between the Portobello/Harington Point bus route and Bayfield School, these services (routes 77, 40C, 70 and 18c/d) carried, from March to December 2022, a total of 86,686 child trips.

[47] The table below shows the total trips by route for each month in this period, together with a chart detailing the average trips per day.



	March	April (school holidays)	May	June	July (school holidays)	August	September	October (school holidays)	November (Exams)	December (school holidays)	Grand Total
Route 18 (Peninsula-Bayfield)	1,399	573	1,421	1,262	414	1,221	1,051	583	854	311	**9,089**
Route 40C (GI-Kings/Queens)	1,369	628	1,197	1,128	605	1,308	1,307	740	837	119	**9,238**
Route 70 (Brighton-GI-KVC)	1,642	764	1,584	1,330	600	1,375	1,165	751	1,055	413	**10,679**
Route 77 (Mosgiel-GI-City)	7,832	3,644	8,334	7,155	3,659	7,793	6,999	4,403	5,683	2,178	**57,680**
Totals	**12,242**	**5,609**	**12,536**	**10,875**	**5,278**	**11,697**	**10,522**	**6,477**	**8,429**	**3,021**	**86,686**

Figure 9: Child patronage on Dunedin routes 77, 40C, 70 and 18c/d, 1 March to 31 December 2022: Average trips per day (chart) and total trips (table)

PUBLIC TRANSPORT – QUEENSTOWN

[48] In Queenstown, the impacts of significant localised driver shortages continue to have a negative impact on the ability to operate the reduced timetable that is currently in place. However, the opening of the border to tourists has resulted in a significant uptake in patronage.

[49] Patronage data for the months prior to November 2021 impact the overall FY comparison. These preceding months were affected by the Level 2, 3 and 4 restrictions. Level 3 continued to 7 September 2021 and Level 2 until 1 December 2021, superseded by the COVID-19 Protection Framework which remains in place at the time of writing.

[50] For FY 2022/23, Queenstown is tracking at 138% of patronage compared to FY 2021/22.

[51] Comparing FY 2022/23 against FY 2018/19 (the last pre-COVID-19 period), Queenstown is tracking at 82% of patronage levels.

Queenstown	July	August	Septembe	October	November	December	January	February	March	April	May	June	Totals
2018/19 Patronage	122,752	117,442	103,974	111,657	125,600	118,997	136,055	129,439	134,084	125,244	118,077	124,736	**1,468,057**
2019/20 Patronage	136,766	129,011	121,416	120,662	128,440	128,282	136,985	131,102	90,746	9,919	42,577	73,597	**1,249,503**
2020/21 Patronage	100,951	98,102	72,143	73,385	71,464	69,096	68,550	60,717	62,613	65,928	66,863	79,251	**889,063**
2021/22 Patronage	95,248	51,010	51,987	66,690	64,895	66,507	69,147	52,471	53,524	68,158	73,786	93,367	**806,820**
2022/23 Patronage	100,966	100,668	88,268	91,277	100,579	91,940							

Figure 10: Queenstown patronage statistics Financial Year 2018/19 to date

[52] Increasing levels of missed trips have been experienced across the network, a nationwide driver shortage issue due which is particularly acute in Queenstown. This has been exacerbated by COVID-19 and seasonal flu.

[53] From 1 July 2022 to 31 December 2022, the Queenstown network experienced an average of 37 missed trips per day across 38,430 trips.

[54] The number of missed trips has increased since the beginning of the financial year: In July 2022, an average of 40 missed trips per day was recorded. This increased to 62 trips per day in December 2022.

[55] The total number of missed trips was 6823, or 9.95% of trips operated.

[56] Figure 11 tracks daily missed trips, which have been trending upwards to a peak in December 2022.

[57] The Queenstown network is returning to full timetables on 1st June 2023.

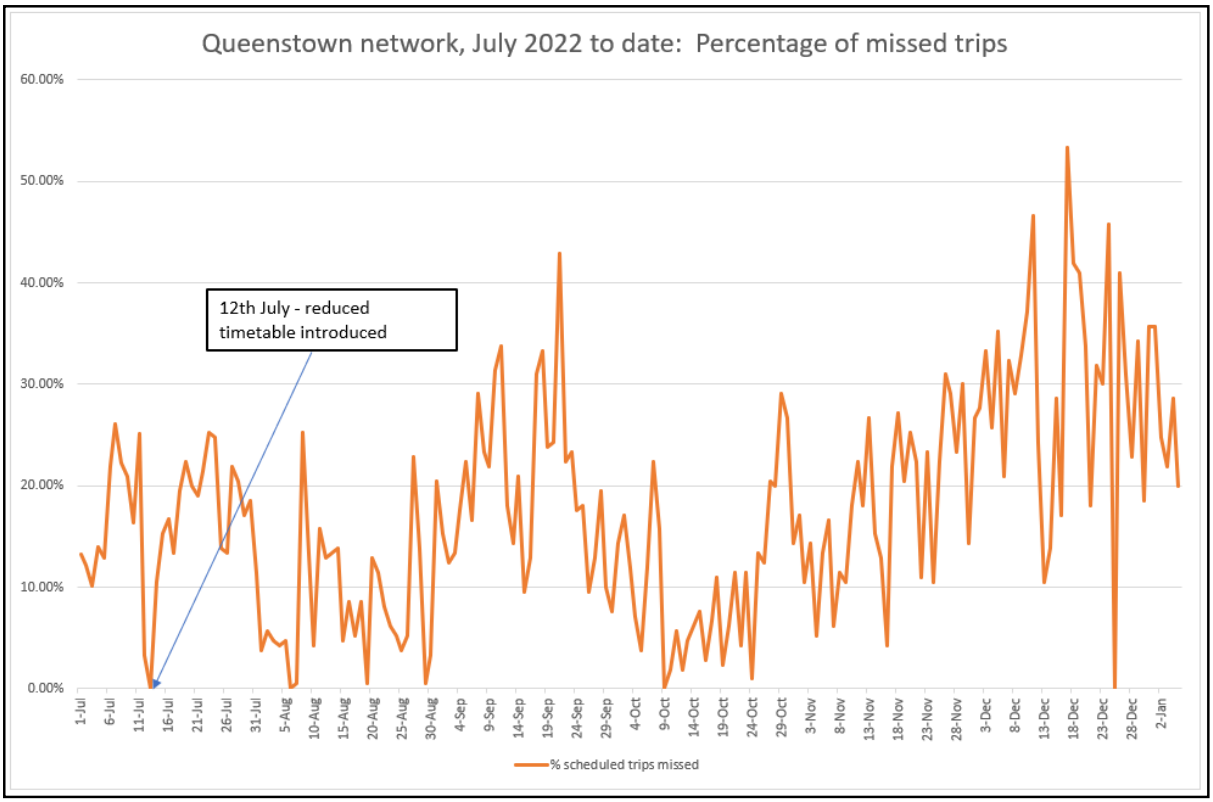


Figure 11: Queenstown missed trips, 1 July 2022 to 31 December 2022

[58] Figure 12 shows the annualised relationship between the varying COVID-19 alert levels on patronage for Queenstown, together with the increases in patronage associated with pre-Bee Card fare-free travel.

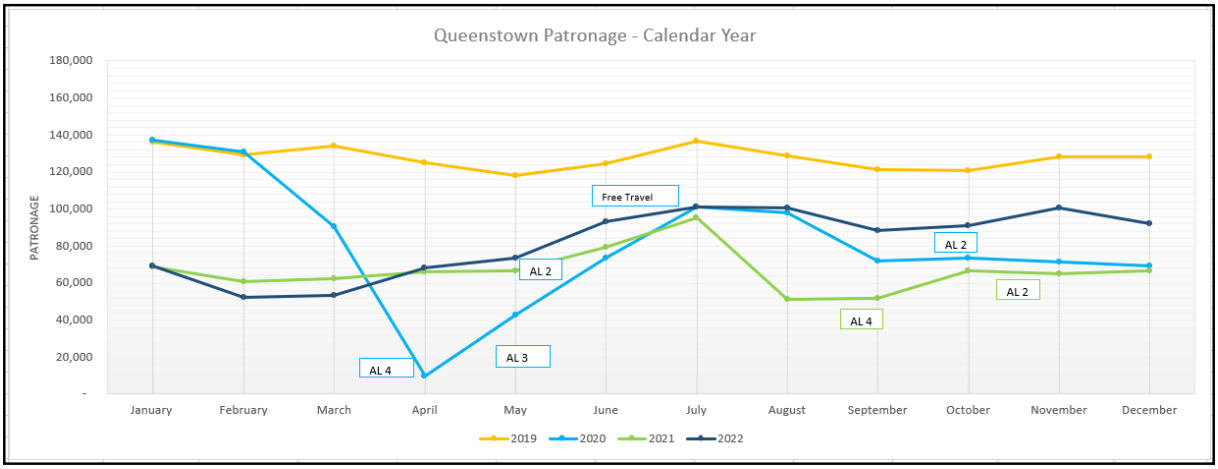


Figure 12: Relationship between COVID-19 alert levels and patronage

[59] Figures 13 to 15 chart FY unit revenue and patronage, as well as detail on the most recent month's data.

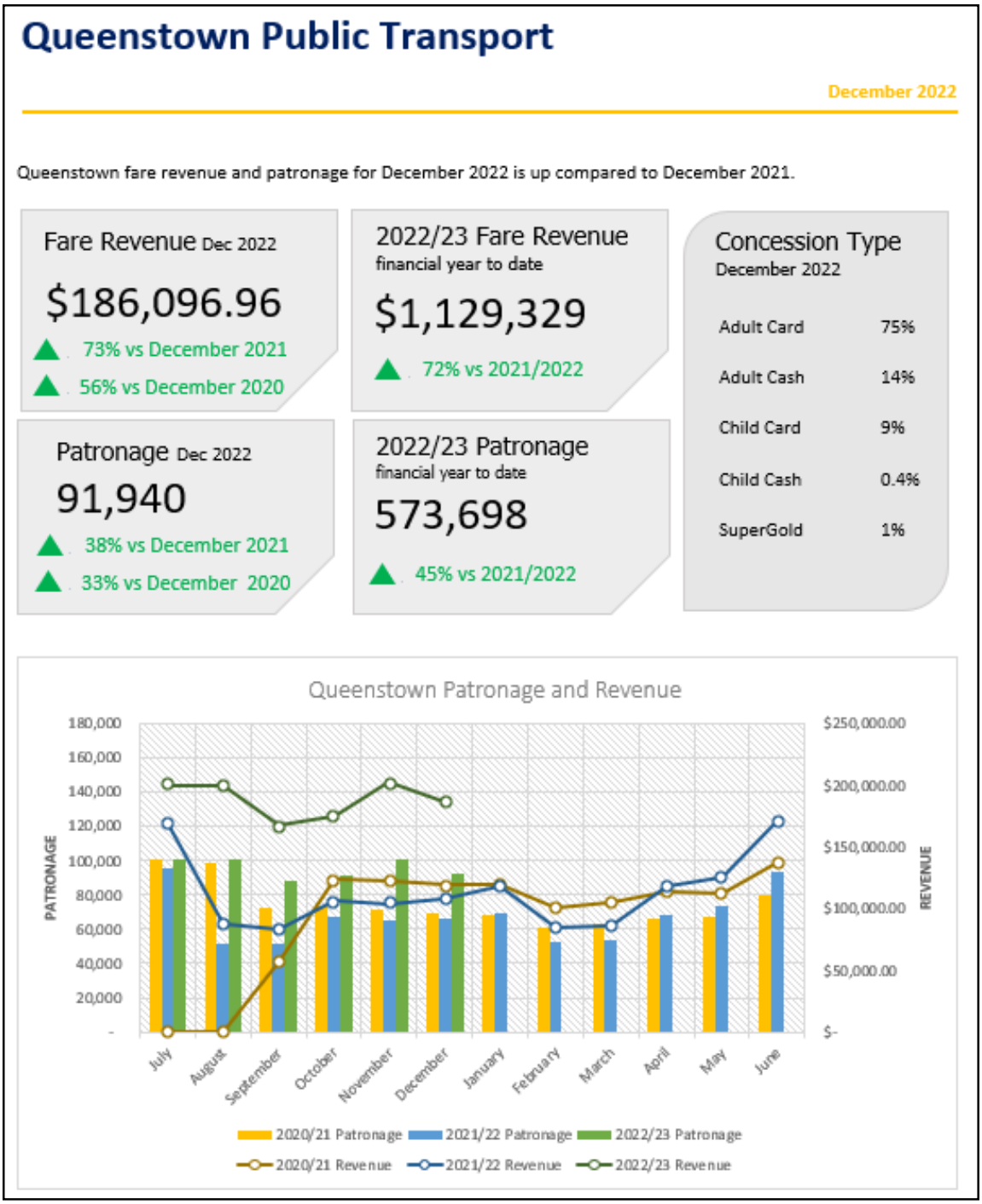


Figure 13: Queenstown patronage and revenue, FY 2022/23

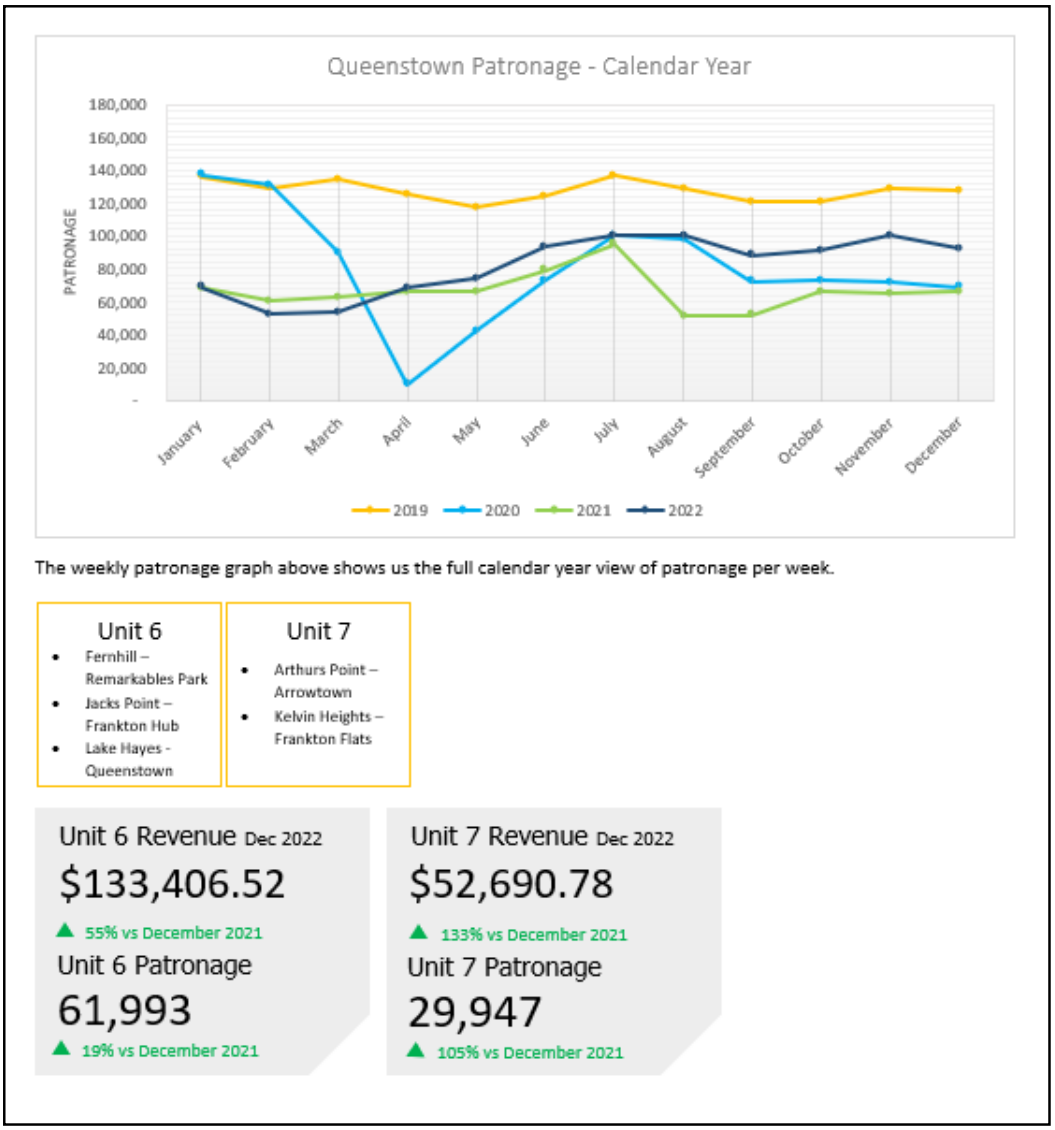


Figure 14: Queenstown weekly patronage, Unit Revenue and Unit Patronage

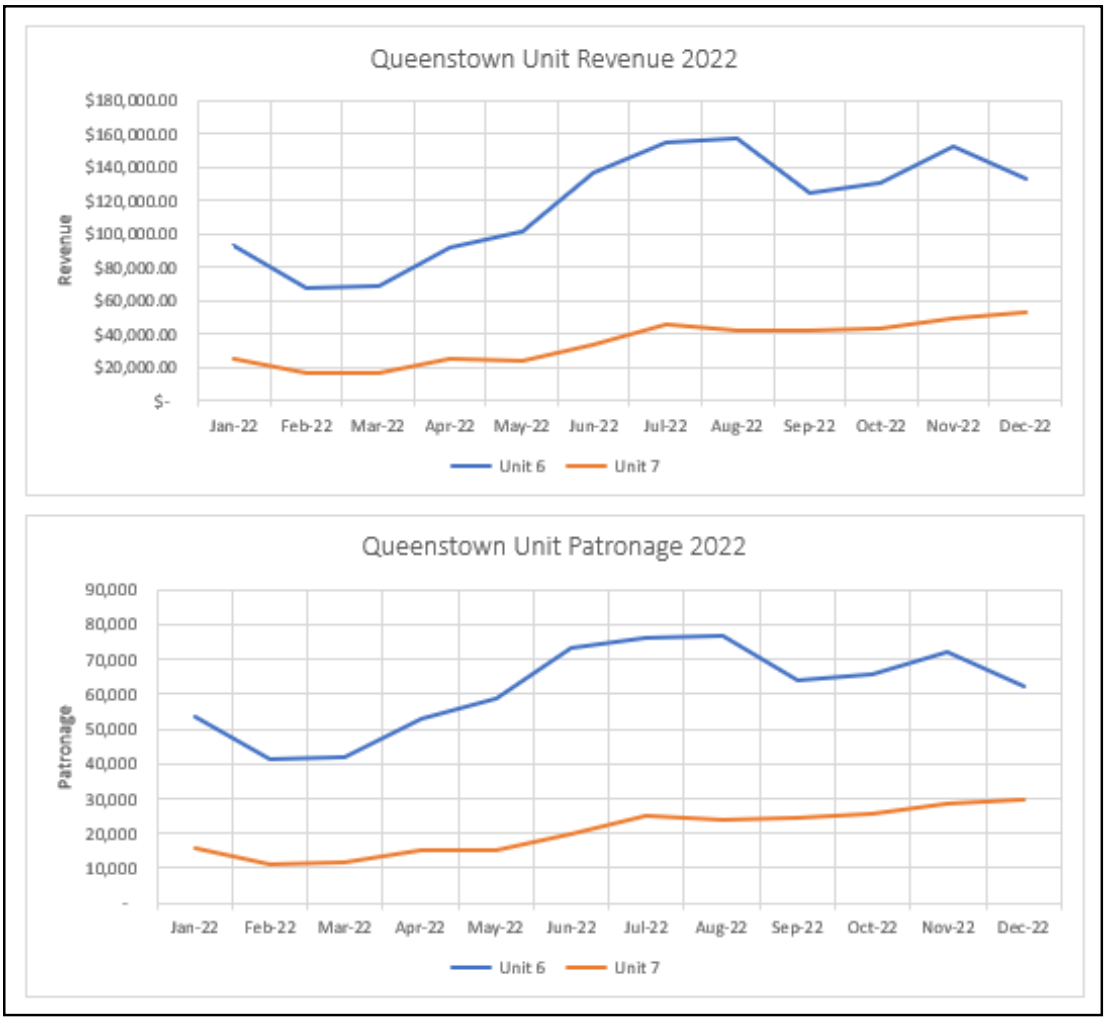


Figure 15: Queenstown weekly patronage, Unit Revenue and Unit Patronage

QUEENSTOWN FERRY

[60] The Queenstown Ferry service provides a daily timetabled ferry service on Lake Wakatipu, contracted between Go Orange (now RealNZ) and ORC from October 2020 to date.

[61] The ferry serves Queenstown Bay (Steamer Wharf), Queenstown Marina, the Hilton Hotel and Bayview (Kelvin Heights), between 7:30am and 10:30pm.

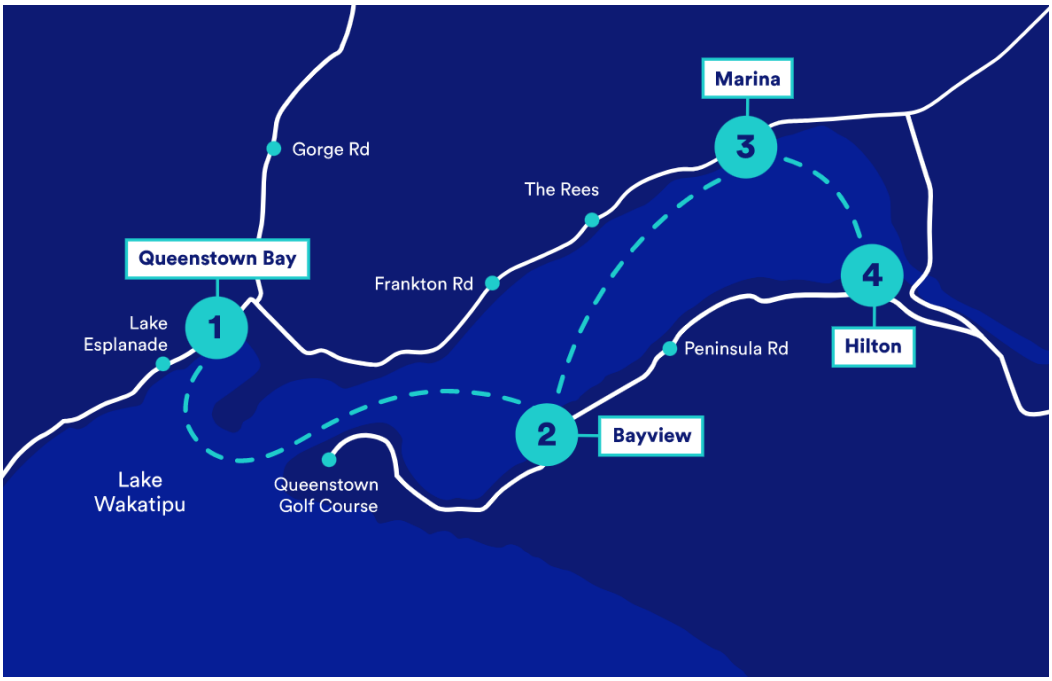


Figure 16: Queenstown Ferry Route Map

[62] FY 2022/23, fare revenue has increased by 187% and patronage has increased by 88% on the Queenstown Ferry service compared to FY 2021/22.

[63] Fare revenue has increased by 187% to $365,602.

[64] Patronage has increased by 88% to 47,524.

[65] In addition to the increase in patronage, revenue increases are explainable by a fare increase (return fares increased in price by $3 in 2022) and the introduction of the Bee Card, which was introduced onto ferries in September 2022. Additionally, concession 'stamp' cards are no longer in use.

[66] Queenstown water ferries are significantly affected by seasonal/holiday travel patterns, and the influx of tourists to the area has had a positive effect on patronage.

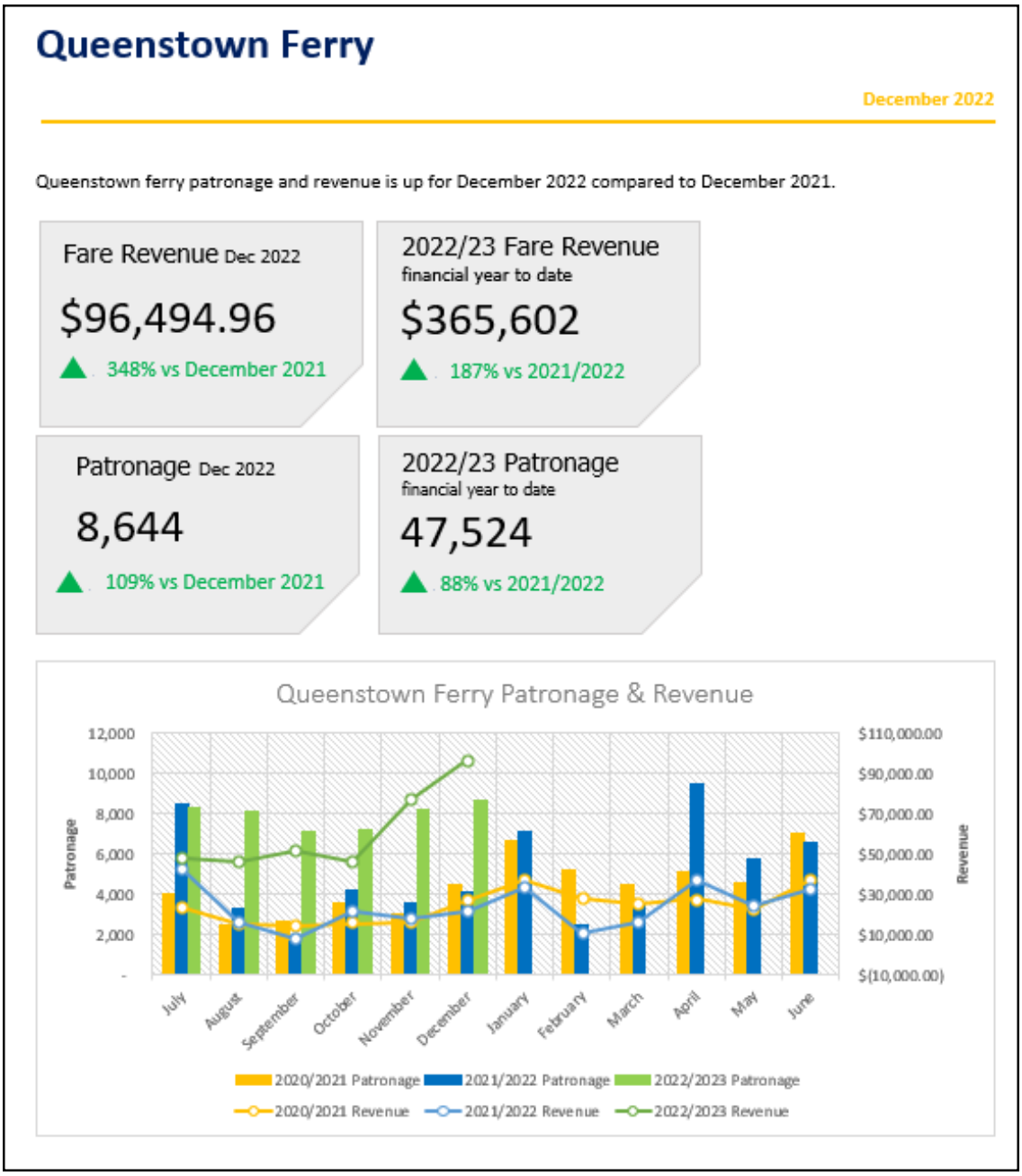


Figure 17: Queenstown Ferry Patronage and Revenue, FY 2022/23

BEE CARD STATISTICS

[67] At December 2023, Otago has 88,870 registered Bee Card users. This is an increase of 5,538 cards since August 2022.

[68] 188,445 Bee Cards have been issued and distributed in Otago, which equates to more than three-quarters of the combined population of Dunedin and Queenstown.

CUSTOMER FEEDBACK

[69] Figure 18 below captures feedback and complaints data for FY 2022/23 year to date.

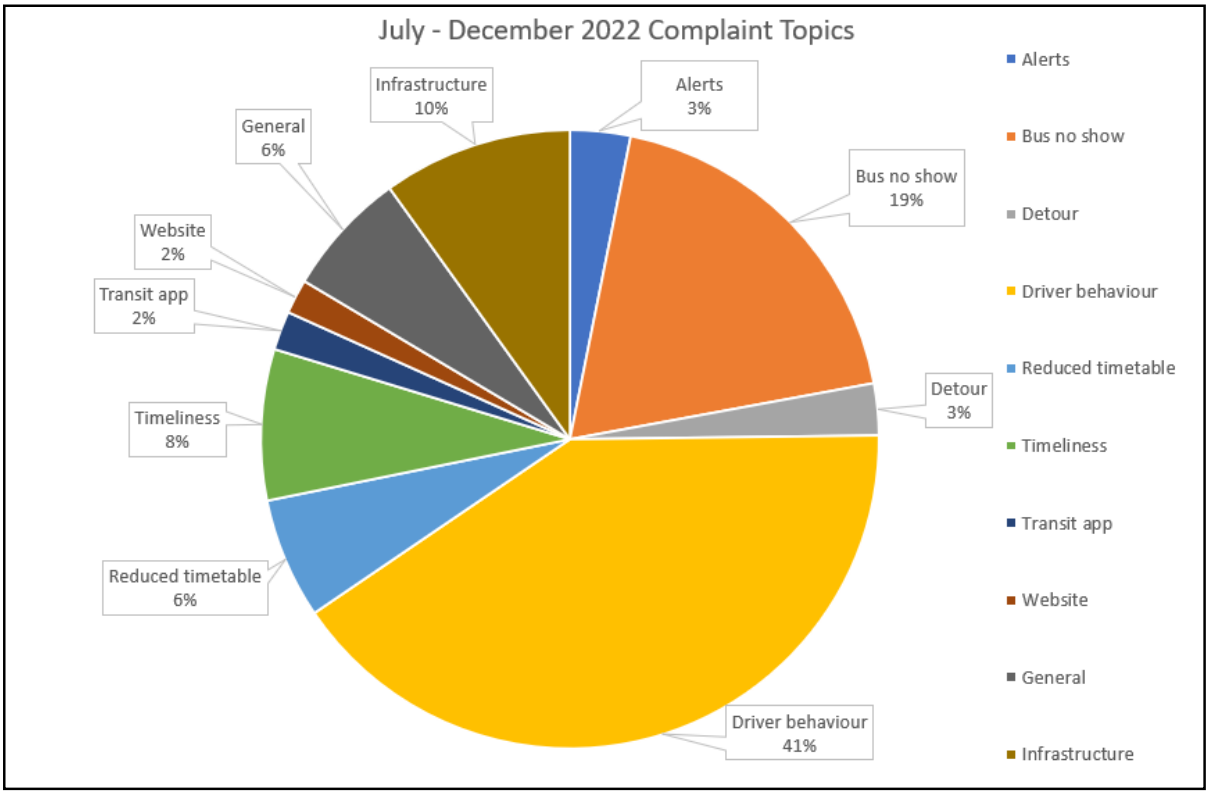


Figure 18: Feedback segregated by type

[70] A total of 953 matters were logged for the period, across 1,881,229 passenger trips. This represents 0.051% of the total trips taken.

[71] The majority of feedback is complaints, although positive driver feedback was also received.

[72] The largest source of feedback was driver behaviour, at 41% of the total for the period.

[73] The driver behaviour measure is further reported on by sub-category and operator in chart 18, below.

[74] Communication of service disruptions has increased across media channels (website, Transit App, Facebook) and implemented daily. Transport operators are also required to be proactive in notifying Transport staff of any upcoming disruptions they were aware of.

[75] Staff continue to follow up all complaints and take operational action where required. To address the concerns of passengers seeking live information related to missed trips, transport staff have introduced live alerts to the Transit app, which ensure passengers received push notifications to their mobile devices.

[76] Recent activity has also included:

[77] Arrangement of a series of sessions between transport operators and Blind Citizens Otago Network, regarding driver awareness training;

[78] Reiterating the requirement for transport operators to log trip cancellations well in advance of the scheduled departure time;

[79] Improving school connections at Green Island with additional overflow buses and school connections.

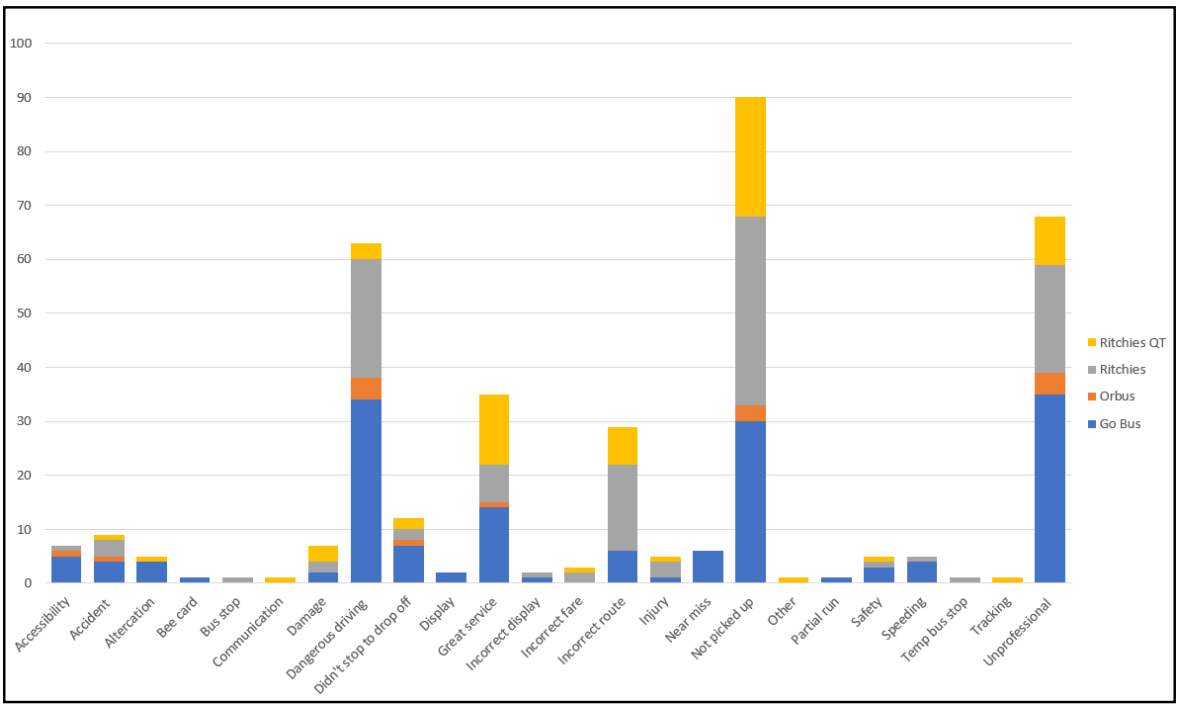


Figure 19: Driver behaviour sub-category feedback, segregated by operator.

REAL TIME INFORMATION (RTI)

[80] The accuracy of RTI in Queenstown and Dunedin has been increased with the data feed now being derived from a hierarchy of on-bus devices, with the primary source now being the Bus Driver Console (RITS ticketing device), followed by E-Road and Wi-fi hardware.

[81] The device hierarchy means that if one device does not deliver an accurate signal, or fails, the system defaults to the next device in the hierarchy, meaning increased continuity of tracking and significantly less likelihood of unsuccessful vehicle tracking. Previously, the data feed was derived solely from on-bus wi-fi hardware.

[82] Operators have contractual Punctuality KPIs and are expected to deliver 95% of their trips on time; meaning that 95% or more of their scheduled trips leave the Terminus (origin stop) between 59 seconds before and 4 minutes & 59 seconds after the scheduled departure time.

[83] Dunedin buses are running at an average of 2.56 minutes to schedule from the Terminus. Queenstown buses are running at an average of 1.45 minutes to schedule from the departure terminus. However, multiple roadworks and diversions in Dunedin, together with severe congestion in Queenstown, are resulting in late arrivals at transfer hubs and final destinations, particularly at peak times.

[84] Transit, the real time tracking app, remains popular, following a promotional campaign carried out by the Communications team. In the period October 2021 to December 2022, passengers used the app over 3.65 million times (2,613,323 user sessions in Dunedin and 1,038,824 in Queenstown).

[85] Figures 20 and 21 show Transit app usage for the period October 2021 to December 2022 for Dunedin and Queenstown:

[86] 'Monthly Active Users' refers to the number of active users in that particular month. This means opening and the action of using the app, not just having it installed on a device;

[87] 'Views refers to the number of times passengers opened Transit in that month;

[88] 'Downloads' is the number of new downloads of the app each month;

[89] 'Most Popular Lines' are the most popular routes, i.e. the routes for which the most people are using the Transit app;

[90] 'Go Trips' refer to passengers utilising additional functionality in the app. The 'GO' feature enables users gets step by step navigation while helping to improve real-time vehicle locations;

[91] 'Service alert subscribers' is the total number of users receiving alerts for individual routes (events, delays, roadworks, etc).

	DUNEDIN						
	Monthly Active Users	Sessions	Downloads	DAU's	Most popular lines (taps)	Go Trips	Service Alert Subscribers
Oct-21	2,820	71,970	329	514	8, 63, 3	1,567	973
Nov-21	2,942	77,695	337	553	8, 63, 3	1,667	1,054
Dec-21	2,825	63,947	272	445	8, 19, 63	1,361	1,105
Jan-22	2,722	66,423	351	444	8, 63, 3	1,539	1,182
Feb-22	3,217	80,498	514	588	8, 63, 77	2,013	1,287
Mar-22	3,845	110,225	725	702	8, 63, 77	2,936	1,611
Apr-22	4,125	103,317	411	732	8, 63, 3	2,593	1,713
May-22	5,703	197,025	948	1,292	8, 63, 3	4,184	2,140
Jun-22	6,199	223,956	899	1,492	8, 63, 3	4,196	2,496
Jul-22	7,628	275,971	1,310	1,756	8, 63, 3	5,175	2,935
Aug-22	7,721	292,006	780	1,827	8, 63, 77	6,772	3,139
Sep-22	7,646	278,393	641	1,818	8, 63, 77	6,474	3,287
Oct-22	7,665	282,123	910	1,800	8, 63, 77	6,140	3,120
Nov-22	7,571	263,592	323	1,596	8, 63, 77	6,328	3,535
Dec-22	6,674	226,182	276	1,175	8, 63, 77	4,846	3,608

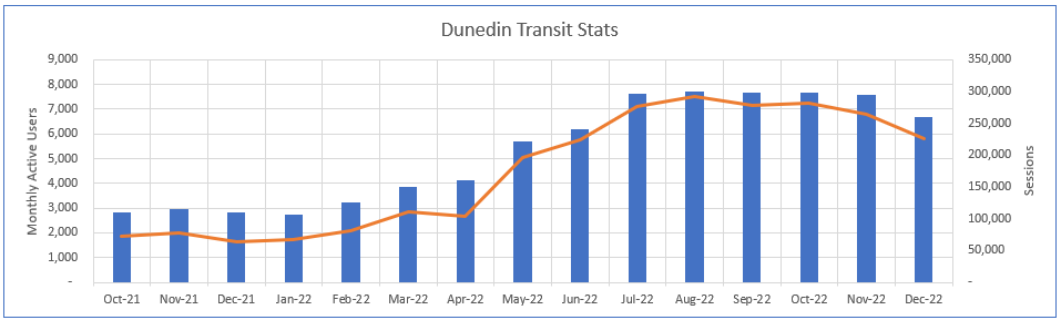


Figure 20: Transit app usage, October 2021 – December 2022, Dunedin

	QUEENSTOWN						
	Monthly Active Users	Sessions	Downloads	DAU's	Most popular lines (taps)	Go Trips	Service Alert Subscribers
Oct-21	697	13,581	135	103	1, 2, 5	203	86
Nov-21	635	11,733	100	94	1, 2, 5	178	90
Dec-21	717	14,270	130	98	1, 2, 5	232	102
Jan-22	691	13,290	138	88	1, 5, 2	235	110
Feb-22	555	10,855	76	77	1, 2, 5	267	121
Mar-22	642	11,678	140	86	1, 2, 5	252	158
Apr-22	871	17,789	122	123	1, 2, 5	319	171
May-22	1,028	19,984	154	143	1, 2, 5	487	185
Jun-22	1,615	42,637	467	255	1, 2, 5	863	247
Jul-22	2,913	114,890	1,060	572	1, 2, 5	1,672	439
Aug-22	2,998	133,940	753	646	1, 2, 5	2,115	513
Sep-22	3,170	144,900	762	716	1, 2, 5	1,943	620
Oct-22	3,027	131,243	858	645	1, 2, 5	1,910	524
Nov-22	3,607	155,009	456	767	1, 2, 5	2,218	793
Dec-22	4,108	203,025	572	829	1 ,2, 5	2,201	940

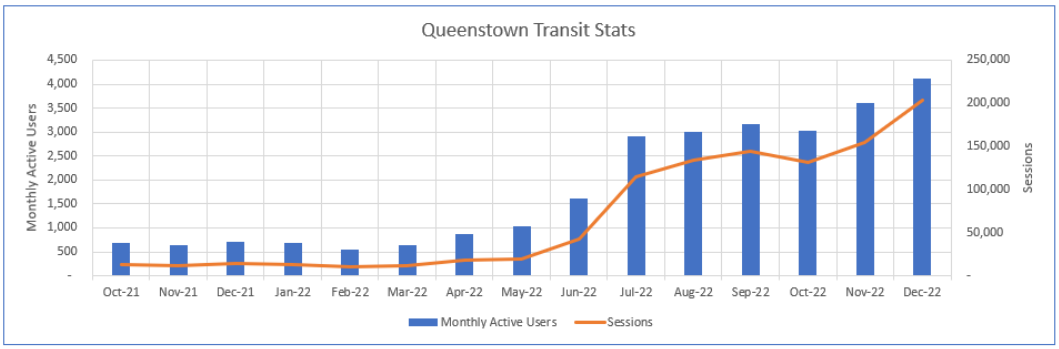


Figure 21: Transit app usage, October 2021 – December 2022, Queenstown

TOTAL MOBILITY

[92] Total Mobility is a nationwide scheme, administered by Regional Councils, that provides subsidised travel to help people who are unable to access public transport due to impairment. This operates through a swipe card which subsidises taxi travel by 75%, to a maximum of $37.50 subsidy in Otago.

[93] December saw the return of Total Mobility to Balclutha. Balclutha has in the past seen high demand for these services, in some years seeing more patronage than Queenstown or Wanaka. However, the previous operator had retired around Covid. The new operator is Nathan's Taxis, who saw their first 9 Total Mobility trips in December.

[94] Figure 22, below, shows 2022/23 patronage, whereby 'Trips' includes 'Hoist' trips. 'Hoist' refers to those customers that require a wheelchair accessible vehicle to travel, for which suppliers receive a separate reimbursement.

[95] For the 6 months shown below, the mean monthly number of trips per month was 9119 (18.8% increase) and, on average, 1315 required the use of a hoist (a 28.7% increase).

[96] 84.3% of trips take place in Dunedin and Mosgiel, followed by 11.9% in Oamaru, 2.5% in Wanaka and 1.3% in Queenstown.

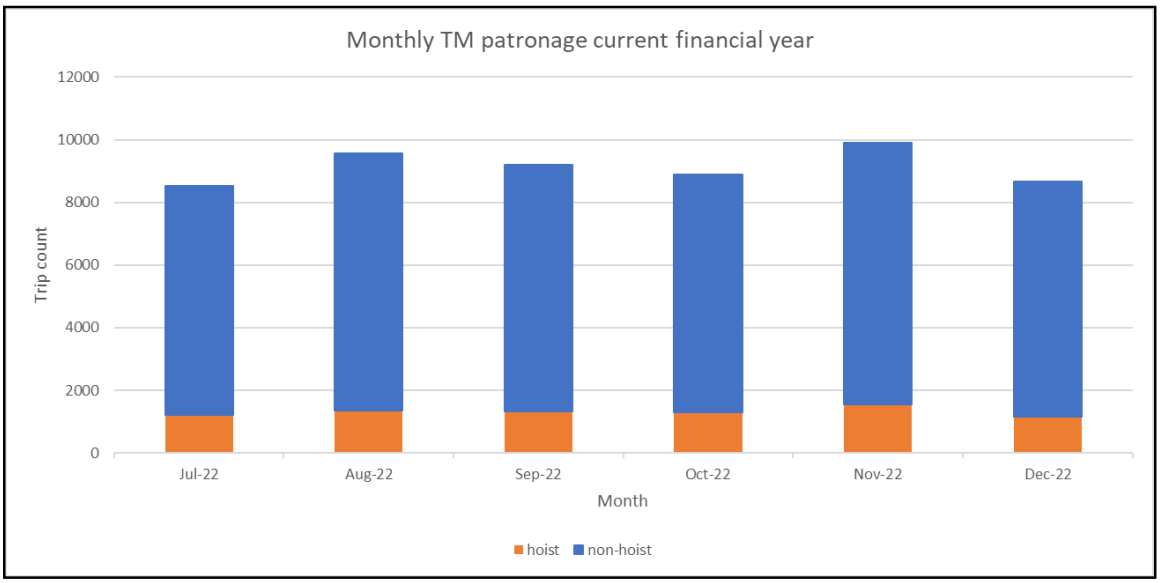


Figure 22: Total Mobility trip statistics

[97] The Total Mobility subsidy was 50% until April 2022, being increased to 75% as part of the government's reduced fare subsidies for public transport. For Total Mobility, this fare reduction is now permanent.

[98] Under reduced fares, there has been a recovery in trip numbers to date, with an average of 9119 trips per month being far above 2021 levels and just 147 trips a month lower than the equivalent period in 2020, and close to pre-Covid patronage.

[99] Figure 23 compares monthly TM patronage each financial year since 2017/18.

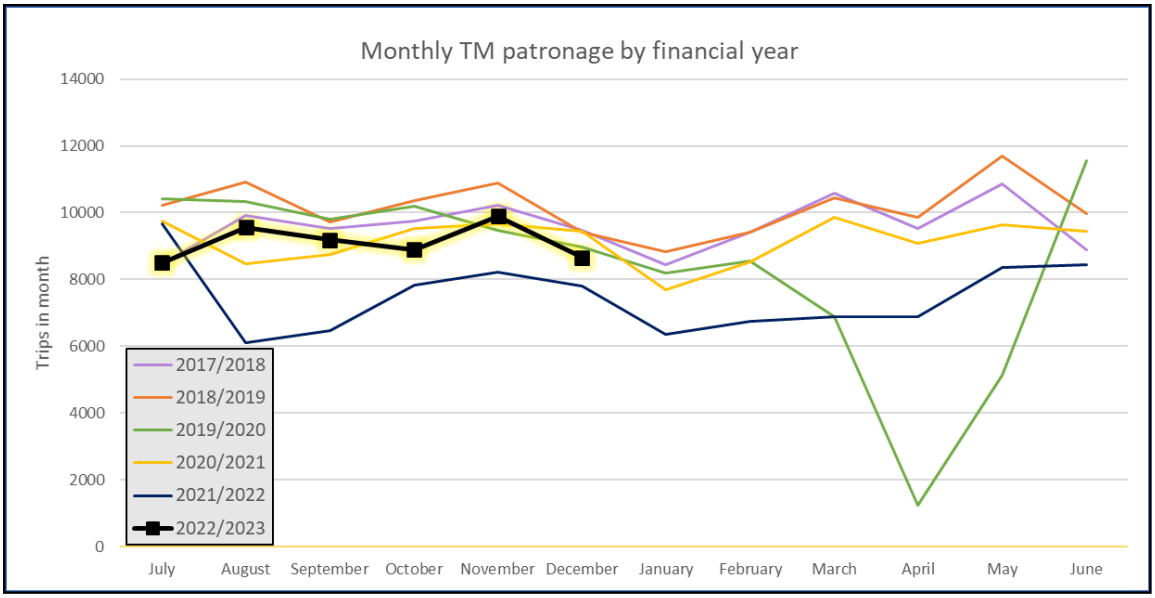


Figure 23: Total Mobility patronage for first 6 months of financial year, compared to previous years

[100] A similar trend is evident for hoist trips (Total Mobility trips in which a wheelchair hoist or ramp is deployed). These represent 14.4% of Total Mobility patronage this financial year, an increase from 13.3% in the same period last year.

[101] Much of this increase comes from Oamaru, which has seen a 106% increase in hoist trips compared to a 15% increase in all trips. In Dunedin, the hoist trips have increased 22% compared to a 20% increase in all trips.

[102] The likely reason for this is that existing hoist vehicles are operating at or beyond their capacity in Dunedin, so operators have been limited in their ability to serve increased demand. Meanwhile, Oamaru's two hoist vehicles were not being used so heavily, so operators have been able to serve an increase in demand.

[103] Like Orbus operators, taxi operators face a tight labour market which means that demand is high. With the increased subsidy made permanent, we expect to see the Total Mobility market stabilise, as operators now have the certainty to invest in staffing and vehicles.

[104] Patronage figures do not, however, show the full effect of reduced fares. In addition to the recovery in trip numbers, average trip lengths have increased, which has driven an increase in average trip prices from c.$20 to as high as $24. This is shown in figure 24.

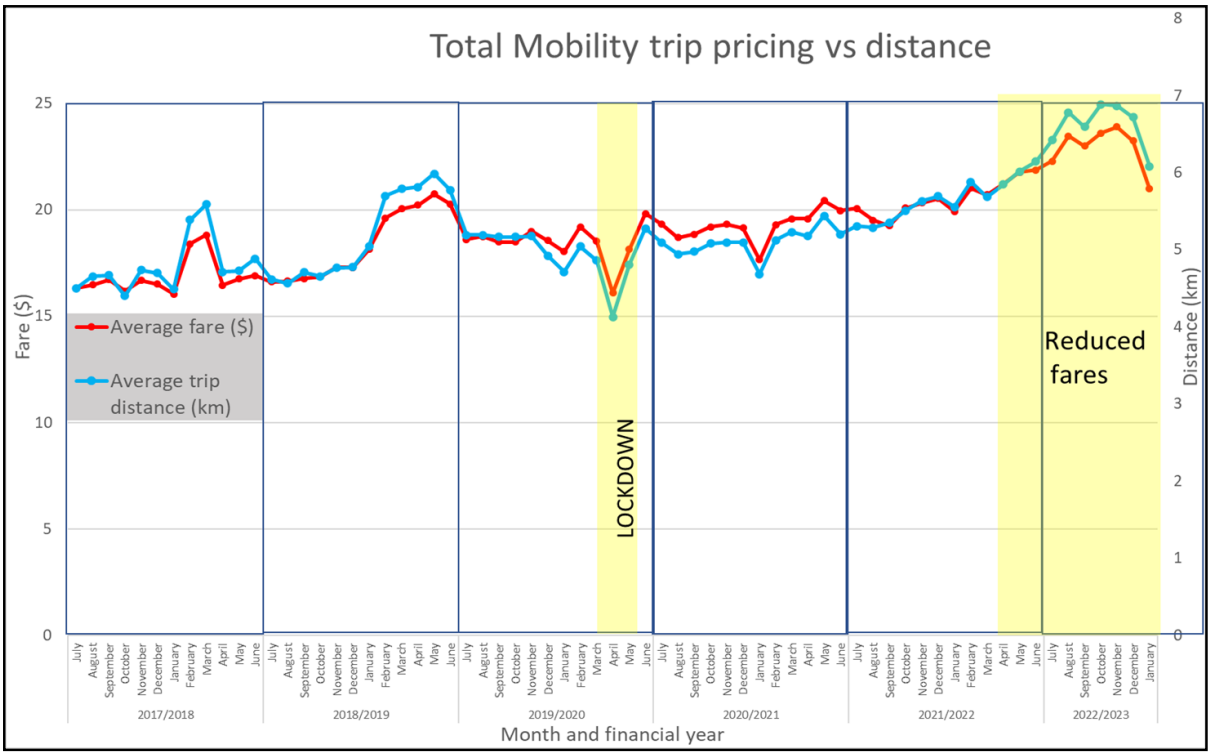


Figure 24: Total Mobility pricing and trip distance trends

[105] Although operators have so far shown some resistance to increasing their base fares (with variations in pricing so far largely correlated with variations in journey lengths), we do expect to see some increases in base pricing over time as the market tries to cope with high levels of demand and limited driver numbers.

[106] Greater business certainty, due to reduced fares being made permanent, will allow operators to make investments in staffing and vehicles that will increase their capacity.

[107] In coming months Transport staff will work on contract renewals for our Total Mobility operators. We will also look to support interested operators who wish to apply for funding to install wheelchair hoists, especially in Dunedin where there is a clear shortage, and potentially in Queenstown and Wanaka where no wheelchair hoists are currently in operation for the Total Mobility scheme.

CONSIDERATIONS

Strategic Framework and Policy Considerations

[108] Not applicable

Financial Considerations

[109] Not applicable

Significance and Engagement

[110] Not applicable

Legislative and Risk Considerations

[111] Not applicable

Climate Change Considerations

[112] Not applicable

Communications Considerations

[113] Not applicable

NEXT STEPS

[114] Provide an update to the next relevant Committee on patronage and revenue for Dunedin and Queenstown.

ATTACHMENTS

Nil

6.2. Palmerston route patronage report

Prepared for:	Public and Active Transport Committee
Report No.	OPS2246
Activity:	Transport - Public Passenger Transport
Authors:	Doug Rodgers, Interim Manager-Transport Julian Philips, Implementation Lead Transport
Endorsed by:	Pim Borren, Interim Chief Executive
Date:	1 February 2023

PURPOSE

[1] This report is provided to update the Committee on the success of the route 1 changes implemented in May 2022 (Dunedin to Palmerston) to date.

EXECUTIVE SUMMARY

[2] Following a request for a broader service for Coastal Waikouaiti area from the community, a Council decision on 9 December 2021 approved a limited-service improvement for route 1 from Dunedin to Palmerston.

[3] The 9 March 2022 Implementation committee approved extension of the route 1 service (Dunedin to Palmerston) to a broader level of service to include weekends. This extension of the service was limited to an increased weekend service and began on 28th May 2022.

[4] Monthly patronage on the route has steadily grown from a monthly average of 1873 in 2020 to a peak of 3164 in August 2022. Patronage in December 2022 was 2185.

[5] Average monthly patronage 2020 for the same period (1 June to 31 December) was 1421.

[6] Average monthly patronage for the same period (1 June to 31 December) in 2021 was 1809.

[7] Average monthly patronage for the same period (1 June to 31 December) in 2022 was 2756. These figures confirm increased patronage.

[8] The patronage has steadily risen over that time with it currently reaching daily averages of 21 passengers per trip. There are 3 scheduled return trips per weekday.

[9] Cancelled or missed trips are low with a total of 10 missed trips over the entire period from 1 June to 31 December. The table in Fig 1 below shows the causes of each missed trip.

Month	Number of Cancellations	Reason
June	2	2 Driver illness
July	4	3 Driver illness, 1 Accident
August	2	2 Weather condition
September	0	
October	0	
November	1	1 Unforeseen incident
December	1	1 Mechanical issues

Fig. 1. Cancelled trips Route 1 Palmerston – Dunedin 1 June to 31 December.

[10] Weekend averages in October 2022 were 33 passengers per trip, likely improved by the effect of school holiday patronage. There are 4 scheduled return trips on Saturdays and 2 on Sundays.

[11] Expectations of increased patronage were modest with officers estimating a 10-15% increase. The service extension has exceeded expectations for patronage.

[12] Financial performance has been within expectations. Estimate for the additional service for the period June to December 2022 was $56,748.39. Costs for the provision of this service is $59,585.79 for the period June to December 2022.

[13] This cost is for the kilometres, hours and operational requirements to operate the service.

[14] Fare revenue figures for the period June to December 2022 show average monthly revenue of $3,580.27. The same 7-month period in 2021 was lower and had an average monthly fare revenue of $2,231.23.

[15] Waka Kotahi funding covers 51% of the costs of the service.

RECOMMENDATION

That the Committee:

1) ***Notes** this report.*
2) ***Notes** that a further staff report will be provided showing the performance of the service in 12 months.*

BACKGROUND

[16] The 9 March 2022 Implementation Committee approved options for the extension of Route 1 from Dunedin to Palmerston include additional services for a more comprehensive level of service.

[17] These service improvements were in response to a request from the Waikouaiti Coast Community who saw the need for a permanent weekend service.

[18] The Palmerston to Dunedin route is the longest in the Dunedin public transport network (63km each way).

[19] The $2 flat fare (currently $1 from the Government half price fare initiative) means users have access to an extremely affordable service for this service, given the distances travelled by the service.

[20] A Saturday service and a Sunday service were implemented and became operational on 28th May 2022.

DISCUSSION

[21] Overall patronage increased by 22% on the route when the $2 fare was implemented between 2019/20 and 2021/22.

[22] Recent significant growth has been in the weekend service with total weekend monthly average patronage growing from implementation (28th May) to December from 245 per month to peaking in October at 374 per month. December levelled off at 186 per month (Fig. 2.)

Note: 9011 indicates the trip to Dunedin, 9012 indicates the trip to Palmerston

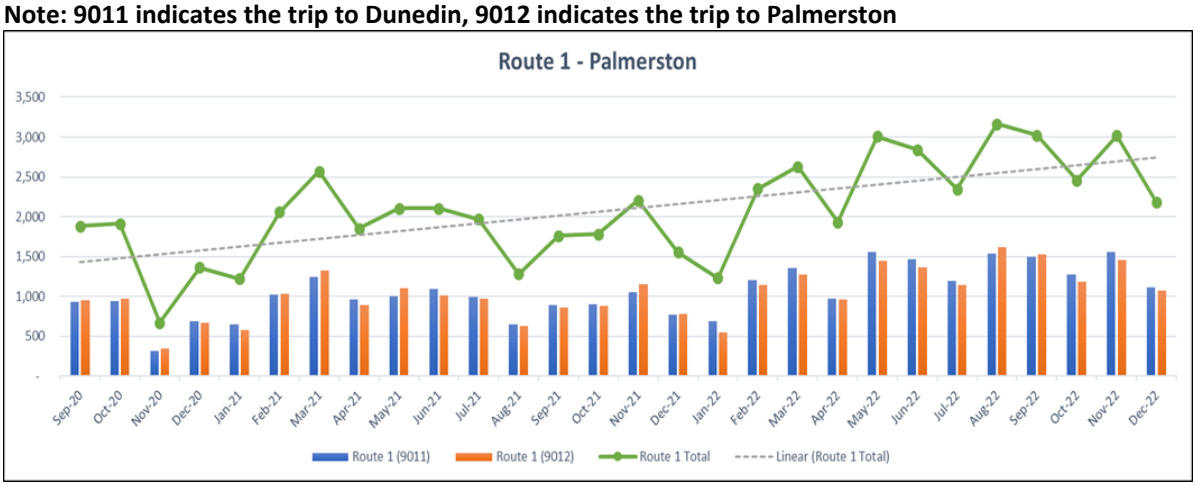


Fig 2. Patronage Sept 2020 to Dec 2022 Palmerston to Dunedin

[23] The service patronage has steadily risen over that time with it currently reaching daily averages of 21 passengers per trip.

[24] Weekend averages in October 2022 were 33 passengers per trip, likely improved by the effect of school holiday patronage. (Fig 3.)

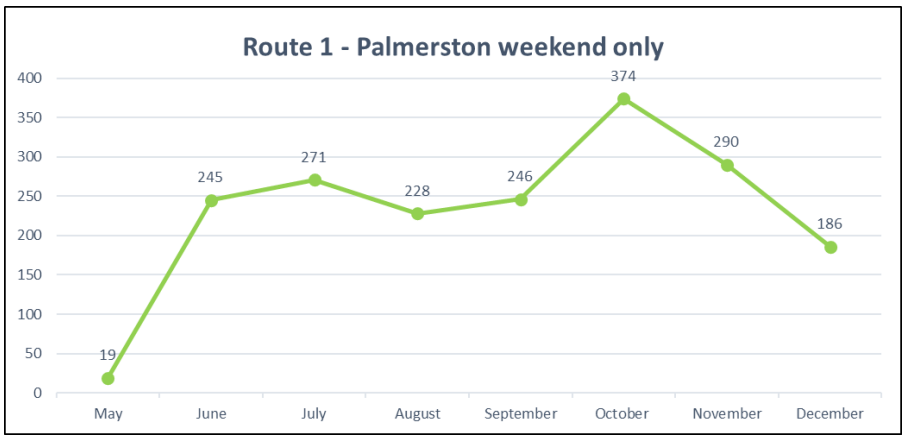


Fig. 3. Patronage May 2022 to Oct 2022 Weekend Route 1 Dunedin/Palmerston

[25] The figures show the service is also well utilised during weekdays at peak commuting times. Daily average patronage for weekdays from June 2022 to December 2022 was 123 compared to the same period for weekdays in 2021 which was averaging 78 passengers per day.

[26] This can be compared favourably to other similar services such as the Brighton service, in place since 2015 and running an average of 40 passengers per weekend.

CONSIDERATIONS

Strategic Framework and Policy Considerations

[27] None

Financial Considerations

[28] Financial matters are discussed in the body of the report

[29] This cost is for the kilometres, hours and operational requirements to operate the service.

Significance and Engagement Considerations

[30] The Waikouaiti Coast Community Board will be provided a copy of this report.

Legislative and Considerations

[31] No legislative considerations

Climate Change Considerations

[32] None directly, however increased patronage on public transport positively reduces emissions.

Communications Considerations

[33] Communications include a media release covering the patronage of the route extension.

NEXT STEPS

[34] Review performance and patronage in 12 months

ATTACHMENTS

Nil

6.3. Unit 5 Public Transport Contract Extension

Prepared for:	Public and Active Transport Comm
Report No.	OPS2254
Activity:	Transport - Public Passenger Transport
Author:	Doug Rodgers, Manager Transport
Endorsed by:	Pim Borren, Interim Chief Executive
Date:	22 February 2023

PURPOSE

[1] The purpose of this report is to seek Council's approval to vary the existing passenger transport service contract "Unit 5 Southern Routes", extending the expiry date from Sunday 30 June 2023 to 30 June 2024 as well as introducing certain service level changes (previously approved by Council).

EXECUTIVE SUMMARY

[2] The Unit 5 Southern Routes passenger transport service contract covers four routes servicing Mosgiel, Brighton, Fairfield, Abbotsford and Green Island. The contract commenced 1 July 2015 and has an 8-year term, expiring 30 June 2023.

[3] For a number of reasons, it is considered prudent to extend the current contract term from June 2023 to June 2024. These are summarised below.

[4] A draft programme for going to market for Unit 5 was developed in 2022. Subsequently GoBus contacted ORC directly and requested an extension to the contract. Discussions internally reached an agreement in principle to an extension.

[5]

[6] The time needed for procurement is currently insufficient and it is now necessary to extend the contract as stated to ensure a robust procurement process.

[7] Wider public transport tendering programme – moving expiry of the Unit 5 contract to June 2024 harmonises the procurement programme of this unit with other units across the networks of Dunedin and Queenstown.

[8] Government led changes to the public transport operating model – there are ongoing Government led changes afoot, such as the Sustainable Public Transport Framework that we do not yet have full visibility of. Extension to the Unit 5 contract to June 2024 allows time for these changes to play out and bed in before we procure a new service.

[9] Strategic funding certainty – the Government Policy Statement on Land Transport (GPS) 2024 will be confirmed in 2023. There is a General Election to be held no later than 13 January 2024 that could change this. Subsequently, the Regional (RLTP) and National (NLTP) Land Transport Programmes for Otago-Southland will be confirmed in June 2024, along with the Long-Term Plan 2024-34.

[10] Council approach to transitioning the fleet to zero emission buses – Government has introduced a commitment to decarbonise New Zealand's public transport bus fleet by 2035. Only zero-emission public transport buses may be purchased from 2025. Council needs time to determine the implications for the region, how fast it wishes to make this transition and the resultant financial implications for the 2024-34 LTP. Establishing a clear transition plan towards a zero-emission bus fleet before embarking upon new contract procurement is a prudent step to take.

[11] A transition plan is being prepared currently.

[12] In addition to the above, it is proposed to introduce certain service level enhancements to these routes previously approved by Council, but which were unable to be introduced due to supply side constraints, that have now been resolved. These involve enhanced coverage and peak period weekday frequencies on route 77 Mosgiel services as well as the introduction of a weekday peak express service.

[13] The procurement of Unit 5 must comply with the Waka Kotahi NZ Transport Agency (WKNZTA) Procurement Manual and the Council's WKNZTA-endorsed Transport Activities Procurement Strategy.

[14] To achieve a robust procurement and allow operators to source low or no emission vehicles and provide the opportunity for operators to prepare depot infrastructure an extension to the contract is needed.

[15] Discussions with WKNZTA in late 2022 and early 2023 have confirmed they have no fundamental issue with an extension of the Unit 5 contract expiry date. Staff are working in this process currently and have followed up with WKNZTA accordingly.

[16] Discussion with the operator have been clear on ORC requirements. Whilst they wished for a 2-year extension, officers believed this was too long and would delay transition to low or zero emissions fleet.

RECOMMENDATION

That the Public and Active Transport Committee:

1) ***Notes** this report.*
2) ***Notes** that Council previously approved a service level variation to route 77 weekday peak frequencies and coverage and the addition of a weekday peak express service.*
3) ***Recommends Council approval** of a variation to the Unit 5 Southern Routes passenger transport services contract expiry date, from 30 June 2023 to 30 June 2024, which will incorporate the previously approved service level variation.*
4) ***Recommends Council to authorise** the Chief Executive to sign the variation on behalf of Council.*

BACKGROUND

[17] The Unit 5 Southern Routes Passenger Transport Contract comprises four public transport services, one serving passengers travelling from Mosgiel, Fairfield and Green Island to and from the city (route 77), a second linking passengers between Brighton, Abbotsford, and Green Island (route 70) and two further Mosgiel local (80 east and 81 west) circuit services.

[18] Route 77 generally offers a half hourly service from 6.30 am to 4.30 pm, Monday to Friday, with additional trips in the peak direction. Weekends are also half hourly but with a slightly later first trip and earlier last trip.

[19] Route 70 generally offers an hourly service from 7.25 am to 7.25 pm, Monday to Friday. Weekends are also hourly but with a slightly later first trip and earlier last trip.

[20] Services 80 and 81 offer a weekday service every 40 minutes between the hours of 8 am and 6 pm.

[21] Unit 5 services are provided by Go Bus Transport Limited. The contract was signed in April 2015, with services commencing 1 July 2015. The contract duration is eight years, with a current expiry date of 30 June 2023. There is provision in the contact for variations, including variations to the contract timing. Three months' notice must be given prior to the date the variation is to commence.

[22] The contract value is $1.27m per annum, excluding for any potential deductions under the contract or indexation adjustments. Year on year patronage and revenue gains from unit 5 have been very positive and officers are comfortable to maintain the current arrangements with the operator. 2022/23 Financial Year patronage, covering July 2022 to December 2022, is 167,705. This is a 27% increase on the same period in the pre-COVID 2018/19 Financial Year, noting also that a reduced timetable has been in place since July 2022.

[23] Factors have emerged in recent times that have given cause for officers to consider whether June 2023 is an appropriate time for the contract to expire. Aside from the ongoing issue with in-house capacity to conduct a procurement process, developments at a national level point toward a contract extension being a prudent move.

[24] In addition, in August 2022, Council approved a variation to route 77 to enhance service levels however this was unable to be implemented du to driver supply issues and uncertainty over the potential to extend the contract. With driver supply issues resolved there now exists the opportunity to implement this enhancement as part of extending the contract. It will address passenger capacity on the existing services which suffer over-crowding due to large volumes of school pupils.

[25] The contract extension will allow the impact of these service level changes to be assessed and consideration given as to whether to include them, or how to include them, in the forthcoming Unit 5 tender that will be undertaken in the first half of 2024.

[26] The extension also provides the incumbent operator, Go Bus, certainty of tenure for a sufficient period to warrant the additional commitment they will need to make to the service in terms of vehicles and drivers.

[27] A further benefit of introducing the express service from Mosgiel is to foreshadow a park and ride level of service for Mosgiel, which is currently in development in association with Dunedin City Council. Express bus services supported by secure (sometimes free) parking and other infrastructure are key components of successful park and ride systems, generating step changes in public transport ridership and mode shift.

[28] The extension also creates time and space to consider the future of the Mosgiel east and west circuit services. These services currently meet a limited need and look of the nature and type that might better be serviced through more innovative means currently emerging in New Zealand, known as on-demand public transport. Examples of this type of service exist in south Auckland and Timaru already and we have investigations underway already to determine how these could be rolled out in several places across Otago where conventional public transport services might not be economically viable, but where nevertheless, a demand for public transport exists.

[29] The value of the previously approved variation was c. $800,000, making the total contract value of unit 5 to be carried through to June 2024 some $2m p.a., unindexed and exclusive of GST. The variation is budgeted and covered in the Annual Plan to the value of $880,000 per annum.

[30] The variation costs are composed of the total hours, kilometres, peak vehicle requirement (the number of vehicles required at peak times) for both the express service and 15-minute frequency peak service.

[31] Waka Kotahi have also approved the increase in their share of this at 51% of the total cost.

Vehicles

[32] High quality vehicles and standards form an essential component to providing a public transport that is attractive, attracts new customers and ensures that we are contributing to reducing the emissions associated with the operation of our public transport system.

[33] All operators are required to, at a minimum, adhere to the national standard 'Requirements for Urban Buses in New Zealand' published by WKNZTA (known as the RUB).

[34] Central government has announced that from 2025 no new fossil-fuelled buses can be introduced into service in New Zealand and by 2035, all fossil fuelled buses must be replaced. The new Unit 5 contract will commence in July 2024 and run for nine years. Any fleet replacement after 2025 must meet this government requirement.

[35] In regard to vehicles, RPTP2021 states:

a. *Objective 1: Contribute to carbon emission reduction and improved air quality through increased public transport mode share and sustainable fleet options.*

b. Policy 5.1.2 - *Ensure high vehicle quality standards on all contracted services.*

c. Policy 5.1.3 - *Transition to a lower-emission public transport network.*

[36] Due to these factors the lead time for renewing the unit 5 contract is seen as insufficient and requires an extension.

DISCUSSION

[37] Currently, passenger transport bus service contracts across Dunedin and Queenstown are due to expire at the following intervals:

- Unit 1 - September 2026
- Unit 2 - September 2026

- Unit 3 - March 2031
- Unit 4 - August 2028
- Unit 5 - June 2023
- Unit 6 - September 2029
- Unit 7 - September 2029

[38] As can be seen, unit 5 is somewhat of an outlier, expiring next June. This is followed by a gap of over three years to Units 1 and 2 in September 2026. The opportunity exists to better harmonise the cadence of contract renewal dates by extending the current unit 5 contract to June 2024. This would make the total contract term for unit 5 nine years, up from 8 years, which is more consistent with current procurement practice.

[39] This offers a number of benefits. From a council resourcing perspective, it helps compress more procurement processes (which involve specialist skills) into a shorter period.

[40] From a tenderer perspective, it is also beneficial as it compresses tendering processes into defined windows, introducing greater certainty for their business planning and thereby potentially the ability to be more competitive in their offering.

[41] Commercial and in-house resourcing issues aside, the public passenger transport sector faces significant change and uncertainty in the coming eighteen months to two years. There are changes to the Public Transport Operating Model to be introduced by central government in the form of the mooted "Sustainable Public Transport Framework" or SPTF, and a potential transformation in public transport funding support in response to climate change imperatives via the next Government Policy Statement on Land Transport (GPS).

[42] Government has also made a commitment to decarbonise New Zealand's public transport bus fleet by 2035. Only zero-emission public transport buses may be purchased from 2025. Council will need time to determine the implications for the region, how fast it wishes to make this transition and the resultant financial implications for the 2024-34 Long Term Plan. Establishing a clear transition plan towards a zero-emission bus fleet before embarking upon new contract procurement is a prudent step to take. A transition plan is currently being developed.

[43] These all present the prospect of a transformational shift in thinking on public transport provision across New Zealand, with Otago being no exception. With these playing out in 2023 and Council's Long-Term Plan and the National Land Transport Programme following on in mid-2024 it makes sense to push out any new public transport procurement until these developments are concluded, Council has had time to make a considered response, and that this is then embedded into Council long term planning.

OPTIONS

[44] Later expiry dates of January or June 2025 have considered. This provides a longer lead in time for a robust procurement process and stabilisation of SPTF mechanisms.

[45] A 12-month extension of the expiry date to June 2024 is considered responsible where it gives sufficient time for operators to prepare from the current date.

[46] Officers have concluded that June 2024 is the recommended contract expiry date.

CONSIDERATIONS

Strategic Framework and Policy Considerations

[47] Strategy and policy changes at a national level is the primary driver for this decision. Government decisions around the public transport operating model and potential funding levels to grow public transport and transition fleets to zero-emission vehicles will play out in 2023 and 2024. These will subsequently impact Council's strategy and policy around public transport investment, expressed through the RLTP/NLTP and Councils Long Term Plan, due for approval in June 2024.

Financial Considerations

[48] As noted above, financial considerations are central to the rationale for extending the current contract to June 2024, when a new set of services would be introduced. This could potentially offer higher service levels and zero-emission vehicles, in line with decisions made by Council in the LTP, due mid-2024.

[49] Proceeding with procurement to introduce a new service from July 2023 would foreclose such opportunities to an extent, or at least potentially introduce added commercial complexity to negotiations and contract terms. It could also put Council at a commercial disadvantage over the longer term through the need to negotiate large contract variations to introduce new vehicles and/or service levels at a later date.

[50] The cost of the service level enhancements already approved by council amounted to circa $800,000 p.a. unindexed and before GST. The existing unit 5 contract value is some $1.27m, making the varied contract value some $2.07m p.a. before indexation and GST. This is the approximate contract value going forward until the unit is retendered and takes effect from June 2024. Waka Kotahi NZ Transport Agency have confirmed they will co-invest in this service at the usual financial assistance rate of 51%.

Significance and Engagement Considerations

[51] Strategy and policy changes at a national level is the primary driver for this decision. Government decisions around the public transport operating model and potential funding levels to grow public transport and transition fleets to zero-emission vehicles will play out in 2023 and 2024.

Legislative and Considerations

[52] These have been set out above. Legislative and policy change in the public transport sector is underway and may take 12-18 months to be completed. By extending the existing arrangements for this passenger transport contract until these matters are resolved we are ensuring continuity of service for our customers and a prudent use of current and future ratepayer contributions.

Climate Change Considerations

[53] Central government decisions on the next GPS will largely determine the speed with which Councils can enhance public transport service levels and transition bus fleets to zero-emission vehicles.

[54] Extending the unit 5 expiry date to June 2024 represents a prudent step in this context, allowing Council subsequent time to develop its own approach and then apply it, resulting in a more comprehensive policy led approach to the procurement of future services, and avoiding a retrospective one likely to represent less value for money.

Communications Considerations

[55] There are no communications necessary with customers as a result of this decision. Customers will enjoy the continuity of the existing service until a new one is introduced in June 2024.

NEXT STEPS

[56] Should Council approval the recommendations in this report, officers will inform both Waka Kotahi and the incumbent operator of this decision and make use of existing delegations to formalise the contract variation.

ATTACHMENTS

Nil

6.5. Queenstown Public Transport Business Case - Engagement Plan

Prepared for:	Public and Active Transport Comm
Report No.	OPS2301
Activity:	Transport: Transport Planning
Author:	Doug Rodgers
Endorsed by:	Pim Borren, Interim Chief Executive
Date:	22 February 2023

PURPOSE

[1] The purpose of this report is to seek approval for the Stage 2 Engagement Plan for the Queenstown Public Transport Business Case currently underway.

EXECUTIVE SUMMARY

[2] The Queenstown Business Case completed in November 2020 recommended that a Public Transport Business Case (QPTBC) be developed.

[3] The purpose of the Queenstown Public Transport Business Case (QPTBC) is:

"To develop a 30-year public transport service plan that is agreeable by the partners, is adaptable, realistic, fundable, accepted by the community, and aligned to the Spatial Plan, QTBC and the ORC RPTP."

[4] As part of the programme an Engagement Plan has been formulated to inform and engage with Queenstown residents and stakeholders.

[5] The Engagement Plan is intended to take place in March 2023 and will use various media to engage on the Business Case and gather feedback which will inform part of the development of options.

[6] A long list of options has been developed and is outlined in the attached engagement material including:

- Frequency
- Bus max options
- Ferry capacity and growth
- Park and Ride
- On Demand
- Moving to a low emissions fleet
- Bus type options

[7] Draft engagement material is appended.

[8] The QPTBC is progressing as expected with a completion date of 28th August 2023.

RECOMMENDATION

That the Public and Active Transport Committee:

1) ***Notes*** *this report.*

2) ***Recommends Council Approval*** *of the Engagement Plan.*

BACKGROUND

[9] The Otago Regional Council (ORC) together with its Way to Go partner agencies, Queenstown Lakes District Council and Waka Kotahi New Zealand Transport Agency are developing a 30-year plan to inform future public transport investment decisions for Queenstown.

[10] This project follows on from the work already undertaken with the Queenstown Business Case 2020 which included a package of infrastructure, demand management and public transport services improvements.

[11] The Queenstown Public Transport Business Case (QPTBC) is focussing on:

- what the public transport network will look like in the future (bus and ferry)
- decarbonisation of public transport
- where on-demand bus services should be considered
- future capacity and configuration of bus hub,
- what the future ownership, operating, and management systems should look like
- what proposals will cost and how they can be funded.

[12] An Engagement Strategy was developed for the QPTBC which included three stages of engagement:

- Stage 1: Inform stakeholders and the community of the project
- Stage 2: Consult on options
- Stage 3: Inform stakeholders and the community of the preferred option
- Stage 1 engagement took place in November/December 2022.

The QPTBC is now at a stage where a long list of options has been developed for stakeholder and community engagement ("Stage 2 Engagement").

DISCUSSION

[13] The purpose of the Queenstown Public Transport Business Case is to develop a long-term strategy (30 years) to address public transport demands and the needs of users.

[14] The engagement material will include a high-level discussion on growth pressures facing Queenstown. There is a fast rate of growth with a transport system that is already at capacity so there is a need for mode shift. The Emissions Reduction Plan means that the public transport system needs to be decarbonised.

[15] Stage 1 of the engagement took place in November/December 2022.

[16] The long list of options has been developed for stakeholder and community engagement (Stage 2 Engagement). The engagement will include the following themes:

- Forecast Growth – QLDC Spatial Plan forecasts, how people are forecast to move about in the future, and Airport growth projections

- Fleet – Public Transport will be buses moving to higher quality / larger capacity bus technology.
- The role of ferry's, capacity and expansion of service options.
- Decarbonisation – The Emissions Reduction Plan, Otago Regional Public Transport Plan, and QLDC transport policy require the decarbonisation of the public transport system. The recommendation for the future fleet is battery electric in the short term due to tech feasibility and availability (and need to meet zero emission). Other options would be considered in the longer term as technology develops.
- Service patterns – Seek feedback on options including a range of bus and ferry networks. A longer-term option is an additional public transport / active mode crossing of the Kawarau River at Remarkables Park. This potential future connection has been highlighted in spatial planning.
- On Demand services – most areas of Queenstown would be serviced by a fixed network service. Some areas like Queenstown Hill and Goldfields would be candidates for an on-demand service due to limited walkability to SH6A and the steep terrain which is challenging for larger buses.
- Park and Ride – the engagement material will describe the key criteria when considering park and ride as well as listing pros and cons. We will be seeking feedback as to whether people would use park and ride and if so, what potential locations should be considered.

[17] The draft engagement plan was presented to the Way to Go management group on 7 February 2023.

[18] Methodology:

- Engagement will be undertaken through a variety of online material and some face-to-face meetings with targeted stakeholders such as Queenstown Airport, Queenstown Lakes District Council, the Chamber of Commerce, community associations and key tourism associations such as Destination Queenstown.
- Two days for a community pop up session are planned at a location to be determined.
- It is also proposed to use a survey to gain feedback on options. A copy of the draft survey is attached.

[19] Proposed engagement timings:

- Development of final engagement content, brochure, website: 23 February to 23 March.
- The approvals approach for the engagement material will be confirmed with W2G partners following PT / AT committee approval
- Engagement will be live for four weeks from mid-March
- The draft engagement report will be available two weeks after engagement has been completed (anticipate late April/ early May 2023).

CONSIDERATIONS

Strategic Framework and Policy Considerations

[20] The Otago Regional Council's 2021/31 Long-term Plan (LTP) outlines how activities undertaken by Council will help to achieve community outcomes. One of the Community Outcomes that ORC aims to achieve is sustainable, safe, and inclusive transport.

[21] The QTPTBC will be completed by August 2023.

Financial Considerations

[22] The QTPTBC is tracking within expected limits.

Significance and Engagement

[23] The Queenstown Public Transport Business Case has been developed in partnership with Way2Go partners (ORC, QLDC, WKNZTA).

[24] The Way2Go management group have been briefed on the engagement stage.

Legislative and Risk Considerations

[25] There are no legislative considerations regarding this paper

Climate Change Considerations

[26] No direct impact however increasing patronage of public transport has emissions reduction and reduced vehicle kilometres travel impacts.

Communications Considerations

[27] The public engagement stage 2 process forms an important part of the inform and engage process for the development of the business case.

[28] The Way2Go management group have been briefed on the engagement stage.

NEXT STEPS

[29] Following Committee approval, commence engagement stage 2 (23rd Feb to 23 March 2023)

[30] Confirm with W2G partners

[31] Produce Draft engagement outcome report (available late April/Early May 2023)

ATTACHMENTS

1. Draft Engagement Material [**6.5.1** - 17 pages]

6.4. Queenstown Public Transport Business Case Progress

Prepared for:	Public Transport and Active Travel Committee
Report No.	OPS2247
Activity:	Transport - Public Passenger Transport
Author:	Doug Rodgers – Interim Manager Transport
Endorsed by:	Pim Borren, Interim Chief Executive
Date:	22 February 2023

PURPOSE

[1] To inform Councillors of the progress and status of the Queenstown Public Transport Business Case (QPTBC), the scope of works, the partner and stakeholder engagement approach, project timeframes, and proposed requirements of Councillors and the Public and Active Transport Committee.

EXECUTIVE SUMMARY

[2] The Queenstown Business Case completed in November 2020 recommended that a Public Transport Business Case (QPTBC) be developed.

[3] The purpose of the Queenstown Public Transport Business Case (QPTBC) is:

"To develop a 30-year public transport service plan that is agreeable by the partners, is adaptable, realistic, fundable, accepted by the community, and aligned to the Spatial Plan, QTBC and the ORC RPTP."

[4] A tender process was completed, and the contract was awarded to WSP on 22 July 2022.

[5] The QPTBC is progressing as expected with an updated established completion date of 28 August 2023.

[6] The QPTBC is within financial limits and, due to early delays with modelling data, is underspent currently. This will rectify as the project continues.

RECOMMENDATION

That the Committee:

1) ***Notes*** *this report.*
2) ***Notes*** *Otago Regional Council has endorsed the QPTBC scope.*
3) ***Notes*** *the project is to address what the Queenstown public transport system will look like over the next 30 years taking into consideration future growth, and relevant policies and plans, including the Government's Emission Reduction Plan. It will set out funding required for the 2024 - 2034 Long-Term Plan funding period and beyond.*
4) ***Notes*** *the approach to engagement with partners, stakeholders, and the wider community.*
5) ***Notes*** *the project timeframes with the project to be complete by Q4 2023.*

BACKGROUND

[7] The Queenstown area is one of New Zealand's fastest-growing regions, driven by growth in population, the tourism industry and supporting activities. This growth is placing increasing pressure on infrastructure and the transport system. The Queenstown Lakes Spatial Plan forecasts that the average day population will more than double from 51,000 people (41,000 residents, 10,000 visitors) in 2021 to 120,000 people (78,000 residents and 42,000 visitors) in 2051.

[8] In 2020, a Queenstown Transport Business Case (QTBC) was completed, which looked at options to address future growth and outlined the case for investment for a suite of multi-modal transport interventions covering the Whakatipu Basin over the next 30 years. These transport interventions focus on targeted bus priority, walking and cycling infrastructure improvements, bus rapid transit services and travel behaviour initiatives to reduce growth in private car use.

[9] The QTBC was approved by Otago Regional Council (ORC) and Queenstown Lakes District Council (QLDC) in January 2021 and Waka Kotahi in February 2021. The QTBC identified that further work is required, including preparing a detailed Queenstown Public Transport Business Case (QPTBC) to inform future investment decisions for public transport service provision.

[10] The scope for the QPTBC was endorsed by ORC Councillors on 27th October 2021 - paper PPT2115. This was followed by a formal tender process which WSP were successful and commissioned to undertake the QPTBC. The QPTBC commenced in August 2022. The tendered cost including provisional sums is $895,702. This is below the budget set.

[11] The scoping report defined the purpose of the Queenstown Public Transport Business Case as

"To develop a 30-year public transport service plan that is agreeable by the partners, is adaptable, realistic, fundable, accepted by the community, and aligned to the Spatial Plan, QTBC and the ORC RPTP."

[12] The scope of work covers:

a. What will the Queenstown public transport system look like in 30 years?
b. What is the forecast patronage demand (bus and ferry) based on the updated Queenstown Lakes Spatial Plan household, jobs, and visitors' growth projections?
c. What are the frequencies and services needed to meet this future patronage demand?
d. How will the fleet be decarbonised consistent with government policy, noting that government policy stipulates that by 2025 only zero emission public transport buses will be allowed to be purchased new, and the public transport fleet will be decarbonised by 2035?
e. What on-demand services should be considered for further investigation?
f. What is the role of park-and-ride in the future?
g. What is the life of the bus hubs (Frankton Hub and Stanley Street) based on future demand, vehicle requirements, and infrastructure required for alternative fuels/ charging technologies?
h. What changes should be adopted to existing ownership and operating models, how should the system be managed, how and where sufficient resource can be resourced?

i. What is an affordable and deliverable funding plan considering an appropriate funding mix from ratepayers, central government, and other alternative sources of revenue, including developer/third party contributions.

[13] Further details of the scope are presented in Appendix A.

REVIEW PROCESS AND STAKEHOLDER ENGAGEMENT

[14] As part of its QPTBC development, ORC officers will consult and work in close collaboration with staff from QLDC, and Waka Kotahi.

[15] Engagement with stakeholders and the wider community will be through three phases.

[16] Stage 1: Inform stakeholder and the wider community of the project (November 2022). This will be a letter and visits to key stakeholders, a media release and website going 'live'.

[17] Stage 2: Consult on a short list of options (February / March 2023). It is anticipated that consultation will cover future service routes and frequencies and future technology options.

[18] Stage 3: Inform stakeholders and the wider community of the project findings post business case endorsement (September/ October 2023).

DISCUSSION

[19] To the end of November, the Business Case has proceeded to Stakeholder engagement and discussions.

[20] The Investment Logic Mapping workshop was held on 22nd October. From this came three identified problem statements:

a. Poor temporal coverage, indirect routes and infrequent services mean that public transport is less attractive+ than travel by car.
b. Capacity of the public transport system means it cannot accommodate the expected growth in travel demand.
c. Poor coordination of land use policy and long-term public transport planning limits the ability of PT to attract enough new passengers.

[21] Draft benefit statements to solve these three identified problems from the investment logic mapping process are:

a. Reduced greenhouse emissions
b. Increased Public Transport Mode Share (more here)

[22] Final Benefit statements will be confirmed after peer reviews.

[23] The proposed Council programme to achieve increased mode share for public transport is:

a. 2021/22 - further investigation (Public Transport Business Case [PTBC] – estimated total cost of $1.5m).
b. 2024/30 - delivery of improved bus services (especially in 2027, but dependent upon the Detailed Business Case (DBC) and subsequent approval processes of Council and Waka Kotahi NZ Transport Agency (Waka Kotahi or WKNZTA) – estimated additional total cost of $131m).

c. 2028/30 - infrastructure (i.e., Queenstown public transport interchange and Frankton public transport interchange - also dependent upon the Detailed Business Case and subsequent approval processes of Council and Waka Kotahi - estimated additional total cost of $61m).

OPTIONS

[24] Options N/A. For noting.

CONSIDERATIONS

Strategic Framework and Policy Considerations

[25] The Otago Regional Council's 2021/31 Long-term Plan (LTP) outlines how activities undertaken by Council will help to achieve community outcomes. One of the Community Outcomes that ORC aims to achieve is sustainable, safe, and inclusive transport.

[26] The QTPTBC will be completed by August 2023.

Financial Considerations

[27] Financial matters are addressed in the report.

[28] The project is tracking with an overspend due mainly due to initial delays with modelling at the start.

[29] The project has an underspend of $65,110 to the end of November 2022. This will reduce as the project progresses.

Significance and Engagement Considerations

[30] The Queenstown Public Transport Business Case has been developed in partnership with Way2Go partners (ORC, QLDC, WKNZTA).

Legislative and Risk Considerations

[31] There are no legislative considerations regarding this paper.

Climate Change Considerations

[32] No direct impact however increasing patronage of public transport has emissions reduction and reduced vehicle kilometres travel impacts.

Communications Considerations

[33] There are no communications considerations regarding this paper.

NEXT STEPS

[34] Complete first stage of PT modelling to produce forecast for Service of Demand Advisory Paper.

[35] Complete Draft Service of Demand Advisory Paper.

[36] Complete ILM.

[37] Delivery of Draft Strategic Case.

[38] Long list development for decarbonisation and service patterns advisory papers.

[39] Commence on-demand services advisory paper.

[40] Complete 'Inform' engagement stage including publishing of online material as well as face to face meetings in Queenstown with key stakeholders.

ATTACHMENTS
Nil

Attachment 1: Draft Engagement Material

Queenstown Public Transport Business Case

The Otago Regional Council (ORC) together with its Way to Go partner agencies, Queenstown Lakes District Council and Waka Kotahi New Zealand Transport Agency are developing a 30-year strategy to inform future public transport investment decisions for Queenstown.

The Queenstown Public Transport Business Case (QPTBC) is focussing on:

- what the public transport network will look like in the future (bus and ferry)
- decarbonisation of public transport
- where on-demand bus services should be considered
- future capacity and configuration of bus hub,
- what the future ownership, operating, and management systems should look like
- what proposals will cost and how they can be funded.

This project follows on from the work already undertaken with the Queenstown Business Case 2020 which included a package of infrastructure, demand management and public transport services improvements.

Project Area

The QPTBC will consider the existing public transport network and services that intersect with the Whakatipu Basin including Glenorchy, Kingston and Cromwell. The study area is shown on the map.

Why is the project needed?

Queenstown Lakes Spatial Plan

The Queenstown Lakes Spatial Plan sets out a long-term vision for how and where the Queenstown Lakes District will grow, looking out to 2050. Key features include:

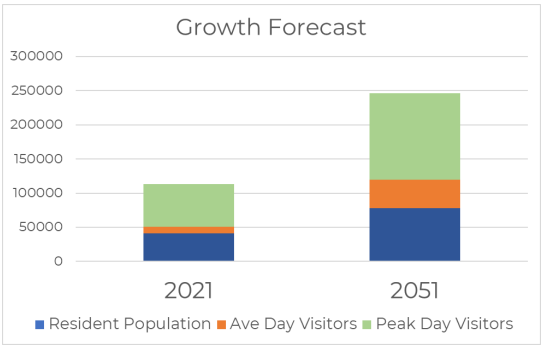
- Residential growth will move towards medium and higher density housing.
- Queenstown growth will be focussed on locations with good access to facilities, jobs and public transport.
- The Spatial Plan seeks to concentrate development along public transport corridors that will support high-frequency public transport services. This is West-East from Tāhuna/Town Centre to Waiwhakaata/Lake Hayes and North-South from Frankton to Homestead Bay.

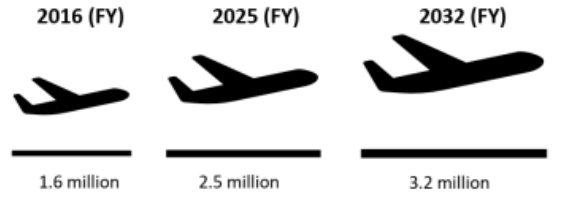
The Spatial Plan includes strategies that create a resilient, sustainable and safe transport network where public transport, walking and cycling is an attractive transport choice.

Growth in Queenstown

Queenstown is one of Aotearoa New Zealand's fastest-growing regions. Forecast demand based on the Queenstown Lakes Spatial Plan (2021) (diagram on next page) predicted over the next 30 years:

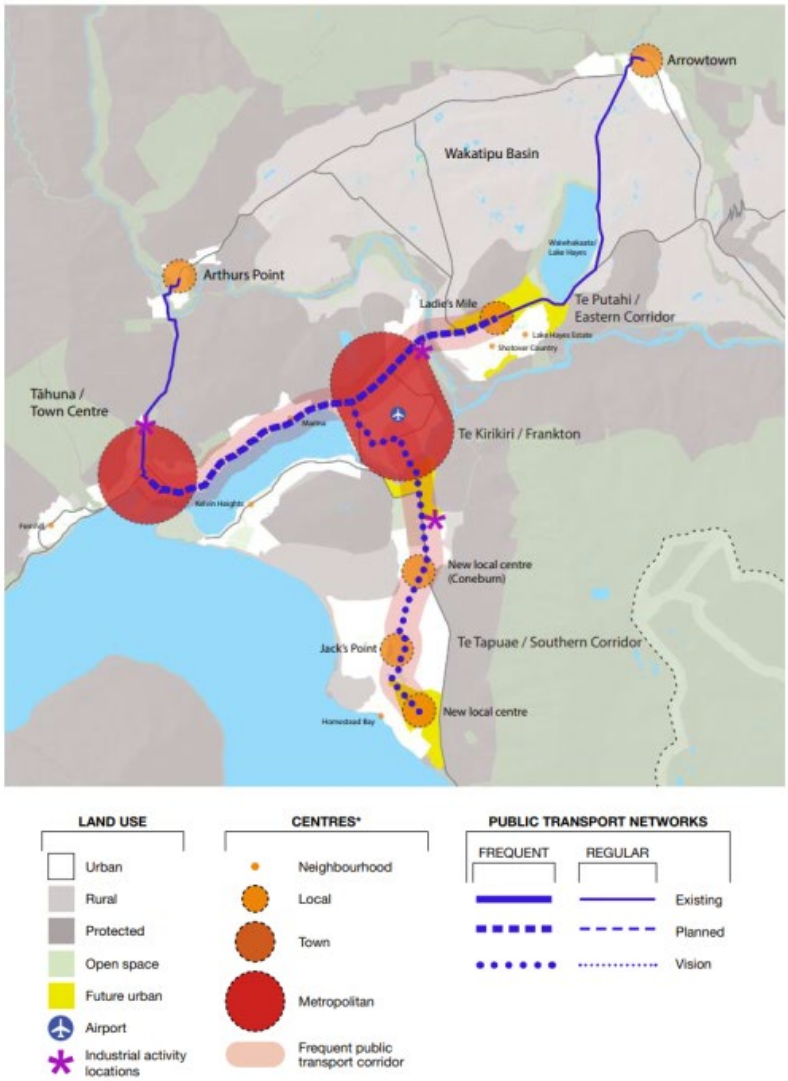
- Nearly a doubling of the resident population, increasing from 41,000 in 2021 to an estimated 78,000 in 2051.
- Nearly a doubling of the peak day population (residents and visitors) from 103,000 people (41,000 residents and 62,000 visitors) in 2021 to an estimated 204,000 (78,000 residents and 126,000 visitors) in 2051.
- Nearly doubling of houses from 22,000 to 40,000.
- An increase of between 10,000 to 15,000 jobs over the 30 year period.
- A 1-2% per annum increase in visitors.
- Queenstown Airport is expected to see significant passenger demands in the future, growing to 3.2M passengers by 2032.
- More than a 60% increase in vehicle trips during peak hours.





This growth is placing increasing pressure on the transport system and the QPTBC is about developing a 30-year strategy to inform future public transport investment decisions for Queenstown within the backdrop of this growth.

Queenstown Spatial Plan Growth Areas



Shift to Public Transport Needed

SH6A is geographically constrained making it challenging and costly to provide additional road capacity. The environmental constraints mean that the transport network is not resilient to disruption. Providing more sustainable options like public transport will help to reduce emissions.

To keep Queenstown's transport system moving, it's important to get more people walking, cycling, and using public transport instead of the current reliance on cars. To give an idea of the scale and volume of passengers required to be accommodated by public transport from the main road network, targets to get people out of cars are forecast as:

- By 2039, over 1,000 trips to be made by -non-car travel modes including buses and ferries, Shotover Bridge approximately 650 trips and Kawarau Falls Bridge approximatrly 1,000 trips in the AM/PM peak periods.
- By 2053: approximately 1,400 trips to be made by non-car travel modes on SH6A, Shotover Bridge approximately 750-850 trips, and Kawarau Falls Bridge of approximately 1,500-1,700 trips in the AM/PM peak periods.

Providing these targets to help get people out of their cars and walking, cycling and using public transport plays an important part in reducing congestion and is needed for planning the future public transport network.

We need your views on options to help shape what the Queenstown public transport network will look like in the future.

Let's take a look at future public transport options

Key Public Transport Design Considerations

Key principles used in the development of options for a new public transport network for Queenstown are:

Walk out and catch frequency	More frequent public transport services mean less wait times between trips. This makes using public transport more attractive. When a service has a 15-minute frequency or higher this means that users can forget about the timetable and make spontaneous trips because the wait times at stops is short. **All of the network options propose to increase the frequency of public transport services to a walk out and catch frequency.**
Span	This is the length of time which a public transport service operates. A service with a long span starts early in the morning and finishes late at night. Services with a longer span tend to have higher usage as people know then can get home even if they are delayed. Queenstown is a 24/7 destination so it's desirable to have a long span. **All network options assume services commencing early in the morning and finishing late at night with the potential for limited after midnight services.**
Directness	Directness is whether a route travels straight between key destinations or makes large detours. A direct service is more attractive than an indirect service for public transport users as the journey time is more competitive compared to driving. In Queenstown the road network limits routes to travel direct as some suburbs are only accessible from one entry point. **Some network options propose new road links to enable suburbs and destinations to be served without needing a detour.**
Corridor capacity	Sometimes a further increase in service frequency does not meaningfully decrease customer wait times but contributes to congestion along the corridor. This threshold tends to be a 2-minute frequency due to delays experienced at traffic lights and passengers getting on and off at stops. Beyond this point buses start to bunch together; the reliability of a service reduces and capacity at bus stops starts to become an issue. **The network options aim to keep the number of buses on State Highway 6A at or below a 2-minute frequency. State Highway 6A is the key bottle neck because the town centre is a key destination and there is a lack of alternative roads to State Highway 6A.**
Overlapping services	This is where lots of public transport routes run along the same corridor before branching off to different destinations. It's good to reduce the number of overlapping services and instead have fewer high frequency services. This is because overlapping services result in an oversupply of service in the trunk section that could be deployed elsewhere on the network. Due to Queenstown Town Centre being a key destination there needs to have some level of overlapping services on State Highway 6A. **Therefore, the network options attempt to balance the number of overlapping**

	services with the number of transfers resulting from terminating services at outer locations.
High-capacity vehicles	Due to the growth planned for Queenstown and the level of mode shift desired, different bus and ferry fleet options have been considered. This is because larger buses and ferries enable more people to be moved using fewer vehicles and drivers which helps to reduce congestion on State Highway 6A. **This may include double deck or articulated buses in the medium and long term for Queenstown that would be limited to main roads where more capacity is needed.**
Transfers	Transfers are when customers need to change between services to get to their destination. Transfers are necessary as it is not possible to provide routes between all origins and destinations. Transfers need to be as seamless by providing a comfortable place to wait between service. It's desirable to avoid transfers for customers travelling from main suburbs to key destinations like Frankton and Queenstown Town Centre. **The network options attempt to balance providing a one seat ride to key destinations whilst limiting the number of overlapping services on State Highway 6A**.
Walking catchment	This is the distance people need to walk to catch public transport. Walking catchment is a balancing act as stops that are too closely spaced result in slow journey times but stops that are too widely spaced reduce accessibility. Stops are generally spaced every 400m to 800m. **For the network options a wider stop spacing along State Highway 6A has been assumed which helps to speed up journey times and reduce congestion. The current stop spacing of approximately 400m has been assumed for suburban areas**.

What might the future Queenstown public transport system look like?

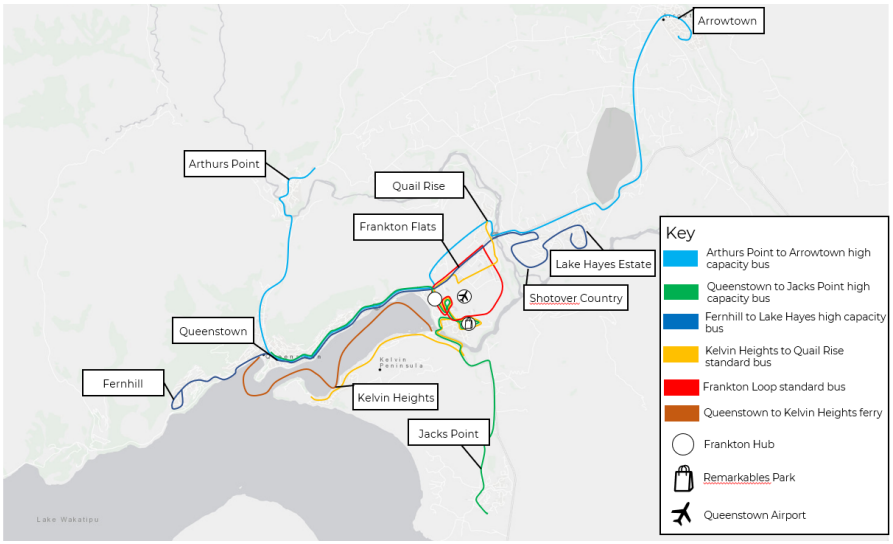
Keeping the key public transport design considerations in mind, options have been developed on what the future Queenstown public transport network may look like. This considers the goals of getting people out of their cars and walking, cycling and using the public transport network. It includes a mix of networks which require transfers and one seat rides.

Option / Description	Pros	Cons
High Capacity High Frequency Network One seat rides (minimising transfers) from Jacks Point, Arrowtown and Lake Hayes to Queenstown using high-capacity bus routes. Italso includes a "Frankton Circular" linking areas of Frankton to each other and the Frankton Hub, plus a Queenstown to Kelvin Heights Ferry.	• Customers travelling between Jacks Point and Queenstown who no longer need to transfer • Customers in Arthurs Point, Quail Rise, Kelvin Heights, Jacks Point, Lake Hayes and Arrowtown who enjoy a frequent service • Customers travelling to Frankton who have more options to travel to Five Mile and Remarkables Park	• People in Fernhill who no long have direct route to Airport • People travelling from Quail Rise who now need to transfer • The Jacks Point to Queenstown route being less direct due to a detour to Remarkables Park • The duplication of services in Frankton which presents users with multiple routes to the same destination
High Capacity High Frequency Network with new Remarkables Park bridge. Uses bus max as a starting point but routes the Jacks Point service via a new Remarkables Park bridge which removes the need for the Frankton loop service.	• Customers travelling from Jacks Point to Queenstown who no longer need to transfer and who have a direct journey • Customers in Arthurs Point, Quail Rise, Kelvin Heights, Jacks Point, Lake Hayes and	• People in Fernhill who no long have direct route to Airport • People travelling from Quail Rise who now need to transfer

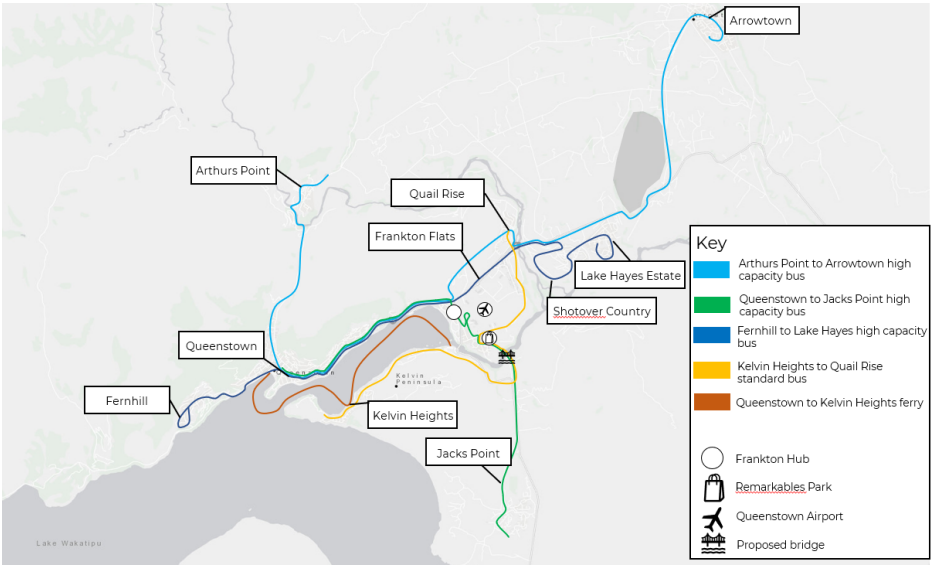
This is because the Kelvin Heights to Quail Rise bus service can accommodate the cross Frankton transfers.	Arrowtown who enjoy a frequent service • Faster journey times for people from Jacks Point due to a new Kawarau River public transport bridge • Simpler and easier to understand network from reduced service duplication in Frankton	
High Capacity High Frequency Network using Malaghans Road. This option uses the High Capacity High Frequency Network as a starting -point and runs Arrowtown to Queenstown bus via Malaghans Road instead of SH6A in order to free up space for more buses on SH6A. A bus service would be maintained between Arrowtown and Frankton. This option also provides the potential for a park n ride for Speargrass Flat. The new Remarkables Park bridge could also be included.	• Customers from Arrowtown who have the option to go via Malaghans Road and bypass any traffic on SH6 • Customers travelling from Jacks Point to Queenstown who no longer need to transfer and who have a direct journey • Customers in Arthurs Point, Quail Rise, Kelvin Heights, Jacks Point, Lake Hayes and Arrowtown who enjoy a frequent service • Faster travel time between Arrowtown and Queenstown due to the higher speed limit on Malaghans Road	• People in Fernhill who no long have direct route to Airport • People travelling from Quail Rise who now need to transfer • Increased terminating services in Stanley Street which puts more pressure on the interchange • Increased operating costs from having two bus routes from Arrowtown
One seat ride. Similar to the current bus network but uses standard buses at high frequency and extends the Jacks Point bus all the way directly into Queenstown.	• Avoids the detour into Remarkables Park for customers from Jacks Point • Service from Fernhill to the Airport retained	• Increased congestion on State Highway 6A due to the use of standard buses • Service duplication along State Highway 6A which present multiple routes to the same destination • Lower frequency services due to the inefficiency of running duplicate services • Higher number of drivers required due to the inefficiency of using standard buses
Ferry to Frankton Beach. High-capacity ferry service from Kelvin Heights and Frankton Beach. Jacks Point and Arrowtown buses continue into Queenstown.	• Ferry services avoid congestion on State Highway 6A • Greater resilience from road closures on State Highway 6A	• Increased walking distance due to the limited catchment area of ferries • Reduced accessibility due to the difficulty of boarding and alighting for people with limited mobility • Slower journey times due to the limited operating speed of ferries

		• Ferries are more impacted by poor weather conditions than road based transport • Unable to replace bus services for inland suburbs
Ferry to Lake Hayes. High frequency service using jet boats down the Kawarau River with a feeder bus service in Lake Hayes, Shotover Country and Ladies Mile	• Ferry services avoid congestion on State Highway 6A • Greater resilience from road closures on State Highway 6A	• Increased walking distance due to the limited catchment area of ferries • Reduced accessibility due to the difficulty of boarding and alighting for people with limited mobility • Slower journey times due to the limited operating speed of ferries • Ferries are more impacted by poor weather conditions than road based transport • Unable to replace bus services for inland suburbs
Ferry to Jacks Point. High-capacity ferry to Homestead Bay with supporting bus service from Jacks Point into Queenstown	• Ferry services avoid congestion on State Highway 6A • Greater resilience from road closures on State Highway 6A	• Increased walking distance due to the limited catchment area of ferries • Reduced accessibility due to the difficulty of boarding and alighting for people with limited mobility • Slower journey times due to the limited operating speed of ferries • Ferries are more impacted by poor weather conditions than road based transport • Unable to replace bus services for inland suburbs

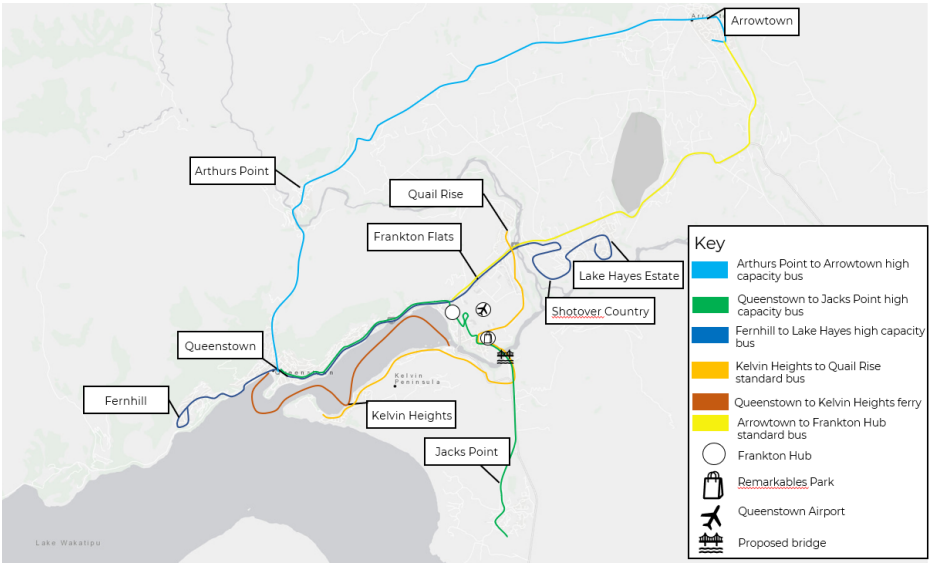
Option 1: High Capacity High Frequency Network



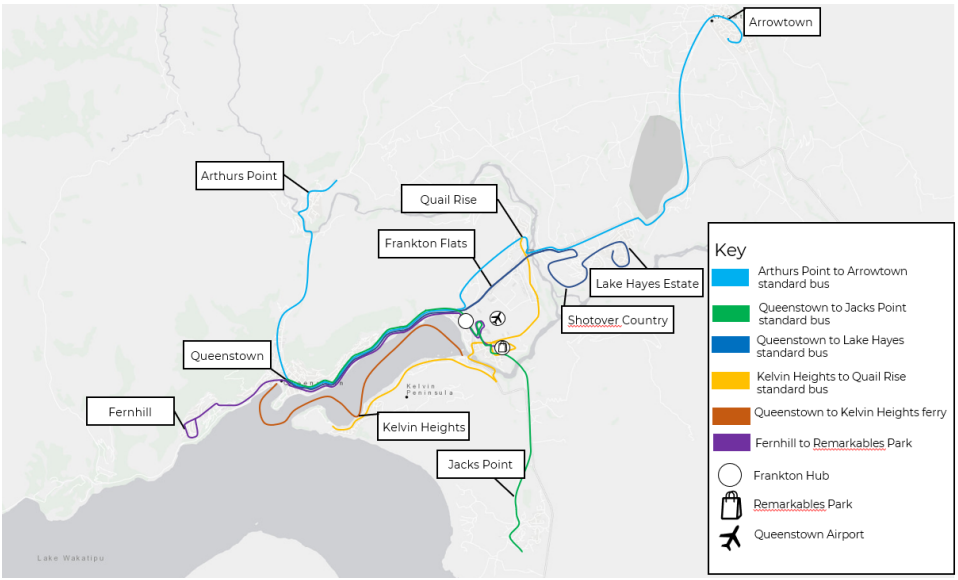
Option 2: High Capacity High Frequency Network with Remarkables Park Bridge



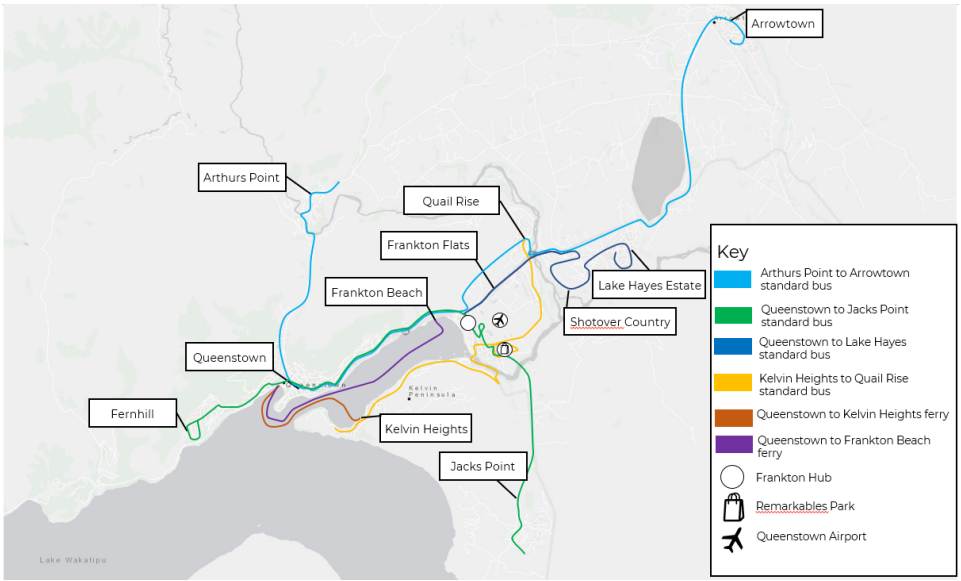
Option 3: High Capacity High Frequency Network Using Malaghans Road



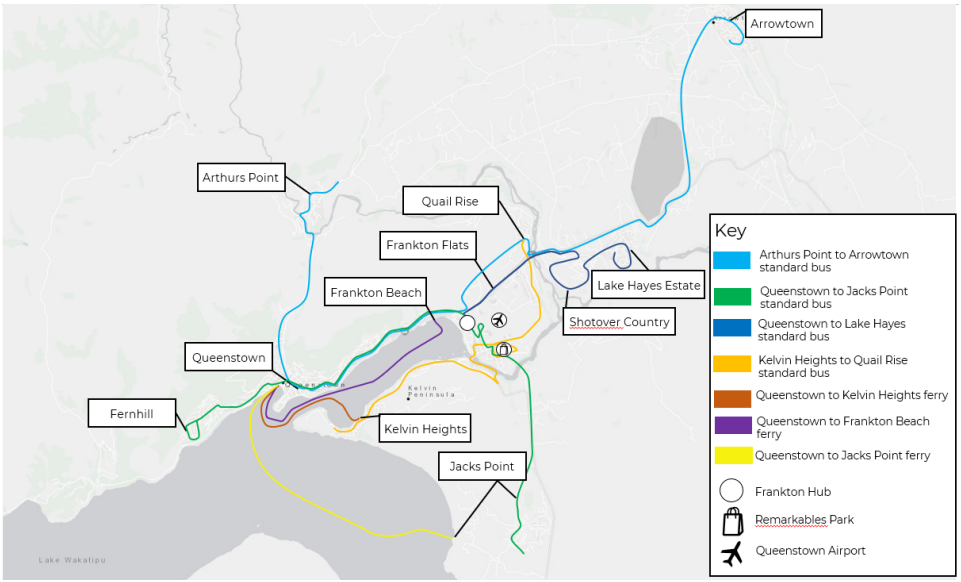
Option 4: One Seat Ride Network



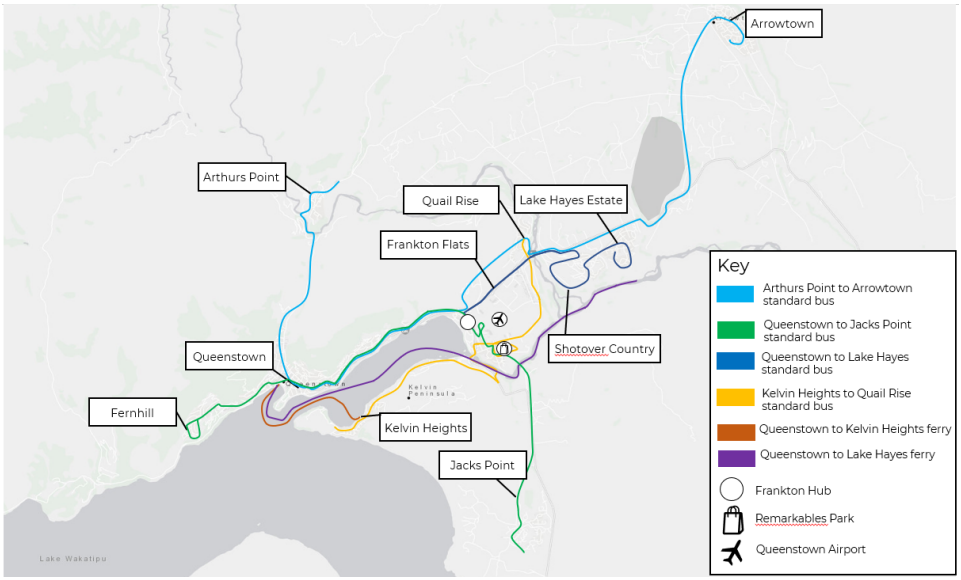
Option 5: Ferry to Frankton Beach



Option 6: Ferry to Jacks Point



Option 7: Queenstown to Lake Hayes Ferry



Having considered the long list of service pattern options above, tell us what you like and/or don't like about the options? Are there any other options which need to be considered?

What vehicles will be used?

A number of key principles will guide the selection of the future bus fleet, including:

Capacity	This is the number of passengers that the vehicle is able to transport. Based on Queenstown's growth, we need **high capacity buses to cater for demand.**
Weight	A key consideration when attaining high-capacity buses is the vehicle weight which is a particular **constraint for battery electric buses because these are generally heavier than the equivalent diesel or trolley buses.**
Turning Circle	Turning circle is the minimum radius which a vehicle needs to turn around which is a measure of how manoeuvrable a vehicle is. It's influenced by the length of the vehicle, the distance between axles, the amount of front and rear overhang and whether the bus has steerable rear axles. **Vehicles need to be able to safely navigate Queenstown's urban road network**
Vehicle Length	This is an important consideration for the interaction between these vehicles and general traffic. A longer vehicle is harder to overtake, has larger blind spots and is more likely to obstruct intersections. **Articulated and bi-articulated buses would also require longer bus stops in order for the rear of the bus to be able to pull up in line with the kerb.**
Overhead Clearance	This is the space needed for a bus to safety pass under obstacles such trees, verandas, street light poles and power poles. The amount of space needed depends on type of buses used. **Should double-deck buses be implemented in Queenstown then the routes used by double deck buses and the dead runs would need to be cleared for obstructions.**

What bus options are being considered?

Three high capacity bus options are being considered for the future Queenstown public transport system including: double-decker, articulated, and bi-articulated buses. These are described below, along with a comparison to a standard bus.

Bus Option	Capacity	Turning Circle	Length	Height
Standard Bus 	55-75	25m	10-13m	3.4m
Double Decker 	80-100	25m	11-13m	4.3m

Articulated 	110-130	24m	18m	3.4m
Bi-Articulated 	150-180	24m	24m	3.4m

Having considered the bus fleet options above, tell us what you like and/or dislike about the bus fleet options? Are there any other vehicle types which need to be considered?

Moving to a low carbon public transport fleet

We recognise that how we get around day to day can have significant impacts on our environment and our community. This is why we are working to deliver a safe, innovative, sustainable and low carbon transport system for Queenstown.

To help achieve this goal, we are working on identifying transformational options for net zero-emissions public transport. This aligns with Queenstown Lakes District Council's Climate Action Plan to have a low carbon transport system and the government's commitment to decarbonising the public transport bus fleet. By 2025, the Government will only allow zero-emission public transport buses to be purchased. This commitment targets decarbonisation of the public transport bus fleet by 2035 as per the Ministry for the Environment's Emissions Reduction Plan (2022).

Transport policy by Otago Regional Council and Queenstown Lakes District Council also require decarbonisation of the public transport system.

Regionally, a key objective of the 2021-32 Otago Regional Public Transport Plan (RPTP) is to contribute to carbon emission reduction and improved air quality through increased public transport mode share and sustainable fleet options, through these key actions:

- Introduce non-CO2 emitting vehicles into the operational fleet in a phased approach based on the re-tendering of contract Units
- Engage with operators to explore options to introduce ethically built non-CO2 emitting vehicles and/or alternative fuelled vehicles into the operational fleet earlier than the retendering of contract Units through contract variations
- Trial new technologies and platforms that improve the efficiency and operation of the public transport network
- Assess alternative funding opportunities for the delivery of the necessary infrastructure (e.g. charging stations) to support the transition to electric and/or alternative fuelled vehicles

We are looking at options to decarbonise Queenstown's public transport services through introducing new technology vehicles.

Bus technologies

The table below shows the options available, their readiness and a short summary of their characteristics.

Technology System	Battery Electric (BEB)	Hydrogen Fuel Cell (HFCB)	Biodiesel	Hybrid
				
Readiness				
Zero Emission/ Suitability				
Overview	Electric motors powered by on board batteries Batteries are typically large, higher bus weight Current actual range to circa 350 km, planned range to 450 km per charge May require upstream infrastructure	Electric motors powered by batteries that are charged using on board hydrogen fuel cells Batteries are smaller, resulting in lighter buses Planned range up to c.350 km per tank Requires substantial upstream power & associated depot infrastructure	Combustion engine powered by sustainably sourced biofuels (biodiesel or biogas). Average range per tank up to c.850 km. Produces GHG from the tailpipe Requires biodiesel supply by others.	Electric motors, typically powered by batteries, operate at low speeds (under 20 km/h) with diesel engines used for higher speeds. Similar range to diesel c.850 km. Produces GHG from the tailpipe when the ICE is in use

- Ready for implementation
- Some parts of the technology and its supply chain are still in prototyping trails and costs may be high. Yet to be successfully delivered from a total cost of ownership perspective.
- Technology exists and can be demonstrated, but low adoption and/or high cost/complexity/weight may preclude.
- Does not meet the criteria / not suitable

Battery Electric buses are considered most suitable as the technology is ready and zero emission. Hydrogen fuel cell technology is zero emission; however, the technology is still being developed and not likely to be ready for implementation within the required timeframes. Biodiesel and hybrid are not considered suitable as they are not zero emission technologies.

Also, ferries can potentially use all the fuels noted above. They have been historically used diesel engines. However, new technologies, such as electrical propulsion are emerging. Hybrid systems have been proposed and are under trial, but presently their increased complexity has resulted in few being commercially

implemented. Electric systems are by far the greatest application and new battery systems and fast charging capability has accelerated this trend.

A number of catamaran designs are being implemented in NZ and will comfortably cruise at 23 knots with 120 to 150 passengers covering both tourist and commuter needs.

Various bus technologies have been considered to decarbonise Queenstown's public transport service including battery electric, hydrogen fuel cell, biodiesel, hybrid, liquid natural gas (LNG) and compressed natural gas (CNG). These options have been considered for the next 15 years as technology may change beyond this.

In your view, what other ways could we decarbonise the public transport system?

On-Demand Public Transport Services

The QPTBC is looking at the option to complement the public transport network with on-demand public transport services. On-demand services would not completely replace the fixed route bus network.

What are on-demand public transport services?

On-demand public transport services have flexible routes and timetables which change based on the location and destinations of passengers who book a trip. It does not use a fixed route or a regular timetabled schedule. For some on-demand services, passengers are limited to set destinations with other on-demand services dropping passengers at any destination within a fixed area.

How would the on-demand services work?

On-demand services are generally provided in a smaller vehicle such as a van with 8-12 seats. Some vehicles would need to be wheelchair and pram accessible and be able to store luggage including bike/ski/snowboard racks. Customers could book at trip using an app or through a contact centre. Virtual bus stops would be used where customers can arrange to walk a short distance (ideally no more than 100m) to a pick-up location.

What is the pro's and con's of on-demand services?

Like all forms of transport, on-demand services have both pro's and con's and isn't suitable in all situations.

Pro's of On-demand Services	Con's of On-Demand Services
Reduces emissions-can use electric and hybrid vehicles and reduce energy consumption	**Less Capacity**-smaller vehicles are able to carry less passengers which may be a limitation at peak times
Improved access to economic and social destinations-makes it easier for people to get to work, shops, health care and recreation, including passengers with limited mobility	**Unsuitable for Long Distance Trips**-On-demand services are unsuitable for long distance trips as it needs to be able to shuttle passengers to a destination and then quickly pick up other passengers

Improved travel choice- Helps reduce traffic congestion by reducing the number of cars on the road	**Unsuitable for Rural Areas**-Where long detours are needed to pick up each passenger in rural areas, it may be more appropriate for a fixed route public transport service or a park and ride facility because passengers can be concentrated at a single point
Flexibility-Can serve areas hard to reach by buses and shortens walking distances to bus stops. Provides more flexible departure times which is not limited by a fixed timetable	**Less Certain Route** and arrival times as timetable and route are responsive to other passengers
Complements but not replace a fixed public transport route	**Lack of Bus Stops Reduces Awareness** of the service, this can be mitigated through greater marketing
	Higher operation cost per passenger

What is being looked at for Queenstown?

A key matter when looking at on-demand services in Queenstown is accessibility to bus routes. The coverage of bus routes in Queenstown is high, with 73% of parcels being within a 5min walk of a bus route. This means there is limited areas where on-demand services may be suitable in Queenstown.

What locations may be suitable for on-demand services in Queenstown?

Queenstown Hill and Goldfields have the highest potential for on-demand services because:

- Limited walkability to fixed route buses on SH6A due to the steep terrain
- Short distance to Queenstown and Frankton allows on-demand services to shuttle back and forth
- Steep and winding streets within Queenstown Hill and Goldfields better suit a smaller vehicle
- The location of hotels and rental homes in the area increases the trips made by tourists and people in the service sector
- Takes short car trips off SH6A by enabling people to use a shared vehicle with on-demand services

Indicative Service Area for Potential Queenstown Hill On Demand Service

Other areas within Queenstown were found to be better suited to the proposed fixed route public transport network or through the provision of park and ride. For example, in Quail Rise and Lower Shotover there are

options to change bus routes to increase coverage and improve access to the public transport network without needing to create a new service.

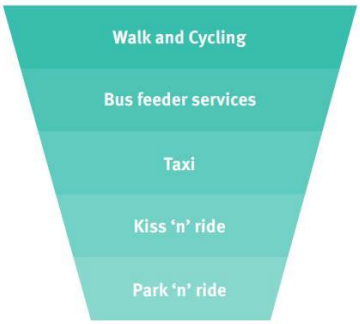
Park and Ride

What is Park and Ride?

Park and Ride is a car and bike parking facility traditionally located in the outer suburbs that connects more people to public transport, providing a safe and convenient alternative way for getting into town. Park up, leave your private vehicle, bike or scooter at the facility, and take public transport for the rest of your journey.

What is the role of Park and Ride?

The role of Park and Ride within the public transport network is to provide access to public transport for those that do not have public transport close to where they live.



However, park and ride should be the lowest priority for providing access to the public transport network because of the high cost of providing car parking spaces. A higher priority should be given to walking, cycling and feeder buses and Kiss and Ride are a more preferred approach. This is because Park and Ride is the least space-efficient way of providing access to the public transport network in urban areas where land is always at a premium. Although preferable to driving for the whole trip, park and ride does not align as well with strategic priorities around sustainability and vehicle kilometre reduction than walking, cycling and feeder bus services.

How could Park and Ride be used in Whakatipu Basin/Queenstown area?

- To serve rural areas where buses services are not viable. Park and ride may be suitable for rural areas due to high car ownership and less competing uses for land compared to urban areas.
- To help get a new bus service off the ground, such as Cromwell to Queenstown or other new growth areas.
- To intercept cars trips on the outskirts of Queenstown by providing a location for drivers park their car and then use public transport. However intercepting trips is considered to be most effective when park and ride is located a short distance from the start of their journey.
- Park and ride must provide a benefit to potential users over driving for the entire trip. To do this it requires supporting strategies, services, infrastructure and policies in relation to car parking cost and availability.

Would you use a Park and Ride facility if it was introduced within the Whakatipu Basin/Queenstown area? If so, where should it be located?

Your feedback is important

It will help us understand your views and will be used to inform future public transport investment decisions for Queenstown. We want to capture your thoughts and ideas now so we can incorporate them into shaping what the Queenstown public transport network will look like in the future.

Here's how to get involved:

Take a look through the options we are sharing here then:

Take the online survey at xxxxx; and/or

Come along to our pop up stall. Check the dates and location at xxxxx. This is a chance to view the project information and ask our team any questions; or

Complete the survey attached and freepost the completed survey to us.

Please provide your feedback by **5pm on Friday xxxxx.**

Next Steps

Once we've received your input we'll publish and engagement summary report so you can see what has been said. We'll consider all feedback received along with technical inputs and ongoing conversations with partners and stakeholders to help identify future preferred options.