

Impact Assessment

Te Anau Downs to Cascade Creek Trail

FINAL REPORT

Prepared for Department of Conservation
(Milford Opportunities Project)

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EXECUTIVE SUMMARY

This impact assessment considers both the economic contribution that may accrue from a proposed trail connecting Te Anau Downs with Cascade Creek, and other benefits both for (local and visiting) trail users and the wider Fiordland community.

Three scenarios are proposed, based on available market size and focussing primarily on use of the trail for cycling:

- a) A higher use case scenario in which there is no fee charged for entry to Fiordland National Park for domestic or international visitors.
- b) A moderate use case scenario in which international visitors are charged a \$50 fee for access to Fiordland National Park but there is no charge for domestic visitors.
- c) A lower use case scenario in which international visitors are charged a \$100 fee for access to Fiordland National Park but there is no charge for domestic visitors.

With somewhat conservative assumptions relating to market penetration and market composition, these scenarios suggest the following outcomes in 2028 (the estimated first year of trail operation).

Scenario 2028	Cycling Visitors (#)	Incremental Visitor Nights (#)	Visitor Expenditure ¹ (\$)	FTE Jobs (#)
Higher use case scenario	74,433	76,599	\$19.8 million	173
Moderate use case scenario	58,802	60,513	\$15.6 million	136
Lower use case scenario	51,954	53,466	\$13.8 million	121

By 2040 the proposed trail is forecast to carry more than 120,000 cycling visitors, and contribute more than 125,000 incremental visitor nights and \$43.5 million in direct economic contribution to Fiordland (in the moderate use case scenario).

All modelling assumes:

- a) a Grade 2 trail
- b) a high-quality experience for trail users
- c) a base level of marketing is undertaken to generate awareness of the opportunities for cycling on a new Te Anau Downs to Cascade Creek trail (both in the domestic and international markets)
- d) a base level of infrastructure is in place to support demand

¹ As context, Tourism Electronic Card Transactions data for the Fiordland RTO area indicates that there was \$82 million of tourism expenditure by international and domestic visitors in the year to November 2019. International visitors accounted for 68% of this expenditure.

e) the Te Anau to Te Anau Downs extension of the Lake2Lake Trail is completed (so a continuous trail exists from Manapouri to Cascade Creek).

In the absence of the planned Te Anau to Te Anau Downs extension of the Lake2Lake Trail, use of a Te Anau Downs to Cascade Creek trail would likely be limited to short (less than two hour), half- and full-day cycling experiences. In all use scenarios, this would have a significant impact on forecast use and economic impact - reducing forecasts for incremental visitor nights and visitor expenditure by approximately 60% in both 2028 and 2040.

While not assumed, there may be some further upside potential if the new trail (in combination with the extended Lake2Lake Trail from Manapouri to Te Anau Downs) were to achieve Great Ride status, for example - benefitting from an enhanced profile and promotion through the Great Rides network.

In addition to the economic impact forecast, it is likely that the proposed trail would deliver a range of other benefits for trail users and the wider Fiordland community. Amongst these are physical and mental health benefits for trail users, social group benefits, and opportunities for individuals to build confidence and self-esteem.

As a low carbon impact tourism activity, and recreational resource for the local community, the trail is also likely to deliver environmental benefits.

Finally, if development were to proceed, the trail would likely deliver significant regional development benefits: enhancing the profile of the local community, building pride, attracting visitor expenditure that helps to sustain valued local services (especially in the shoulder and off-peak seasons), and attracting people to live, work and invest in Fiordland.

Please note: this assessment does not consider benefits in relation to the costs associated with trail development or the ongoing maintenance and management of the trail. Further design work and analysis is being undertaken by the Milford Opportunities Project team through other workstreams and it is assumed that the outcomes of that work will be considered in conjunction with this report.

INTRODUCTION

Background

An integrated Masterplan has been developed to address a series of longstanding issues and challenges facing Milford Sound Piopiotahi and the Milford Road Corridor (SH94 connecting Milford Sound Piopiotahi village with Te Anau).²

Amongst key concepts outlined in the Milford Opportunities Project (MOP) Masterplan are proposals to establish a new Te Anau hub - supporting the town's growth as a standalone destination and starting point for the journey to Milford Sound Piopiotahi - and to develop a range of experiences along the Milford Road corridor and key nodes. As part of the latter proposal, MOP is considering a shared cycling and walking trail connecting Te Anau Downs with Cascade Creek, and a range of other single- and multi-day walking experiences.

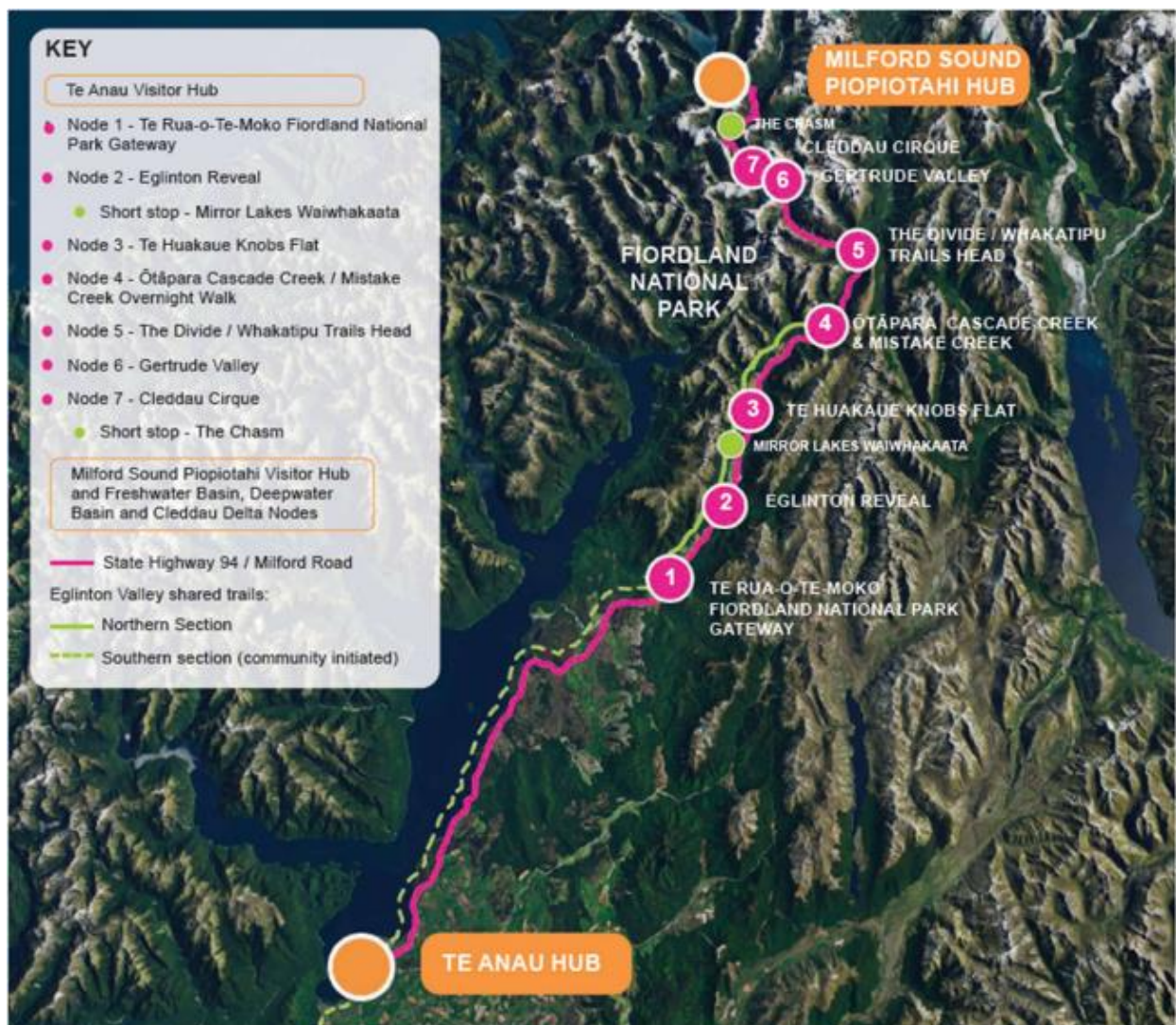
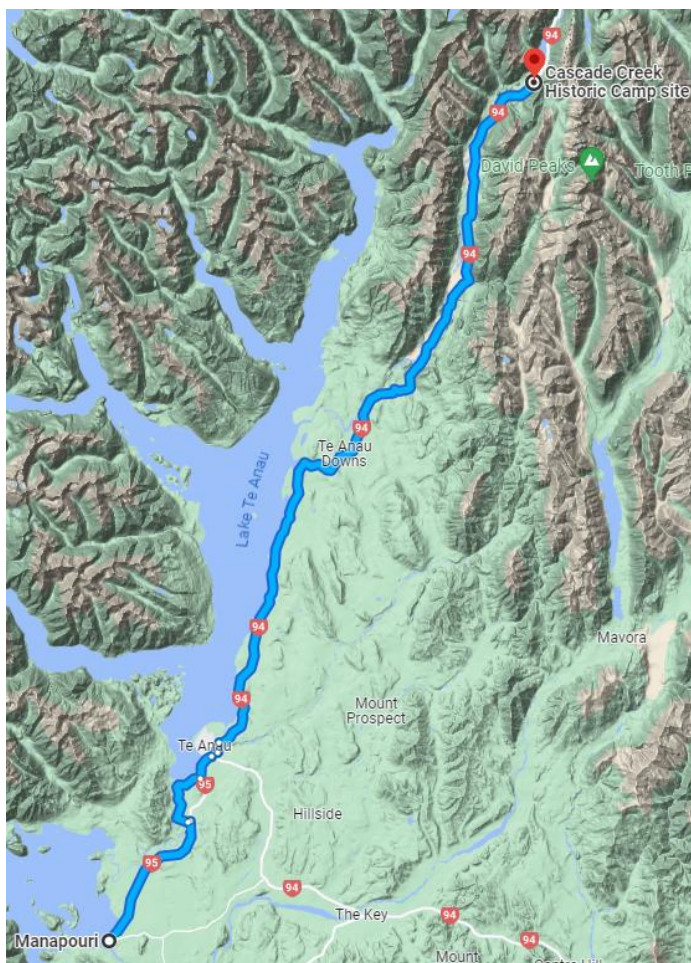


Figure 13: Hubs, Nodes & Short Stop Experiences Plan

² <https://www.milfordopportunities.nz/assets/Projects/210503-MOP-Masterplan-FINAL.pdf>

The proposed trail from Te Anau Downs to Cascade Creek would connect with the planned extension of the Lake2Lake Trail from Te Anau to Te Anau Downs. The combined trail – extending from Manapouri in the south to Cascade Creek in the north – would measure approximately 120 kilometres in length. This makes for an approximate three-day cycling experience (if ‘consumed’ as one multi-day cycling experience) or suitable for a range of half- to full-day cycling and walking experiences.

It is noted that Fiordland Trails Trust and other local groups also have a mix of other trail developments in mind. These include a trail south from Manapouri to Tuatapere, a trail to Hidden Lakes and an Upukerora River Trail. These, together with the Te Anau Downs to Cascade Creek trail (were it to proceed) and the existing Around the Mountains Trail (one of 23 cycle trails that make up New Zealand’s ‘Great Rides’ network), could further enhance Fiordland’s reputation as a walking and cycling destination.



Before preparing a formal business case/s for funding to support the development of the Te Anau Downs to Cascade Creek trail, the Milford Opportunities Project team sought the current high-level assessment of the trail’s likely impact. In conjunction with other streams of work, this impact assessment will: -

- a) assist MOP in understanding whether the activity is likely to be feasible from use, construction, and cost perspectives; and
- b) provide guidance on the type of development for which demand is likely to be greatest (i.e. for short, accessible walking and cycling experiences or longer multi-day cycling experiences) and in which markets (e.g. domestic, international, specific geographic markets of origin, specific demographic segments).

Approach

This impact assessment considers both the economic contribution that may accrue from the proposed trail connecting Te Anau Downs with Cascade Creek, and any wider impacts (such as the social benefits that may accrue to Fiordland residents). To the extent possible, the analysis also considers the proposed trail in isolation of other local trails (i.e. as a standalone trail of approximately

60 kilometres in length) and in conjunction with an extended Lake2Lake Trail (a combined trail of approximately 120 kilometres in length).

The assessment draws on interviews with a range of stakeholders in Fiordland³ to understand possible drivers of demand and any constraints that may affect the district's capacity to provide for the demand anticipated. The analysis also draws on publicly available data from a variety of secondary sources, including: -

For analysis of demand:

- Recent international and domestic visitor market research undertaken by Tourism New Zealand for the Department of Conservation Te Papa Atawhai on behalf of the Milford Opportunities Project⁴
- New Zealand international visitor arrivals data for the year ending December 2019⁵
- Data provided by a leading local operator on visitor activity post-COVID⁶
- International Visitor Survey data for the year ending June 2019⁷
- The Milford Opportunities Project Tourism Report, March 2021⁸
- The Department of Conservation's 2020 National Survey of New Zealanders⁹
- A 2021 evaluation of the Great Rides undertaken for Ngā Haerenga New Zealand Cycle Trails¹⁰
- A study on cycle tourism opportunities in the New Zealand and Australian markets undertaken in 2021 for Ngā Haerenga New Zealand Cycle Trails¹¹
- A recent analysis of the impact of the Lake2Lake Trail on Fiordland undertaken for the Fiordland Trails Trust¹²

³ Interviews were undertaken on a confidential basis with representatives of the Fiordland Business Association, Fiordland Community Board, Fiordland Trails Trust, Great South, Southland Conservation Board, Southland District Council, Visit Fiordland, Waka Kotahi, and several Te Anau businesses involved in tourism- and cycling-related activities.

⁴ Consumers Insights to support development and implementation of the Milford Opportunities Project Masterplan, Kantar, April 2023.

⁵ International Visitor Survey, YE December 2019, Statistics New Zealand

⁶ Passenger data, September 2021 to May 2023, Tourism Milford Sounds

⁷ International Travel and Migration, Visitor Arrivals by Country of Residence, YE December 2019, Statistics New Zealand

⁸ Milford Opportunities Project Tourism Report, Visitor Solutions Ltd and Fresh Info Ltd, 10 March 2021

⁹ Department of Conservation Survey of New Zealanders 2020, Ipsos Public Affairs, 17 December 2020

¹⁰ 2021 Evaluation of Ngā Haerenga Great Rides of New Zealand for Ngā Haerenga New Zealand Cycle Trails, Angus & Associates, January 2022

¹¹ Cycle Tourism Insights: New Zealand and Australian Market Summary for Ngā Haerenga New Zealand Cycle Trails, Angus & Associates, September 2021

¹² Fiordland Trails, Lake2Lake Trail Impact Assessment for Fiordland Trails Trust, Angus & Associates, June 2023

For analysis of supply:

- Accommodation Data Programme for the year ending May 2023¹³
- Inside Airbnb: data available for the Mararoa Waimea ward¹⁴

For analysis of economic and other impacts:

- The recent analysis of the impact of the Lake2Lake Trail on Fiordland undertaken for the Fiordland Trails Trust¹⁵
- The 2021 evaluation of the Great Rides undertaken for Ngā Haerenga New Zealand Cycle Trails¹⁶
- Regional Tourism Estimates prepared by MBIE for the year ending November 2019¹⁷
- Tourism Electronic Card Transactions data, also for the year ending November 2019¹⁸
- The New Zealand Tourism Satellite Account produced by Statistics New Zealand for the year ending March 2020¹⁹

¹³ Accommodation Data Programme, Ministry of Business, Innovation & Employment, YE May 2023

¹⁴ Inside Airbnb: New Zealand, refer <http://insideairbnb.com/new-zealand/>

¹⁵ Fiordland Trails, Lake2Lake Trail Impact Assessment for Fiordland Trails Trust, Angus & Associates, June 2023

¹⁶ 2021 Evaluation of Ngā Haerenga Great Rides of New Zealand for Ngā Haerenga New Zealand Cycle Trails, Angus & Associates, January 2022

¹⁷ Regional Tourism Estimates, Ministry of Business, Innovation & Employment, YE November 2019

¹⁸ Tourism Electronic Card Transactions data, Ministry of Business, Innovation & Employment, YE November 2019

¹⁹ Tourism Satellite Account, Statistics New Zealand, YE March 2020

DEMAND ANALYSIS

This section considers demand for a shared cycling and walking trail connecting Te Anau Downs with Cascade Creek. It sets out the context within which the trail would be developed, outlines key drivers of visitor demand, and concludes with a set of forecasts for the period 2028-2040.

Context

Walking and tramping have long been popular activities for New Zealanders and visitors to New Zealand -

- The Department of Conservation's most recent National Survey of New Zealanders (undertaken in 2020) showed that **64% of Kiwis** had taken a short walk in the bush or forest in the preceding year, 33% had done a day walk/tramp, and 9% an overnight or multi-day tramp.
- International Visitor Survey data shows that, in the year to June 2019 (the last full year for which this data is available prior to COVID), more than 2.36 million international visitors (or more than **60% of all international visitors**) went for a "walk, hike, trek or tramp" in New Zealand, and more than 1.8 million (or approximately 47%) visited a National Park.

While fewer people participate in cycling experiences, cycling is still a popular activity both for New Zealanders and international manuhiri (visitors) -

- A Cycle Tourism Insights study undertaken for Ngā Haerenga New Zealand Cycle Trails in 2021 showed that **27% of New Zealanders** aged 18 years or more had participated in a cycle tourism activity²⁰ in the preceding year.
- International Visitor Survey data for the year to June 2019 indicates that more than 260,000 international visitors (or around **7% of international manuhiri**) participated in a cycling experience during their visit to New Zealand.

While COVID-19 and the closure of New Zealand's international border has made it difficult to measure changes in international visitor demand over recent years, there is evidence of substantial growth in demand for both walking and cycling experiences in the domestic market.

For example, the 2021 Evaluation undertaken for Ngā Haerenga New Zealand Cycle Trails showed a +10% year on year increase in trips taken on the Great Rides network (comparing the year ending June 2021 with the year ending February 2020). Growth in the number of cycling trips was higher than growth in walking trips (at +14% and +7% respectively).

²⁰ Defined as: "cycle tourism involves travelling away from your usual place of residence (on a day or multi-day trip), with cycling being an important or notable part of the trip. It can include cycle touring, bike-packing, cycling to a specific destination or attraction while on your trip (e.g. wineries), mountain biking (e.g. on a trail or at a park), urban cycling and bike-related events."

With the international border closed for most of the year ending June 2021, this growth can be attributed primarily to the domestic market. Indeed, combined walking/cycling trips taken by New Zealand residents on Great Ride trails increased by +25% year on year, more than offsetting the reduction in trips by international visitors that year.

While some of this growth in domestic walking/cycling activity on the Great Ride trails can be attributed to the closure of New Zealand's international border and the substitution of outbound for domestic travel, it is likely that an increase in participation would have occurred regardless.

Demand Drivers

There are a number of 'tailwinds' supporting growth of **cycle** tourism in particular –

- Cycling is a 'slow' and low-impact activity that supports New Zealand's sustainability goals and aligns with a global trend to 'regenerative' tourism development (tourism that contributes more to a destination than it takes - from economic, environmental, social and cultural perspectives).
- As a form of active transport and popular recreational activity, cycling supports the physical and mental health of those who participate, and the wellbeing of communities.
- A driver of regional tourism activity, cycle tourism has been shown to deliver both economic and broad-based social benefits: for example, supporting local enterprise, providing employment opportunities, stimulating the development of events in which local people can also participate, and contributing to community vibrancy.
- Importantly, cycle tourism has been shown to deliver valuable shoulder- and off-peak tourism activity: a boon to highly seasonal destinations and the tourism businesses that have traditionally relied heavily on summer (and, for some, winter) peak-season business.
- The growing body of evidence relating to the benefits of cycle tourism has, in turn, driven investment in trail development, the development of supporting infrastructure (including cycle hire, shuttle services, and clusters of accommodation, food/beverage and other services in popular cycle tourism destinations), and in destination/experience marketing. This investment has further **enabled** cycle tourism activity.
- Growing uptake of e-bikes, and advances in adaptive bike technology, are also enabling a broader cross-section of the population to participate in cycle tourism experiences, and to participate more often.

Locally, these drivers of demand have been recognised in the development of a Cycle Tourism Opportunity Assessment for Murihiku Southland. While this Assessment had yet to be released at the time this report was prepared, we understand that two strategic pillars are:

1. To position Southland as a cycle tourism destination (via a combination of product development and marketing); and
2. To encourage the development of infrastructure to support cycle tourism.

The launch of the new Cycle Tourism Opportunity Assessment for Murihiku Southland will no doubt provide further tailwinds to fuel the growth of cycling in Southland generally and Fiordland specifically. Feedback from local stakeholders indicates that Te Anau and the wider Fiordland district (including Milford Sound Piopiotahi) are likely to be key beneficiaries of this growth given: -

- The existing trail network, including the Lake2Lake and Around the Mountains trails, which provides an established base of popular trails from which to 'build out'.
- Existing infrastructure – such as accommodation, bike hire, food and beverage, and transport services – that makes it easier both to deliver services for a growing number of cyclists and to leverage further growth.
- Te Anau's geographical location: within easy access of Queenstown and on the route to Milford Sound Piopiotahi – perhaps New Zealand's most iconic visitor destination.
- The Milford Opportunities MasterPlan and the significant impact that this is likely to have on Fiordland both as a place to live and as a destination for visitors: for example, through the development of new visitor experiences and supporting infrastructure, through growth in the local population and available workforce, and general increase in the profile of Te Anau as the new 'gateway' to Milford Sound Piopiotahi.

Demand Forecasts

To forecast demand for a new trail connecting Te Anau Downs with Cascade Creek, it is necessary to consider:

- a) the **size of the available market** (i.e. the number of people visiting Fiordland who have an opportunity to experience the new trail),
- b) likely **market penetration** (i.e. the extent to which the available market will participate in experiences on the proposed trail), and
- c) likely **market composition** (specifically, the ratio of international to domestic visitors).

Available Market Size

The Milford Opportunities Project Tourism Report prepared in March 2021 indicates that, in the 2019 calendar year, there were 870,000 visitors to Milford Sound Piopiotahi. This excludes cruise ship passengers – an additional 222,000 visitors. Most (83%) were international visitors, with just 17% being New Zealand residents.

Data provided by Milford Sound Tourism (also for the calendar year 2019) showed that visitation was highly seasonal, with **average** daily visitors ranging from a high of 4,071 in February 2019 to a low of 908 in August 2019. However, when considered on a **daily** basis, visitor counts have exceeded the 4,000 visitor cap set by the Department of Conservation in the Fiordland National Park Management

Plan on many occasions – for example, reaching 5,718 in December 2018, 5,112 in February 2019 and 5,797 in December 2019.²¹

At the time the Tourism Report was prepared, it was expected that (without intervention) visitor numbers (excluding cruise) would continue to grow ‘organically’ in line with international visitor growth, reaching almost 1.4 million in 2045 and almost 1.5 million in 2050.

Anecdotal feedback suggests that visitor activity in Fiordland is rapidly returning to pre-COVID levels, as it is in other South Island destinations (such as Queenstown, Wānaka and Central Otago). If current expectations are correct, the 2023/24 summer season will see visitor numbers at or above 2019 volumes and the trajectory of growth returning to that forecast in 2021. This would result in approximately 1.04 million visitors to Fiordland National Park in 2028 and 1.28 million visitors by 2040.²²

However, it is expected that overall visitor numbers to Milford Sound Piopiotahi will reduce to some extent if the managed access model proposed in the Milford Opportunities Project Masterplan is introduced. This would see access to Fiordland National Park limited primarily to public transport and the introduction of a fee to enter the National Park (for international visitors only).

Under the proposed access model, visitor volumes to Milford Sound Piopiotahi are forecast as follows, considering pricing elasticity of demand.²³

Scenario	2028 (forecast)	2040 (forecast)
\$0 price point	1,026,662	1,255,087
\$50 price point	811,063	991,519
\$100 price point	716,610	876,051

If demand proves more inelastic, visitor numbers may of course reduce to a lesser extent.

In normal circumstances, estimates of available market size for the proposed Te Anau Downs to Cascade Creek trail would consider both the current volumes of visitors to Fiordland and the stimulatory effect that a new trail development might have (i.e. the extent to which the trail might attract **additional** visitors to Fiordland). However, given that the new trail will be located (almost

²¹ Tourist Summary (All Passengers – including FOC/Children), Milford Sound Tourism Limited, data to June 2020.

²² Milford Opportunities Project Tourism Report, March 2021. As calculated using CBA Inputs – Demand Profile for Milford Sound Piopiotahi: Unconstrained (page 246).

²³ Consumer Insights to support development and implementation of the Milford Opportunities Project Masterplan, Kantar, April 2023. Willingness to Pay (WTP) data was collected for each of seven international visitor markets. This data has been weighted to reflect each market’s share of international visitor arrivals in the year to December 2019 (International Travel & Migration, Statistics New Zealand, YE Dec 2019) and a weighted average produced. This weighted average has been applied to estimate pricing elasticity of demand for the international visitor segment. The introduction of the proposed access model is assumed to have no impact on the behaviour of the domestic visitor segment as no access fee will apply to this segment. The scenarios assume that domestic visitors will increase in proportion to 25% of all visitors to Milford Sound Piopiotahi by 2028 (from 17% pre-COVID), as detailed on page 16.

entirely) within Fiordland National Park, **the available market is set by the number of visitors permitted to enter the National Park.**

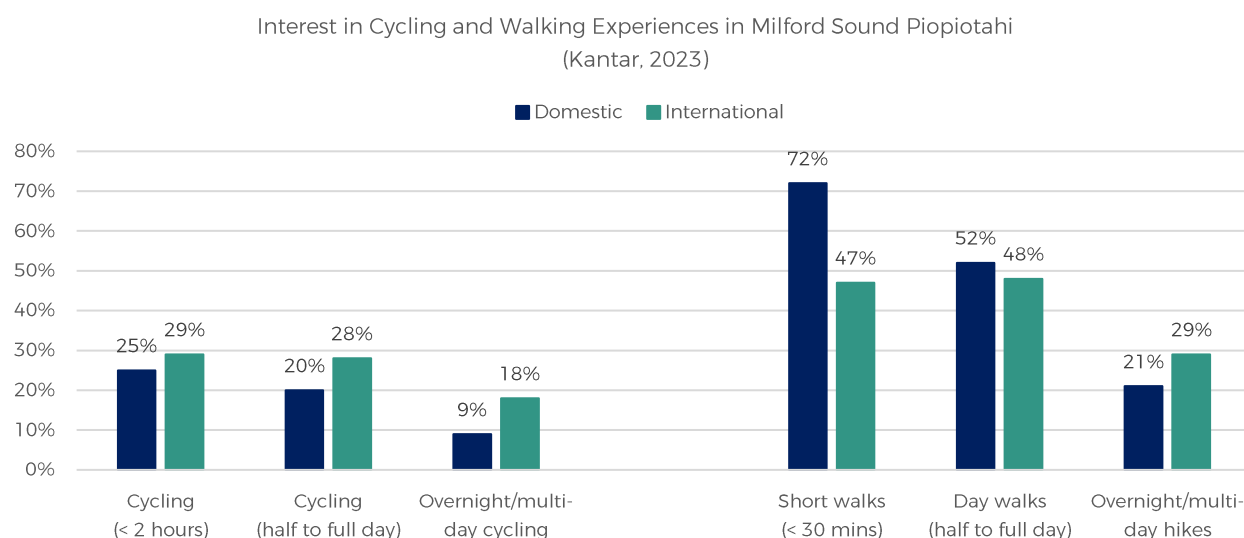
To model demand for experiences on a new Te Anau Downs to Cascade Creek trail, we have assumed three scenarios for available market size:

- a) A **higher use case scenario** in which there is no fee charged for entry to Fiordland National Park for domestic or international visitors.
- b) A **moderate use case scenario** in which international visitors are charged a \$50 fee for access to Fiordland National Park but there is no charge for domestic visitors.
- c) A **lower use case scenario** in which international visitors are charged a \$100 fee for access to Fiordland National Park but there is no charge for domestic visitors.

Modelling Scenarios (Available Market Size)	2028 (forecast)	2040 (forecast)
Higher use case: no access charge	1,026,662	1,255,087
Moderate use case: \$50 access charge for international visitors	811,063	991,519
Lower use case: \$100 access charge for international visitors	716,610	876,051

Market Penetration

Recent international and domestic visitor market research undertaken for Tourism New Zealand and the Department of Conservation Te Papa Atawhai by Kantar shows high levels of interest in walking and cycling experiences in the Milford Sound Piopiotahi area.

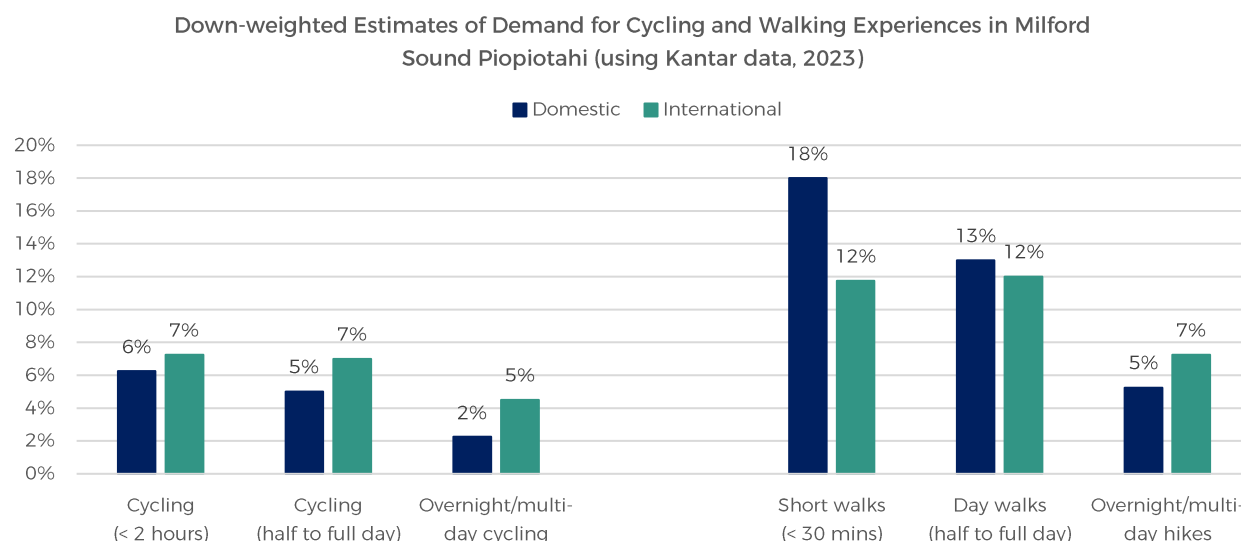


Amongst the international visitors surveyed, interest in cycling experiences in Milford Sound Piopiotahi was highest amongst younger people (aged 18-39 years) and amongst those from China and India. Neither of these markets has historically shown great interest in cycling experiences in

New Zealand and the Kantar researchers suspect a degree of 'compliance behaviour' in survey responses.

Stated 'intention' or 'interest' data is known to overstate demand: more people will generally express interest in a concept or idea, or indicate that they are **likely** to buy a product or participate in an experience, than will actually do so. It is common to down-weight stated intention/interest data to account for this, using a methodology such as that developed by Urban & Hauser.²⁴ Using the Urban & Hauser method, the proportion of respondents that indicate they are 'very likely' to participate is weighted by 0.8; the proportion that indicate they are 'likely' to participate is weighted by 0.25; and the proportion that indicate they are only 'somewhat likely' to participate is weighted by 0.05.

In the Kantar research, only a single data point was collected: the proportion of respondents that indicated they would be 'interested' in participating in each activity while visiting Milford Sound Piopiotahi. Given this, a down-weighting of 0.25 has been applied, to arrive at the estimates of market penetration shown below.

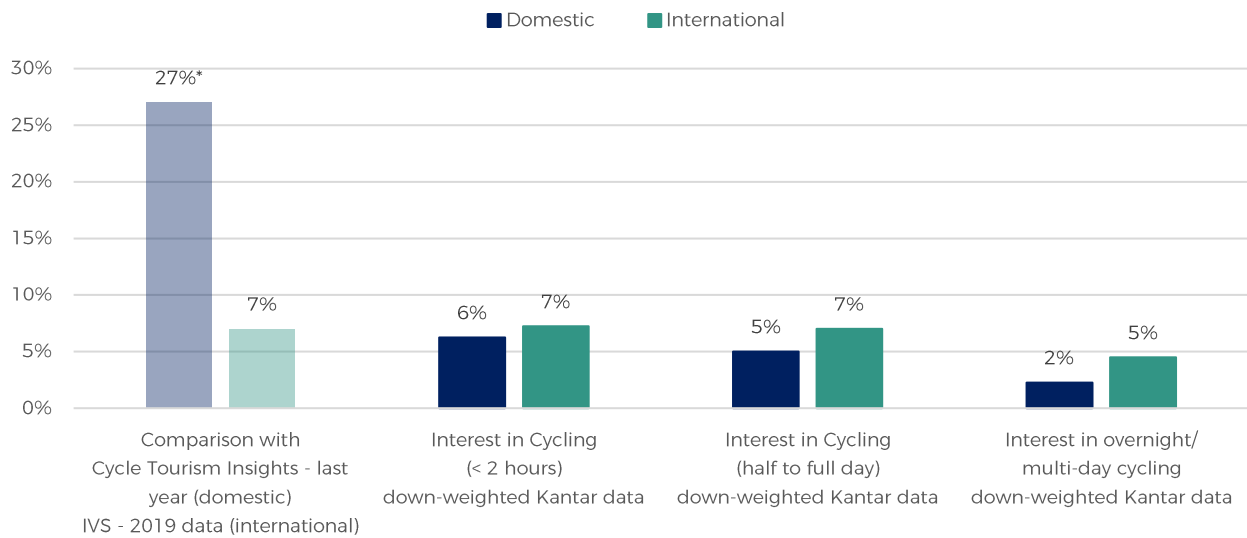


It is noted that these figures may be conservative as they will under-represent the propensity to participate of those who might have expressed 'strong interest' (had the data been collected using a 7-point Likert scale for example: i.e. very interested, interested, somewhat interested, neither, somewhat disinterested, disinterested, very disinterested). At the same time, they will over-represent the propensity to participate of those who might have expressed only mild interest (being 'somewhat interested').

However, the down-weighted figures for international visitors do align closely with reported cycling **behaviour** of international visitors as measured in the 2019 International Visitor Survey. See chart overleaf.

²⁴ Urban, G.L., Hauser, J.R. (1980), Design and Marketing of New Products, Prentice-Hall, Englewood Cliffs, NJ.

Comparison with Other Datasets



* This is the proportion of New Zealanders aged 18 years or more who reported having participated in one or more cycle tourism activities in the previous year. The figure therefore encompasses cycling activity undertaken over a number of possible trips/occasions and in a variety of contexts (including urban settings).

To model demand for experiences on a new Te Anau Downs to Cascade Creek trail, we have considered use of the trail **for cycling only**. This is on the assumption that demand for walking/hiking experiences will be catered for by a range of opportunities within Fiordland National Park, while cycling will only be permitted on the proposed Te Anau Downs to Cascade Creek Trail. Therefore, while some walking activity is to be expected on the trail, cycling may well be its primary purpose.

The assumption for market penetration is based on the down-weighted Kantar data, as below. This shows market penetration in the international market growing from 7% in 2028 to 12% in 2040 (combining figures for day and overnight experiences). In the domestic market, the assumption is that market penetration grows from 8% to 13% in the same period.

Modelling Scenarios (Market Penetration)	2028 (forecast)	2040 (forecast)
	%	%
Domestic visitors	8	13
International visitors	7	12

Market Composition

In the calendar year 2019, international visitors made up 83% of all visitors to Milford Sound Piopiotahi and domestic visitors 17%. While it is likely that international visitors will continue to make up the largest proportion of visitors to Milford Sound Piopiotahi in the future, the introduction of an access charge (for international visitors only) and the development of a new cycle trail is expected to drive some increase in the **proportion** of domestic visitors.²⁵

Therefore, to model demand for experiences on a new Te Anau Downs to Cascade Creek Trail, we have assumed that the ratio of international to domestic visitors will shift from the current 83:17 to 75:25 from 2028. The resulting demand forecasts are shown below.

Higher Use Case Scenario	2028	2040
Available market size	1,026,662	1,255,087
• Domestic visitors (25%)	256,666	313,772
• International visitors (75%)	769,997	941,315
Market penetration		
• Domestic visitors (8% in 2028 to 13% in 2040)	20,533	40,790
• International visitors (7% in 2028 to 12% in 2040)	53,900	112,958
CYCLING VISITORS	74,433	153,748

Moderate Use Case Scenario	2028	2040
Available market size	811,063	991,519
• Domestic visitors (25%)	202,766	247,880
• International visitors (75%)	608,297	743,639
Market penetration		
• Domestic visitors (8% in 2028 to 13% in 2040)	16,221	32,224
• International visitors (7% in 2028 to 12% in 2040)	42,581	89,237
CYCLING VISITORS	58,802	121,461

Lower Use Case Scenario	2028	2040
Available market size	716,610	876,051
• Domestic visitors (25%)	179,153	219,013
• International visitors (75%)	537,458	657,038
Market penetration		
• Domestic visitors (8% in 2028 to 13% in 2040)	14,332	28,472
• International visitors (7% in 2028 to 12% in 2040)	37,622	78,845
CYCLING VISITORS	51,954	107,316

²⁵ According to the 2021 Evaluation undertaken for Ngā Haerenga New Zealand Cycle Trails, international visitors accounted for just 13% of all trips taken on the Great Rides in the year prior to COVID (YE February 2020). With possible constraints on access to Fiordland National Park, and increased domestic demand, it is expected that domestic visitors would displace international visitors to some extent.

These forecasts assume: -

- a) a Grade 2 trail
- b) a high-quality experience for trail users
- c) the Te Anau to Te Anau Downs extension of the Lake2Lake Trail is completed (so a continuous trail exists from Manapouri to Cascade Creek)²⁶
- d) a base level of marketing is undertaken to generate awareness of the opportunities for cycling on a new Te Anau Downs to Cascade Creek trail (both in the domestic and international markets)
- e) a base level of infrastructure is in place to support demand (discussed further on page 20)

While this has not been assumed in the forecasts, it is thought there may be upside potential if the new trail (in combination with the extended Lake2Lake Trail from Manapouri to Te Anau Downs) were to achieve Great Ride status, for example.

By way of comparison with existing trails, the moderate use case scenario for 2028 would see the new Te Anau Downs to Cascade Creek trail attracting almost three times the number of cycling trips taken by users of the Lake2Lake Trail in the year ending March 2023 (59% of 32,560 trips, or 19,210 trips in total).²⁷

As shown in the table overleaf, the moderate use case scenario for the Te Anau Downs to Cascade Creek trail would also result in a higher number of cyclists than all but four of the Great Rides in the year immediately prior to COVID (these being the Hawke's Bay Trails, Tasman's Great Taste Trail, Queenstown Trails and the Remutaka Cycle Trail). It is noted that these trails are all close to major population centres or have significant year-round commuter/active transport use.

Use under the moderate use case scenario for the Te Anau Downs to Cascade Creek trail would significantly exceed that of other well-established South Island destination trails such as the Otago Central Rail Trail, the West Coast Wilderness Trail and the Alps to Ocean.

²⁶ The option for overnight/multi-day experiences is largely dependent on there being a continuous trail from Manapouri through to Cascade Creek (and therefore completion of the Te Anau to Te Anau Downs extension of the Lake2Lake Trail).

²⁷ Fiordland Trails, Lake2Lake Trail Impact Assessment for Fiordland Trails Trust, Angus & Associates, June 2023

Cycling Trips	YE Feb 2020 ²⁸
Hawke's Bay Trail	188,037
Tasman's Great Taste Trail	182,506
Queenstown Trails	131,038
Te Anau Downs to Cascade Creek (Higher Use Case Scenario 2028)	74,433
Remutaka Cycle Trail	73,451
Te Anau Downs to Cascade Creek (Moderate Use Case Scenario 2028)	58,802
Te Ara Ahi	55,343
Te Anau Downs to Cascade Creek (Lower Use Case Scenario 2028)	51,954
Coppermine Trail	51,870
Otago Central Rail Trail	46,427
Hauraki Rail Trail	44,790
Twin Coast Cycle Trail	30,949
West Coast Wilderness Trail	30,568
Great Lake Trail	21,010
Alps 2 Ocean	19,505
Lake2Lake Trail (estimated cycling trips YE March 2023)	19,210
Mountains to Sea Trail	14,728
Waikato River Trail	14,428
Motu Trails	10,884
Roxburgh Trail	9,417
Timber Trail	8,863
Clutha Gold Trail	5,993
Old Ghost Road	5,173
Queen Charlotte Track	5,054
Around the Mountains	3,319
St James Cycle Trail	1,822

Based on stated interest in the range of cycling experiences that might be available on a new Te Anau Downs to Cascade Creek Trail²⁹ the breakdown of use in 2028 is forecast to be as shown in the table overleaf.

²⁸ 2021 Evaluation of Ngā Haerenga Great Rides of New Zealand for Ngā Haerenga New Zealand Cycle Trails, Angus & Associates, January 2022

²⁹ Consumers Insights to support development and implementation of the Milford Opportunities Project Masterplan, Kantar, April 2023.

Market	< 2 hour experiences	Half- to full-day experiences	Overnight/multi-day experiences
Domestic			
• Proportion of uses	46%	39%	15%
• Number of trips 2028 (higher)	9,445	8,008	3,080
• Number of trips 2028 (moderate)	7,462	6,326	2,433
• Number of trips 2028 (lower)	6,593	5,589	2,150
International			
• Proportion of uses	37%	37%	26%
• Number of trips 2028 (higher)	19,943	19,943	14,014
• Number of trips 2028 (moderate)	15,755	15,755	11,071
• Number of trips 2028 (lower)	13,920	13,920	9,782
TOTAL			
• Proportion of uses	39%	38%	23%
• Number of trips 2028 (higher)	29,388	27,951	17,094
• Number of trips 2028 (moderate)	23,217	22,081	13,504
• Number of trips 2028 (lower)	20,513	19,510	11,932

Similarly, based on the pattern of visitation to Milford Sound Piopiotahi in the calendar year 2019³⁰, the seasonal distribution of cycling visitors on the Te Anau Downs to Cascade Creek track in higher, moderate and lower use case scenarios would look as follows. In the moderate use case scenario, this would equate to average daily trail (cycling) users of 60 (in August) and 298 (in February).

Month	Proportion of visitors to MS			Avg. per day (moderate use case scenario)
	2019	Higher use case scenario	Moderate use case scenario	
January	13%	9,975	7,880	254
February	14%	10,564	8,345	298
March	12%	9,033	7,136	230
April	11%	7,914	6,252	208
May	5%	3,825	3,022	97
June	4%	2,826	2,232	74
July	4%	2,885	2,280	74
August	3%	2,356	1,861	60
September	5%	3,376	2,667	89
October	6%	4,811	3,801	123
November	10%	7,491	5,918	197
December	13%	9,378	7,408	239

This may overstate seasonality of use as cycling trails have been shown to lift regional visitation in the shoulder (and even off-peak) seasons. Any increase in the proportion of domestic visitors to Milford Sound Piopiotahi can also be expected to smooth seasonality to some extent.

³⁰ Milford Opportunities Project Tourism Report, Visitor Solutions Ltd and Fresh Info Ltd, 10 March 2021

SUPPLY

A range of hard and soft infrastructure will be required to cater for new tourism demand generated by the proposed Te Anau Downs to Cascade Creek trail: including bike hire and shuttle services, accommodation, food and beverage services, and the workforce needed to deliver the services required.

Alongside the transport infrastructure envisaged as part of the new operating model planned for Milford Sound Piopiotahi, local stakeholders are confident that supply will expand organically to meet demand, as it has in other centres which have experienced rapid cycle tourism growth (such as Central Otago). It is thought likely that new and existing commercial operators will recognise the opportunity presented by the Te Anau to Cascade Creek trail development - alone and in combination with the Lake2Lake Trail and its planned extension - and invest accordingly. (This is considered especially likely if the trail helps to address the perennial challenges of seasonality in Te Anau).

Any challenge may lie with accommodation supply, given that there are currently no confirmed developments in the pipeline³¹ and long lead-in times for development.

As at May 2023, the Fiordland RTO area had 2012 commercial 'stay units' (e.g. motel units, hotel rooms, campsites etc.), with each 'stay unit' accommodating an average of 1.7 people.³² This equates to daily accommodation capacity for 3,420 people.

Inside Airbnb³³ data indicates that there are a further 294 entire dwellings available for rent on Airbnb in the Mararoa Waimea ward, and 114 private rooms. If we assume that entire dwellings provide accommodation for an average of two people each, and private rooms accommodate 1.7 (as with commercial 'stay units'),³⁴ this adds further accommodation capacity for 782 people.

This indicates that there is currently commercial accommodation capacity in the Fiordland RTO area for approximately 4,000-4,200 people.

In the most recent year for which data is available (year ending May 2023), commercial accommodation occupancy ranged from a low of 18% in July 2022 to a high of 72% in February 2023. This suggests that there were still 1,120 beds available per night at the peak of the summer season – sufficient to accommodate the incremental demand generated by the proposed Te Anau Downs to Cascade Creek trail in 2028 (in higher, moderate and lower use case scenarios).

³¹ A proposed development at Te Huakaue Knobs Flat will accommodate approximately 400 people but this is not yet confirmed.

³² Accommodation Data Programme for the year ending May 2023

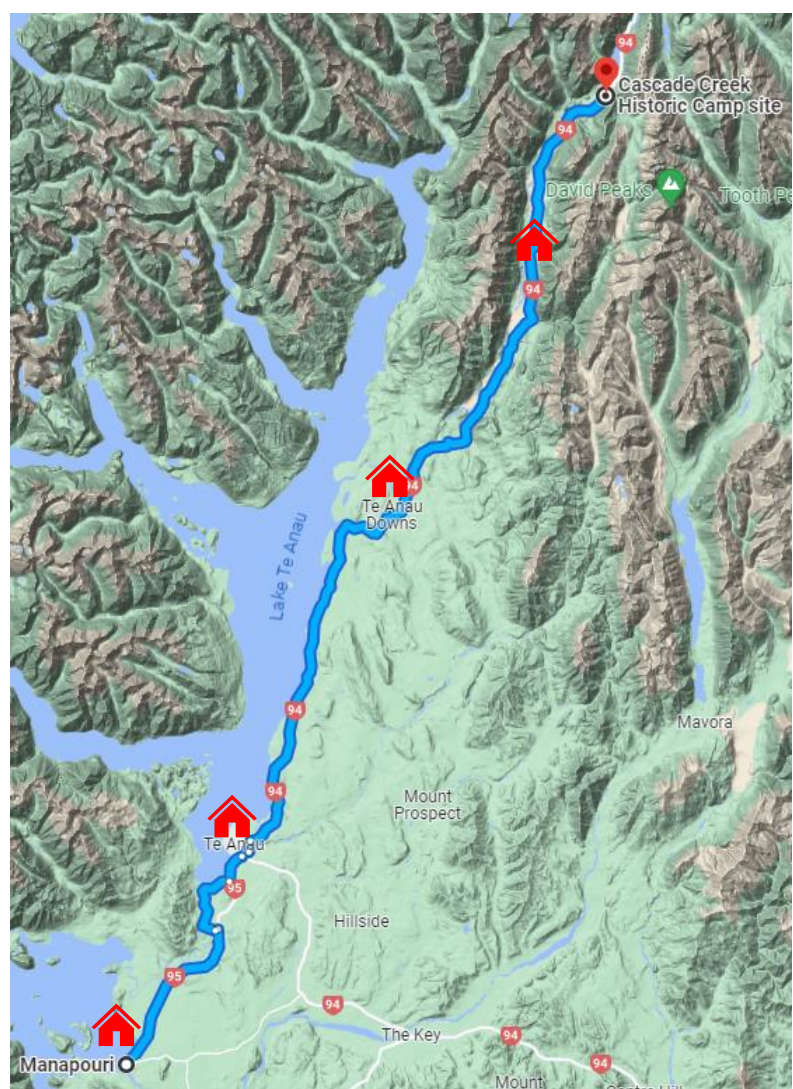
³³ <http://insideairbnb.com/new-zealand/>

³⁴ Calculations are conservative to account for the fact that peer to peer accommodation is not always available year-round (for example, there is an unknown degree of private use).

Nevertheless, the changes proposed under the new operating model for Milford Sound Piopiotahi are likely to result in additional demand for accommodation in Te Anau (as the 'centre of gravity' for day trips shifts from Queenstown to Te Anau). This means that new accommodation supply – such as that proposed at Te Huakaue Knobs Flat – will be important if the economic and other benefits of a Te Anau Downs to Cascade Creek trail are to be realised.

As around 80% of trail trips are likely to be half- to full-day trips or of less than two hours in duration, much of the accommodation supply required will be 'off trail' (for example, accommodation in Te Anau accessed by planned transport services pre-/post-experience on trail). However, accommodation on/adjacent to the trail may be needed for up to 13,504 overnight/multi-day cycling trail users (in the moderate use case scenario).

Considering the approximately 120km length of a combined Manapouri to Cascade Creek trail – and an average daily cycling distance of 40-45km – this suggests suitable accommodation may be needed at Manapouri, Te Anau, Te Anau Downs, and Te Huakaue Knobs Flat. This would give trail users a range of options for 20-60km legs over two to four days in total.



FORECAST IMPACT

Economic Impact

Should it proceed, the Te Anau Downs to Cascade Creek trail will make a **direct economic contribution** to Fiordland. Beyond the period of trail planning and construction (during which money will be spent on goods and services, including by visiting workers), this direct economic contribution will accrue primarily from the expenditure of visiting trail users who might not have otherwise travelled to Fiordland, and from those who choose to stay longer than they might otherwise have done in order to experience the trail. This direct economic contribution is driven principally by **incremental visitor nights**.

An **indirect economic contribution** will also result from jobs created and the flow-on effects from the re-spending of money by households and businesses within the local economy. Also referred to as 'the multiplier effect', this is the additional economic impact created as a result of the direct economic contribution.

Direct Economic Contribution

This analysis considers direct economic contribution in relation to trail users only (i.e. excluding the design and construction of the trail and other expenditure by the Milford Opportunities Project team on trail development and maintenance).

For the purposes of the analysis, it is assumed that just 10% of trail users are local residents³⁵ and 90% are people visiting Fiordland: -

- a) primarily to experience the Te Anau Downs to Cascade Creek trail (including some in combination with the extended Lake2Lake Trail) or
- b) extending their stay in the Milford Sound Piopiotahi area in order to experience the Te Anau Downs to Cascade Creek trail.

The modelling also assumes that: -

- a) Most people participating in less than 2-hour experiences will not stay an extra night in Fiordland (i.e. they will be day visitors or staying overnight but able to include this experience in an existing itinerary). However, some of these visitors will need to stay an extra night in order to combine an up to 2-hour experience with other activities in Milford Sound Piopiotahi. We have assumed an **incremental 0.2 visitor nights** per trail user participating in an up to two-hour experience.
- b) Most people participating in a half- to full-day experience will require an extra night/s in Fiordland in order to do so. We have assumed **one incremental visitor night** per trail user participating in a half- to full-day cycling experience.

³⁵ This proportion of local users is much lower than that observed on the Lake2Lake Trail but is in line with destination Great Rides – those without significant population centres nearby – such as West Coast Wilderness Trail, The Old Ghost Road, Alps 2 Ocean, and Mountains to Sea – Ngā Ara Tūhono.

c) All people participating in an overnight/multi-day experience will require extra nights in Fiordland. On the basis that a multi-day experience will take in the Te Anau Downs to Cascade Creek trail and all/most of the extended Lake2Lake Trail from Manapouri to Te Anau Downs, we have assumed **three incremental visitor nights** per trail user participating in an overnight/multi-day experience.

The incremental visitor nights attributable to the Te Anau Downs to Cascade Creek trail would therefore range from 53,466 (in the lower use case scenario) to 76,599 (in the higher use case scenario) in 2028 and from 110,738 (lower use case scenario) to 158,651 (higher use case scenario) in 2040.

Use Scenario - 2028	< 2 hour experiences	Half- to full-day experiences	Overnight/multi-day experiences	TOTAL
Higher use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	29,388	27,951	17,094	74,433
• Trips by visitors in 2028 (90%)	26,449	25,156	15,385	66,990
• Incremental visitor nights	5,290	25,156	46,154	76,599
Moderate use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	23,217	22,081	13,504	58,802
• Trips by visitors in 2028 (90%)	20,895	19,873	12,154	52,922
• Incremental visitor nights	4,179	19,873	36,461	60,513
Lower use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	20,513	19,510	11,932	51,954
• Trips by visitors in 2028 (90%)	18,462	17,559	10,738	46,759
• Incremental visitor nights	3,692	17,559	32,215	53,466

Use Scenario - 2040	< 2 hour experiences	Half- to full-day experiences	Overnight/multi-day experiences	TOTAL
Higher use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	60,558	57,703	35,488	153,749
• Trips by visitors in 2028 (90%)	54,502	51,933	31,939	138,374
• Incremental visitor nights	10,900	51,933	95,818	158,651
Moderate use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	47,841	45,585	28,035	121,461
• Trips by visitors in 2028 (90%)	43,057	41,027	25,232	109,315
• Incremental visitor nights	8,611	41,027	75,695	125,333
Lower use case scenario				
• Incremental visitor nights pp	0.2	1	3	
• Number of trips 2028	42,270	40,277	24,771	107,317
• Trips by visitors in 2028 (90%)	38,043	36,249	22,293	96,585
• Incremental visitor nights	7,609	36,249	66,880	110,738

Recent research completed for Fiordland Trails Trust indicated that each visitor using the Lake2Lake Trail in the year to March 2023 spent an average of \$176 per person per night. This is lower than the average for visitors on the Great Rides in the equivalent year (\$238.40 per person per night) but not out of line with a number of these trails when considered individually.

For the purposes of modelling, we have assumed that per person per night expenditure attributable to the Te Anau Downs to Cross Creek trail will sit mid-point between the Lake2Lake Trail and Great Rides average (i.e. at around \$210 per person per night in today's dollars). On this basis, and allowing for an increase of +3% per annum (in line with movements in the Consumers Price Index), the direct economic contribution accruing from the Te Anau Downs to Cascade Creek trail in 2028 and 2040 would be as follows.

Direct Economic Contribution (Visitor Expenditure)	2028	2040
Higher use case scenario		
• Per person expenditure per night	\$258.27	\$347.10
• Incremental visitor nights	76,599	158,651
• Total visitor expenditure	\$19,783,306	\$55,067,672
Moderate use case scenario		
• Per person expenditure per night	\$258.27	\$347.10
• Incremental visitor nights	60,513	125,333
• Total visitor expenditure	\$15,628,797	\$43,503,074
Lower use case scenario		
• Per person expenditure per night	\$258.27	\$347.10
• Incremental visitor nights	53,466	110,738
• Total visitor expenditure	\$13,808,684	\$38,437,148

Again, it is noted that these forecasts assume the Te Anau to Te Anau Downs extension of the Lake2Lake Trail is completed (so a continuous trail exists from Manapouri to Cascade Creek to cater for overnight/multi-day cycling experiences). In the absence of this extension, use of a Te Anau Downs to Cascade Creek trail would likely be limited to short (less than two hour), half- and full-day cycling experiences. In all use scenarios, this would reduce forecasts for incremental visitor nights and visitor expenditure by approximately 60% in both 2028 and 2040.

Indirect Economic Contribution

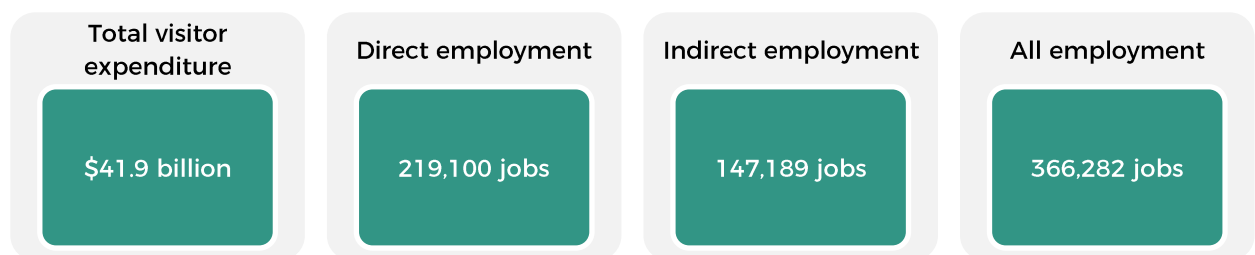
It is beyond the scope of this work to prepare a comprehensive forecast of the indirect economic contribution that would be made by the Te Anau Downs to Cascade Creek trail. However, by drawing upon data from the Ministry of Business, Innovation & Employment's Regional Tourism Estimates³⁶

³⁶ MBIE, Regional Tourism Estimates, year ending November 2019

and data from Stats New Zealand’s Tourism Satellite Account³⁷, we have estimated that in 2028 (in the moderate use case scenario) the trail would support 136 full-time equivalent jobs in Fiordland: 81 directly (e.g. in accommodation services, tour guides) and 55 indirectly (e.g. in supermarkets and other retail stores). This is based on the relationship between tourism expenditure and employment (broadly one job for every \$114,392 of tourism expenditure) as measured prior to COVID but without adjustment for subsequent CPI movements.

Note that pre-COVID data was used to exclude skews relating to the closure of New Zealand’s international borders and the impacts of lockdowns etc on domestic travel patterns.

New Zealand



Fiordland (based on expenditure attributable to the Te Anau Downs to Cascade Creek trail)

Higher use case scenario:



Moderate use case scenario:



Lower use case scenario:



³⁷ Stats NZ, Tourism Satellite Account, YE March 2020

Other Impacts

As demonstrated in other work for Ngā Haerenga New Zealand Cycle Trails³⁸ and the Fiordland Trails Trust³⁹, a Te Anau Downs to Cascade Creek trail can be expected to deliver a range of other benefits, both for (local and visiting) trail users and for the wider Fiordland community.

Amongst these are: -

Benefits for individuals and groups

- Physical and mental health benefits for trail users
- Trails are accessible to a wide range of users, regardless of age, socio-economic factors, or (dis)ability
- Trails provide opportunities for individuals to learn and develop valuable skills (e.g. bike riding for children)
- Separation of trail users from vehicles provides for safe active transport
- Trails provide opportunities for social connection and shared group experiences
- Trail experiences help to build personal self-esteem and confidence

Benefits for the environment

- Cycling is a low carbon tourism activity and recreational opportunity for the local community
- Trail experiences promote understanding of, and advocacy for, the natural environment and local culture
- Trail experiences provide access for planting and other conservation activities

Benefits for regional development

- Trails enhance the profile of their community
- Trails attract valuable off-peak season tourism business
- Trails provide opportunities to stage events (which create opportunities for participation by the local community and contribute to community vibrancy)
- Trails attract visitors and their expenditure which helps to stimulate and sustain services valued by the local community (e.g. retail, hospitality and other services)
- Trails attract people to live, work and invest in their communities

³⁸ 2021 Evaluation of Ngā Haerenga Great Rides of New Zealand for Ngā Haerenga New Zealand Cycle Trails, Angus & Associates, January 2022

³⁹ Fiordland Trails, Lake2Lake Trail Impact Assessment for Fiordland Trails Trust, Angus & Associates, June 2023