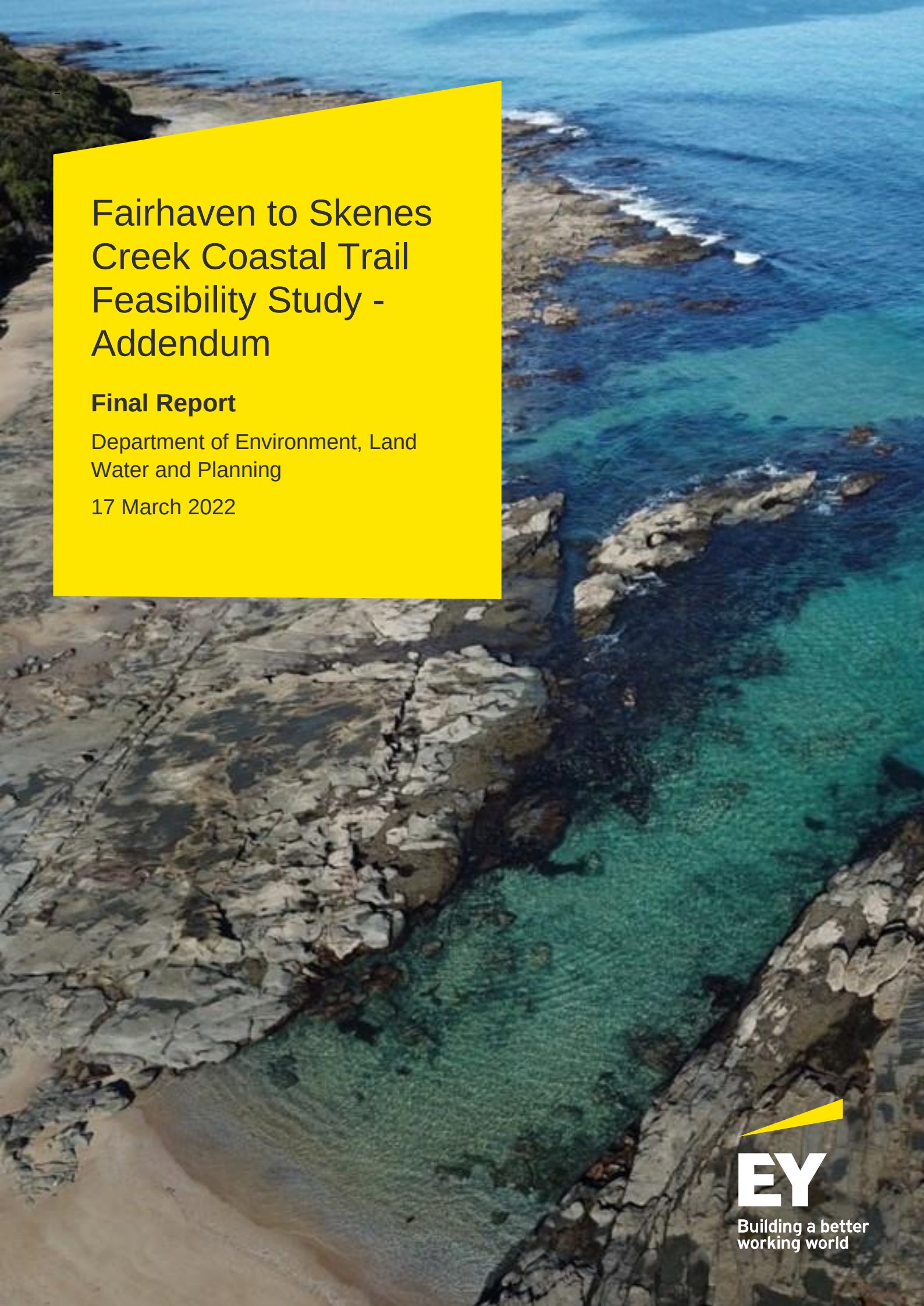

Fairhaven to Skenes Creek Coastal Trail Feasibility Study - Addendum

Final Report

Department of Environment, Land Water and Planning

17 March 2022

Building a better working world

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Emily Steele
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Reliance Restricted

Fairhaven to Skenes Creek Coastal Trail Feasibility Study – Addendum

Dear Emily

We are pleased to present the Department of Environment, Land, Water and Planning (DELWP) with our Final Addendum Report to the 2019 Fairhaven to Skenes Creek Coastal Trail Feasibility Study.

This report may be relied upon by DELWP for the purpose set out in our Engagement Agreement. It should not be relied upon for any other purpose or by any other parties. Please see Appendix A for further details on how the report may be used and relied upon.

Thank you to you and your team for assisting us during the delivery of our work. If you would like to clarify any aspect of this Report or discuss any other related matters then please do not hesitate to contact me on 0402 093 800 or Katie McNamara on 0405 260 014.

Yours sincerely

Matt Colston

Associate Partner

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1. Executive Summary

Background

In 2019, EY developed a Business Case and Feasibility Study for DELWP which investigated the feasibility of a coastal walking trail between Fairhaven and Skenes Creek (The Fairhaven to Skenes Creek Coastal Trail). The reports explored a range of trail designs, concepts and the economic benefits and costs of each. The project returned a BCR of 2.49, demonstrating that for every $1 invested in the trail the Government could expect a return of $2.49.

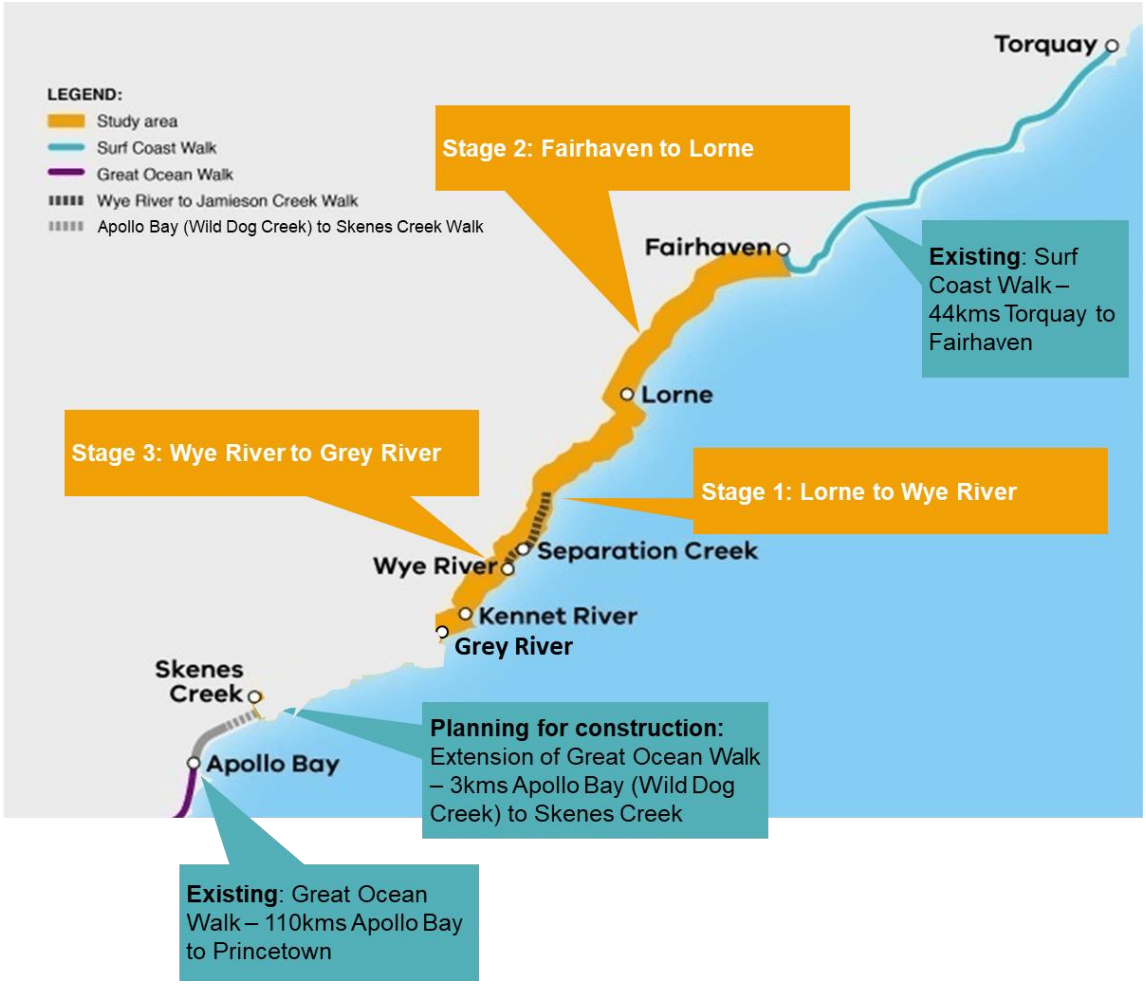
Based on the outcomes of the Business Case and Feasibility Study, the Victorian Government funded the design and construction of a walking trail from Fairhaven to Grey River (the final section of the trail between Grey River to Skenes Creek was not funded). The detailed design for the trail is currently being completed. DELWP will shortly conduct community consultation on the detailed design and requires an updated economic assessment of the project to support the consultation process.

The trail will provide approximately 90 kilometres of existing and new tracks that will link the Surf Coast Walk (beginning in Torquay).

The construction of the new trail has been split into the following stages:

- Stage 1: Lorne to Wye River
- Stage 2: Fairhaven to Lorne
- Stage 3: Wye River to Grey River.

Figure 1: Fairhaven to Grey River Coastal Walking Trail



One of the key economic benefits was additional tourism spend in the region. The COVID-19 pandemic has significantly impacted tourism to Victoria and the Great Ocean Road Region (GORR) and effects are expected to continue for some time. Therefore, it is critical that the previous economic analysis is reviewed and updated to reflect these changed visitor forecasts for the Region and ensure that the project still delivers net economic benefits to Victoria.

This Addendum revises the previous economic analysis, given the changing circumstances following COVID-19. It provides updated assumptions and economic analysis outputs for the project. While there remains a level of uncertainty surrounding COVID-19 and its ongoing impacts to Victoria, this report is based on public information available as of January 2022 and describes Victoria's likely recovery out of the pandemic.

Key updates to the modelling

There are a number of key updates to the modelling, due to new information since the 2019 Study, these are described below.

Project timing

COVID-19 has impacted the timing of the design, construction and opening dates for the walking trail. The opening of each section of trail is expected to be delayed by two to three years as a result. DELWP has also requested that sensitivity analysis be undertaken on a more a "pessimistic" scenario where timelines are delayed a further three years (see Table 1 below). The results indicate that a positive BCR can still be achieved under the "pessimistic" scenario. The assessment period for the project has been extended to account for the delay in the delivery of the project. The model run remains at 20 years however it is now from 2024 to 2043 (instead of 2021 to 2040).

Table 1: Project timeframes

	2019 Feasibility Study	2022 Addendum	Pessimistic (+3 years)
Funding committed	November 2020	November 2020	November 2020
Detailed design	December 2020 – April 2022	September 2021 – July 2022	September 2021 – June 2023
Stage 1: Lorne to Wye River			
Construction commences	July 2022	July 2024	July 2027
Construction Complete	March 2023	October 2025	October 2028
Opening of trail	May 2023	December 2025	December 2028
Stage 2: Fairhaven to Lorne			
Construction commences	July 2022	January 2025	January 2028
Construction Complete	March 2023	June 2026	June 2029
Opening of trail	November 2023	September 2026	September 2029
Stage 3: Wye River to Grey River			
Construction commences	October 2023	July 2025	July 2028
Construction complete	December 2023	October 2026	October 2029
Trail opening	March 2024	December 2026	December 2029

Tourism assumptions

The original 2019 Feasibility Study estimated tourism to the GORR region by relying on two sources of information. Firstly actual tourism numbers for 2019 and secondly Deloitte GORR tourism forecasts (developed in 2018). In 2019, 6.0 million tourists visited the GORR region (this was higher than the Deloitte forecast 5.5 million). The 2019 tourism numbers were used as the starting point and the growth in Deloitte's tourism forecasts for GORR was applied. This approach resulted in resulted in EY forecasted tourism numbers in the 2019 Feasibility Study being slightly higher than the 2018 Deloitte forecast.

In early 2020 Deloitte released a revised tourism forecast for the GORR however the COVID-19 pandemic resulted in a number of lockdowns and restrictions which impacted tourism numbers. In 2020 and 2021 only 4.2 and 4.3 million tourists visiting the GORR respectively, compared with the 2020 forecast of 6.6 and 6.8 million. There have been no further updates to Deloitte's forecasts since 2020.

As a result of the significant impact of the pandemic on tourism DELWP have asked to revise the economic analysis in this Addendum. A review of a review of publicly available tourism data and information would suggest that visitors to GORR are expected to return to pre-COVID levels (2019 actual visitor numbers) over the next couple of years. More detailed calculations are provided in Section 2.2, however at a high level

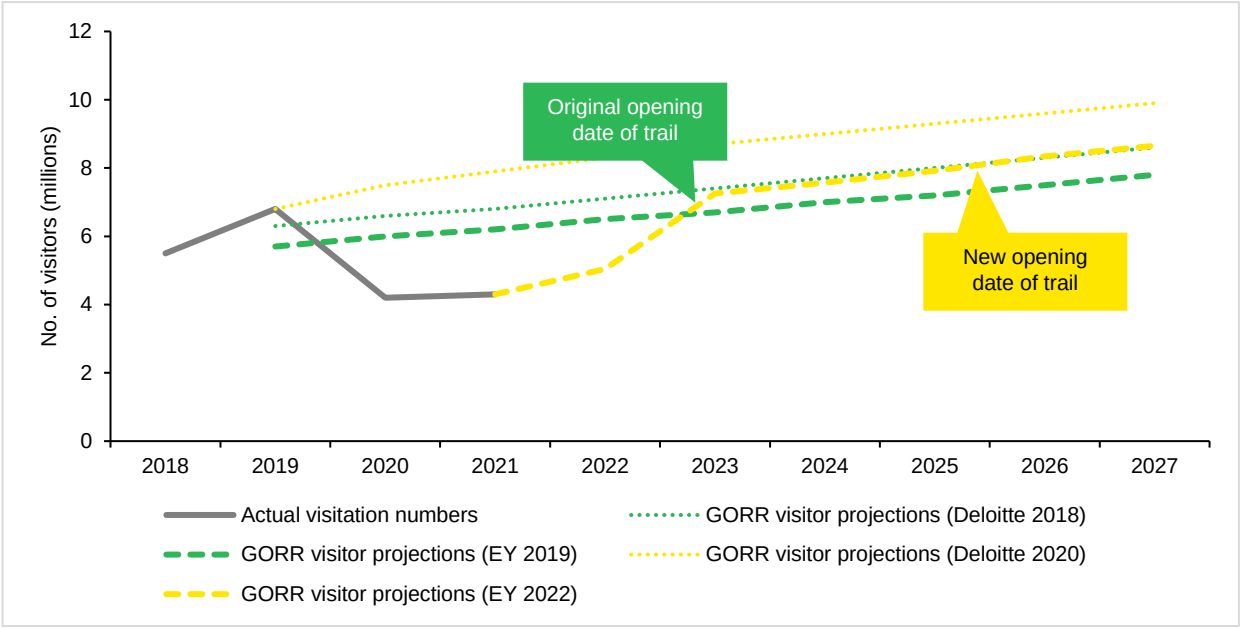
- Intrastate tourists are expected to return to 2019 actual numbers in 2023
- Interstate tourists are expected to return to 2019 actual numbers in 2023
- International tourists are expected to return to 2019 actual numbers in 2025

As for the 2019 Feasibility Study the annual growth rates included in the 2020 Deloitte forecast have been used to estimate GORR tourism numbers beyond 2023. As can be seen from the Figure 2 below, the revised 2022 EY forecast (shown in yellow below) demonstrate that by 2023 tourism numbers are similar to those in 2019, they then grow at the same rate as the 2020 Deloitte forecast (light yellow line).

Table 2: GORR visitor projections (millions)[1]

No. of visitors (millions)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
GORR visitor projections (2018)[2]	6.0	6.3	6.6	6.8	7.1	7.4	7.7	8.0	8.3	8.6
GORR visitor projections (2020)[3]	-	6.8	7.5	7.9	8.3	8.7	9.0	9.3	9.6	9.9
Actual visitation numbers[4]	5.5	6.8	4.2	4.3						

Figure 2: GORR visitor projections (millions)



There have also been a number of other impacts to tourism spend since the pandemic, some visitor groups to GORR are spending more money and staying for longer in the region, generating improved outcomes for the Region's economy. For example, Tourism Research Australia (TRA) data indicates that domestic daytrip visitors to the Great South Coast Region spent approximately 25% more per day in

[1] Deloitte. 2018. *Visitor and accommodation forecast: Great Ocean Road* and Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road.* Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[2] Deloitte. 2018. *Visitor and accommodation forecast: Great Ocean Road*. Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[3] Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road.* Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[4] Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit. 2021. *Great Ocean Road: Regional Tourism Summary, Year Ending September 2021*. Note that these visitation numbers are for the year ending September.

2020 compared to the 2015-19 average (see Section 2 for more details). The limited opportunity to travel internationally is behind this change. As a conservative measure, we have assumed that these trends will only continue over the next five years (i.e. until the end of 2026).

Economic results

Our analysis has estimated the economic costs and benefits associated with a coastal trail between Fairhaven and Skenes Creek compared to the Base Case scenario (no investment).

The overall value for money of an option is summarised by the benefit-cost ratio (BCR). BCRs represent the economic gain to the GORR realised from the trail (i.e. benefits) versus the amount it costs to execute that option (i.e. costs). If the benefits are greater than the costs, then the BCR is greater than 1.0. Conceptually, a BCR below 1.0 can be thought of as spending $1 to achieve less than $1 in financial, economic, social and environmental benefits.

There are limitations, however, to the completeness of any BCR analysis. Some benefits and costs cannot be practically quantified due to a lack of data. In this instance, the benefits and costs (or dis-benefits) that have not been quantified are private sector investment, visitor disruptions and environmental impacts. This means that qualitative factors and the overall strategic environment must also be considered when making a decision on whether to invest.

As demonstrated below, the BCR has increased from 2.49 in the 2019 Study to 2.66 in the revised 2022 Study. The main reasons for this include:

- Although there is expected to be a phased return of some visitor types to pre-pandemic levels, in the long run total visitors to GORR are expected to exceed the projections outlined in the 2019 Study
- In the short run, some visitor types are expected to spend more money in the Region
- In the short run, some visitor types are expected to stay longer in the Region.

Table 3: Cost-benefit analysis results – Regional economic analysis (real) ($m)

	Concept Design Option 2: Part walking trail (2019 Feasibility Study)	Concept Design Option 2: Part walking trail (2022 Addendum Analysis)
Costs (NPV) ($m)		
Capital expenditure	$20.4	$18.5
Operating expenditure	$6.3	$6.5
Total	**$26.8**	**$25.1**
Benefits (NPV) ($m)		
Visitation	$47.0	$48.4
Health benefit	$0.5	$0.5
Construction impact	$14.6	$13.2
Maintenance impact	$4.5	$4.6
Total	**$66.6**	**$66.7**
Outputs		
Net Benefit (Cost)	$39.8	$41.6
Benefit-Cost Ratio (BCR)	**2.49**	**2.66**

Due to the uncertain nature of economic analyses and forecasting in general, it is often helpful to have a range of estimates for the costs and benefits within which the true costs and benefits are likely to fall. Sensitivity analysis is a process used to test the sensitivity of the model results to changes in the model inputs (costs and benefits) and thereby produce a range of outputs rather than a point estimate.

The following scenarios examined the sensitivities of the following parameters as related to:

- Construction costs
- Visitation estimates

- ► Rates of inflation applied to construction costs (due to issues presented by COVID e.g. potential supply shortages)
- ► Construction delays of three years ("Pessimistic" scenario as outlined in Section 2).

There are a number of scenarios that we could have included in the sensitivity analysis, however the scenarios were selected based on the inputs that have the greatest impact on the model outputs. As demonstrated below, the results are most sensitive to changes in visitation, which is why changes in visitation have been modelled in both the expected scenario and the pessimistic scenario.

Table 4: Sensitivity analysis

	Low	Main modelled result	High
Variable construction costs (excluding maintenance) (using medium visitation forecast)	20% lower **BCR: 2.97**	**BCR: 2.66**	20% higher **BCR: 2.43**
Variable specific and extended stay visitation and local resident usage (using medium cost forecast)	Ratio of domestic overnight trail users to region visitors = 0.3%, Ratio of international overnight trail users to region visitors = 1.0%, Ratio of domestic overnight trail users to region visitors = 0.5%; 3% of local residents use trails for walking at least once per week **BCR: 1.90**	Ratio of domestic overnight trail users to region visitors = 0.6%, Ratio of international overnight trail users to region visitors = 1.3%, Ratio of domestic overnight trail users to region visitors = 0.8%; 6% of local residents use trails for walking at least once per week **BCR: 2.66**	Ratio of domestic overnight trail users to region visitors = 0.9%, Ratio of international overnight trail users to region visitors = 1.6%, Ratio of domestic overnight trail users to region visitors = 1.1%; 9% of local residents use trails for walking at least once per week **BCR: 3.88**
Variable construction cost escalation (using medium visitation forecast)	Inflation rate of 1.5% applied to construction costs **BCR: 2.64**	Inflation rate of 3% applied to construction costs **BCR: 2.62**	Inflation rate of 4.5% applied to construction costs **BCR: 2.60**
Variable specific and extended stay visitation and local resident usage (using medium cost forecast) – Pessimistic scenario	Ratio of domestic overnight trail users to region visitors = 0.3%, Ratio of international overnight trail users to region visitors = 1.0%, Ratio of domestic overnight trail users to region visitors = 0.5%; 3% of local residents use trails for walking at least once per week **BCR: 1.73**	Ratio of domestic overnight trail users to region visitors = 0.6%, Ratio of international overnight trail users to region visitors = 1.3%, Ratio of domestic overnight trail users to region visitors = 0.8%; 6% of local residents use trails for walking at least once per week **BCR: 2.39**	Ratio of domestic overnight trail users to region visitors = 0.9%, Ratio of international overnight trail users to region visitors = 1.6%, Ratio of domestic overnight trail users to region visitors = 1.1%; 9% of local residents use trails for walking at least once per week **BCR: 3.45**

The sensitivity analysis demonstrates that the project would still generate a positive BCR if:

- ► Construction costs were increased by 20%
- ► Visitation was approximately 40% lower than anticipated
- ► Construction costs were inflated by a further 4.5% due to potential supply shortages
- ► Construction and opening of the new sections of trail were delayed by three years.

This demonstrates that the project is very robust to adjustments to the costs and benefits.

Outlined below is the updated performance measures for the project.

Table 5: Project performance measures

KPI	Measure	Baseline	Interim target (2029/30)	Final target (2034/35)	Reporting
Benefit 1: Increased tourism revenue (55%)					
Increased tourism yield (20%)	Average domestic daily spend for GORR (10%)	$91 daily spend (2019) $146 overnight spend (2019)	$100 daily spend $155 overnight spend	$105 daily spend $160 overnight spend	Annual Project Report
	Average length of stay for overnight domestic visitors to GORR (10%)	2.7 nights (2019)	2.8 nights	2.9 nights	
Increased economic return and job growth (25%)	Gross Regional Product generated by the tourism sector in the GORR (15%)	$1.1 billion Gross Regional Product (2018-19)	$10 million	$15 million	
	Number of new jobs created through increased visitor spend and ongoing maintenance related to the trail (10%)	0	79	85	
	Number of Aboriginal tourism business related to the trail	0	1	1	
Increase private sector investment (10%)	Number of new tourism businesses in the GORR related to the trail (10%)	Existing total tourism businesses in GORR. Surf Coast 447 and Colac -Otway 325 (772 total)	5 new businesses related to the trail (accommodation, glamping or shuttle service)	7 new businesses related to the trail (accommodation, glamping or shuttle service)	
Benefit 2: Improved visitor experience and reputation (30%)					
Enhance the Great Ocean Road's reputation as a tourist destination (15%)	Visitor satisfaction (collected through annual survey) (15%)	N/A	N/A (survey is yet to be developed)	N/A (survey is yet to be developed)	Annual Project Report
Increased off-peak visitation (15%)	Number of visitors to the GORR outside of summer months (15%)	0	23,000	36,000	
Benefit 3: Improved health and well-being (15%)					
Improved liveability of local communities (10%)	Number of local residents who actively use the new walking trail to remain physically active (walking and running) (10%)	0	2,400	2,400	Annual Project Report

2. Summary of key updates to the modelling

2.1 Project timing

COVID-19 has impacted the design, construction and proposed opening dates for the new walking trail. Table 6 below outlines the timeframes outlined in the 2019 Business Case and Feasibility Study process as well as the updated timeframes assumed for this Addendum. The next page presents a visual representation of the timeframes for the 2019 Feasibility Study, the 2022 Addendum and the Pessimistic scenario.

Table 6: Project timeframes

	2019 Feasibility Study	2022 Addendum	Pessimistic (+3 years)
Funding committed	November 2020	November 2020	November 2020
Detailed design	December 2020 – April 2022	September 2021 – July 2022	September 2021 – June 2023
Stage 1: Lorne to Wye River			
Construction commences	July 2022	July 2024	July 2027
Construction Complete	March 2023	October 2025	October 2028
Opening of trail	May 2023	December 2025	December 2028
Stage 2: Fairhaven to Lorne			
Construction commences	July 2022	January 2025	January 2028
Construction Complete	March 2023	June 2026	June 2029
Opening of trail	November 2023	September 2026	September 2029
Stage 3: Wye River to Grey River			
Construction commences	October 2023	July 2025	July 2028
Construction complete	December 2023	October 2026	October 2029
Trail opening	March 2024	December 2026	December 2029

Figure 3: Project timeframes, 2020-29

2.2 Cashflows for capital costs

Table 7 below summarises the capital cost cashflows from the 2019 Feasibility Study, the 2022 Addendum and the Pessimistic scenario. Due to delays from COVID-19 the construction period for the 2022 Addendum has been delayed until 2024 and the Pessimistic scenario is another three years of delays.

Table 7: Capital and cost cashflows ($m) Real

	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total (real)	Total (NPV)
2019 Feasibility Study											
Capital costs[5] ($2019)	0.2	0.3	14.1	5.8	-	-	-	-	-	**20.4**	**20.4**
2022 Addendum											
Capital costs ($2022)				4.5	12.7	3.9				**21.1**	**18.5**
Pessimistic scenario											
Capital costs ($2022)							4.5	12.7	3.9	**21.1**	**15.1**

2.3 Tourism assumptions

The prior analysis considered both the costs and benefits of the Fairhaven to Grey River Coastal Trail. The costs included capital, operating and maintenance costs. Key benefits of the project were tourism spend in the GORR region, health benefits for local residents and value add for the region generated from construction and maintenance of the trail.

The COVID-19 pandemic has impacted intrastate, interstate and international travel and tourism. As a result the key tourism assumptions have been reviewed to ensure they reflect current economic conditions.

There are three key tourism assumptions, they are:

- Visitor numbers
- Visitor expenditure
- Visitor length of stay.

Each of these are further broken down by intrastate day visitors, intrastate overnight visitors, interstate visitors and international visitors.

In the Business Case and 2019 Feasibility Study, visitor numbers, expenditure and length of stay assumptions to the GORR were based on the following key data sources:

- Travel to Great Ocean Road: Quarterly tracking results (Great Ocean Road Regional Tourism, 2019) visitor and accommodation forecast:
- Great Ocean Road (Deloitte, 2018) to develop overarching assumptions for the visitation to the Great Ocean Road Coastal Trails.

EY has undertaken a literature review based on publicly available information as at January 2022. The following data sources were reviewed in revising the tourism forecast assumptions:

- Tourism Research Australia 2020, Tourism Recovery Scenarios
- Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit 2021, Coronavirus (COVID-19) impact on Victoria's Visitor Economy
- EY Future Consumer Index Survey, February 2021
- Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit 2021, Barwon South West – Visitor Economy

[5] Cashflows taken from the 2019 Business Case and presented in 2019 dollars. As a conservative measure, in the previous modelling we assumed that all construction costs were incurred in the first year of the model which resulted in higher costs in the cost benefit analysis.

- Australian Government Centre for Population 2020, Population Statement 2020 capital city and balance of state (GCCSA) population projections, 2019-20 to 2030-31
- Qantas, International Network Changes, https://www.qantas.com/us/en/travel-info/travel-updates/coronavirus/qantas-international-network-changes.html

Based on an assessment of these key data sources, revised forecasts for visitor numbers, expenditure and length of stay were developed. There remains a level of uncertainty around future visitor numbers to Victoria and to the GORR with the COVID-19 situation rapidly evolving and changing. The Victorian State Government ended lockdown in October 2021, borders opened in November 2021 and some restrictions were again put in place in January 2022.

Outlined on the following pages are revised tourism assumptions, with more specific assumptions will be outlined in the Section 3.

Visitor numbers

To undertake the economic analysis, a Base Case must first be established, which describes the estimated visitation to the GORR without any additional investment by Government in a coastal trail between Fairhaven and Grey River.

The GORR visitation estimates were categorised into five major visitor groups:

- Intrastate daytrip visitors
- Interstate daytrip visitors
- Intrastate overnight visitors
- Interstate overnight visitors
- International overnight visitors.

The original Feasibility Study (2019) relied on forecast projections published in 2018, which shows strong growth in visitor numbers. However, in 2019, actual visitation to GORR was far stronger than forecast (6.8 million actual compared with 6.3 million forecast) meaning the 2018 projections were significantly exceeded.

In 2020, tourism to GORR was severely impacted by lockdowns and restrictions resulting in only 4.2 and 4.3 million tourists visiting the region in 2020 and 2021. This is still a significant number of tourists to the region and was predominantly driven by intrastate and interstate tourism. Despite this, the 2020 and 2021 tourism numbers are lower than the 2018 projections relied upon in the 2019 Feasibility Study (6.6 and 6.8 million tourist respectively), and even further below the 2020 GORR visitor projections.

Table 8: GORR visitor projections (millions)[6]

No. of visitors (millions)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
GORR visitor projections (2018)[7]		6.3	6.6	6.8	7.1	7.4	7.7	8.0	8.3	8.6
GORR visitor projections (2020)[8]	-	-	7.5	7.9	8.3	8.7	9.0	9.3	9.6	9.9
Actual visitation numbers[9]	**5.5**	**6.8**	**4.2**	**4.3**						

While there is no formal update to these tourism projections (Deloitte have not released any updated tourism projections for GORR since 2020), a review of a range of publicly available tourism data and has been undertaken to revise the assumptions for each of the tourist categories. The key sources of data

[6] Deloitte. 2018. *Visitor and accommodation forecast: Great Ocean Road* and Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road.* Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[7] Deloitte. 2018. *Visitor and accommodation forecast: Great Ocean Road*. Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[8] Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road.* Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.
[9] Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit. 2021. *Great Ocean Road: Regional Tourism Summary, Year Ending September 2021*. Note that these visitation numbers are for the year ending September.

are outlined above and these have been used to revise the assumptions for each of the key different tourist groups.

The below assumptions relating to the return of tourists to Victoria will be used as a proxy for the return of visitors to the Great Ocean Road Region, given the popularity of the Region for tourists.

Table 9 Modelling assumptions – visitor numbers

Tourist category	Assumption	Source/Logic
Intrastate daytrip visitors	Intrastate daytrip visitors are likely to recover to pre-pandemic (i.e. 2019) by September 2022, meaning that 2023 visitation will reflect 2019 actual visitation, 2024 visitation will reflect forecast 2020 visitation and so on. We expect a phased return of intrastate daytrip travel in 2022 with approximately 70% of 2019 visitation.	► Under Tourism Research Australia's (TRA's) Tourism Recovery Scenarios, the 'most likely' scenario was for domestic (i.e. intrastate and interstate) visitor levels in Victoria to recover by September 2022 ► Research from Victoria's Tourism, Events and Visitor Economy Research Unit indicates that people are more likely to travel within their own state or territory in the short term
Intrastate overnight visitors	Intrastate daytrip visitors are likely to recover to pre-pandemic (i.e. 2019) by September 2022, meaning that 2023 visitation will reflect 2019 visitation, 2024 visitation will reflect 2020 forecast visitation and so on. We expect a phased return of intrastate overnight travel in 2022] approximately 70% of 2019 visitation.	► Under TRA's Tourism Recovery Scenarios, the 'most likely' scenario was for domestic (i.e. intrastate and interstate) visitor levels in Victoria to recover by September 2022 ► Research from Victoria's Tourism, Events and Visitor Economy Research Unit indicates that people are more likely to travel within their own state or territory in the short term
Interstate visitors	Interstate visitors are likely to recover to pre-pandemic (i.e. 2019) by early 2023, meaning that 2023 visitation will reflect 2019 visitation, 2024 visitation will reflect 2020 forecast visitation and so on. We expect a phased return of interstate travel in 2022 approximately 70% of 2019 visitation.	► Under TRA's Tourism Recovery Scenarios, the 'most likely' scenario was for domestic (i.e. intrastate and interstate) visitor levels in Victoria to recover by September 2022 ► Research from Victoria's Tourism, Events and Visitor Economy Research Unit indicates that people are less likely to travel interstate in the short term
International visitors	International visitors are likely to recover to pre-pandemic (i.e. 2019 actual) by early 2025, meaning that 2025 visitation will reflect 2019 visitation, 2026 visitation will reflect 2020 visitation and so on. We expect a phased return of international travel in 2022, 2023 and 2024 and have applied 20%, 50% and 70% of the 2019 visitation.	► Under TRA's Tourism Recovery Scenarios, the 'pessimistic' scenario was for international visitor levels in Australia to recover by February 2025 ► The 'pessimistic' scenario was utilised rather than the 'most likely' scenario (which was used for other visitor origin groups) because of potential hesitancy in travelling overseas. For example, 37% of global responses to EY's Future Consumer Index Survey at the beginning of 2021 indicated that would take fewer international vacations

The tables below outline the GORR visitor forecasts by visitor origin type in both the 2019 Feasibility Study and the 2022 Addendum. For this Addendum, the assumptions outlined in the table above have been applied to each visitor group, with the sum of each visitor group equalling the total visitors. For example, in 2022 we have applied 70% of the intrastate daytrip, intrastate overnight and interstate visitors from 2019 and 20% of the international visitors from 2019. Applying these assumptions leads to an estimate of 5 million visitors for 2022.

Table 10: 2019 Feasibility Study (Base Case) – GORR visitor forecasts (millions)

	Actual[10]	EY forecasts											
Visitor type	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Intrastate daytrip	2.8	2.9	3.0	3.2	3.5	3.5	3.6	3.8	3.9	4.1	4.2	4.2	4.3
Interstate daytrip	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Intrastate overnight	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5
Interstate overnight	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
International	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5
Total	**5.5**	**5.7**	**6.0**	**6.2**	**6.5**	**6.7**	**7.0**	**7.2**	**7.5**	**7.8**	**7.9**	**8.0**	**8.1**

Table 11: 2022 Addendum (Base Case) – GORR visitor forecasts (millions)

	Actual[11]				EY forecast								
Visitor type	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Intrastate daytrip	2.8	3.5	2.1	2.2	2.8	4.0	4.2	4.4	4.6	4.7	4.9	5.1	5.3
Interstate daytrip	0.3	0.4	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Intrastate overnight	2.0	2.4	1.6	1.7	1.7	2.4	2.5	2.5	2.7	2.8	2.9	3.0	3.0
Interstate overnight	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
International	0.2	0.2	0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total	**5.5**	**6.8**	**4.2**	**4.3**	**5.0**	**7.2**	**7.6**	**7.9**	**8.3**	**8.7**	**9.0**	**9.3**	**9.6**

[10] Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit. 2021. *Great Ocean Road: Regional Tourism Summary, Year Ending September 2021*. Note that these visitation numbers are for the year ending September.

[11] Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit. 2021. *Great Ocean Road: Regional Tourism Summary, Year Ending September 2021*. Note that these visitation numbers are for the year ending September.

Visitor expenditure

Since the beginning of the pandemic, data suggests that visitors to GORR are willing to spend more in the Region than before the pandemic. The key visitor region which is relevant for visitor spend data is the Barwon South West region, which includes Barwon (which captures the new walking trail) and Great South Coast. While Great South Coast falls to the west of the new walking trail, we have also analysed this data to identify trends within the broader Barwon South West region.

Table 12: Modelling assumptions – Visitor expenditure

Visitor origin group to GORR	Assumption	Source/logic
Intrastate daytrip visitors	Visitors spend approximately **10% more per day** in the GORR compared to pre-pandemic levels in the short run	► Based on TRA data for the Barwon South West region, domestic daytrip visitors to the Great South Coast Region spent approximately 25% more per day in 2020 compared to the 2015-19 average and visitors to the Barwon Region spent 5% less per day in 2020. ► Given the location of the Trail, we have taken an average of the Great South Coast and Barwon visitor spend. ► To take a conservative approach, we have assumed that this increase in expenditure will only occur in the short run (up to the end of 2026), before returning to pre-COVID levels.
Intrastate overnight visitors	No change to average daily spend	► Based on TRA data for the Barwon South West region, intrastate overnight visitors to the Great South Coast Region spent approximately 9% more per day in 2020 compared to the 2015-19 average and visitors to the Barwon Region spent 10% less per day in 2020. ► Given the location of the Trail, we have taken an average of the Great South Coast and Barwon visitor spend.
Interstate visitors	Visitors spend approximately **10% more per day** in the GORR compared to pre-pandemic levels in the short run	► Based on TRA data for the Barwon South West region, interstate overnight visitors to the Great South Coast Region spent approximately 22% more per day in 2020 compared to the 2015-19 average and visitors to the Barwon Region spent approximately the same per day in 2020. ► Given the location of the Trail, we have taken an average of the Great South Coast and Barwon visitor spend. ► To take a conservative approach, we have assumed that this increase in expenditure will only occur in the short run (up to the end of 2026), before returning to pre-COVID levels.
International visitors	No change to average daily spend	► Given a lack of data for international visitors in a COVID-19 environment, we have not adjusted the average daily spend for international visitors.

Visitor length of stay

Since the beginning of the pandemic, data suggests that visitors to GORR are staying longer in the Region than before the pandemic. The assumptions below outline the overarching assumptions we have made relating to visitor length of stay.

Table 13 Modelling assumptions - visitor length of stay

Visitor origin group to GORR	Assumption	Source/logic
Intrastate daytrip visitors	No change to average length of stay	► Daytrip tourists only stay in GORR for one day
Intrastate overnight visitors	Visitors stay for approximately **30% longer** in the GORR compared to pre-pandemic in the short run	► Based on TRA data for the Barwon South West region, intrastate overnight visitors to the Great South Coast Region stayed approximately 30% longer in 2020 compared to the 2015-19 average and visitors to the Barwon Region stayed 31% longer in 2020.

		► Given the location of the Trail, we have taken an average of the Great South Coast and Barwon results. ► To take a conservative approach, we have assumed that this increase in length of stay will only occur in the short run (up to the end of 2026), before returning to pre-COVID levels.
Interstate visitors	Visitors stay for approximately **15% longer** in the GORR compared to pre-pandemic in the short run	► Based on TRA data for the Barwon South West region, interstate overnight visitors to the Great South Coast Region stayed approximately 38% longer in 2020 compared to the 2015-19 average and visitors to the Barwon Region stayed for 6% less time in 2020. ► Given the location of the Trail, we have taken an average of the Great South Coast and Barwon results. ► To take a conservative approach, we have assumed that this increase in length of stay will only occur in the short run (up to the end of 2026), before returning to pre-COVID levels.
International visitors	No change to average length of stay	► Given a lack of data for international visitors in a COVID-19 environment, we have not adjusted the average daily spend for international visitors.

Local resident population

Although there has been much talk of Melbourne residents moving to Regional Victoria during the following the pandemic, the Australian Government Centre for Population's forecasts for Rest of Victoria's population (i.e. excluding Melbourne) has only changed marginally from the pre-pandemic forecasts. As a result, we have not adjusted the local resident population projections in the economic modelling.

3. Economic feasibility

3.1 Define concept design options

This Addendum revises the economic analysis for Design Option 2 (preferred option) in the 2019 Feasibility Study for the walking trail from Fairhaven to Grey River. This project received funding from Government in the 2020-21 Budget and is detailed design is being undertaken on the design. DELWP will shortly conduct community consultations on the detailed design and would like updated economic assessment of the project to support the consultation process.

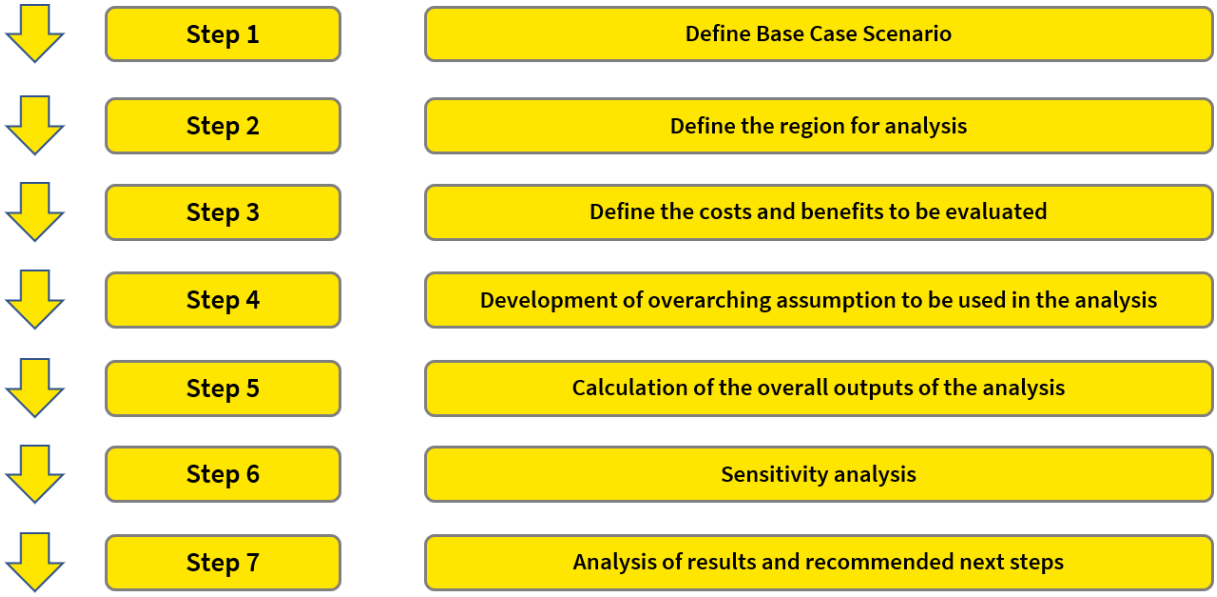
Table 14: Concept design option

Concept design option	Description
Concept Design Option 2: Part walking trial	The trail runs from Fairhaven to Grey River taking in some existing trails and some new trails.

3.2 Economic feasibility analysis

As part of the economic feasibility analysis, the economic benefits and costs of the Concept Design Option 2 have been quantified and discounted to a common point in time to determine the net present value of benefits for each concept design option. A summary of the methodology undertaken for the economic feasibility analysis is provided in Figure 4 below and presented in further detail in the following sections.

Figure 4: Economic feasibility analysis methodology



3.2.1 Step 1: Defining the Base Case scenario

To undertake the economic analysis, a Base Case must be established. The identified Base Case option is forecast visitation to the GORR without any additional investment by Government in a coastal trail between Fairhaven and Grey River.

The GORR visitation estimates were categorised into five major visitor groups:

- Intrastate daytrip visitors
- Interstate daytrip visitors
- Intrastate overnight visitors
- Interstate overnight visitors
- International overnight visitors.

Table 15 below Presents the Base Case visitor projections to GORR to 2027 used in the revised modelling.

Table 15: GORR visitor projections (millions)[12]

No. of visitors (millions)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Assumed projected visitation in Addendum					**5.0**	**7.2**	**7.6**	**7.9**	**8.3**	**8.7**

Key visitation assumptions for the Base Case are summarised in Table 16 below. The average annual growth in visitation from 2026 until 2045 has been calculated using the 2020 GORR visitor projections, which have been calculated until 2030, followed by a reduced long-term growth rate. The long-term growth rate is lower than the short-term rate (applied until 2030) as it is expected that the short-term rate will not be sustained.

As outlined in Section 2, tourism data following lockdowns in Victoria indicates that tourists are spending more money and staying in destinations for longer. As a conservative measure, we have assumed that these increased spend and length of stay trends will only continue for a five-year period from 2022 until 2026, before returning to pre-pandemic trends (noting that these trends do not impact all visitor types). Given that the first section of new trail is not due to open until December 2025, these short-term tourism trends will only affect the first year of the model period. Assumptions utilised in the 2019 Feasibility Study are also outlined below for comparison.

Table 16: Base Case visitation assumptions[13]

	Intrastate overnight visitation	Interstate overnight visitation	International overnight	Intrastate daytrip visitation	Interstate daytrip visitation
Visitor numbers					
Number of visitors (2019)	2,382,300	264,700	251,000	4,029,300	447,700
2019 Feasibility Study: Average annual growth in visitation 2018-40 (%) –	1.6%	1.6%	4.0%	2.5%	2.5%
2022 Addendum: Average annual growth in visitation 2024-43 (%)	1.9%	1.9%	7.0%	2.0%	2.0%
Average daily spend ($2022)					
2019 Feasibility Study:	$159	$159	$114	$110	$110
2022 Addendum: Average daily spend – 2026 Average daily spend – 2027-42	$159 $159	$175 $159	$114 $114	$121 $110	$121 $110
Average length of stay (days)					
2019 Feasibility Study:	**2.8**	1.0	4.9	1.0	1.0
Addendum 2022: Average length of stay 2026 Average length of stay 2027-42	**3.6** **2.8**	1.2 1.0	4.9 4.9	1.0 1.0	1.0 1.0

[12] Deloitte. 2018. *Visitor and accommodation forecast: Great Ocean Road* and Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road.* Note that a number of these forecasts have been interpreted visually from charts and so may be slightly incorrect.

[13] Great Ocean Road Regional Tourism. 2019. *Travel to Great Ocean Road: Quarterly tracking results* and Deloitte. 2020. *Visitor and accommodation forecast: Great Ocean Road*

3.2.2 Step 2: Define the region of analysis

For the purposes of this analysis, it is important to define the geographic boundary from which to consider the economic costs and benefits. Our analysis seeks to quantify (where possible) the costs and benefits on a regional basis. A regional analysis is better suited, as the benefits from increased visitor expenditure predominantly accrue to local residents.

A regional analysis considers only the costs and benefits that accrue to the GORR. This analysis assesses all the costs and benefits associated with the project and includes spend by international, intrastate and interstate visitors in the region who visit the region specifically to use the trail. Figure 5 below presents the region that is considered in the economic analysis.

Figure 5: Region of analysis for regional economic feasibility analysis

3.2.3 Step 3: Defining the costs and benefits to be evaluated

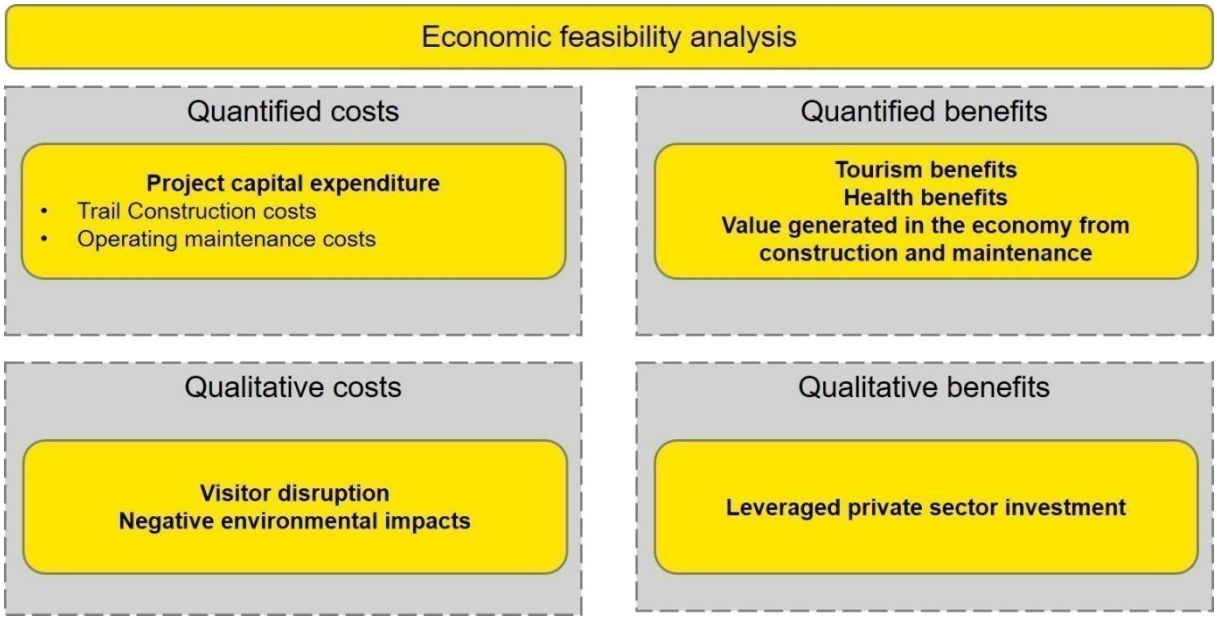
An economic feasibility analysis is complex as it involves converting (where possible) a project's costs and benefits into dollar terms. This can be difficult, as it looks to monetise both market values and non-market values (i.e. those values that are not transacted in the economy).

In an ideal world, where there are no limitations to the information available, all costs and benefits would be presented in monetary terms. In reality, this is not possible because there are significant challenges with obtaining the required information.

For this analysis, the quantified costs are the capital and operating expenditure of Concept Design Option 2, and the quantified benefits are the economic impact (gross value add) of visitation to the region, health benefits for local residents, and the economic impact (gross value add) of the construction and maintenance of the trail.

Figure 6 provides a summary of the quantitative and qualitative costs and benefits to be evaluated in the analysis. Each cost and benefit is described in further detail in the sections below.

Figure 6: Summary of costs and benefits



Quantified costs

The following table provides an overview of the quantified costs included in this economic analysis for the concept design options relative to the Base Case.

Table 17: Quantified costs

Cost	Description

Project capital expenditure (including design cost)	Construction, professional services, contingency allowance and associated infrastructure costs for:
	► Additional design and planning costs
	► Existing trail upgrades
	► New trail construction
	► Suspension bridges
	► Small span bridges
	► Boardwalk structure
	► Outlooks
	► Shelters along the trail
	► Access upgrades between
	  ► Big Hill and Lorne,
	  ► Cumberland River,
	  ► Lorne
	  ► Between Wye River and Kennett River.

Maintenance costs	Maintenance costs relate specifically to the ongoing maintenance of the trial and include: ► Maintenance costs (equipment and materials) for the upkeep of the trail and suspension bridges ► Staffing costs to manage the maintenance of the trail.

Non-monetised costs and economic dis-benefits

A number of qualitative costs and economic dis-benefits are likely to result as a consequence of the construction of the walking trail. These are described below.

Table 18: Non-monetised costs and economic dis-benefits

Cost	Description
Visitor disruption	It is expected that there will be some disruption for existing visitors while the trail is constructed, impacting their enjoyment of the region. These disruptions should be comparatively short term in nature and phased to be focused at quieter times of the day and in off peak months.

Cost	Description
Environmental impacts	While the guiding principles for the design of the trial are to ensure a safe and environmentally sustainable route is found, there is the potential for some environmental impacts along some sections of the trail. These may include: ► Negative impacts to native vegetation/waterways ► Increased vehicle trips and local road congestion (increased CO2 congestion) ► Local road congestion ► Road maintenance wear and tear.

Quantified benefits

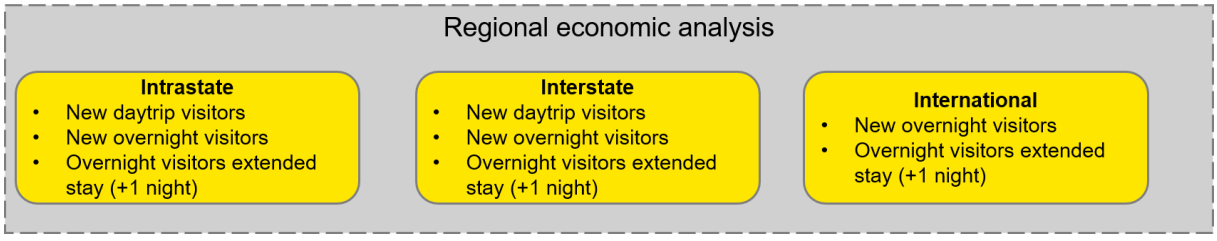
The following table provides an overview of the quantified benefits assessed in the economic analysis of the concept design options relative to the Base Case.

Table 19: Quantitative benefits

Benefit	Description
Visitation	Gross value add (GVA) estimates the economic impact to the region as a result of visitation directly related to those using the walking trail. This includes the direct value added to the region generated as a result of expenditure from out of region and overseas visitors that specifically come to or extend their stay in the region to use the walking trail. GVA has been estimated using input-output (multiplier) analysis. Input-output analysis represents the total change in economic activity in a region based on the change in activity from a given sector. These models assume that the resources needed to support output are available and as such, are not 'diverted' from other activity, and so the models show the activity 'supported' by investment. The estimate includes only the incremental benefit (i.e. the difference between the Base Case and Concept Design Option 2).
Health benefits	Several health benefits will be generated by local residents and may include: ► Avoided costs associated with a reduction in physical inactivity through increased physical activity and use of the new trail ► Mental and physical health social benefit associated with a reduction in physical inactivity ► Improved sense of wellbeing and positive influence on immunity and cardiovascular function ► Reduction in magnitude of physiological response to stress ► Improved psychological health ► Alleviation of anxiety and depression.
Value generated in the economy resulting from construction spend	GVA is estimated on construction expenditure in the region for the trails. This includes both direct value-add from the expenditure, as well as indirect value-add in terms of local purchases and consumption that is a result of the direct value-add.
Value generated in the economy resulting from operating spend	GVA is estimated on expenditure in the region for the ongoing maintenance of the trails once they have been constructed. This includes both direct value-add from the expenditure, as well as indirect value-add in terms of local purchases and consumption that is a result of the direct value-add.

A breakdown of the visitation benefits is presented in Figure 7 below. The benefits will be realised from those visitors who come specifically to the GORR, or extend their stay in the region, because of the trails. These visitors are split up based on their origin as there are different visitor spend assumptions for visitors from within Victoria, interstate or outside of Australia (see section 3.2.4 for more details).

Figure 7: Breakdown of visitation benefits



Non-monetised benefits

Outlined below is the major expected benefit from this project that has not been quantified.

Table 20: Non-monetised benefits

Benefit	Description
Leveraged private sector investment	The walking trail is likely to stimulate private sector investment in retail and commercial development, accommodation and other tourism businesses in the region (e.g. tour operators, shuttle services for walking trail users, restaurants, food and beverage and specialty stores).

3.2.4 Step 4: Development of overarching assumptions

Quantified costs

The expected capital and operating costs of the trail have not changed since the previous analysis, however have been inflated to 2022 dollars for this revised analysis. The costs used in the analysis (summarised in Table 21 below) represent an average of the high and low estimates provided by World Trail in their initial concept design (refer to Section 6 of the 2019 Feasibility Study). The annual operating costs of the trail will be an estimated $600,000 (2022 dollars), made up of:

- Staffing ($350,000)
- Trail maintenance ($200,000)
- Suspension bridge maintenance ($50,000).

Table 21: Quantified costs ($m) (Net Present Value)

	Concept Design Option 2: Part walking trail
Total capital cost	$18.5
Total operating cost	$6.5
Total cost	**$25.1**

Table 22 below summarises the capital cost cashflows from the 2019 Feasibility Study, the 2022 Addendum and the Pessimistic scenario. Due to delays from COVID-19 the construction period for the 2022 Addendum has been delayed until 2024 and the Pessimistic scenario is another three years of delays.

Table 22: Capital and cost cashflows ($m) (Real)

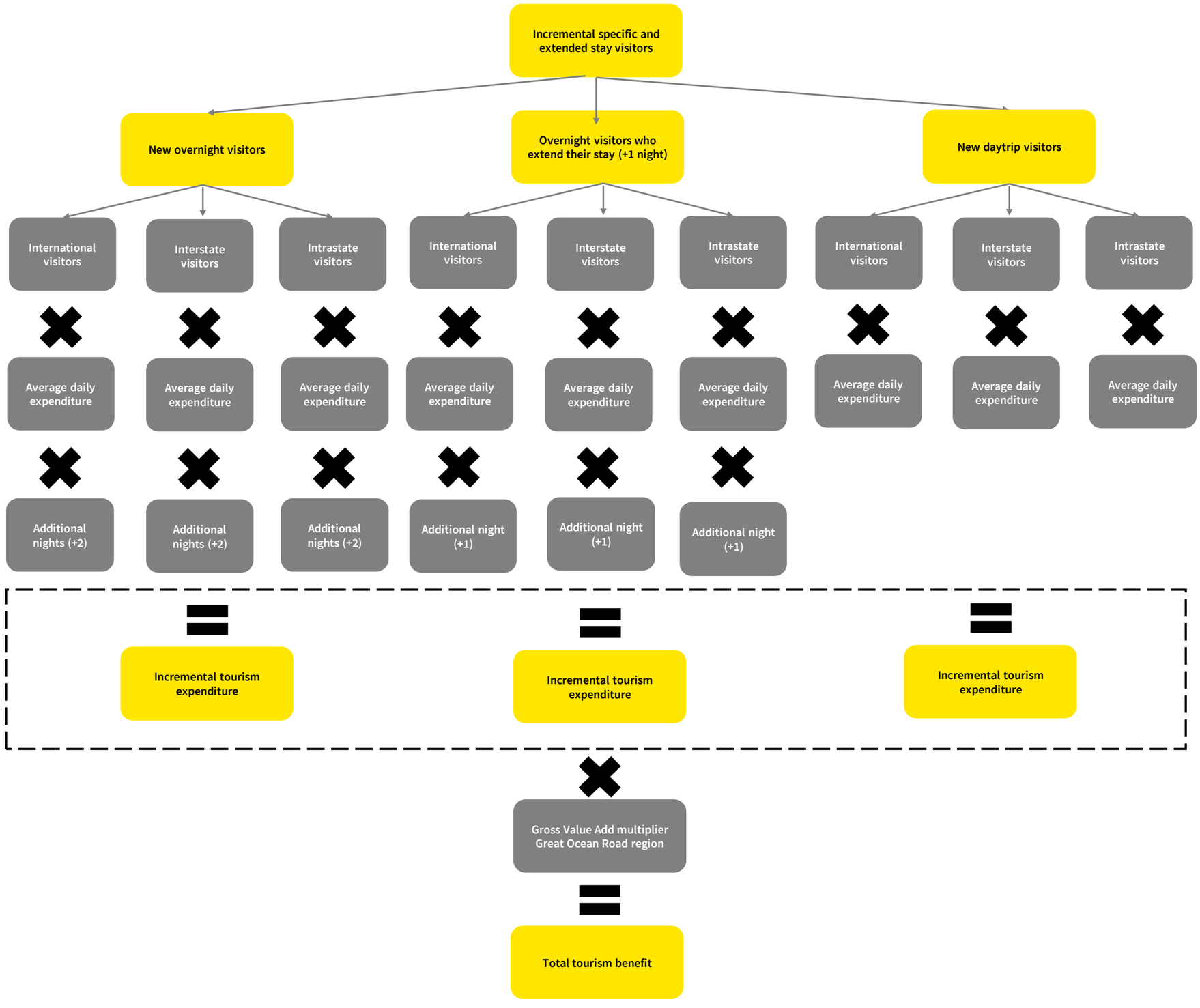
	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total (real)	Total (NPV)
2019 Feasibility Study											
Capital costs ($2019)[14]	0.2	0.3	14.1	5.8	-	-	-	-	-	**20.4**	**20.4**
2022 Addendum											
Capital costs ($2022)				4.5	12.7	3.9				**21.1**	**18.5**
Pessimistic scenario											
Capital costs ($2022)							4.5	12.7	3.9	**21.1**	**15.1**

Visitation benefits: Value add from incremental visitor expenditure

The primary benefit of the trail will be the economic impact on the GORR because of increased visitation to the region. The methodology used to quantify the value add for incremental visitor expenditure for the analysis is presented in Figure 8 and described in further detail in the following sections. As a conservative measure, we have assumed that all new visitors travelling to the Region specifically to use the trail stay for two nights (regardless of origin).

[14] Cashflows taken from the 2019 Business Case and presented in 2019 dollars. As a conservative measure, in the previous modelling we assumed that all construction costs were incurred in the first year of the model which resulted in higher costs in the cost benefit analysis.

Figure 8: Value add for incremental visitor expenditure - Regional economic feasibility analysis



Using benchmark data from comparable walking trails and publicly available information, the following key assumptions have been developed:

- The level of specific and extended stay visitation (i.e. visitors who came to the GORR specifically to use the trail or extended their stay because of it)
- Ramp up of trail use after post construction of the trail
- Origin of specific and extended stay visitors
- Average length of stay of intrastate, interstate and international visitors
- Average daily expenditure of intrastate, interstate and international visitors.

Specific and extended stay visitation – Walking trails

The proportion of visitors to the GORR who will specifically visit or extend their stay because of the trail was estimated based on usage of other walking trails in Victoria and the corresponding overall visitation for that area.

Other trail usage data points were:

- Great Ocean Walk attracts approximately 20,000 new visitors to the region per year (mix of day and overnight visitors), however this walk is aimed a smaller group of more "hard core" bushwalkers who walk for multiple days and camp with limited access to other accommodation or services
- Grampians Peak Trail attracts approximately 16,000 visitors per year (6,000 overnight), however most sections include rocky and steep terrain and are better suited to more experienced walkers. The trail is approximately three hours from Melbourne
- Three Capes Track attracted 12,000 new visitors per year to the local region. Visitation to this trail is somewhat limited by the number of permits issued for the trail per day and the number of accommodation spots available along the trail
- Overland Track attracted 8,000 new visitors to the region per year.

The analysis only considers those visitors who specifically visit the region, or stay longer in the region, due to the walking trail. This is important, as it is these visitors who will bring additional expenditure to the GORR (that otherwise would not have been generated without the walking trail). Table 23 below outlines the trail users as a proportion of total visitors to the region in the major visitor groups of domestic overnight, international overnight and daytrip visitors.

Table 23: Specific and extended stay trail users as a proportion of total visitation to the GORR[15]

	%
Domestic overnight visitors	0.6%
International overnight visitors	1.3%
Daytrip visitors	0.8%

These specific and extended stay proportions are consistent with the 2019 Feasibility Study, however the total number of specific and extended stay visitors to the region have increased compared with the previous study as tourism numbers are expected to be higher, even despite the impacts of COVID-19 (see Section 2 for more details).

Table 24: Specific and extended stay trail users as a proportion of total visitation to the GORR[16]

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10
2022 Addendum						
Domestic overnight visitors	5,220	8,990	12,923	17,122	19,604	20,846
International overnight visitors	1,018	1,792	2,688	3,629	4,237	5,258

[15] Assumptions based on visitation estimates from Insight Leisure Planning. 2008. *Surf Coast Walk Feasibility Study*; Great Ocean Road Regional Tourism. 2019. *Travel to Great Ocean Road: Quarterly tracking results*; Parks Victoria. 2014. Grampians Peaks Trail 2014 Master Plan; and https://grampianstourism.com.au/wp-content/uploads/sites/4/2019/07/Grampians-Tourism-travel-snapshot-YE-Mar-19.pdf.

[16] Assumptions based on visitation estimates from Insight Leisure Planning. 2008. *Surf Coast Walk Feasibility Study*; Great Ocean Road Regional Tourism. 2019. *Travel to Great Ocean Road: Quarterly tracking results*; Parks Victoria. 2014. Grampians Peaks Trail 2014 Master Plan; and https://grampianstourism.com.au/wp-content/uploads/sites/4/2019/07/Grampians-Tourism-travel-snapshot-YE-Mar-19.pdf.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10
Daytrip visitors	11,864	20,553	29,877	39,803	45,786	48,861
Total	**18,101**	**31,335**	**45,488**	**60,554**	**69,627**	**74,965**
2019 Feasibility Study						
Domestic overnight visitors	4,184	7,231	10,523	13,668	15,466	16,704
International overnight visitors	1,039	1,657	2,141	3,325	4,098	6,319
Daytrip visitors	8,200	14,302	20,958	28,209	32,747	37,867
Total	**13,423**	**23,189**	**33,622**	**45,202**	**52,311**	**60,890**

Table 25 below outlines the estimated average daily specific and extended stay visitation to the trail in Year 1, Year 5 and Year 10 of operation.

Table 25: Average daily specific and extended stay Trail users (medium visitation scenario)

	Daily additional visitation			Annual additional visitation		
Visitor type	**Year 1**	**Year 5**	**Year 10**	**Year 1**	**Year 5**	**Year 10**
Domestic overnight visitors	14	54	57	5,220	19,604	20,846
International overnight visitors	3	12	14	1,018	4,237	5,258
Daytrip visitors	33	125	134	11,864	45,786	48,861
Total visitors	**50**	**191**	**205**	**18,101**	**69,627**	**74,965**

Ramp-up visitation

Visitation to the trail is not expected to peak immediately following the opening of the trails, as knowledge of the trails may not be widespread in the beginning and 'word of mouth' recommendations need time to be shared around. Given this information, it is assumed that visitation will not reach its 'maximum' level until the fifth year of the trail being in operation.

With planning and construction delays due to COVID-19, the first section of new trail is not expected to open until December 2025 instead of May 2023. By this time, we assume that tourism numbers will have returned to pre-COVID levels (see Section 2 for more details). Another consideration is the expected proportion of total visitation allocated to each stage of new trail. Due to the major drawcard features such as unrivalled views and thrilling swing bridges, the Lorne to Wye River and Fairhaven to Lorne sections of trail are expected to be the most popular for trail users (see Table 26 below). These are also the first two stages of construction (see the project timeline in Section 2). With these points in mind, we have kept the ramp up assumptions over the first five years of operation the same as the 2019 Feasibility Study.

Table 26: Proportion of total trail users allocated to each stage of trail

	Proportion of total trail users
Stage 1: Lorne to Wye River	59%
Stage 2: Fairhaven to Lorne	34%
Stage 3: Wye River to Grey River	7%

Table 27: Ramp up assumptions

	Year 1	Year 2	Year 3	Year 4	Year 5
Ramp up (previous analysis)	30%	50%	70%	90%	100%
Ramp up (revised analysis)	30%	50%	70%	90%	100%

The following tables provide an overview of the key assumptions that underpin the calculation of economic benefits.

The origin of specific and extended stay visitors has changed marginally in this revised analysis due to the updated GORR visitor forecasts used, while the average spend per day/night is higher in the short-term for some visitor types due to changes in trends seen in tourism data (see Section 2 for more details).

Table 28: Origin of specific and extended stay visitors[17]

	Intrastate	Interstate	International	Total
Daytrip visitors who extend their stay	13%	1%	2%	16%
Overnight visitors who extend their stay	13%	1%	2%	16%
New overnight visitors	6%	1%	1%	8%
New daytrip visitors	52%	6%	3%	61%

Table 29: Average spend per day/night with additional length of stay ($2022)[18]

	Intrastate 2026	Intrastate 2027-45	Interstate 2026	Interstate 2027-45	International 2026	International 2027-45
Daytrip visitors who extend their stay	$121	$110	$121	$110	$110	$110
Overnight visitors who extend their stay	$121	$110	$121	$110	$110	$110
New overnight visitors	$159	$159	$175	$159	$114	$114
New daytrip visitors	$121	$110	$121	$110	$110	$110

Health benefits: local resident use

There is expected to be health benefits for local residents who utilise the walking trails. This benefit is quantified through avoided health costs to the Victorian economy as a result of local residents no longer being physically inactive or being less insufficiently active. The assumptions utilised to quantify this benefit are outlined below.

Population projections for the areas closest to the trails have been utilised to estimate the number of local residents who will use the trails. The main areas of consideration are:

- Surf Coast Shire (Surf Coast Rural District)
- Colac-Otway Shire (Apollo Bay-Gellibrand District)
- Colac-Otway Shire (Colac Town District).

These assumptions have not changed in the revised analysis.

Table 30: Local resident population projections[19]

	2021	2026	2031	2036
Surf Coast Shire (Surf Coast Rural District)	11,643	12,082	12,520	12,939
Colac-Otway Shire (Apollo Bay-Gellibrand District)	3,621	3,650	3,691	3,729
Colac-Otway Shire (Colac Town District)	12,727	13,026	13,288	13,516

There are two forms of physical activity that can be measured through the use of the trails: walking and running. The benefit of each activity has been quantified using assumptions outlined in the table below. These assumptions have not changed in the revised analysis.

Table 31: Health benefit assumptions

	Walking	Running
Proportion of local residents who use trails for activity at least once per week (medium usage scenario)	6%[20]	15%[21]
Net avoided healthcare costs per hour (2022 dollars)[22]	$4.38	$16.44

[17] Assumptions based on visitation estimates from Tourism Research Australia. 2019. Domestic Visitor Estimates to Victoria; and Deloitte. 2020. Visitor and accommodation forecast: Great Ocean Road.

[18] Adapted from Great Ocean Road Regional Tourism. 2019. *Travel to Great Ocean Road: Quarterly tracking results* and Victorian Tourism, Events and Visitor Economy (TEVE) Research Unit. 2021. *Barwon South West – Visitor Economy*

[19] Department of Environment, Land, Water and Planning. 2019. *Victoria In Future population projections*

[20] Michael Smith and Associates. 2018. *Apollo Bay to Skenes Creek Coastal Discovery Trail – Stage 2 – Skenes Creek to Wild Dog Creek – Report of Findings and Analysis*

[21] Average of age groups taken from VicHealth. 2016. *VicHealth Indicators Survey 2015 Selected findings*

[22] Marsden Jacob. 2016. *Victoria's Nature-Based Outdoor Economy*

	Walking	Running
Average number of hours per week spent using trails (additional to any time already doing that activity)	Six hours	One hour

Economic Value Generated

The benefit of construction and maintenance expenditure for the trails generates economic benefits in the form of gross value-add. It includes both direct value-add from the expenditure, as well as indirect value-add in terms of local purchases and consumption that is a result of the direct value-add.

Table 32: Proportion of construction and operating maintenance expenditure that corresponds to value-add[23]

	Proportion of expenditure that corresponds to value-add
Design costs	88.2%
Construction costs	70.9%
Operating maintenance costs (including staffing)	70.9%

3.2.5 Step 5: Calculation of the overall outputs of the analysis

Our analysis has estimated the economic costs and benefits associated with the preferred concept design option in comparison to the Base Case scenario.

Summary of costs and benefits

The overall value for money of an option is summarised by the benefit-cost ratio (BCR). BCRs represent the economic gain to the GORR realised from each concept design option (i.e. benefits) versus the amount it costs to execute that option (i.e. costs). If the benefits are greater than the costs, then the BCR is greater than 1.0. Conceptually, a BCR below 1.0 can be thought of as spending $1 to achieve less than $1 in financial, economic, social and environmental benefits.

There are limitations, however, to the completeness of any BCR analysis. Some benefits and costs cannot be practically quantified due to a lack of data. In this instance, the benefits and costs (or dis-benefits) that have not been quantified are private sector investment, visitor disruptions and environmental impacts. This means that qualitative factors and the overall strategic environment must also be considered when making a decision on the preferred concept design.

As demonstrated below, the BCR has increased from 2.49 in the 2019 Study to 2.66 in the revised 2022 Study. The main reasons for this include:

- Although there is expected to be a phased return of some visitor types to pre-pandemic levels, in the long run total visitors to GORR are expected to exceed the projections outlined in the 2019 Study
- In the short run, some visitor types are expected to spend more money in the Region
- In the short run, some visitor types are expected to stay longer in the Region.

Table 33 below summarises the NPV results of the economic feasibility analysis by major cost and benefit categories for the medium visitation scenario for the previous analysis and the revised analysis. The analysis shows that that the project still returns a positive BCR and that in fact the BCR of the project has increased following revisions to the modelling.

As demonstrated below, the BCR has increased from 2.49 in the 2019 Study to 2.66 in the revised 2022 Study. The main reasons for this include:

- Although there is expected to be a phased return of some visitor types to pre-pandemic levels, in the long run total visitors to GORR are expected to exceed the projections outlined in the 2019 Study
- In the short run, some visitor types are expected to spend more money in the Region
- In the short run, some visitor types are expected to stay longer in the Region.

[23] Calculated from input-output multiplier analysis from REMPLAN
Department of Environment, Land Water and Planning

Table 33: Cost-benefit analysis results – Regional economic analysis (real) ($m)

	Concept Design Option 2: Part walking trail (previous analysis)	Concept Design Option 2: Part walking trail (revised analysis)
Costs (NPV) ($m)		
Capital expenditure	$20.4	$18.5
Operating expenditure	$6.3	$6.5
Total	**$26.8**	**$25.1**
Benefits (NPV) ($m)		
Visitation	$47.0	$48.4
Health benefit	$0.5	$0.4
Construction impact	$14.6	$13.2
Maintenance impact	$4.5	$4.6
Total	**$66.6**	**$66.7**
Outputs		
Net Benefit (Cost)	$39.8	$41.6
Benefit-Cost Ratio (BCR)	**2.49**	**2.66**

3.2.6 Step 6: Sensitivity analysis

Due to the uncertain nature of economic analyses and forecasting in general, it is often helpful to have a range of estimates for the costs and benefits within which the true costs and benefits are likely to fall. Sensitivity analysis is a process used to test the sensitivity of the model results to changes in the model inputs (costs and benefits) and thereby produce a range of outputs rather than a point estimate.

The following scenarios examined the sensitivities of the following parameters as related to:

1. Construction costs
2. Visitation estimates
3. Rates of inflation applied to construction costs (due to issues presented by COVID e.g. potential supply shortages)
4. Construction delays of three years (“Pessimistic” scenario as outlined in Section 2).

There are a number of scenarios that we could have included in the sensitivity analysis, however the scenarios were selected based on the inputs that have the greatest impact on the model outputs. As demonstrated below, the results are most sensitive to changes in visitation, which is why changes in visitation have been modelled in both the expected scenario and the pessimistic scenario.

The key findings from the sensitivity analysis and the impact on the benefit cost ratio are presented below. The high and low-cost sensitivities are considered against one another with visitation constant at the medium scenario, while the visitation sensitivities are compared with costs held at a medium level (the average of the high and low costs).

The sensitivity analysis demonstrates that the project would still generate a positive BCR if:

- Construction costs were increased by 20%
- Visitation were approximately 40% lower than anticipated
- Construction costs were inflated by a further 4.5% due to potential supply shortages
- Construction and opening of the new sections of trail were delayed by three years.

Table 34: Sensitivity analysis

Scenario	Low	Main modelled result	High
Variable construction costs (excluding maintenance) (using medium visitation forecast)	20% lower **BCR: 2.97**	**BCR: 2.66**	20% higher **BCR: 2.43**

Scenario	Low	Main modelled result	High
Variable specific and extended stay visitation and local resident usage (using medium cost forecast)	Ratio of domestic overnight trail users to region visitors = 0.3%, ratio of international overnight trail users to region visitors = 1.0%, ratio of domestic overnight trail users to region visitors = 0.5%; 3% of local residents use trails for walking at least once per week **BCR: 1.90**	Ratio of domestic overnight trail users to region visitors = 0.6%, ratio of international overnight trail users to region visitors = 1.3%, ratio of domestic overnight trail users to region visitors = 0.8%; 6% of local residents use trails for walking at least once per week **BCR: 2.66**	Ratio of domestic overnight trail users to region visitors = 0.9%, ratio of international overnight trail users to region visitors = 1.6%, ratio of domestic overnight trail users to region visitors = 1.1%; 9% of local residents use trails for walking at least once per week **BCR: 3.88**
Variable construction cost escalation (using medium visitation forecast)	Inflation rate of 1.5% applied to construction costs **BCR: 2.64**	Inflation rate of 3% applied to construction costs **BCR: 2.62**	Inflation rate of 4.5% applied to construction costs **BCR: 2.60**
Variable specific and extended stay visitation and local resident usage (using medium cost forecast) – Pessimistic scenario	Ratio of domestic overnight trail users to region visitors = 0.3%, ratio of international overnight trail users to region visitors = 1.0%, ratio of domestic overnight trail users to region visitors = 0.5%; 3% of local residents use trails for walking at least once per week **BCR: 1.73**	Ratio of domestic overnight trail users to region visitors = 0.6%, ratio of international overnight trail users to region visitors = 1.3%, ratio of domestic overnight trail users to region visitors = 0.8%; 6% of local residents use trails for walking at least once per week **BCR: 2.39**	Ratio of domestic overnight trail users to region visitors = 0.9%, ratio of international overnight trail users to region visitors = 1.6%, ratio of domestic overnight trail users to region visitors = 1.1%; 9% of local residents use trails for walking at least once per week **BCR: 3.45**

Appendix A Notice and Disclaimer

Ernst & Young was engaged on the instructions of the Department of Environment, Land, Water and Planning (DELWP) to revise the Fairhaven to Skenes Creek Coastal Trail Feasibility Study forecasts and provide an Addendum, in accordance with the signed purchase order dated 12 January 2022.

The results of Ernst & Young's work, including the assumptions and qualifications made in preparing the report, are set out in Ernst & Young's report dated 16 January 2022 ('Report' or the 'Study'). The Report should be read in its entirety including the introductory chapters, the applicable scope of the work and any limitations. A reference to the Report includes any part of the Report. No further work has been undertaken by Ernst & Young since the date of the Report to update it.

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Basis of our work and limitations

The information contained in this Report is, in part, based on information and explanations provided to us by DELWP.

We have performed analysis using the information provided by DELWP and other publicly available information drawn from a wide range of databases and on-line information which were available to us within the timeframe specified for preparation of this Report. We have not independently verified, or accepted any responsibility or liability for independently verifying, any such information nor do we make any representation as to the accuracy or completeness of the information.

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