



CITY OF STIRLING COASTAL BOARDWALK FEASIBILITY STUDY ECONOMIC IMPACT ASSESSMENT

Prepared for the City of Stirling
July 2025

CONTENTS

Executive Summary	3
Introduction	5
Project Overview	6
Usage Analysis	10
Business Context	20
Stakeholder Engagement	24
Literature Review and Case Studies	27
Project Timings and Cost	34
Impact Assessment	36
Rapid Cost Benefit Assessment	43
Benefit Realisation	46
Appendices	49

EXECUTIVE SUMMARY

The proposed coastal boardwalk between Scarborough and Trigg beach nodes is expected to generate significant economic and health benefits for the City of Stirling.

The City is currently undertaking a feasibility study to consider the development of a coastal boardwalk which links the Scarborough Beach car park with the Trigg Beach car park.

The proposed boardwalk seeks to create a functional and safe experience that connects people along the coast from Trigg to Scarborough beaches, in a way that respects the environment, highlights its iconic character and views, and offers a unique tourist destination. In particular, the boardwalk seeks to:

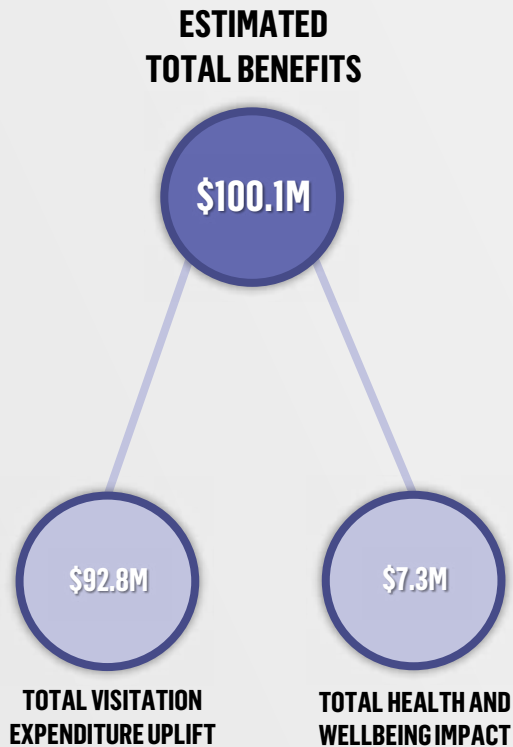
- Build a more functional connection and safer experience for pedestrians and recreational users away from West Coast Highway;
- Reduce conflict between users (such as pedestrians, cyclists and e-scooter users) on the West Coast Highway PSP;
- Link two major recreational nodes at Scarborough and Trigg Beaches; and
- Provide more immersive opportunities for tourists and locals to interact with the natural environment in a safe and sustainable manner and build a better understanding of the cultural value and heritage associated with the area.

The boardwalk project has been considered by the City of Stirling Council numerous times since 2005, and most recently in October 2024, where Council resolved to undertake a feasibility study of the project.

A usage analysis of the Scarborough Tourist Zone and wider trends within the City of Stirling revealed these key statistics.

- The population of Stirling is expected to grow from 234,320 in 2021 to 288,485 by 2036, representing a 1.4% average annual growth rate over 15 years.
- Visitation to Scarborough-Trigg has seen an historically even split between domestic and international visitation, however since the Scarborough Foreshore redevelopment in 2018, domestic daytrips have increased. The March quarter sees the highest visitation.
- Visitors participate in social activities (eating, visiting friends/relatives, picnics) and recreational and outdoor / nature activities (including going to the beach) when in the Scarborough Tourist Zone.
- Walking is the top physical activity for those living in the City of Stirling – 37% of residents participate in walking for recreation or health.
- Due to the composition of businesses within the Scarborough Tourist Zone, the majority of spending within the precinct is from tourism and entertainment. The extensive food and beverage offerings along the foreshore accounted for \$91,093,000 (46% of total) in spending in the 12 months to April 2025.

EXECUTIVE SUMMARY



Urbis undertook engagement with 29 businesses in the Scarborough-Trigg area to understand the projects' perceived impact on business turnover and customer attraction. Overall, business sentiment of the boardwalk was positive.

Of businesses surveyed, 62% were aware of the project and that the City of Stirling were conducting a feasibility study.

Most businesses believed the boardwalk would have a positive impact on their turnover. Approximately 45% of businesses surveyed believed that a coastal boardwalk would increase turnover by 1-4% and 34% believed it would increase turnover by 5-9%. There were no businesses which believed that the boardwalk would have a negative impact on their turnover.

Almost every business surveyed (96%) believed the boardwalk would attract more visitors to both Scarborough and Trigg Beaches.

IMPACTS

Local spending and the effects on health and wellbeing were analysed, including a sensitivity analysis. Based on case studies and data on economic impacts from residents and visitors, 194,545 trips along the boardwalk are estimated to boost annual spending by \$6.9 million.

The health and wellbeing benefits, particularly from walking and the associated reduction in health costs, are expected to add \$541,000 per year.

Qualitative benefits that could not be reliably monetised includes increased perceived safety, business development and sense of community.

The assessed economic benefits equate to **\$100.1m** over the 30 years assessed.

REALISING THE BENEFITS

The Benefits Realisation Plan highlights six anticipated benefits to be measured if the proposed boardwalk was constructed, including opportunities to maximise these benefits through organisational initiatives, additional infrastructure opportunities and partnerships.

Anticipated benefits for measurement include:

- Conversion of driving to walking;
- Improved community health;
- Increased number of businesses;
- Visitor uplift and;
- Reduced pedestrian conflicts.

CONCLUSIONS

The proposed coastal boardwalk between Scarborough and Trigg Beach presents a significant opportunity for the City of Stirling. By addressing safety concerns, reducing user conflicts, and enhancing the connection between two major destination nodes, the boardwalk is expected to deliver substantial economic and health benefits. The positive sentiment from local businesses and the projected increase in visitor numbers highlight the boardwalk's potential to stimulate the local economy and enhance community well-being.

INTRODUCTION

STUDY BACKGROUND AND PURPOSE

The Scarborough and Trigg Beaches are vital assets to the lifestyle, livelihood, and economy of the City of Stirling and Western Australia. This coastal area significantly contributes to the environmental, economic, social, and cultural fabric of the State as a premier tourism and recreation destination.

Over the past 20 years, the City of Stirling Council has considered the implementation of an environmentally-sensitive coastal boardwalk connecting South Trigg Beach car park through the coastal dunes, to North Scarborough Beach, though the project has not been significantly progressed during this time. In response to renewed community interest in 2024, the City started exploring the opportunities and constraints of the project and a preliminary environmental report was completed.

To further inform the City of Stirling's feasibility study, Urbis have been commissioned to undertake an economic assessment of the impacts of the proposed boardwalk. Given the importance of this coastal region, the economic assessment is necessary to measure its impact on the local economy, including tourism, wellbeing, and overall economic stimulus. The findings will inform the concept design feasibility phase, ensuring an integrated and well-considered approach to determining the feasibility of constructing a boardwalk.

STUDY APPROACH

Urbis was engaged by the City to assist with understanding the social and economic value of the proposed boardwalk. In particular, this study sought to identify and assess the potential impacts to the local community and the Western Australian economy and ensure that any future investment will generate economic uplift.

This study included the following considerations.

- **Project Overview** – overview of the project including its history and proposed outputs.
- **Usage Analysis** – assessment of the local context including planning attributes, population and visitation, events and spending characteristics.
- **Business Context** – assessment of the state of industry in and around the project area.
- **Stakeholder Engagement** – a business survey of the local area to understand perceptions and localised impacts.
- **Case Studies and Literature Reviews** – understanding of the impacts of other public boardwalk projects, and monetised benefits of these.
- **Impact Assessment** – quantitative and qualitative benefits expected from implementation of the project, and a benefit realisation plan to monitor success.

01

PROJECT OVERVIEW

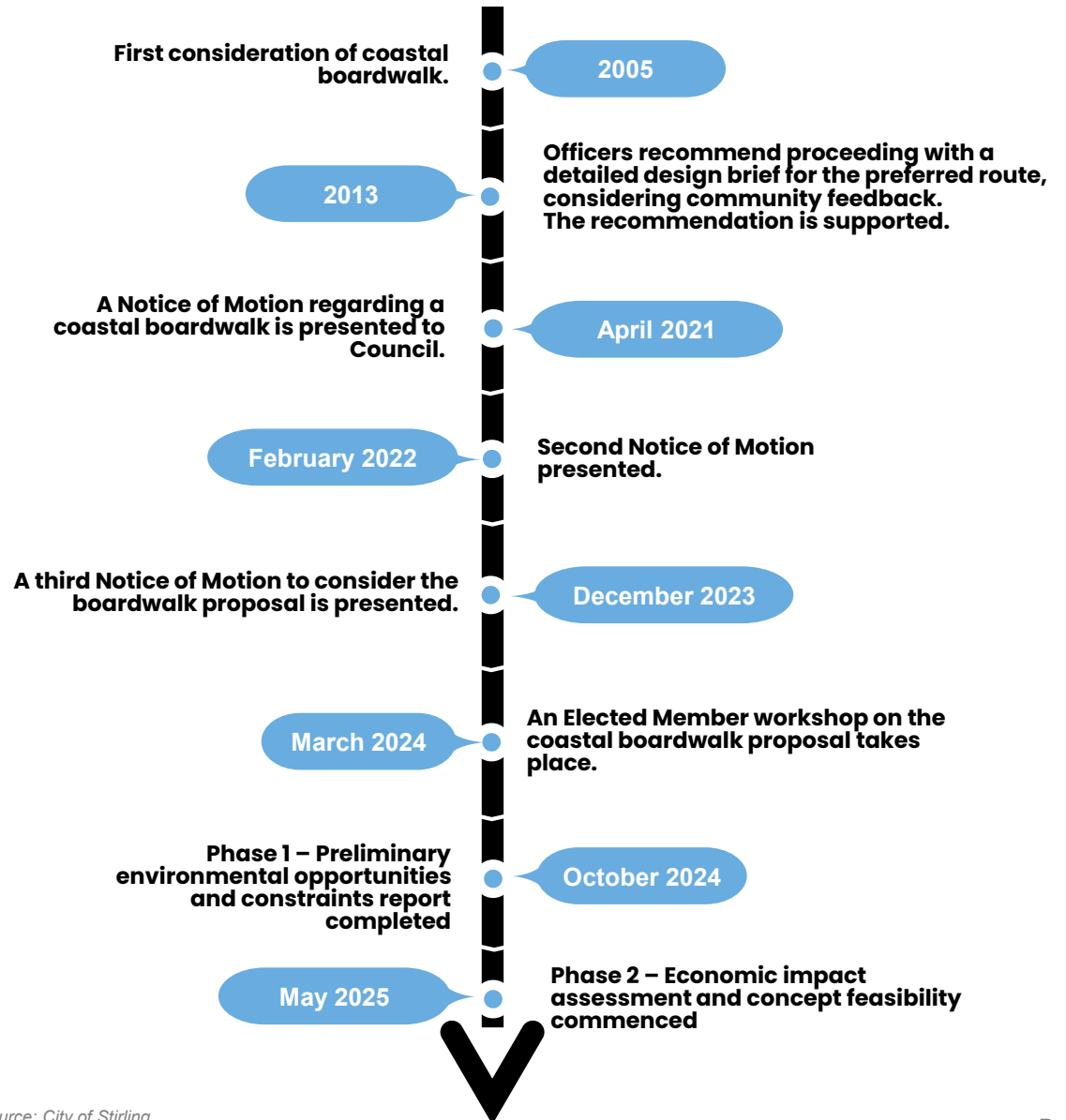


PROJECT OVERVIEW | PROJECT HISTORY

Initial proposals for a coastal boardwalk emerged in 2005 and again between 2011 and 2013, as the Principle Shared Path (PSP) along the major arterial road of West Coast Highway (between Scarborough and Trigg), has long been a safety concern for pedestrians. With the growing presence of bikes, e-scooters and other recreational users on the path, pedestrians' perception of the path's safety has decreased.

After renewed interest in the project in 2024, the City of Stirling allocated \$500,000 in its 2024–2028 Corporate Business Plan to conduct a feasibility study for the boardwalk project.

PROJECT HISTORY TIMELINE



PROJECT OVERVIEW | PROPOSED COASTAL BOARDWALK

The PSP along West Coast Highway caters to pedestrians, e-scooters, skateboards and cyclists. The City of Stirling are looking to address safety concerns for pedestrians as alternative modes of transport increase in popularity, the speed of and volume of traffic on West Coast Highway pass and user conflicts are increasing.

The proposed coastal boardwalk's core aims are to establish a safe, accessible pedestrian link between Scarborough and Trigg beaches, enhance seaside connectivity, and support a tourism-attracting iconic experience appealing to locals, visitors, and tourists alike. It also seeks to relieve parking and traffic pressure by providing alternative access routes alongside the West Coast Highway corridor.

Rooted in the City's environmental and coastal hazard risk planning, the proposed coastal boardwalk concept prioritises being environmentally sensitive and sustainable. The alignment largely avoids the highest-risk coastal erosion zones, using the City's Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) to steer siting and materials choices. The plan emphasises use of eco-friendly materials and minimal disturbance to protected natural values, including Class A Reserve and Bush Forever-designated dune systems.

Preliminary design concepts place the proposed coastal boardwalk structures to the east of the projected 2070 erosion line and include strategic lookout points to maximise coastal vistas without intruding on residents' sightlines. The design process envisages careful visual assessment by landscape architects to blend the structure into the coastal dune landscape and preserve the natural horizon views. Materials and construction techniques are being explored in detail as part of the concept-phase design and cost estimation.

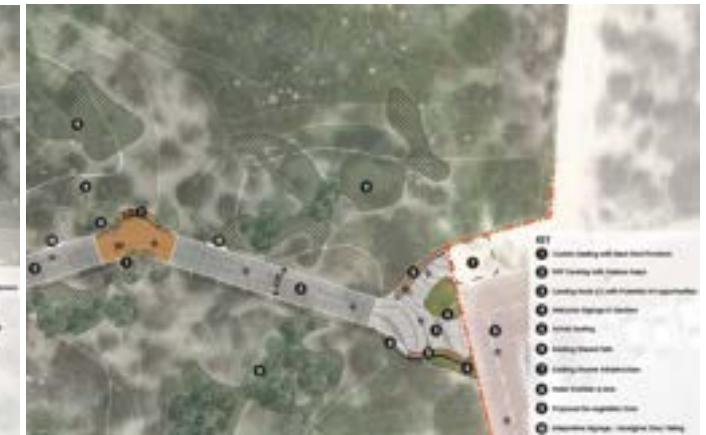
Primary Node



Connection Node



Secondary/Landing Node



Source: City of Stirling, UDLA

PROJECT OVERVIEW | SITE CONTEXT

The activity nodes at the western and eastern ends of the proposed boardwalk possess their own unique identity and points of attraction.

Scarborough is one of Perth's premier tourist destinations, being majorly comprised of food and beverage outlets and short stay accommodation, as well as destinational recreation space. The amphitheatre and communal space is a major visitation driver, with community events such as the Scarborough Sunset Markets, open salsa dancing classes, run clubs and other community activities (such as Cold Nips) held there.

Trigg includes both South Trigg Beach and Trigg Beach and marks the beginning of West Coast Drive - a scenic road that runs along the northern coast of metropolitan Perth. Its connected pathway sees major pedestrian usage thanks to its beachside views. Trigg is home to several major food and beverage establishments, including Island Market Trigg, Canteen Trigg and Bronty's Trigg. It is also home to Surfing WA, Trigg Island Surf Life Saving Club and community events such as the Summer x Salt Markets which are held at Clarko Reserve.



02

USAGE ANALYSIS



USAGE ANALYSIS | POPULATION

To inform the following analysis, the Statistical Areas (SA2s) of 'Scarborough' and 'Trigg – North Beach – Watermans Bay' were used to derive the indicative localised population and characteristics of the boardwalk's two end points. These two SA2's collectively together have been referred to as 'Scarborough-Trigg' for the purpose of this report.

The population of Stirling is expected to grow from 234,320 in 2021 to 288,485 by 2036, representing a 1.4% average annual growth rate over the 15 years. Scarborough-Trigg is expected to grow at a slower rate, at 0.8% per annum over the same 15-year period, given it is a relatively established area.

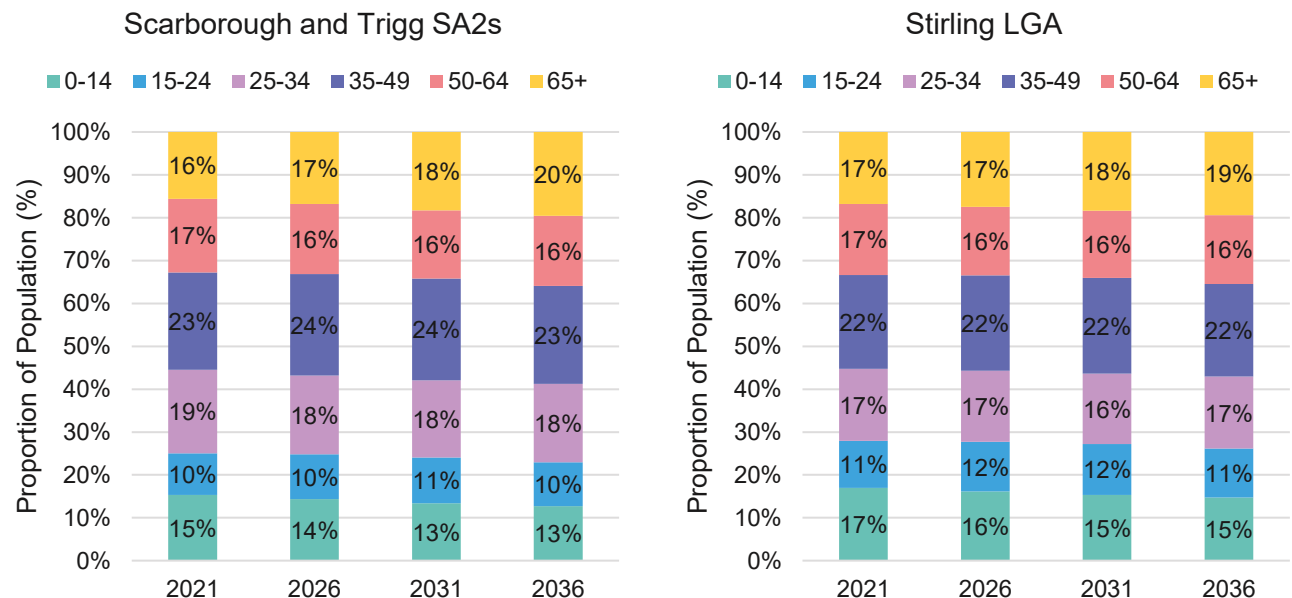
Both the City of Stirling and Scarborough-Trigg are expected to see a gradual increase in average age over the next 15 years, with the City of Stirling having a slightly higher proportion of residents under 25 at each 5-year interval.

POPULATION FORECASTS, SCARBOROUGH-TRIGG AND CITY OF STIRLING, 2021-2036

	2021	2026	2031	2036
Scarborough – Trigg	26,435	28,380	29,215	29,900
City of Stirling	234,320	254,965	272,265	288,485
ANNUAL GROWTH RATE		2021-26	2026-31	2031-36
Scarborough – Trigg		1.4%	0.6%	0.5%
City of Stirling		1.7%	1.3%	1.2%

Source: ABS, DPLH WA Tomorrow Population Forecasts (Central Band) 2024

POPULATION AGE DISTRIBUTION, SCARBOROUGH –TRIGG & CITY OF STIRLING, 2021 – 2036



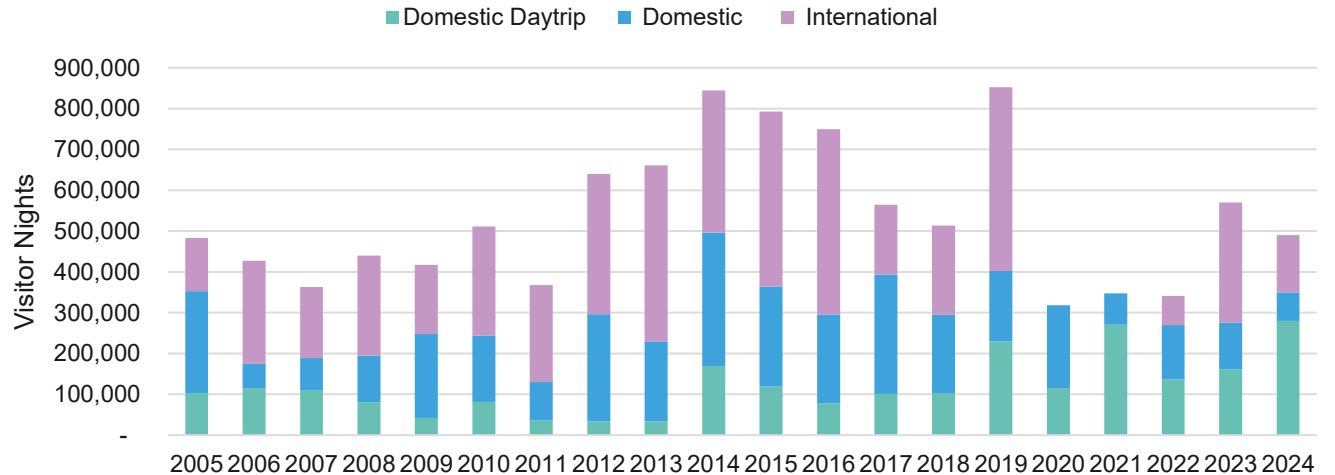
USAGE ANALYSIS | TOURIST VISITATION PROFILE

The following visitation data obtained by Tourism Research Australia gives insight into tourist activity over the last 20 years.

Visitation to Scarborough-Trigg has seen an historically even split between domestic and international visitation. Following a period of redevelopment of the Scarborough Beach Foreshore that started in 2013, domestic daytrips have seen a notable increase.

In line with the summer season of WA, the March quarter (Jan 1st – March 31st) has seen typically higher tourist visitation over the last 20 years, accounting for 32% of total visitor nights. During this quarter, holiday visitor nights increase significantly while business trips decrease, comparative to the other quarters.

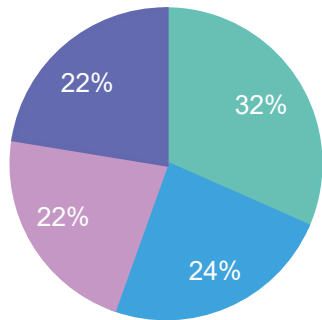
VISITS BY VISITOR TYPE, SCARBOROUGH-TRIGG, 2005-2024



Source: Tourism Research Australia
 Note: Domestic Daytrips count as one visitor night. International data from 2020-2021 is deemed unusable given travel restrictions as a result of COVID-19.

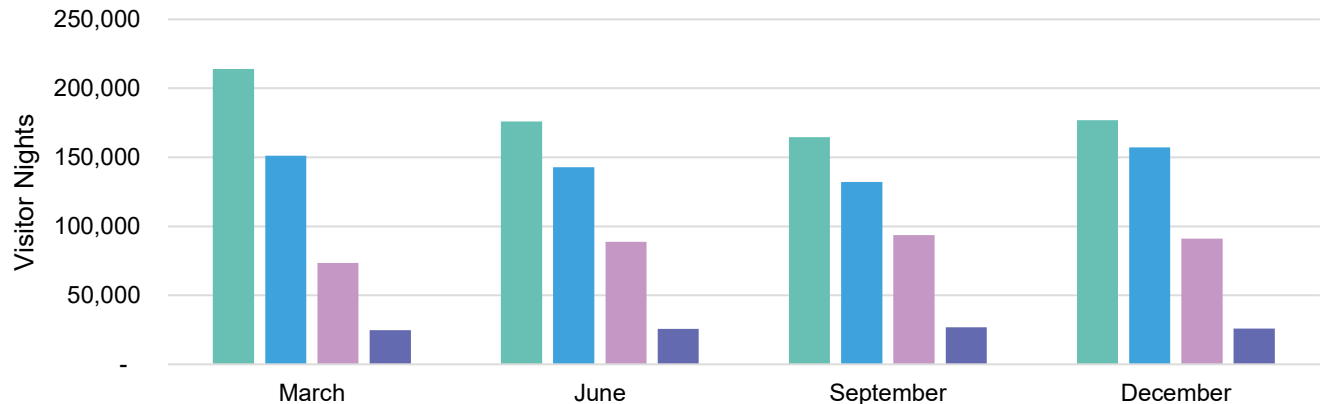
VISITATION BY QUARTER, SCARBOROUGH-TRIGG, 2005-2024

Legend: March (Green), June (Blue), September (Purple), December (Dark Blue)



VISITATION BY QUARTER AND STOPOVER REASON, SCARBOROUGH-TRIGG, 2005-2024

Legend: Holiday (Green), Visiting friends and relatives (Blue), Business (Purple), Other reason (Dark Blue)



Source: Tourism Research Australia
 Note: Visitation counts visitor nights by Domestic Daytrip, Domestic and International visitors. Domestic Daytrips count as one visitor night. International data from 2020-2021 is deemed unusable. "Other" includes "Other Reason" and "In Transit".

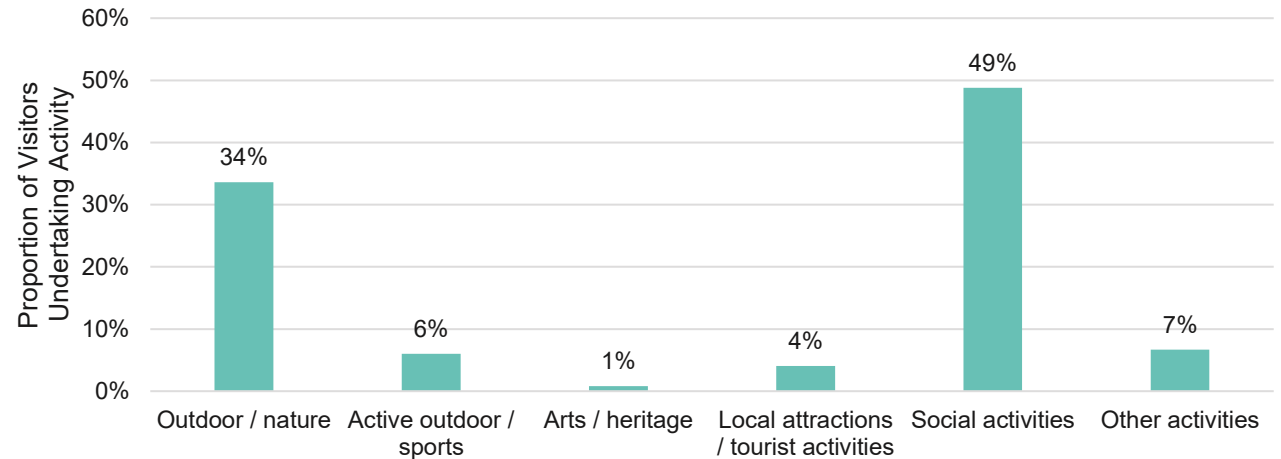
USAGE ANALYSIS | TOURIST VISITATION PROFILE (CONT.)

Amongst those visitors that declared the activity they participated in, social activities were the leading driver at 52%.

'Social activities' includes activities such as visiting friends and relatives, going to pubs/clubs, eating out at restaurants/cafes and having picnics or BBQs.

This is testament to the significant food and beverage hubs that both Scarborough Beach and Trigg Beach have curated, outside of its beachfront offering. Outdoor / nature¹ follows at 36%, which is comprised almost solely of people going to the beach.

DOMESTIC DAYTRIPS BY ACTIVITY TYPE, SCARBOROUGH-TRIGG, 2022-2024



Source: Tourism Research Australia

Note: Totals rounded. 'Other Activities' includes 'Other Activities' and 'None of These'

¹See appendix for definitions

USAGE ANALYSIS | RESIDENT PHYSICAL ACTIVITY

A review of AusPlay data shows that adults and children living in the City of Stirling have a higher participation rate in physical activity than that of Greater Perth, at 92% vs 89% for adults and 79% vs 71% for children.

Data also shows that adults living in the City of Stirling exhibit higher participation rates in key activities such as walking, swimming, surfing, running and cycling, which are all activities enabled by a proposed coastal boardwalk.

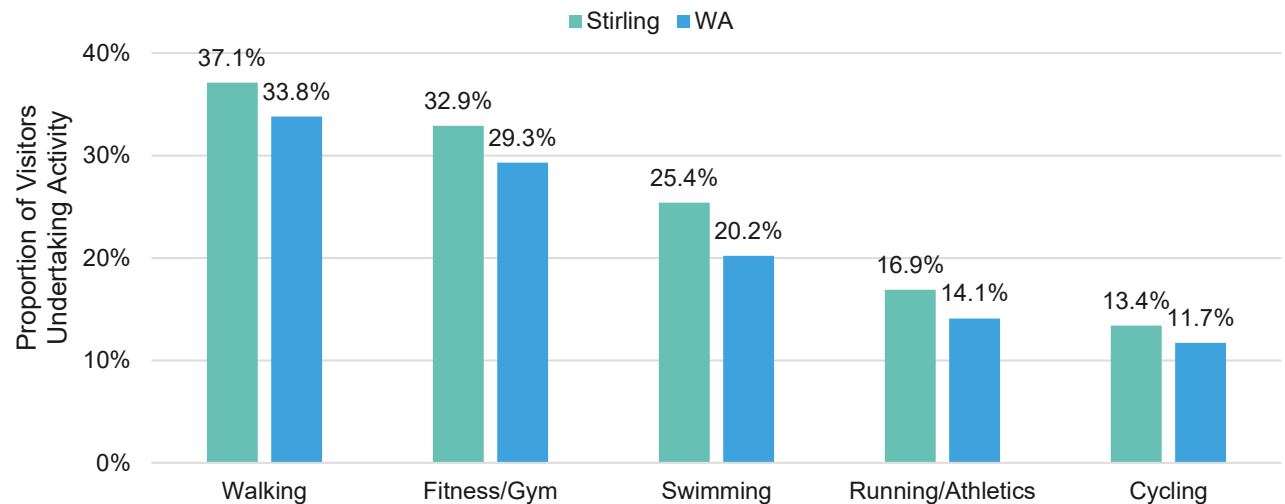
The higher prevalence of those who engage in both walking, running and cycling supports the need to reduce conflict between path users through an introduction of a boardwalk.

PHYSICAL ACTIVITY PARTICIPATION, CITY OF STIRLING VS GREATER PERTH, 2015-2023 AVERAGE



Source: AUSPLAY

TOP 5 SPORTING ACTIVITIES FOR ADULTS, CITY OF STIRLING VS GREATER PERTH, 2015-2023 AVERAGE



Source: AUSPLAY

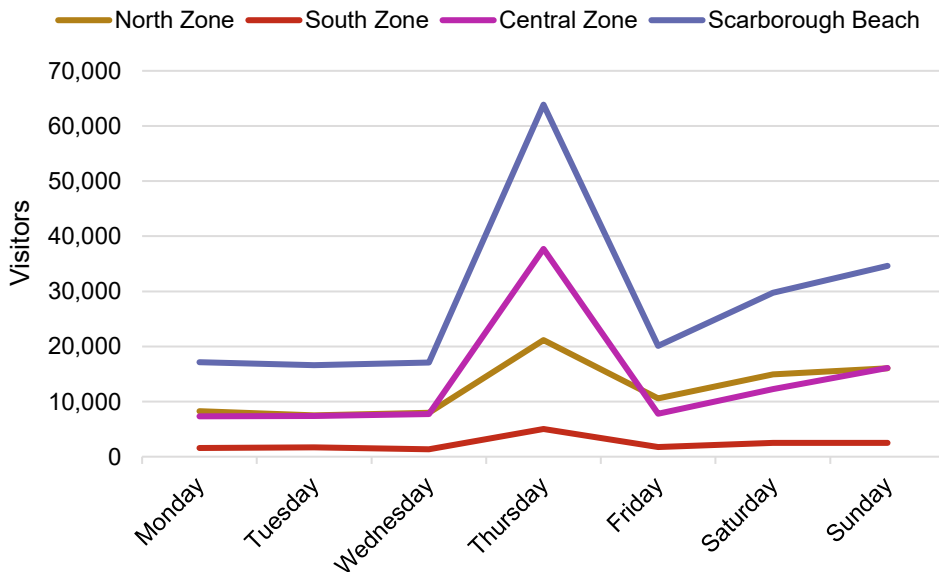
USAGE ANALYSIS | VISITATION PROFILE

The following visitation data obtained by the City of Stirling gives insight into a typical week of visitation during summer, at a point in time of heightened activity. The analysis splits the Scarborough foreshore into a north, central and south zone. The central zone receives the highest visitation, reflective of the appeal of the amphitheater.

Thursday sees a significant spike in traffic due to the occurrence of the Scarborough Sunset Markets, which drives significant night-time attendance to the central zone. Attendance also typically ramps up from Friday to Sunday.

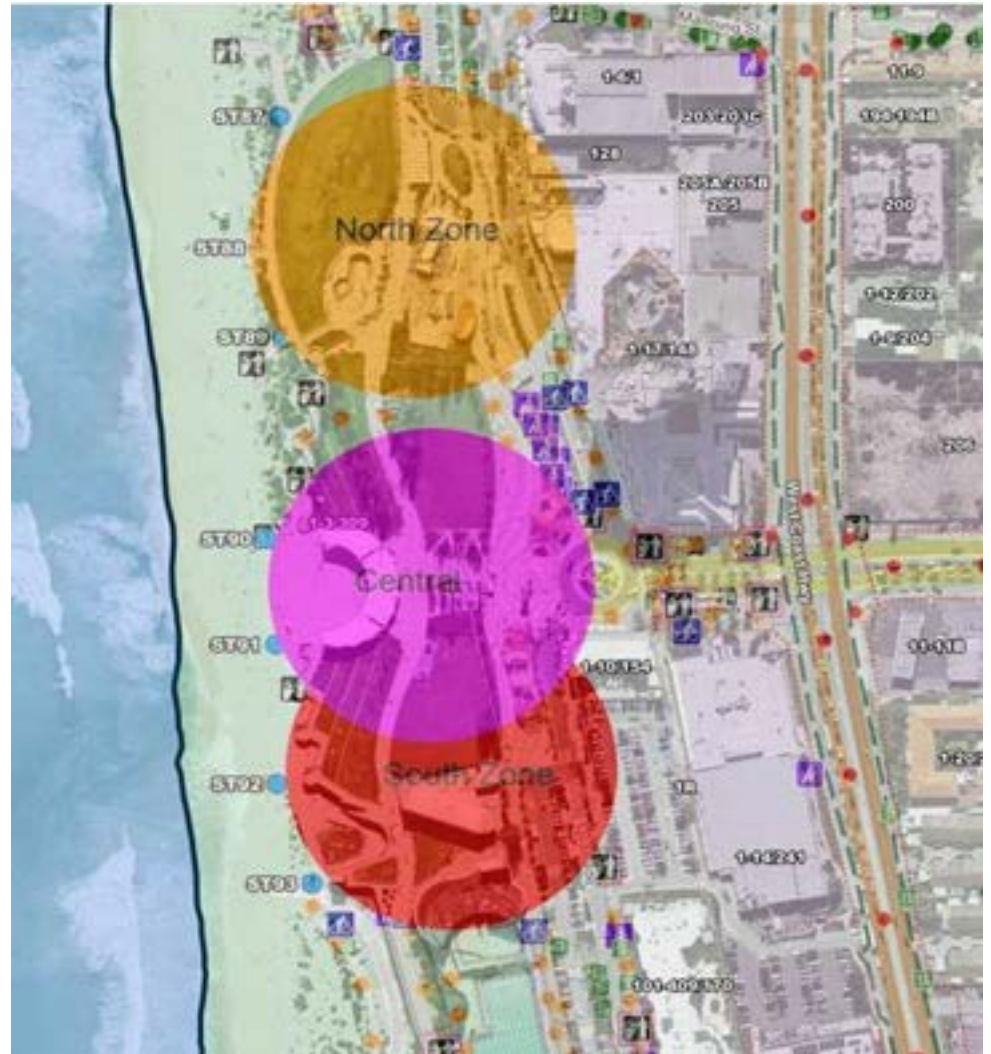
On average for the week, 51% of visitation was from daytime visits (from 6am-6pm), with 7-8pm being the busiest time of the day.

SCARBOROUGH VISITATION ANALYSIS, 3-9 FEBRUARY 2025



Source: City of Stirling

SCARBOROUGH STUDY AREA, CITY OF STIRLING



Source: City of Stirling

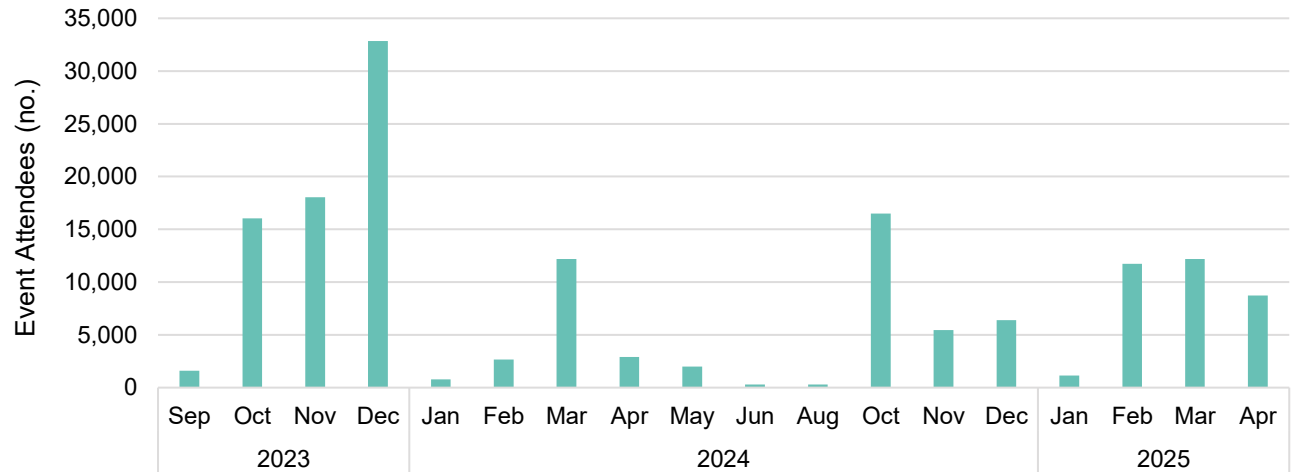
USAGE ANALYSIS | VISITATION PROFILE – EVENT ATTENDANCES

From September 2023 to April 2025, a total of 60 events were held in Scarborough. Event attendances have varied over this period. Events with large attendances include:

- Guinness World Record – December 2023, 30,000 attendees
- Groundswell Festival – October 2023, 15,000 attendees
- Scarbs Beach Party – October 2024, 15,000 attendees
- Brazilian Beach Carnival – March 2024 and 2025, 10,000 attendees each
- Scarborough Beach Slam – March 2024, 10,000 attendees

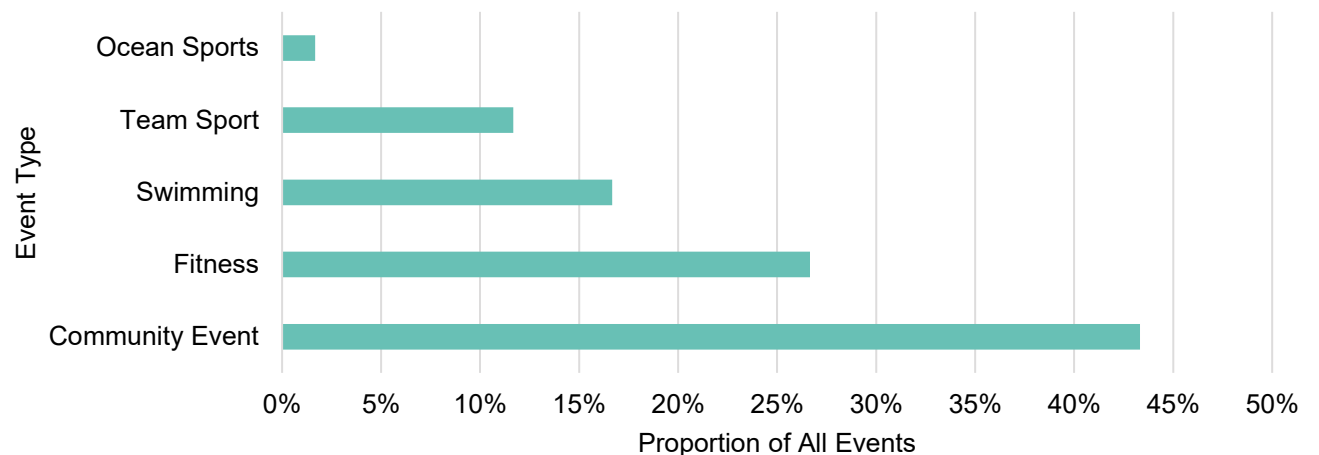
In terms of events held by type, community-based events accounted for 43% of all events over the period. Active events like fitness and swimming accounted for the remaining events, benefitting from Scarborough’s beachside location.

EVENT ATTENDANCE, SCARBOROUGH BEACH FORESHORE, SEPTEMBER 2023 – APRIL 2025



Source: City of Stirling

EVENT TYPE, SCARBOROUGH BEACH FORESHORE, SEPTEMBER 2023 – APRIL 2025



Source: City of Stirling

USAGE ANALYSIS | SPENDING CHARACTERISTICS

The following spending data shows the value of spending on businesses within the Scarborough Tourist Zone, which is comprised of the Scarborough and Trigg beachfront precincts.

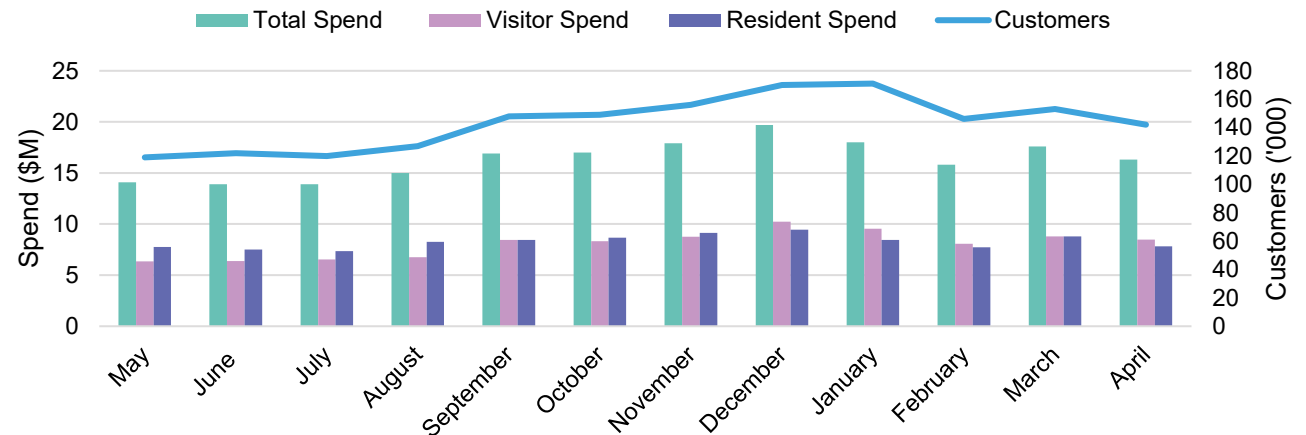
The level of spending experiences a peak during December, at the peak of summer and the festive period where Visitor Spend occurs the most. Conversely, the Tourist Zone experiences lower amounts of activity and spending during the winter season where Resident Spend increases.

Due to the composition of businesses within the Scarborough Tourist Zone, the majority of spending within the precinct is from tourism and entertainment. The extensive Food and Beverage offerings along the foreshore account for \$91,093,000, with restaurants the main contributor, at \$30,326,000.

Food retailing is still a significant spending, attributable to the Coles located along West Coast Highway.

The level of private transport spending is testament to the scale of parking offerings and prevalence of ride sharing usage within the precinct.

RESIDENT AND VISITOR SPEND, SCARBOROUGH TOURIST ZONE*, 12 MONTHS TO APRIL 2025



Source: Council IQ
*See Appendix

SPENDING BREAKDOWN, 12 MONTHS TO APRIL 2025, SCARBOROUGH TOURIST ZONE

Total	\$196,246,000
Tourism and Entertainment	\$91,093,000
Restaurants	\$30,326,000
Pubs, Taverns and Bars	\$26,172,000
Cafes	\$20,749,000
Takeaway and Fast Food Outlets	\$11,688,000
Attractions, Events and Recreation	\$2,159,000
Food Retailing	\$45,160,000
Private Transport	\$26,782,000
Discretionary Retail	\$12,587,000
Other Discretionary Retail	\$10,316,000
Department Stores, Clothing & Accessories	\$2,270,000

Source: Council IQ

Note: Spending figures do not add to total. Category of 'Accommodation' has been excluded from Council IQ's spending breakdown due to small sample size.

USAGE ANALYSIS | PLANNED TRANSPORT WORKS

An addition to the current transport options, there are several proposed transport projects at different stages set to impact the Scarborough foreshore precinct.

The Trackless Trams project – which progressed from business case to physical trials in late 2023 - aims to connect Glendalough Station to the Scarborough foreshore through the 7km Scarborough Beach Road Activity Corridor. The project has received support from the Federal Government under the Urban Congestion Fund.

The State Government has allocated \$18 million to the development of a free Central Area Transit (CAT) bus service from Stirling Station to Scarborough Beach, labelled the “Surf CAT”. The Surf CAT is expected to run every 10 minutes during peak times and expected to be operational by early 2026.

To support this bus service, \$4.3 million has also been allocated by the state to the upgrade of the Scarborough Beach Road and West Coast Highway Intersection.

Initial plans have been created by Main Roads to sink a 2km portion of West Coast Highway from West Coast Terrace to Ventnor Street to accommodate the projected 50,000 vehicles passing through the road per day by 2041.

This involved an open 3-lane trench, a reversible central lane, surface roads for local traffic and multiple east-west pedestrian bridges.

ARTIST'S IMPRESSION OF WEST COAST HIGHWAY THREE-LANE TRENCH



Source: Main Roads

03

BUSINESS CONTEXT



BUSINESS CONTEXT | FLOORSPACE GROWTH

To understand the business context for the City of Stirling to compare with Scarborough and Trigg, a review of the DPLH Land Use and Employment Survey was undertaken to compare the growth of commercial floorspace in the City of Stirling between 2008 and 2017.

Total floorspace increased by 64,309 sq.m, which equates to an average of 7,145 sq.m of new floorspace introduced each year between 2008 and 2017. The composition of the floorspace has changed significantly in this time too.

Storage / Distribution floorspace saw an increase of 204,340 sq.m over the course of 2008-2017, notably in areas such as Osborne Park and Balcatta. Storage / distribution had the largest increase in floorspace between 2008 and 2017 across all industries within the City of Stirling.

Residential, Health / Welfare / Community and Utilities / Communications floorspace has also seen significant increases over the course of 2008 and 2017 as the City has grown and provided these essential services.

Manufacturing / Processing / Fabrication floorspace has seen a significant decline between 2008 and 2017, from 300,186 sq.m to 182,545 sq.m. Businesses have moved from areas such as Balcatta and Osborne Park to other heavier industrial areas across Perth, better suited to this land use.

GROWTH IN FLOORSPACE (SQ.M NLA), CITY OF STIRLING, 2008 AND 2017

LAND USE	2008	2017	VARIANCE	AVERAGE FLOORSPACE TAKE UP PER YEAR
			2008 - 2017	2008 - 2017
Entertainment / Recreation / Culture	148,731	185,441	36,710	4,079
Health / Welfare / Community Services	487,902	611,283	123,381	13,709
Manufacturing / Processing / Fabrication	300,106	182,545	-117,561	-13,062
Office / Business	526,585	539,656	13,071	1,452
Primary / Rural	562	0	-562	-62
Residential	119,908	278,364	158,456	17,606
Other Retail	220,799	196,205	-24,594	-2,733
Service Industry	251,466	259,674	8,208	912
Shop / Retail	387,375	375,585	-11,790	-1,310
Storage / Distribution	529,258	733,598	204,340	22,704
Utilities / Communications	42,424	175,539	133,115	14,791
Total Occupied Floorspace	3,015,116	3,537,890	522,774	58,086
Vacant Floor Area	175,475	231,481	56,006	6,223
Total Floorspace	3,190,591	3,769,371	578,780	64,309

Source: DPLH Land Use Employment Survey 2008 & 2017

Note* 2008 and 2017 are the most recent land use employment surveys conducted. Residential includes only non-private housing such as short stay accommodation and aged care.

BUSINESS CONTEXT | BUSINESS PROFILE

Strong growth in the local economy over the 2019-2024 period shows a 16.7% increase in the total number of businesses in the City of Stirling. This growth was driven by the **Transport, Postal and Warehousing** industry, the **Health Care and Social Assistance** industry, the **Professional, Scientific and Technical Services** industry, and the **Administrative and Support Services** industry.

Sectors which have also seen strong percentage growth are the **Other Services** industry, and **Arts and Recreation Services** industry, which have grown by 40.0% and 32.8% respectively.

Accommodation and Food Services and **Retail Trade** have remained relatively stable over this period, which is reflective of the competitive landscape for these uses in areas such as Scarborough.

BUSINESSES BY INDUSTRY, CITY OF STIRLING, 2019-2024 (AS AT 30 JUNE)

INDUSTRY	2019	2020	2021	2022	2023	2024	2019-2024 GROWTH (%)	NET CHANGE (2019-2024)
Agriculture, Forestry and Fishing	230	236	234	231	226	215	-6.5%	-15
Mining	164	165	169	167	188	150	-8.5%	-14
Manufacturing	698	674	687	733	725	712	2.0%	14
Electricity, Gas, Water and Waste Services	54	45	47	44	43	55	1.9%	1
Construction	3,977	3,884	3,991	4,241	4,066	4,269	7.3%	292
Wholesale Trade	705	697	716	731	714	707	0.3%	2
Retail Trade	1,185	1,190	1,235	1,259	1,273	1,298	9.5%	113
Accommodation and Food Services	742	721	764	793	772	822	10.8%	80
Transport, Postal and Warehousing	2,396	2,610	2,615	2,624	2,805	3,307	38.0%	911
Information Media and Telecommunications	207	229	212	216	226	228	10.1%	21
Financial and Insurance Services	1,232	1,254	1,302	1,390	1,358	1,377	11.8%	145
Rental, Hiring and Real Estate Services	2,815	2,811	2,895	2,939	2,899	2,944	4.6%	129
Professional, Scientific and Technical Services	3,199	3,269	3,383	3,514	3,506	3,659	14.4%	460
Administrative and Support Services	969	982	1,053	1,200	1,253	1,351	39.4%	382
Public Administration and Safety	67	68	71	66	68	72	7.5%	5
Education and Training	277	274	280	293	296	292	5.4%	15
Health Care and Social Assistance	1,285	1,366	1,474	1,615	1,755	1,897	47.6%	612
Arts and Recreation Services	253	258	286	314	321	336	32.8%	83
Other Services	854	879	999	1,119	1,152	1,196	40.0%	342
Currently Unknown	23	15	15	21	16	11	-52.2%	-12
Total	21,332	21,627	22,428	23,510	23,662	24,898	16.7%	3,566

BUSINESS CONTEXT | BUSINESS PROFILE

The Scarborough Trigg Foreshore area is characterised predominantly by the **Accommodation and Food Services** industry. This industry accounts for approximately 45% of jobs in the area (38% more proportionally relative to the City of Stirling), given the prominence of food and beverage establishments and short stay accommodation, particularly within Scarborough. Most other industries are not as well suited to the area, with waterfront views attracting premium dining and short stay opportunities. Almost all other industries are proportionally less prominent within the Scarborough Trigg Foreshore area relative to the City of Stirling.

SCARBOROUGH TRIGG FORESHORE (BASED ON DESTINATION ZONES)



Source: ABS Census 2021, Nearmaps, Remplan

PROPORTION OF JOBS BY INDUSTRY, SCARBOROUGH TRIGG FORESHORE AND CITY OF STIRLING, AS AT ABS CENSUS 2021 (SCALED TO 2024)

INDUSTRY	SCARBOROUGH TRIGG FORESHORE	CITY OF STIRLING	DIFFERENCE PROPORTIONALLY (%) TO CITY OF STIRLING BENCHMARK
Accommodation and Food Services	44.7%	6.4%	38.3%
Professional, Scientific and Technical Services	7.0%	7.7%	-0.7%
Other Services	6.8%	4.7%	2.1%
Education and Training	6.8%	10.5%	-3.7%
Retail Trade	6.7%	12.9%	-6.2%
Construction	6.7%	13.6%	-7.0%
Administrative and Support Services	5.6%	3.9%	1.7%
Health Care and Social Assistance	5.1%	15.4%	-10.3%
Arts and Recreation Services	3.0%	1.7%	1.3%
Public Administration and Safety	1.9%	5.1%	-3.2%
Financial and Insurance Services	1.8%	2.1%	-0.3%
Rental, Hiring and Real Estate Services	1.1%	1.7%	-0.6%
Transport, Postal and Warehousing	1.0%	2.4%	-1.4%
Mining	0.8%	1.1%	-0.3%
Manufacturing	0.7%	4.7%	-4.0%
Information Media and Telecommunications	0.3%	1.8%	-1.5%
Wholesale Trade	0.2%	2.8%	-2.5%
Agriculture, Forestry and Fishing	0.0%	0.5%	-0.5%
Electricity, Gas, Water and Waste Services	0.0%	1.2%	-1.2%

Source: ABS Census 2021, ABS 2022/23 National Input Output Tables, ABS June 2024 Gross State Product, Remplan
*Scarborough Trigg Foreshore is characterised by the following destination zones: 510941309,510921336,510921347.

04

STAKEHOLDER ENGAGEMENT



STAKEHOLDER ENGAGEMENT | BUSINESS SURVEY

APPROACH

To understand the perceived impact a coastal boardwalk would have on businesses within Scarborough and Trigg, Urbis conducted a business survey aimed at understanding:

- Business' awareness of the project;
- Its perceived impact on businesses; and
- If businesses believed it would attract more visitors within the broader area.

The survey and the area in which the survey took place has been appended to this report. The surveying process was undertaken on two separate days during different times;

- Wednesday 4 June 2025 between 2.00pm – 4.30pm; and
- Friday 6 June between 10.30am – 2.00pm.

In total, 29 businesses within Scarborough and Trigg participated in the survey. Some businesses were unable to be surveyed given they were either too busy during the time the survey was taking place.

KEY TAKEAWAYS

Overall, business sentiment of the proposed boardwalk was positive.

Of businesses surveyed, 62% were aware of the project and that the City of Stirling were conducting a feasibility study.

Most businesses believed a coastal boardwalk would have a positive impact on their turnover.

Approximately 45% of businesses surveyed believed that a coastal boardwalk would increase turnover by 1-4% and 34% believed it would

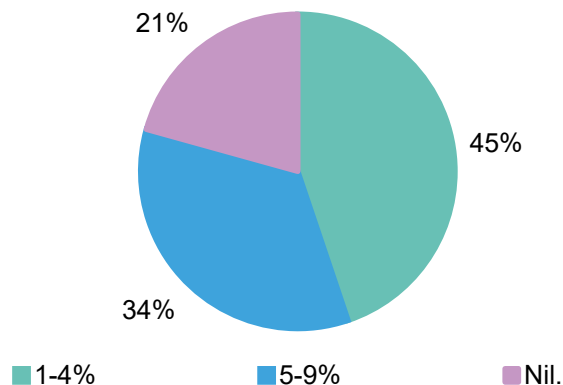
increase turnover by 5-9%. This positive perception was primarily based on the increase in foot traffic and tourism a coastal boardwalk would bring to the local area. There were no businesses which believed that the Coastal Boardwalk would have a negative impact on their turnover.

Almost every business surveyed (96%) believed a coastal boardwalk would attract more visitors to both Scarborough and Trigg Beaches.

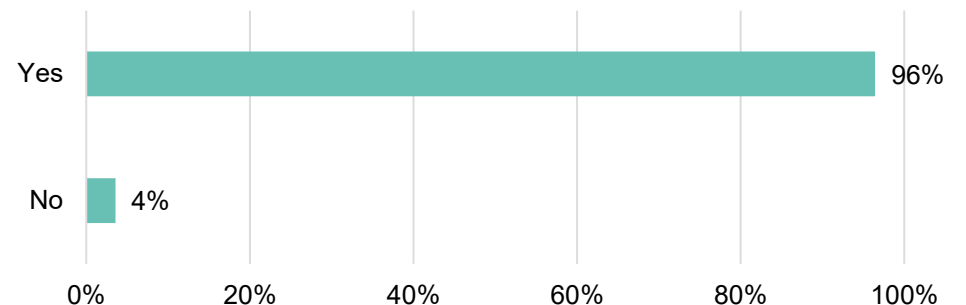
A detailed summary of business sentiment towards a proposed boardwalk based on the business survey has been provided on the following page.

KEY SURVEY STATISTICS

Perceived Financial Turnover Impact caused by Boardwalk



Local Business Perception of whether a coastal boardwalk would attract more visitors to Scarborough and Trigg Beaches



Source: Urbis

Note* no businesses anticipated negative impacts on business turnover
 City of Stirling Coastal Boardwalk Feasibility Study -
 Economic Impact Assessment

Source: Urbis

STAKEHOLDER ENGAGEMENT | BUSINESS SURVEY SUMMARY

BUSINESS SURVEY SUMMARY

QUESTION	SUMMARY
Q1. What is the name of your business and your position – and what services do you offer?	There were a diverse mix of businesses / organisations which participated in the business survey. A majority of these businesses provided food and beverage services (55%). Retail, health and wellness offerings and short stay accommodation operators each accounted for 10% of the businesses surveyed. Surf life saving clubs and other recreational organisations accounted for the remainder of the businesses which participated in the survey. 65% of survey responses were completed by either management or business owners. Of the remaining businesses surveyed, 17.5% of respondents did not provide their position within the business and 17.5% were either in customer service or administration officers.
Q2. Where do your customers come from?	Food and beverage and retail businesses cited that a majority of their customer base were City of Stirling residents or from other parts of WA. Health and wellness businesses and surf life saving clubs see almost all of their customer base come from within the City of Stirling. Short stay accommodation providers have predominantly interstate and international customers given the nature of their operations. Recreational organisations saw a fair split amongst different customer origins.
Q3. Are you aware that the City of Stirling is conducting a feasibility study into a coastal boardwalk that will link Scarborough and Trigg beaches?	Approximately 62% of businesses surveyed were aware that the City of Stirling were conducting a feasibility study into a coastal Boardwalk.
Q4. What impact do you think a coastal boardwalk could have on your business turnover?	Most businesses surveyed were optimistic about a coastal boardwalk's impact on turnover. Approximately 45% expect a 1-4% increase, while 34% anticipate a 5-9% boost. The remaining 21% of businesses surveyed believed that a coastal boardwalk would have no impact on their turnover. Notably, no businesses surveyed foresaw a negative impact on their turnover because of a proposed coastal boardwalk.
Q5. Can you please describe how you think a coastal boardwalk will impact your business?	The comments from businesses surveyed suggest that a coastal boardwalk is expected to increase foot traffic in Scarborough, attract more visitors from surrounding areas and potentially boost walk-in customers for local businesses. Many believe it will enhance tourism and make the broader area more appealing, though a few think the impact on their specific business might be minimal. Overall, the sentiment is positive, with no anticipated negative effects.
Q6. How would a coastal boardwalk (if constructed) influence the future investment decisions for your business?	The majority of respondents indicated that a coastal boardwalk would not significantly influence their future investment decisions, with many providing no specific comments. However, some noted that increased foot traffic and the area's enhanced value from the project could positively impact their business, potentially leading to more investment. A few businesses mentioned a coastal boardwalk could translate to potential partnerships for their businesses with others and that it would provide a generally positive outlook for their future investment.
Q7. Do you think a coastal boardwalk will attract more visitors to Scarborough and Trigg beaches? Why?	Of the businesses surveyed, 96% believed that a coastal boardwalk would attract more visitors to Scarborough and Trigg Beaches. Many businesses cited that it would promote tourism, provide a safer and more scenic walking route, and offer a unique attraction to the area. A coastal boardwalk was seen as a way to enhance the area's appeal, making it more accessible and enjoyable for walkers, runners, and beachgoers.

05



LITERATURE AND CASE STUDY REVIEW

LITERATURE AND CASE STUDY REVIEW | LITERATURE REVIEW

Previous studies have demonstrated that enhanced tourism and community infrastructure significantly contribute to improving the local quality of life for residents, workers, visitors, and businesses.

The construction of a boardwalk is expected to have a wide range of positive impacts, including an enriched visitor experience, reduced pedestrian conflict, and improvements in both physical and mental wellbeing. Additionally, it will boost the quality and value of nearby business activities and provide easier and improved mobility access to the coast.

Detailed literature review findings can be found in appendix A.

IMPACT	FINDINGS
Visitation and Expenditure	Boardwalks often pass through / overlook unique sceneries - offering opportunities for sunset watching. Research shows the implementation of a boardwalk not only improves visitation to the area, but also spending, due to an improved offering and increased dwell time.
Road Safety	Boardwalks provide a physical separation between foot traffic and roadways, potentially reducing the risk of pedestrian-vehicle collisions. According to the National Road Safety Strategy, pedestrians account for 13% of road casualties in Australia. By mitigating these risks, boardwalks contribute to fewer severe injuries, thereby enhancing the overall wellbeing of the community.
Health and Wellbeing	Coastal boardwalks are associated with promoting a higher-level physical activity, given their scenic nature. Given the connections between increased physical activity and the prevention and control of epidemic chronic diseases (as well as decreased depression, prevention of falls, and better cognitive function in older adults), they likely reduce healthcare costs.
Boosting Local Economic Activity	Investing in boardwalks, when combined with other initiatives, has been associated with boosts in the local economy, financial savings from transportation-related costs, and increases in the overall quality and value of homes and businesses. Some trail networks are in fact destination tourist attractions, bringing hundreds or thousands of visitors, and thousands or millions of dollars annually to a community.
Social Connection	Boardwalks become vibrant community hubs that provide spaces for social interaction and cultural exchange. Research shows that these promote social interaction and enhance perceived community cohesion. Activities such as dog walking significantly foster social connections, further enriching the visitor experience.
Accessibility	Access to safe, vehicle free space accommodates to various community members such as individuals with disabilities, strollers and wheelchairs. Furthermore, literature suggests that modern urban design—such as boardwalks—is increasingly focused on reducing accessibility barriers and accommodating the diverse needs of people across all stages of life. As at the ABS Census 2021, approximately 4.9% of the City of Stirling's population requires assistance due to a disability.

LITERATURE AND CASE STUDY REVIEW | CASE STUDY REVIEW

DUBUJI BOARDWALK



Location: Cape Tribulation, QLD



Investment: The boardwalk, at 1.8km long, was built from recycled materials at a cost of \$1.6 million, to retain the well-known tourist attraction of the Daintree Rainforest and improve safety.



Time Period: 2017 – 2018



Impact: The boardwalk increased visitor nights substantially after 2018.

- The number of domestic nights averaged 140,000 visitor nights per annum from 2014-2017 in the Daintree Region, which increased to an average of 213,000 from 2018-2021 (increase of 73,000 trips on average).
- The number of domestic visitor nights increased by 126% from 2017 to 2018 in the Daintree region.

Source: Urbis, Tourism Research Australia, Shire of Douglas

WITTON BLUFF TRAIL



Location: Christie Beach, SA



Investment: The \$6.7million, 1.1-kilometre Witton Bluff Base Trail, connects the foreshores of Port Noarlunga and Christies Beach.



Time Period: 2024



Impact: The project will have positive economic impacts by attracting visitors to the region.

- The anticipated economic impact is calculated based on a 5% increase in both internal and external visitor spend in Port Noarlunga and Christies Beach.
- The increased spend is valued at \$4.66 million, bringing the total combined visitor spend for both locations to \$97.9million.
- Aboriginal cultural advisors employed during ground works.

Source: Urbis, Tourism Research Australia, City of Onkaparinga, Economic.id

LITERATURE AND CASE STUDY REVIEW | CASE STUDY REVIEW (CONT.)

TERRIGAL BOARDWALK



Location: Terrigal, NSW



Investment: The Terrigal Boardwalk and upgraded rockpool project represents a significant investment in the Central Coast community, with a total funding of approximately \$6.86 million. It features a viewing platform, seating, lighting and access to rock platforms.



Time Period: 2020 – 2021



Impact: The boardwalk increased visitor numbers substantially after 2021.

- The number of domestic nights averaged 377,000 overnight trips per annum from 2016-2019 in the Terrigal - North Avoca region, which increased to an average of 398,000 from 2021-2024 (increase of 21,000 overnight trips on average).
- The number of domestic visitor nights increased by 24% from 2021 to 2022 in the Terrigal - North Avoca region.

Source: Urbis, Tourism Research Australia, Central Coast Council

LAKE SAMBELL BOARDWALK



Location: Beechworth, VIC



Investment: This \$22,716 project was completed to improve safety for walkers around Lake Sambell, as severe wet weather in the area has meant that sections of the original track were deteriorated and hazardous.



Time Period: 2020



Impact: Beechworth became more popular among overnight visitors from 2021 onwards.

- The number of domestic nights averaged 304,000 nights per annum from 2015-2018 in the Beechworth region, which increased to an average of 332,000 from 2021-2024 (increase of 28,000 trips on average).
- The number of domestic visitor nights increased by 89% from 2021 to 2022 in the Beechworth region.

Source: Urbis, Tourism Research Australia, Indigo Shire Council

LITERATURE AND CASE STUDY REVIEW | POLICY REVIEW AND STRATEGIC ALIGNMENT

A review of relevant City of Stirling and State Government policies and strategies was undertaken as part of this study.

The City of Stirling's existing policies, plans and strategies recognise the need for the City to provide and upkeep community infrastructure for the benefit of its residents.

City of Stirling Policies Assessed:

- Sustainable Stirling (2022-32)
- Corporate Business Plan (2024-28)
- Public Open Space Strategy (2021-31)
- Public Art Masterplan (2021-25)
- Coastal Hazard Risk Management and Adaption Planning (2023)

State Policies Assessed:

- Western Australia Visitor Economy Strategy 2033 (WAVES 2033)
- WA Public Health Plan – Department of Health (2025-30)
- Classification Framework for Public Open Space – Department of Sport and Recreation (2012)
- Corporate Plan - Department of Infrastructure, Transport, Regional Development, Communication and the Arts (2024/25 – 2027/28)




RELEVANT POLICIES AND STRATEGIES



Source: City of Stirling, Government of Western Australia
 Note* Not all policies reviewed have been presented here.




LITERATURE AND CASE STUDY REVIEW | POLICY REVIEW AND STRATEGIC ALIGNMENT

ALIGNMENT TO STRATEGIC IMPERATIVES

STRATEGIC IMPERATIVE	ALIGNMENT FINDINGS
 Economic Growth and Tourism	<p>The project is a major initiative within the City's Corporate Business Plan, aiming to become a world-class tourist attraction and significantly attract visitors. This directly supports the WAVES 2033 in its ambition to grow the visitor economy to \$25 billion by 2033 and increase tourism jobs, particularly by developing new nature-based tourism offerings that appeal to "high yield travelers" seeking authentic unique experiences. The City's Strategic Community Plan also explicitly targets attracting visitors and encouraging economic investment through unique tourist attractions.</p> <p>The proposed boardwalk project is designed to significantly boost the economic vitality of businesses within the Trigg and Scarborough precinct. This increased foot traffic and sustained interest in the area will directly translate into enhanced revenue and economic stimulus for local businesses, particularly those in the hospitality and retail sectors. The influx of visitors is also expected to lead to longer stays and increased spending patterns, further supporting job creation and fostering vibrancy within the local centers adjacent to the boardwalk.</p>
 Community Health and Wellbeing	<p>The coastal boardwalk project aligns with the City's Strategic Community Plan objectives for "An active and healthy City". It will provide new recreational and leisure opportunities, promoting active lifestyle choices. The Public Open Space Strategy underscores the vital role of public open spaces (POS), like the coastal foreshore, in delivering physical, social, and mental health benefits, fostering social inclusion and connectedness. Furthermore, the State Public Health Plan advocates for "Health-Focused Urban Design" that encourages physical activity and mental wellbeing through access to nature, emphasizing the need to "optimize mental health and wellbeing."</p>
 Safety	<p>The proposed boardwalk directly targets significant safety improvements within the Trigg and Scarborough precinct, primarily by enhancing pedestrian safety. A key driver for the boardwalk is the decreasing perception of safety among pedestrians on the existing dual-use path due to the increasing popularity of bikes, e-scooters, and skateboards. This concern directly reflects community feedback that highlighted fears from sharing pathways with the above transit modes. The project aligns with the State Public Health Plan's goal to "Prevent injuries and promote safer communities" via a safer built environment.</p>

LITERATURE AND CASE STUDY REVIEW | POLICY REVIEW AND STRATEGIC ALIGNMENT (CONT.)

ALIGNMENT TO STRATEGIC IMPERATIVES

STRATEGIC IMPERATIVE	ALIGNMENT FINDINGS
 <p>Accessibility and Inclusion</p>	<p>Accessibility is a core principle in the City's planning. The City's Access and Inclusion Plan explicitly aims to maximize physical accessibility and social inclusivity. It also aims to offer accessible and inclusive open spaces through the provision and maintenance of safe and accessible footpaths. Community feedback highlighted existing barriers like sand on pathways and lack of pedestrian ramps, which the boardwalk offers a direct opportunity to overcome. This commitment is further echoed in the Strategic Community Plan's support for safe and accessible pathways and the Public Open Space Strategy's call for universally accessible POS.</p>
 <p>Cultural and Artistic Opportunity</p>	<p>The City's Public Art Masterplan provides a framework for integrating public art into significant spaces, aligning with the Strategic Community Plan to enrich public spaces and contribute to economic development. The boardwalk offers a prime location to implement public art that can activate tourist areas.</p>
 <p>Coastal Erosion Adherence</p>	<p>For the proposed boardwalk, coastal erosion alignment is a critical consideration. The City of Stirling explicitly uses its Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) to inform the environmental considerations for this project. This plan recognizes coastal erosion as the prevailing coastal hazard for the City's coastline over planning timeframes up to 100 years.</p>

06

PROJECT TIMING AND COST



IMPACT ASSESSMENT | PROJECT TIMINGS AND COST

The development of a proposed boardwalk is estimated to have a total Project Cost of \$24.8 million. These cost estimates cover the construction phase of the project and include design, engineering and project management costs (as well as construction costs).

This study assumes that the construction of a boardwalk will begin in 2026 and take place for a period of a year.

The estimated 30-year operational costs of the project amount to \$5.9m.

ESTIMATED PROJECT COST DURING CONSTRUCTION

DESCRIPTION	COST (\$)
Professional services / design	\$4,361,000
Non-residential construction	\$4,068,741
Heavy / civil engineering construction	\$16,398,259
Total Project Cost	\$24,828,000

Source: Donald Cant Watts Corke

n.b. Construction timing is subject to change pending environmental approvals and other factors

ESTIMATED 30-YEAR OPERATIONAL COSTS (\$ MILLION)

DESCRIPTION	COST (\$)
30-year Expenses, Depreciation & Cost of Capital (\$M)	\$5,943,840

Source: Urbis Estimate

A conservative estimate of 1.5% was applied to materials construction costs to determine yearly maintenance costs.

07

IMPACT ASSESSMENT



IMPACT ASSESSMENT | APPROACH

This section provides an assessment of the likely positive and negative economic and financial impacts from the implementation of the project.

The economic impacts of the project were measured in two components:

- **Construction impact**, where the economic effect is due to the construction activity; and
- **Ongoing economic impact**, where the economic effect is due to the activity generated post the construction of the activation initiatives.

This assessment has been conducted with consideration of the principles listed to the right to ensure it holds rigour and provides Urbis' best assessment of the impact of the project.

According to guidelines set by the WA Treasury, the adopted discount rate was 7% across a 30-year time horizon.

ASSESSMENT PRINCIPLES

PRINCIPLE	DESCRIPTION
Transparency is Paramount	Economic and social evaluations are heavily reliant on judgement. Because of this, it is crucial that the basis for analytical inputs, decisions and conclusions are properly explained and documented. A key benefit is it allows for more robust scrutiny of the analysis by other (independent) parties, thereby facilitating more informed debate and continual improvements over time.
Assumptions Linked to Sound Evidence Base	Credible and current published literature and data of ex-ante and post-ante case studies are referenced to support assumptions.
Guided by Government Guidelines	Assessments closely adhere to government guidelines.
Recognition of Risks	Many of the costs and benefits are uncertain and therefore involve an element of risk. Importantly, this is explicitly accounted for in economic impact assessment, primarily through undertaking a sensitivity analysis of key risk elements.

Source: Urbis, WA Treasury Evaluation Guidelines (2024)

IMPACT ASSESSMENT | CONSTRUCTION PHASE IMPACTS

The project cost of \$24.8 million is expected deliver the following benefits over the construction phase.

- On average, 70 FTE direct & indirect jobs are likely to be supported during construction of the project with the potential for many jobs to be supported locally.
- Total direct and indirect Gross Value-Added to the economy is estimated at \$13.4 million over the construction period of the development.

It is expected that the the proposed Coastal Boardwalk would adopt a procurement approach aligned with the Western Australian Aboriginal Procurement Policy, targeting a minimum of 3% Aboriginal content spend within the project's budget. This may include engaging local Aboriginal businesses, employing Aboriginal workers in construction and landscaping, and involving Traditional Owners in cultural heritage monitoring and interpretive signage development.

This approach is consistent with best practice demonstrated in projects such as the Bundian Way in NSW, where the Eden Local Aboriginal Land Council led the planning and delivery of a culturally significant walking trail, integrating Aboriginal employment, heritage management, and storytelling. Through this approach, the proposed Coastal Boardwalk would contribute to reconciliation outcomes, local economic development, and culturally enriched public infrastructure.

CONSTRUCTION PHASE IMPACT FINDINGS

CATEGORY	DIRECT EFFECT	SUPPLY-CHAIN EFFECT	TOTAL EFFECT
Direct Economic Activity (\$M)	\$24.8	\$20.3	\$45.1
Employment (FTE)	31	39	70
Value Added (\$M)	\$6.2	\$7.2	\$13.4

*Source: Urbis, REMPLAN
* Numbers rounded*

IMPACT ASSESSMENT | LOCAL EXPENDITURE

Expenditure is expected to increase, due to increased visits, dwell time and an improved coastal offering. Case study research and business survey inputs identified that the uplift in expenditure / business turnover could be significant (with case studies demonstrating uplift factors of 6-9%). The analysis assumes a conservative uplift of 3.5% based on the above.

The estimated value of visitation expenditure uplift per annum is \$6,688,610, representing a net-present-value (NPV) of \$78,552,854 over 30-years at a 7% discount rate.

The economic uplift per annum attributable to resident spending is estimated at \$3.5m, while the economic uplift attributable to non-residents is estimated at \$3.4m.

The increased spending in the area is expected to support an additional 35 employment opportunities directly and a further 15 jobs indirectly.

LOCAL EXPENDITURE IMPACTS

Estimated Annual Visitation Expenditure Uplift	\$6,868,610
Annual Expenditure	\$196,246,000
<i>% Estimated Uplift</i>	3.5%
Annual Economic Uplift Attributable to Residents	\$3,497,267
Annual Economic Uplift Attributable to Non-residents	\$3,371,343
Visitation And Expenditure Uplift (NPV @ 7% discount rate)	\$78,552,854

Source: Urbis, City of Stirling, Council iQ
See appendix for detailed assumptions.

LOCAL EXPENDITURE FLOW-ON IMPACTS PER YEAR

Impact	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect
Economic Output (\$m p.a.)	\$6.86	\$3.22	\$3.41	\$13.49
Employment (Jobs)	35	7	8	50
Wages / Salaries (\$m p.a.)	\$2.16	\$0.69	\$0.71	\$3.56
Value-Added (\$m p.a.)	\$3.42	\$1.33	\$1.77	\$6.52

Source: Urbis, REMPLAN
See appendix for detailed assumptions.

IMPACT ASSESSMENT | HEALTH AND WELLBEING

The annual health and wellbeing effects were calculated through the collation of the benefits derived from projected footpath usage of the proposed boardwalk. Due to the poor pedestrian usage of the current pathway, Urbis analysed the usage of comparable offerings to the proposed boardwalk. A conservative estimation of 194,545 trips per annum was adopted.

The health benefit of walking, per kilometer, is valued at \$3.71 per kilometer.

The estimated annual health and wellbeing impact is \$541,321, representing a NPV of \$5,738,561 across 30-years at the 7% discount rate.

HEALTH AND WELLBEING IMPACTS

Estimated Annual Health and Wellbeing Impact	\$541,321
Total Trips between Nodes	194,545
Health Benefit of Walking Per Kilometer	\$3.71
Distance between Scarborough and Trigg Nodes	750m
Total Health And Wellbeing Impact (NPV @ 7% discount rate)	\$5,738,561

*Source: Urbis, City of Stirling, Australia Transport Assessment and Planning
See appendix for detailed assumptions.*

IMPACT ASSESSMENT | ADDITIONAL IMPACTS

This project has the potential to deliver a range of impacts beyond what is quantifiable from a monetary perspective. The table below highlights these considerations and the likely impact that the design of the new facility will have with respect to each.

CONSIDERATION	DESCRIPTION
Safety	<ul style="list-style-type: none"> ▪ According to the NSW Treasury* guidelines, the following crash categories were given a monetary value: <ul style="list-style-type: none"> ○ Cost Of A Road Crash (Including Willingness To Avoid Crash) – Property Damage Only – Per Crash: \$12,476 ○ Cost Of A Road Crash (Including Willingness To Avoid Crash) – Injury – Urban – Per Crash: \$213,029 ▪ Urbis analysed crash data within the portion of road the proposed boardwalk would bypass across 5 years (2019-2024). The economic cost of historical crashes was estimated at approximately \$62,500 per annum. ▪ The separation of pedestrian and cyclists / e-scooters will also reduce the conflict between the user types, creating a perceived safer environment. ▪ The perception of safety will likely induce more traffic through the boardwalk, as users that dismissed walking on the existing PSP due to perceived danger may now entertain the new route. ▪ Perceived road safety also has the effect of fostering improved economic outcomes.
Business Development	<ul style="list-style-type: none"> ▪ As a result of increased traffic and spending in areas around the boardwalk, the locale will experience a compounding effect of increased economic activity. ▪ Research found that pedestrian improvements, as well as economic development incentives, resulted in new businesses, and reduction in vacancy rates. Property values are also likely to rise.
Sense of Community	<ul style="list-style-type: none"> ▪ Sense of community was positively associated with walking for transport and positive perceptions of neighbourhood quality. ▪ Providing a scenic pedestrian boardwalk will in turn garner higher foot traffic and increase perception of neighbourhood quality. ▪ Additional studies conclude that natural features and open spaces play an important role in achieving a sense of community.
Transport	<ul style="list-style-type: none"> ▪ The implementation of a coastal boardwalk will help disperse traffic loads from the Scarborough precinct to the Trigg precinct, easing the congestion and parking capacity issues during peak periods within the Scarborough precinct. ▪ A coastal boardwalk will complement the implementation of the Surf CAT and Trackless Trams project to encourage a shift in the modal preference of visitors. ▪ Each node will become more accessible as a result of the boardwalk's implementation.

Source: Urbis, City of Stirling
 *No WA guidelines available.

08

RAPID COST-BENEFIT ASSESSMENT



RAPID COST-BENEFIT ASSESSMENT | APPROACH

A Rapid Cost Benefit Analysis (Rapid CBA) is an economic evaluation techniques which compares the monetised benefits and costs of a project to determine the desirability of a project.

This study uses a net benefit approach. This only analyses the direct incremental, or additional, benefits and costs that can be estimated with a degree of accuracy. This approach is considered to be the most appropriate to assess the net economic benefits that accrue from the project as it enables direct comparisons with alternative proposals.

The steps in the Rapid CBA include:

- Identify the quantifiable benefits that are able to be monetized (taken from impact assessment);
- Calculate the value (in monetary terms) of the quantified incremental benefits and costs in net present value (NPV) terms using the discount rates;
- Calculate the 30-year total net present value – the total present value of all net benefits minus the present value of economic costs to determine whether net benefits exceed (or undershoot) costs related with the project.

ASSESSMENT ASSUMPTIONS

ASSUMPTIONS	DESCRIPTION
Discount Rate	<p>Discounting is the reverse of compounding (adding) interest. It reduces the monetary value of future costs and benefits back to a common time dimension – the base date (i.e. 2025). Discounting satisfies the view that people prefer immediate benefits over future benefits (social time preference) and it also enables the opportunity cost to be reflected.</p> <p>A real discount rate of 7% was adopted for this assessment. A sensitivity test involved utilisation of 4% and 10% discount rates.</p>
Timeframe	<p>The benefits were identified on an annual basis over a set period and calculated in net present value terms at the defined discount rate. For this study, a 30-year timeframe was assessed as this represents the notional life span of the improvements before significant future investment is required.</p>

Source: Urbis, WA Treasury

RAPID COST-BENEFIT ASSESSMENT | ANALYSIS RESULTS

The CBA results reveal that the project is expected to provide significant ongoing benefits.

This study estimated (at the adopted discount rate of 7%) a boardwalk will support \$54.6 million in net benefits (NPV terms). This translates to a benefit cost ratio of 3.3.

This analysis excludes benefits that could not be reliably monetised (e.g. socialisation benefits) or were not considered to be direct effects from the project. Benefits that could not be reliably quantified include the costs related to traffic congestion and safety concerns arising from the conflict between walkers and cyclists/e-scooters utilising the same facility. Moreover, investment in tourism services and accommodation supported by this project was not measured.

This cost benefit analysis' assumptions are appended to this report.

RAPID COST BENEFIT ASSESSMENT RESULTS (\$ MILLION)

IMPACT CATEGORY	4%	7% (ADOPTED DISCOUNT RATE)	10%
Costs (NPV)	\$25.4	\$23.9	\$22.2
Benefits (NPV)	\$100.1	\$78.6	\$57.0
Net Impact (NPV)	\$74.7	\$54.6	\$34.8
Benefit Cost Ratio	3.9	3.3	2.6

Source: Urbis

09

BENEFIT REALISATION



BENEFIT REALISATION | APPROACH

Benefits realisation is the continuous process that runs through the full infrastructure project lifecycle. A Benefits Realisation Plan (BRP) identifies the benefits an investment must deliver to address the problems identified through the project planning, as well as the expected economic costs of the investment.

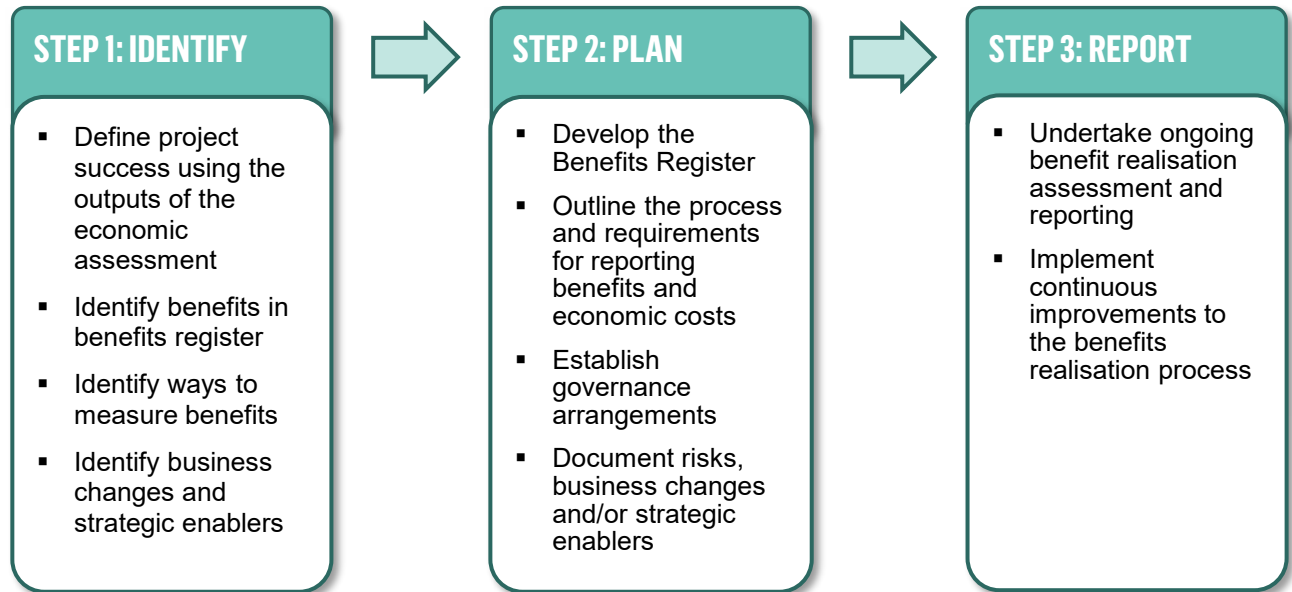
It also describes how the City can measure and monitor the project's actual benefits and broader economic costs. Benefits measurement must be an objective process; if benefits cannot be monitored and measured in a quantifiable manner, they should not be included in the BRP.

The overarching principles used in development of the BRP include:

- Benefits are measurable improvements perceived as an advantage by a stakeholder;
- Benefits are aligned to the City's strategic goals;
- Benefits must be evidence based;
- Benefits are dynamic – they must be regularly reviewed and updated; and
- The number of benefits should remain sensible and manageable.

The City should assign benefits managers to each benefit for reporting and accountability. These are captured overleaf.

BENEFIT REALISATION PROCESS



Source: ACT Treasury

BENEFIT REALISATION | BENEFITS REGISTER

TYPE	BENEFIT	SUCCESS CRITERIA	MEASURE/S	TIMING	MAXIMISATION
Economic	Business Development	Increased number of businesses within 1km of the boardwalk nodes	Increase in number of businesses registered within the catchment	2 years – measured annually	<ul style="list-style-type: none"> Promote local business opportunities and partnerships Incentivise new businesses
	Visitor Uplift – Residential	Increased number of City of Stirling residents to the boardwalk	Visitor surveys, local event attendance records, pedestrian counters	1 year – measured 6 monthly	<ul style="list-style-type: none"> Enhance local facilities including rest amenities Deliver full suite of events at Scarborough Deliver events that incorporate the boardwalk
	Visitor Uplift – Non-Residents	Increased number of people from outside the City to the boardwalk	Visitor surveys, tourism data, pedestrian counters	1 year – measured 6 monthly	<ul style="list-style-type: none"> Develop targeted marketing campaigns Increase cultural representation in and around the boardwalk
Health and Wellbeing	Conversion of Driving to Walking	Increase in walking trips. Increased availability of car parking.	Travel surveys, pedestrian and vehicle counters, mobile app data	2 years – measured 6 monthly	<ul style="list-style-type: none"> Advocate and support additional/increased accessible options for transport around nodes (i.e. public transport at each end)
	Improved Community Health	Enhanced physical activity levels in community	Fitness app data, local health service reports, travel surveys	2 years – measured annually	<ul style="list-style-type: none"> Provide accessible exercise and recreational facilities in strategic locations around the boardwalk or at nodes. Provide food and beverage options along the boardwalk
	Reduced vehicle/pedestrian conflicts	Decrease in accidents on Principle Shared Path	Police and Ranger accident reports, hospital data	3 years – measured annually	<ul style="list-style-type: none"> Provide wayfinding at key locations to indicate which path to take Targeted social media campaigns

Source: Urbis

APPENDIX A



LITERATURE REVIEWS

APPENDIX A | LITERATURE REVIEW

REFERENCE	SUMMARY
Wiesel, I. et al. (2022), Sun, Sand and Surf: Benefits, Elements and Pathways to Accessible Beaches	This report highlights that despite their centrality to Australian culture and wellbeing, most beaches remain inaccessible for people with mobility-related disabilities, facing physical and social barriers. Accessible beaches promote inclusion, freedom, and health benefits for individuals with disabilities and the wider community. Key accessible elements include parking, matting, and wheelchairs. Progress is slow, largely impeded by complex governance, insurance issues, and risk perceptions.
Song, Y., Preston, J., & Ogilvie, D. (2017). New walking and cycling infrastructure and modal shift in the UK: A quasi-experimental panel study. <i>Transportation Research Part A: Policy and Practice</i> , 95, 320–333.	This study investigates the effects of new walking and cycling infrastructure on travel behavior in the UK, using a quasi-experimental panel design. The authors examine whether providing active transport facilities leads to a modal shift from car travel to walking or cycling. Findings suggest that such infrastructure can contribute to modest yet significant changes in travel patterns, particularly among individuals living closer to the new routes, with specific catchments recording a 20%+ modal shift from driving to active transport. The study highlights the potential of infrastructure investment to support sustainable transport policy goals, though it also notes that broader shifts require complementary behavioral and contextual factors.
Davern, M. et al. (2017), Quality Green Space Supporting Health, Wellbeing and Biodiversity	This study reviews quality green spaces, encompassing public and private vegetated areas, highlighting their crucial role in supporting urban health, wellbeing, biodiversity, and ecosystem services. Increasing urbanization necessitates strategic planning and management of these spaces, given their diverse physical, mental, and social benefits for communities, alongside vital environmental contribution.
Høye, A. K., & Hesjevoll, I. S. (2020). Traffic volume and crashes and how crash and road characteristics affect their relationship – A meta-analysis. <i>Accident Analysis & Prevention</i> , 145, 105668.	This meta-analysis synthesizes findings from 118 studies comprising 521 crash prediction models to examine the relationship between traffic volume and crash frequency. The authors report a pooled volume elasticity of 0.875 , meaning that a 1% increase in traffic volume is associated with a 0.875% increase in crash frequency (excluding fatal crashes). The study also explores how factors such as crash type, road type, and study methodology influence this relationship. These findings underscore that reductions in traffic volume can substantially reduce crash incidence, especially on roads with higher baseline crash rates or less forgiving design characteristics.
Genter et al. (2008), Valuing the health benefits of active transport modes	The New Zealand Transport Agency report by Genter et al. (2008) examines how to quantify and monetise the health benefits of walking and cycling, enabling these benefits to be included in transport and urban planning cost-benefit analyses. The study outlines methods for valuing reduced mortality and morbidity associated with increased physical activity from active transport, finding that the health benefits are substantial and often outweigh the costs of infrastructure investments supporting walking and cycling. It provides practical guidance for policymakers to incorporate health-related economic benefits into transport appraisal frameworks.
Nature Bridges (2023), Boardwalks: Building Tourism	Boardwalks serve as vital pathways through challenging or sensitive environments, significantly impacting community, tourism, and the economy. They possess historic appeal, attract diverse visitors with various attractions, and facilitate social gatherings. This drives demand for local services, fosters economic growth, and can encourage urban revitalization, drawing visitors globally.

APPENDIX A | LITERATURE REVIEW

REFERENCE	SUMMARY
National Road Safety Strategy. (N.d), Factsheet: Vulnerable road users.	The website outlines the National Road Safety Strategy's focus on protecting vulnerable road users, including pedestrians, cyclists, and motorcyclists. It highlights the higher risks these groups face and the need for targeted safety measures. The strategy aims to reduce fatalities and serious injuries through infrastructure improvements, education, and enforcement. The goal is to create safer, more inclusive roads for all Australians.
Štěřba, Z., & Čábelková, I. (2022). Perceived road safety and economic development: Evidence from European countries	A study published in the <i>International Journal of Environmental Research and Public Health</i> examined the link between perceived road safety and economic development across European countries. The research found that countries with higher investments in road safety measures not only experienced fewer traffic fatalities but also saw positive impacts on economic growth. This suggests that improving road safety perceptions can contribute to broader economic prosperity.
Cengiz, C. et al. (2022), A Bridge between Coastal Resilience and Tourism-Recreation: Multifunctional Benefit of Boardwalk Design for Sustainable Development in the Western Black Sea Region, Turkey	A study on Turkey's Güzelcehisar Beach Boardwalk (GBB) found 88% overall satisfaction, highlighting its multifunctional benefits for sustainable rural coastal development. Experts prioritized social benefits (92.8%), visual value/accessibility (91.4%), economic (86.8%), and environmental benefits (81.0%). The GBB enhances visitor comfort, safety, and accessibility, supporting geotourism and year-round tourism, while beaches offer diverse recreational activities that promote relaxation and enjoyment of scenic views.
French, S. et al. (2013) Sense of Community and Its Association With the Neighbourhood Built Environment, University of Western Australia	The paper investigated the influence of neighbourhood built form on sense of community in Perth, Western Australia. It was hypothesized that sense of community would be stronger in individuals living in pedestrian-friendly neighbourhoods. Multivariate linear regression models explored associations between walking and sense of community, with progressive adjustment for objective and perceived neighbourhood characteristics. Sense of community was positively associated with walking for transport and positive perceptions of neighbourhood quality. The findings highlight the influence of local area perceptions on sense of community that appeared to be more important than objective environment characteristics
Azevedo, A. et al. (2024), Tourists' assessment of economic value, benefits and negative impacts of pedestrian walkways: Case-studies of the Paiva River (Arouca) and the Mondego River (Guarda) in Portugal	This study assesses the quality and economic value of pedestrian walkways in Portugal, focusing on nature-based tourism. Findings indicate high visitor satisfaction and willingness to pay, demonstrating their role in leveraging destinations and providing access to previously inaccessible areas. Walkways drive local economic development and can offer physiological/psychological restoration. Effective management, including reinvesting revenues and targeted advertising, is crucial for maximizing their benefits
Obatitor, A. et al. (2014), The Importance of Coastal Environment in Promoting Human Health and Wellbeing	This Master's thesis explores the perceived health and wellbeing benefits of coastal environments, such as reducing stress, promoting quality relaxation, and enhancing positive mood. A quantitative survey confirmed respondents experienced these benefits, with fresh air, sunshine, and ocean sound being key elements contributing to improved mental clarity and overall happiness. It advocates for integrating these values into destination planning and sustainable management

APPENDIX B

STUDY AREA DEFINITIONS



APPENDIX B | BUSINESS SURVEY AND SURVEYED AREA

BUSINESS SURVEY QUESTIONS

- **Q1.** What is the name of your business & your position – and what services do you offer?
- **Q2.** Where do your customers come from?
- **Q3.** Are you aware that the City of Stirling is conducting a feasibility study into a coastal boardwalk that will link Scarborough and Trigg beaches?
- **Q4.** What impact do you think a coastal boardwalk could have on your business turnover?
- **Q5.** Can you please describe how you think a coastal boardwalk will impact your business?
- **Q6.** How would a coastal boardwalk (if constructed) influence the future investment decisions for your business?
- **Q7.** Do you think a coastal boardwalk will attract more visitors to Scarborough and Trigg beaches? Why?

BUSINESS SURVEY AREA



Source: Urbis, Nearmaps

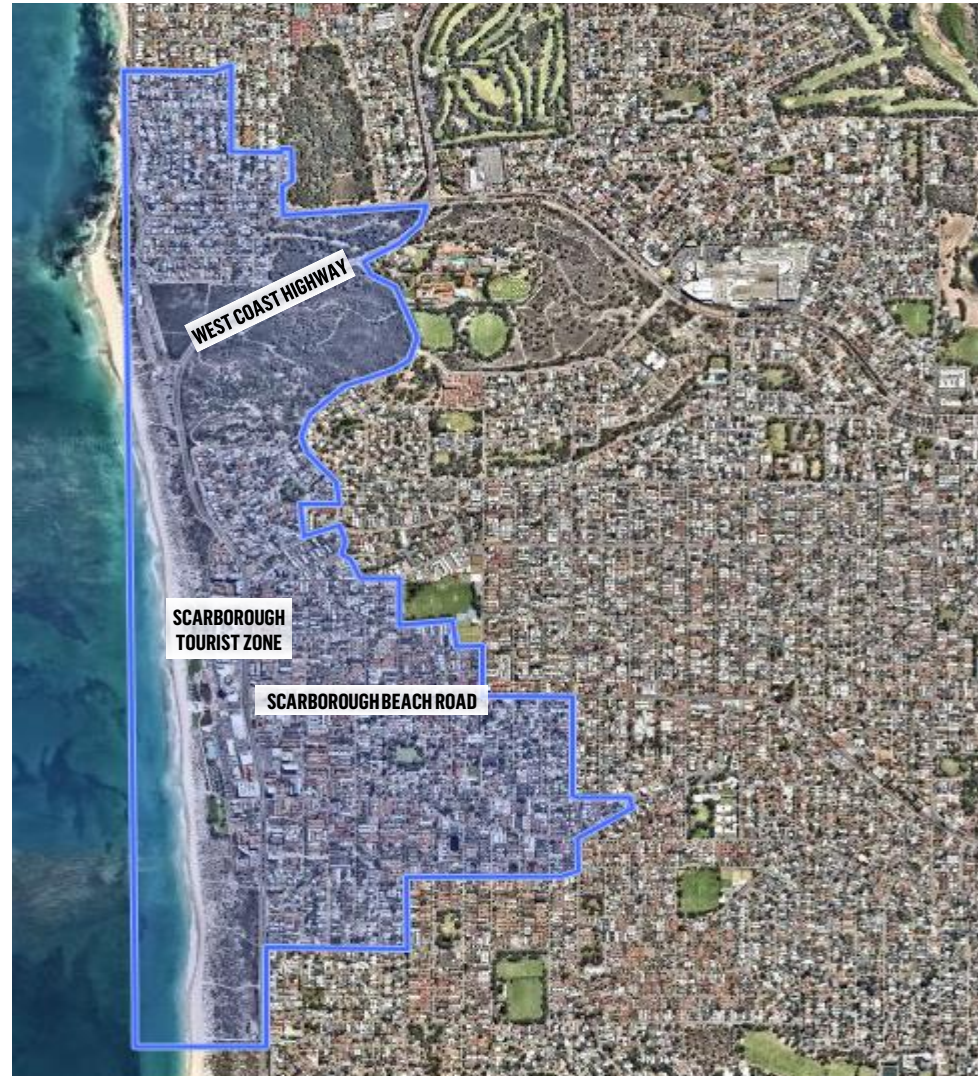
APPENDIX B | SCARBOROUGH TOURIST ZONE

The Scarborough Tourist Zone is comprised of the following Statistical Area's Level 1 (SA1):

- 50502109211
- 50502109217
- 50502109220
- 50502109224
- 50502109223
- 50502109222
- 50502109221
- 50502109210
- 50502109212
- 50502109216
- 50502109213
- 50502109215
- 50502109209
- 50502109411
- 50502109412
- 50502109410
- 50502109409
- 50502109218
- 50502109214

The total land area equated to 429.8ha and collated Commbank iQ industry level categorisations of businesses trading at 1 March 2024. This provided a granular and accurate representation of customer transaction behaviour.

SCARBOROUGH TOURIST ZONE, COUNCIL IQ



Source: City of Stirling, REMPLAN, Nearmaps

APPENDIX B | SCARBOROUGH TOURIST ZONE - COUNCIL IQ SPENDING DEFINITIONS

CATEGORY	SUB-CATEGORY	EXAMPLE CATEGORY INCLUSIONS
Food Retailing	Groceries and Other Food Retailing	Liquor Stores, Bakeries, Butchers, Convenience Stores, Fruit and Vegetable Stores, Health Food Stores, Seafood Stores
	Supermarkets	Supermarkets
Tourism and Entertainment	Attractions, Events and Recreation	Museums and Galleries, Theme Parks, Tourist Attractions, Parks and Recreation, Professional Sports Clubs, Stadiums
	Breweries and Wineries	Breweries and wineries
	Cafes	Cafes
	Food Delivery Services	Food Box Subscriptions, Food Delivery Services
	Online Entertainment	Video Streaming Services, Online Gaming, Mobile Apps, Online Sports Entertainment, Music Streaming Services
	Pubs, Taverns and Bars	Pubs, Taverns and Bars
	Restaurants	Restaurants
	Takeaway and Fast Food Outlets	Takeaway Food, Fast Food Outlets
Private Transport	Private Transport	Petrol Stations, Ride Sharing Services, Parking Lots, Taxis and Limousines, Water Taxis and Ferries
Discretionary Retail	Buy Now Pay Later	Buy Now Pay Later (primarily retail-based transactions)
	Children and Baby Stores	Baby Goods Stores, Children's Shoe Stores, Children's Clothing Stores
	Department Stores, Clothing & Accessories	Department Stores, Discount Department Stores, Men & Women Clothing Stores, Shoe Stores, Online Variety Stores, Luxury Boutiques
	Other Discretionary Retail	Electronics Stores, Hardware, Motor Vehicles & Accessories, Personal Goods Retailing, Pharmacies, Gardening Stores & Nurseries
	Print Media and Books	Newspaper Subscriptions, Other Print Media, Magazine Subscriptions, Book Stores
Accommodation	Accommodation	Hotel and Motel Accommodation, Caravan Parks, Direct online bookings, Online accommodation aggregators, Holiday rentals

Source: Council iQ

APPENDIX B | LAND USE CONTEXT

PLANNING CONTEXT – CITY OF STIRLING

The area for the proposed coastal boardwalk is located within the City of Stirling and contains the area from and including Scarborough Beach Foreshore to the Trigg Beach Foreshore. The areas in and surrounding the proposed coastal boardwalk are generally zoned Urban, Regional Open Space, Bush Forever, and Primary Regional Road under the Metropolitan Region Scheme (MRS). The areas in and surrounding the proposed Coastal Boardwalk are generally zoned 'Development', 'Regional Open Space', 'Primary Regional Road', 'Residential (R20 and R40)', 'Public Open Space', 'Public Use Primary School' zone under the City of Stirling Local Planning Scheme 3 (LPS 3).

TRIGG LOCAL CENTRE

The Trigg Local Centre features several land uses and zones. The Regional Open Space contains reserve, while the Primary Regional Road is designated for road reserves. The Residential zone includes single, group, and multiple dwellings, zoned 'R20' and the Public Open Space zone is dedicated to parkland (Clarko Reserve). The area also includes a Public Purpose Primary School further inland. The local planning strategy recognises the beach between Trigg and Watermans Bay as a major tourist attraction.

Currently, there is little developable land in the immediate vicinity, given it is a relatively established area. Future residential development may come from vacant lots closer to Mettam's Pool.

WEST COAST HIGHWAY (BETWEEN SCARBOROUGH AND TRIGG)

The portion of West Coast Highway between the two proposed nodes is bordered by Regional Open Space on the west and established residential zoned 'R20' to the east, with a large portion of Regional Open Space directly northeast of the Trigg node.

SCARBOROUGH BEACH FORESHORE

The Scarborough Beach foreshore is primarily a 'development zone'. The area features event spaces, offices, consulting rooms, shops, markets, various types of dwellings, short stay accommodation, a library, public open spaces, taverns, small bars, and entertainment complexes.

The proposed coastal boardwalk borders on the northern edge of the Scarborough Beach Redevelopment Area, which saw \$1.5b in development approvals, consisting of circa 1,947 dwellings, 39,998 sqm of commercial floorspace and 247 short stay units.

The Scarborough Beach Road Activity Corridor will likely increase traffic to Scarborough beach foreshore itself. This may incentivize further development within the area, as the foreshore has been identified as a high-order tourist attraction.

Sources: Development WA, DPLH, City of Stirling
¹Development WA, Edge Visionary Living

APPENDIX C



IMPACT ASSUMPTIONS & DETAILED FINDINGS

APPENDIX C | REMPLAN METHODOLOGY

Analysis presented here uses REMPLAN economic modelling to assess current and potential economic impacts. REMPLAN is an Input-Output model that captures inter-industry relationships within an economy. It can assess the area-specific direct and flow-on implications across industry sectors in terms of employment, wages and salaries, output and value-added, allowing for analysis of impacts at the State of Western Australia level.

Key points regarding the workings or terminology of the model are as follows:

- REMPLAN uses either the value of investment or employment generation as the primary input. For this analysis, the value of total upfront investment has been used as the key input to assess the benefits of the construction phase.
- Outputs from the model include employment generated through the project and economic Gross Value Added (GVA) at the State level
- Outputs from the model include employment generated through the project at both the local and the state level.
- Employment generated is calculated over the life of the construction phase; or in terms of the on-going operations, total on-going jobs generated.
- Both the direct and indirect employment are modelled:
 - *Direct* refers to the effect felt within the industry as a result of the investment. For example, the construction phase will directly result in the creation of construction jobs.
 - *Indirect* effects are those felt within industries that supply goods to the industries directly affected.
- It should be noted that the results presented in this report are estimates only based on the existing state of economic activity in the area. Due to the static nature of input-output modelling, they have the potential to overstate the actual effects. Nonetheless, the analysis still reflects the fact that employment growth will be positive for the State and the local area.
- Urbis consider that in the absence of the investment package it is unlikely that similar projects would be undertaken within the same period, and therefore the investments can be considered additional.
- Urbis assumed break-down of costs by industry sector based on industry knowledge.

APPENDIX C | IMPACT ASSUMPTIONS

IMPACT TYPE	KEY ASSUMPTIONS
Expenditure	Expenditure data was obtained from Council iQ, from May 2024 – April 2025. This value totalled to \$196,246,000.
Resident Expenditure	The average resident spending proportion over the sum of the 12 months to April 2025 was 50.9%.
Non-resident Expenditure	The average resident spending proportion over the sum of the 12 months to April 2025 was 49.1%.
Expenditure Uplift	The adopted expenditure uplift was derived from a 'Urbis' of case studies using a pre and post-ante analysis of visitation, anticipated spending increases of similar projects and local business survey responses. Similar projects assessed include the Lake Sambell, Terrigal, Dubuji Boardwalks, as well as the Witton Bluff Trail.
Employment Uplift	The employment uplift was calculated using May 2025 REMPLAN data (its Tourism Impact Module) which converts visitor expenditure into direct and indirect impacts by sector.
Weighted Per KM Benefit Of Walking	The Australian Transport Assessment and Planning Guidelines from the Australian Government associates a health benefit of \$2.77 per km in 2013 (drawn from the work of Genter in 2008). Adjusting for inflation, a 2025 figure represents a \$3.71 health benefit per kilometer walked.
Total Trips	<p>A multitude of pedestrian video surveys were collated and analysed to inform the conservative projected boardwalk usage per annum. These video surveys included the following areas:</p> <ul style="list-style-type: none"> ▪ Intersection of West Coast Highway / Scarborough Beach Road ▪ Intersection of West Coast Highway / Pearl Parade ▪ Intersection of West Coast Highway / Brighton Road ▪ Mandurah Road Bridge ▪ Canning Highway Bridge ▪ Riverton Drive Shared Path <p>A final figure of 194,545 trips per annum was adopted based on the daily traffic on the Riverton Drive Shared Path, which represents a conservative comparable pathway near a body of water that is likely used for both recreation and transport utility.</p>
Distance of Proposed Boardwalk	For the purposes of this analysis, a straight-line distance of ~750m based on proposed start and end nodes has been used.
Reduction In Local Traffic	The study from Song, Y., Preston, J., & Ogilvie, D. (2017), highlighted the modal shift induced for residents living within 5km of public infrastructure. A modest 5% in traffic reduction due to residents converting to active transport (walking/cycling) was assumed.
Conversion of Traffic Reduction to Crash Reduction	According to a meta-analysis conducted by Høye, A. K., & Hesjevoll, I. S. (2020), a 1 percentage point reduction in traffic was associated with a 0.875 percentage point reduction in crashes.
Estimated Local Driver Proportion	It is assumed that 10% of daily traffic is comprised of residents, in line with the City of Stirling's population proportion to Greater Perth.

APPENDIX C | EXPENDITURE UPLIFT (DIRECT AND INDIRECT IMPACTS)

Impacts (p.a.)	Direct Effect (\$m)	Supply-Chain Effect (\$m)	Consumption Effect (\$m)	Total Effect (\$m)
Agriculture, Forestry & Fishing	\$0.020	\$0.202	\$0.078	\$0.299
Mining		\$0.123	\$0.041	\$0.165
Manufacturing	\$0.290	\$0.533	\$0.441	\$1.264
Electricity, Gas, Water & Waste Services		\$0.160	\$0.127	\$0.286
Construction		\$0.175	\$0.087	\$0.262
Wholesale Trade	\$0.100	\$0.110	\$0.101	\$0.310
Retail Trade	\$2.750	\$0.092	\$0.294	\$3.136
Accommodation & Food Services	\$1.670	\$0.034	\$0.203	\$1.907
Transport, Postal & Warehousing	\$0.870	\$0.354	\$0.213	\$1.438
Information Media & Telecommunications	\$0.030	\$0.184	\$0.092	\$0.305
Financial & Insurance Services	\$0.010	\$0.163	\$0.288	\$0.461
Rental, Hiring & Real Estate Services	\$0.070	\$0.321	\$0.758	\$1.148
Professional, Scientific & Technical Services		\$0.449	\$0.140	\$0.589
Administrative & Support Services	\$0.230	\$0.149	\$0.045	\$0.424
Public Administration & Safety		\$0.061	\$0.019	\$0.079
Education & Training	\$0.170	\$0.007	\$0.105	\$0.283
Health Care & Social Assistance	\$0.030	\$0.004	\$0.203	\$0.238
Arts & Recreation Services	\$0.290	\$0.034	\$0.073	\$0.396
Other Services	\$0.330	\$0.069	\$0.104	\$0.502
TOTAL	\$6.860	\$3.221	\$3.412	\$13.494

APPENDIX D



TOURISM RESEARCH AUSTRALIA DEFINITIONS



APPENDIX E | VISITATION BY ACTIVITY

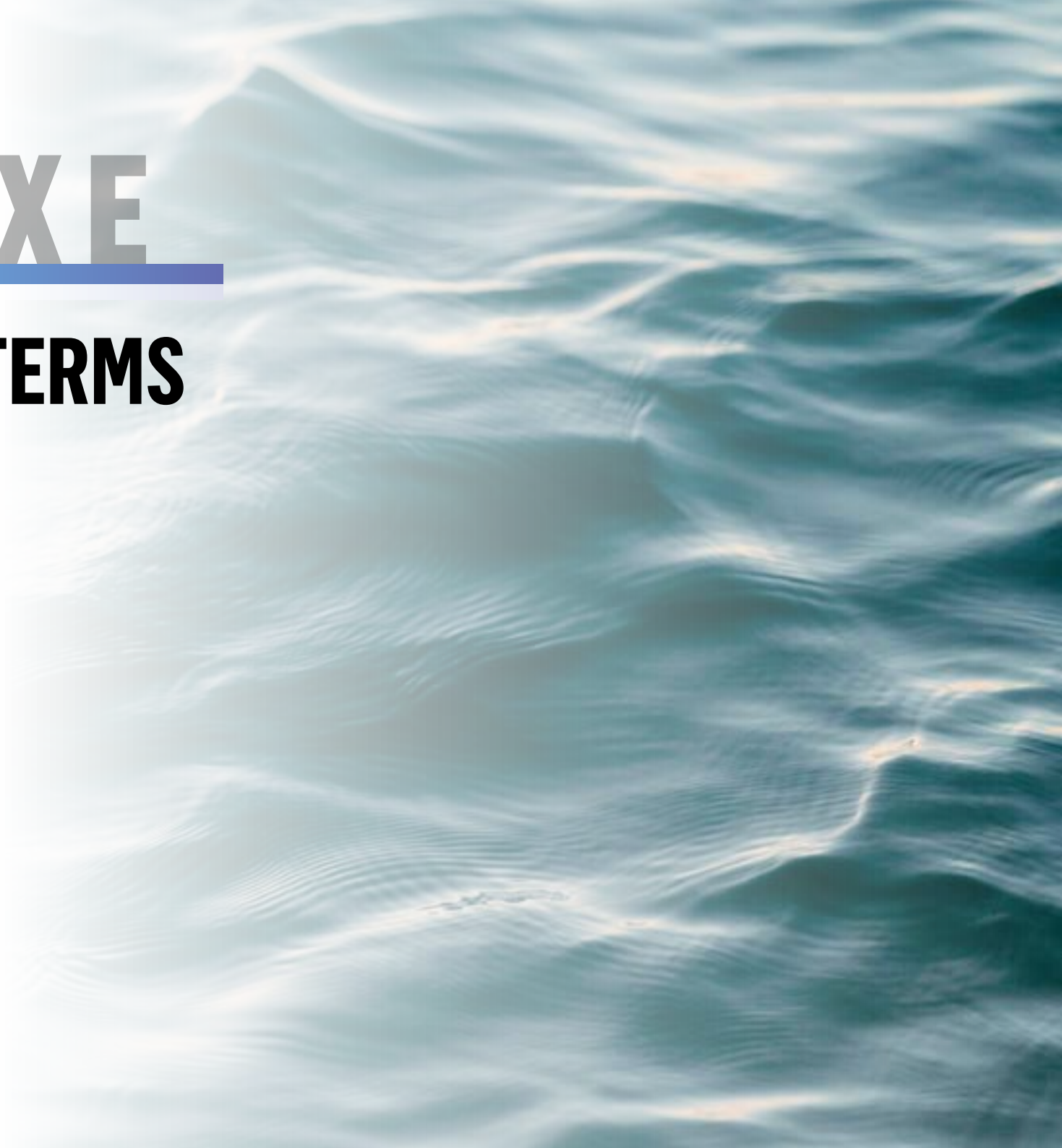
ACTIVITY GROUP	ACTIVITY	
Outdoor / nature	<ul style="list-style-type: none"> ▪ Go to the beach ▪ Visit national parks / state parks ▪ Visit botanical or other public gardens ▪ Go whale or dolphin watching 	<ul style="list-style-type: none"> ▪ Visit farms ▪ Bushwalking / rainforest walks ▪ Birdwatching
Active outdoor / sports	<ul style="list-style-type: none"> ▪ Outdoor activities nfd ▪ Fishing ▪ Golf ▪ Scuba diving ▪ Snorkelling ▪ Water activities / sports 	<ul style="list-style-type: none"> ▪ Surfing ▪ Snow skiing ▪ Cycling ▪ Exercise, gym or swimming ▪ Play other sports
Arts / heritage	<ul style="list-style-type: none"> ▪ Attend theatre, concerts or other performing arts ▪ Visit museums or art galleries ▪ Visit art / craft workshops / studios ▪ Attend festivals / fairs or cultural events ▪ Visit history / heritage buildings, sites or monuments ▪ Experience aboriginal art / craft and cultural displays 	<ul style="list-style-type: none"> ▪ Visit an aboriginal site / community ▪ Attend aboriginal performance ▪ Go on a tour with an Aboriginal guide ▪ Participate in traditional activities ▪ Have an Aboriginal food experience ▪ Have a camping experience on Aboriginal land
Local attractions / tourist activities	<ul style="list-style-type: none"> ▪ Visit amusements / theme parks ▪ Visit wildlife parks / zoos / aquariums ▪ Go on guided tours or excursions ▪ Go to markets ▪ Tourist trains ▪ Visit industrial tourist attractions / mines / breweries ▪ Visit wineries ▪ Charter boat / cruise / ferry 	<ul style="list-style-type: none"> ▪ Visit a health spa / sanctuary / well-being centre ▪ Visit or stay on an island ▪ Visit breweries or distilleries ▪ Visit farmgates ▪ Visit food markets ▪ Visit breweries ▪ Visit distilleries
Social Activities	<ul style="list-style-type: none"> ▪ Visit friends & relatives ▪ Pubs, clubs, discos etc ▪ Visit casinos ▪ Attend an organised sporting event ▪ Go shopping for pleasure ▪ Eat out / dine at a restaurant and/or cafe 	<ul style="list-style-type: none"> ▪ Sightseeing / looking around ▪ Movies / videos ▪ Go on a daytrip to another place ▪ Picnics or BBQs ▪ Attend movies / cinema
Other Activities (Includes 'None of these')	<ul style="list-style-type: none"> ▪ Other Activities 	<ul style="list-style-type: none"> ▪ None of these

Source: Urbis

APPENDIX E



GLOSSARY OF TERMS



APPENDIX F | GLOSSARY OF TERMS

- **Benefit Cost Ratios** are indicators to determine whether the benefits of a project exceed the costs. A value greater than 1 implies there are net benefits.
- **Construction Cost** is the estimated investment value for each development over the anticipated delivery period, measured in constant 2025 dollar (i.e. excluding inflation) excluding GST.
- **Direct Impacts** are the initial round of economic output, employment and household income generated by an economic activity.
- **Discount Rates** represent the view that people prefer immediate benefits over future benefits and additionally enable for opportunity costs to be reflected when making judgements about the value of a project.
- **Economic Output** is a measure of the gross revenue of goods and services produced by commercial organisations and gross expenditure by government agencies.
- **Full-Time Equivalent (FTE) Job Years** refers to the total number of full-time equivalent jobs that can be supported over a 12-month period.
- **Gross Value Added (GVA)** is a measure of the value of goods and services produced in an area, industry or sector of an economy during a certain period of time. GVA is measured in constant 2025 dollar (i.e. excluding inflation) excluding GST.
- **Indirect Impacts** are production-induced effects. Production-induced effects (Type I) are additional output, employment and household income resulting from re-spending by firms that receive payments from the sale of services to firms undertaking production. Consumption-induced effects (Type II) are additional output, employment and household income resulting from re-spending by households that receive income from employment in direct and indirect activities. These Type II effects were not assessed.
- **Induced Impacts** are the expected outcomes of a project versus the business of usual approach whereby the project is not implemented.
- **Net Present Value** is the sum of the present value of benefits and costs over a period of time.
- **Present Value** reflects the current dollar value using a prescribed discount rate.
- **Sensitivity Analysis** refers to the adjustment of discount rates according to low and high cases. Discount rates of 3% and 7% were applied to the low and high cases respectively, in alignment with government guidelines.

COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, has and continues to cause considerable business uncertainty which in turn materially impacts market conditions and the Australian and world economies more broadly.

The uncertainty has and is continuing to impact the Australian real estate market and business operations. The full extent of the impact on the real estate market and more broadly on the Australian economy and how long that impact will last is not known and it is not possible to accurately and definitively predict. Some business sectors, such as the retail, hotel and tourism sectors, have reported material impacts on trading performance. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The data and information that informs and supports the Report Content is current as at the date of this report and (unless otherwise specifically stated in the Report) does not necessarily reflect the full impact of the COVID-19 Outbreak on the Australian economy,

the asset(s) and any associated business operations to which the report relates. It is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event and the various programs and initiatives governments have adopted in attempting to address its impact. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong has been, and may be further, materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a longer lasting impact than we have assumed. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Where we have sought to address the impact of the COVID-19 Outbreak in the Report, we have had to make estimates, assumptions, conclusions and judgements that (unless otherwise specifically stated in the Report) are not directly supported by available and reliable data and information. Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.

This report is dated **June 2025** and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of **City of Stirling** (Instructing Party) for the purpose of an **Economic Impact Assessment** (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events including wars, civil unrest, economic disruption, financial market disruption, business cycles, industrial disputes, labour difficulties, political action and changes of government or law, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

In preparing this report, Urbis may rely on or refer to documents in a language other than English which Urbis will procure the translation of into English. Urbis is not responsible for the accuracy or completeness of such translations and to the extent that the inaccurate or incomplete translation of any document results in any statement or opinion made in this report being inaccurate or incomplete, Urbis expressly disclaims any liability for that inaccuracy or incompleteness.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in the previous paragraphs. Further, no responsibility is accepted by Urbis or any of its officers or employees for any errors, including errors in data which is either supplied by the Instructing Party, supplied by a third party to Urbis, or which Urbis is required to estimate, or omissions howsoever arising in the preparation of this report, provided that this will not absolve Urbis from liability arising from an opinion expressed recklessly or in bad faith.

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

Urbis staff responsible for this report were:

Director	Tim Connoley
Associate Director	Samantha Stewart
Senior Consultant	Christian Mazzone
Research Analyst	Brodie Langan
Project code	P0060361
Report number	v3

