Western Cape Cruise Liner Industry

Economic Contribution 2022-23 Season

Prepared for Wesgro

Prepared by:

Barry Standish

Antony Boting

19 July 2023

Headline Findings

The 2022-23 Western Cape cruising season is the first full season operating out of Cape Town since the covid lockdowns. The contribution to the Western Cape and national economies is presented in Table ES1.

Table ES1: 2022-23 Western Cape Cruise Season

Vessel Numbers	70
Domestic Turnaround	28
International Turnaround	34
International Visits	8
Passengers	77 908
Domestic Turnaround	43 715
International Turnaround	28 445
International Visits	5 748
Crew	41 784
Total Expenditure	R1 397m
International Passengers	R612m
Domestic Passengers	R132m
Crew	R6m
Cruise Lines	R648m
Macroeconomic Contribution	
Western Cape GDP-R	R1 234m
South African GDP	R1 288m
Direct jobs	1 043
Total Western Cape jobs	1 864
Total South African jobs	1 889
Fiscus	R144m
Household Income	R501m
Foreign Exchange	R731m

70 vessels called at the Cape, carrying 78 000 'key' passengers[1]. Over 43 000 were on domestic turnaround and 28 000 on international turnaround vessels. There were 5 700 passengers on international vessels visiting the Cape as part of longer international cruises.

[1] *Key passengers are those passengers who made a single journey. They are disembarking and transit passengers as well as embarking passengers on the final journey from Cape Town. They are different to the passenger movements reported by the V&A Waterfront.*

The season generated R1.4bn in expenditure. The bulk was from cruise liner operators and international passengers.

This expenditure resulted in:

- A R1.23bn contribution to Western Cape GDP-R and R1.29bn to South African GDP.
- Over 1 000 people in the Western Cape owed their employment directly to the cruise industry. Multiplier effects increased this to over 1 800 in the province and nearly 1 900 in the country. One job was created by every 30 passengers. This is on a par with the international norm of 24.
- The season made a R144m contribution to the fiscus, R0.5bn to household income and R731m to foreign exchange.

Executive Summary

There is always a sense of adventure and excitement about an ocean cruise. The same is true of cities that host ocean liners, particularly if their ocean liner industry can create new jobs and generate income. Cape Town has just opened a new chapter in its maritime history. It has had explorers and settlers. There have been troop ships and cargo vessels. Now there are cruise liners.

Cruise vessels have been calling at the Cape for some years. Success breeds success and the industry was given new impetus with the opening of the Cape Town Cruise Liner Terminal in the V&A Waterfront in 2020. The cruise industry was snuffed out by covid but has showed strong recovery. The 2022-23 cruising season in the Western Cape offered the opportunity to establish the baseline against which to measure the economic contribution of future seasons.

Estimating the industry economic contribution is not a simple task. The cruise liner contribution is not just the vessels, it is also the spending by passengers and crew. Vessels call in at the Cape and then sail away. Others start at the Cape and sail on a voyage 'to nowhere' or cruise along the coast making multiple port visits. Some vessels carry mostly South Africans while others are mostly international. Some international visitors disembark just for a day in Cape Town while others fly into South Africa, travel to the Cape for a cruise and then probably continue their stay for a week or so. The South African – international passenger distinction is important because they stay for different lengths and spend differently. Then there is the crew, some of whom are South African, and the extent of their shore leave. Finally, is vessel expenditure for which there was very limited information. The details of these complexities are available in the main report.

Western Cape Economic Contribution

Economic contribution is typically measured as increases in income and jobs. Income is typically measured, at a national level, as contribution to Gross Domestic Product (GDP). The provincial equivalent is Gross Domestic Product – Regional (GDP-R). This is the broadest measure of economic contribution. It is the total value of all final goods and services, which is fundamental to the economic quality of life of people.

The cruise season contributed R1.23bn to Western Cape GDP-R. This is composed of R622m in direct and R613m in multiplied contribution. The contributors were international passengers at 48%, vessel expenditure at 42%, domestic passengers added 9% and crew 1%.

Jobs are important. Over the season there were 1 043 direct (full-time equivalent) jobs provincially. Multiplier effects increased this to 1 864 jobs. It is of some value to know where these jobs were created. Shops, markets and souvenir sellers had a 43% share, followed by hotels and restaurants with 37%. Various business services like tour agencies received 6%, while port fees & other government services had 5%. The remaining 10% was distributed between, to mention a few, fuel, transport, recycling and water provision.

South African Economic Contribution

At a national level economic contribution is typically measured as increases in GDP. Jobs are also important. It is also possible, at a national level, to estimate the contribution to foreign exchange, taxes and household incomes.

GDP is the broadest national measure of economic contribution. The 2022-23 cruise liner season contributed R1.29bn to the South African GDP. This is an increase of R54m on Western Cape GDP-R.

Nationally, there were 1 889 jobs. International passengers made the largest contribution. Their expenditure created 1 060 full-time jobs across the country, 56% of the total. Spending by vessels added 31%.

South Africa has historically had a major current account deficit and any contribution to growing foreign exchange is welcome. Over the cruise season a total of R1.03bn foreign exchange came into the country and R303m flowed out (on fuel, for example). This gives a net R731m foreign exchange inflow. In this instance international visitors accounted for 63% and expenditure by vessels brought in a further 36%.

The season generated R144m for the national fiscus of which 66% was of international origin. Vessel expenditure added a further 33%.

The season added R501m to household incomes, again with the lion’s share of 62% coming from international passengers. Vessel expenditure added 37%.

Local and International Comparisons

Numbers are all very well, but it often helps to see these relative to other metrics. This is done using some national and international comparisons.

There is a wide disparity internationally of the relative economic contribution of the cruise liner industry. In Italy the industry contributed 1.8% to GDP and in the US 0.26% in 2018 (see main report for these and other details). Arguably the Western Cape is more comparable to emerging markets. The relevant available data was for Brazil, Mexico, China and India. Table ES2 gives these details.

Table ES2: Cruise Line Economic Contribution – Selected Emerging Markets

	Cruise line industry as percent of:	
	Total GDP	**Total jobs**
Brazil 2019	0.03%	0.03%
Mexico	*0.10%*	*0.02%*
China	*0.004%*	*0.001%*
India	*0.0002%*	*0.0000%*
South Africa	0.02%	0.01%
	Provincial GDP-R	**Provincial Jobs**
Western Cape	0.13%	0.07%

Sources:

Brazil - Cruise Lines International Association (CLIA)

Countries in italics OpenAI

WC: This analysis and Wesgro & SARB

In Brazil the industry contributed 0.03% to both GDP and jobs in 2019 (latest data). There is a low contribution in China and India, probably more the result of high populations and, for China, high GDP. Mexico's comparators at 0.1% and 0.02% are possibly the result of its location next to the US.

The Western Cape cruising industry can hold its head high. Nationally the industry made a 0.02% contribution to GDP and a 0.01% contribution to job creation. This is well ahead of China and India. It is comparable to Brazil and lags Mexico. However, it must be recognised that these are national and not provincial statistics. The results are even more spectacular from a Western Cape perspective. The 2022-23 season contributed 0.13% to the Western Cape economy and 0.07% to employment. There was one full time provincial job for every 30 passengers.

The final and more direct comparators are against direct national spending by international holiday makers, on the one hand, and tourist spending in the Western Cape. The former could be sourced directly from Tourist SA while the latter was estimated from the Provincial Economic Review and Outlook (PERO) and includes international and domestic tourists. Tourism spending is for 2019, which is the latest data unaffected by the covid lockdowns and is scaled to 2023 prices.

The first comparison is between direct onshore expenditure by international passengers and direct spending by all international holiday makers. In 2019 international holiday makers spent R40bn (in 2023 prices) in the country. In the 2023 cruise season international passengers spent R0.6bn. This is a 1.53% equivalent.

The second comparison is to Western Cape directly. In this instance, the available data was for all visitors to the Western Cape (domestic and international) for all purposes (holidays, visiting friends and family, business, etc.). In 2019 these visitors spent R31bn. In the 2023 cruise season international and ‘out of province’ passengers spent R0.6bn. This is a 1.88% equivalent. This is an understatement because a better comparator would be only holiday makers to the Western Cape rather than all visitors.

Contents

List of Tables

List of Figures

Abbreviations

CLIA	Cruise Lines International Association
Forex	Foreign Exchange
GDP	Gross Domestic Product
GDP-R	Gross Geographic Product – Regional
SIC	Standard Industrial Classification of all Economic Activity
SAM	Social Accounting Matrix

Introduction

There is always a sense of adventure and excitement about an ocean cruise. The same is true of cities that host ocean liners, particularly if their ocean liner industry can create new jobs and generate income. Cape Town has just opened a new chapter in its maritime history. It has had explorers and settlers. There have been troop ships and cargo vessels. Now there are cruise liners.

Cruise vessels have been calling at the Cape for some years. This industry was given impetus with the opening of the Cape Town Cruise Liner Terminal in the V&A Waterfront in 2020. It has gathered momentum post covid.

There is a need to monitor the economic health of industries, including cruise liners. This report sets the baseline by measuring the economic contribution to the Western Cape and South Africa from the 2022-23 Cape Town cruising season. It is expected that this evaluation will be done annually.

There are four parts to this report. First is a description of international experiences and the economic contribution made by cruise liners. The second paints a picture of the Cape Town industry with a view to making the economic estimates. The latter required robust information of which there was only some. The result is that international experiences were relied on where possible and assumptions made where not. Recommendations for future assessments are made about gathering more robust information from both the shipping agents and passengers. The third section gives the estimated economic contribution of the 2022-23 Cape Town cruise liner season. Finally, comparisons are made to other national and international experiences.

1 International Experiences

This section paints a brief picture of the international economic contribution of the cruise liner industry. The main source is the Cruise Lines International Association (CLIA). The CLIA publishes regular information on cruises and passenger numbers, but only conducts ad hoc economic analyses. In many cases the most recent data was between 2018 and 2020. This is not a problem in this section because the intention is to paint a profile rather than have decimal point accuracy.

The global cruise industry is estimated to have contributed $154.5bn to the global economy and created employment for 1 166 000 people in 2019, earning over $50bn in salaries and wages. This came about through 148m passenger and crew shore visits and $72.0bn direct expenditure (CLIA, 2020, p. 4). Cruise passengers spend on average $750 in port cities over the course of a typical seven-day cruise. This is more than $100 daily and it therefore comes as no surprise that globally every 24 cruise passengers create one full-time job equivalent (CLIA, 2023, p. 41). This underscores the importance of this industry to a country such as South Africa, with its high unemployment rate. These jobs are not only confined to those directly employed by the industry but also through the supply chain effects and induced impacts when these employees spend their salaries and wages.

The contribution can be even broader. It has been shown that worldwide 63% of cruise passengers have returned to a destination they first visited on a cruise ship (CLIA, 2023, p. 41). This is important for the Western Cape. This repeat tourism can increase incrementally over time as international visitors are introduced to the Western Cape and become regular visitors.

The United States is one of the largest cruise liner markets in the world, with a significant number of ports of call located throughout the country. The industry generated $55.5 billion in economic activity in the US in 2019, supporting 437 000 jobs and contributing $24 billion in wages and salaries (CLIA, 2020). In addition, the cruise liner industry has had a significant impact on the tourism industry in the US. According to a report by the National Travel and Tourism Office[2], cruise passengers spent $23.8 billion in the US in 2018, supporting local businesses and creating job opportunities. Furthermore, the industry has contributed to the development of new ports of

[2] *National Travel and Tourism Office:* *https://travel.trade.gov/outreachpages/download_data_table/2018_US_Travel_and_Tourism_Statistics.pdf*

call and the improvement of existing infrastructure, providing additional economic benefits to local communities.

Australia has the unique distinction of having the highest penetration rate internationally, meaning the proportion of nationals who take cruises. In 2017 the penetration rate was 5.7% of the population. One of the attractions of Australian cruising is that there are potentially 41 regional ports and anchorages around the Australian coastline and local communities benefit from the injection of valuable tourist dollars into the local economies (CLIA, 2017, p. 1). Australia has seen significant growth in the cruise liner industry in recent years, with the industry contributing A$4.8 billion to the Australian economy in 2018-19. This revenue consists of both direct and indirect output. The economic output is made up of A$2.5 billion indirect revenue and A$2.3 billion direct spending[3]. Of the direct spending, A$1 billion comes from the cruise lines themselves with the rest made up by crew (A$37 million) and passengers (A$1.2 billion). This economic uplift transposes into the creation of 17 369 jobs created (both direct and indirect). This generated A$1.4 billion in direct and indirect salaries. Furthermore, the industry has contributed to the development of regional economies and the growth of tourism in Australia. The industry has helped to develop new ports of call and has increased the demand for tourism-related services, such as accommodation, restaurants and tours.

Brazil has seen significant growth in the cruise liner industry in recent years, with the industry contributing R$2.24 billion ($410 million USD) to the Brazilian economy in 2019, according to a report by the Brazilian Association of Cruise Companies[4]. During the 2016/17 cruise season the industry supported 25 279 jobs and generated R$1.09 billion ($200 million USD) in wages and salaries (CLIA, 2018, p. 24). It also contributed to the development of tourism in Brazil, with cruise passengers spending R$1.54 billion ($280 million USD) in the country in 2019, supporting local businesses and creating job opportunities.

The contribution to the Canadian economy comes from five sources. These are spending by cruise passengers and crew; expenditure by cruise lines to support their operations; shore-side staffing, land transportation and shore excursion activities; spending by the cruise lines for port

---

[3] *Cruise Lines International Association Australasia https://www.cruiseagency.com.au/news/australian-cruise-industry-statistics/#:~:text=Australian%20Cruise%20Passenger%20Numbers,million%20Australians%20took%20a%20cruise.*

[4] *Brazilian Association of Cruise Companies: http://www.abremar.com.br/2020/09/30/setor-de-cruzeiros-maritimos-gerou-mais-de-r-22-bilhoes-na-economia-brasileira-em-2019/*

services; and capital expenditure on equipment and land facilities (CLIA, 2018, p. 6). In 2016 there were 2 230 450 cruise passenger arrivals. The direct spend contributed $1.48bn to the economy, with a further $1 71bn indirect and induced effect. This is a total contribution of $3.19bn. Total salaries and wages were $1.01bn and supported 23 198 jobs (CLIA, 2018, p. 6).

2 Approach and Methodology

An economic analysis of the cruise liner industry is complex not least because of data limitations. It requires that all expenditure in and around the industry be captured. It also requires that there is no double counting. This section sets the scene by describing what data is included, how this data was sourced or, when not available, estimated and how the macroeconomic calculations were made. It concludes with recommendations for additional data gathering for future assessments.

2.1 Conceptual Approach

This section gives a general description of the approach and is illustrated in Figure 1. The detail is given in the rest of the section. A macroeconomic analysis is done using expenditure relating to a project. There are three expenditure categories. The first is onshore passenger expenditure. The second is crew onshore expenditure and the third is expenditure on resupplying vessels.

Several distinctions must be made between different passengers. The first is between domestic and international passengers because they have different spending patterns and stay for different periods before or after the voyage.

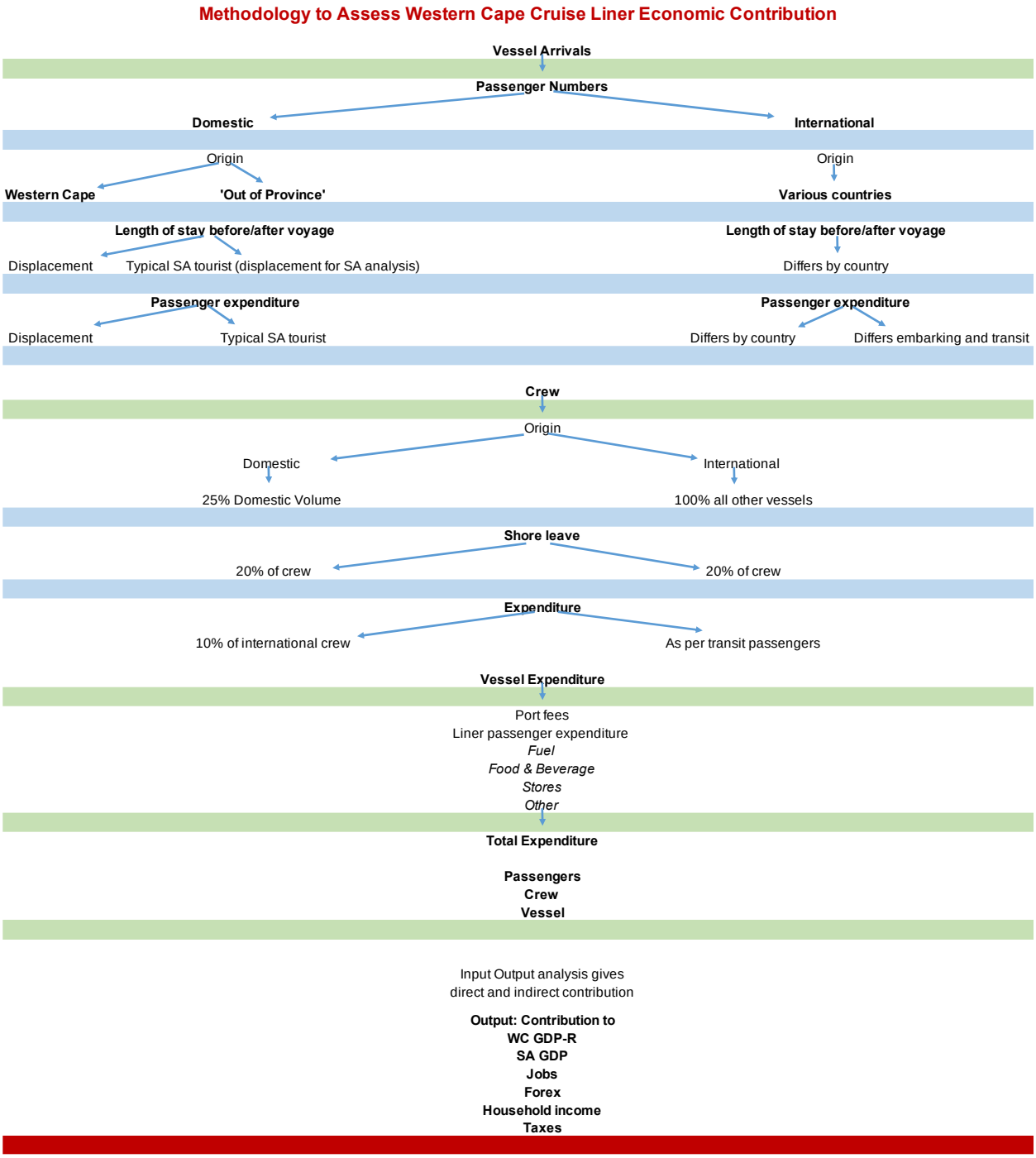
Two additional distinctions are necessary between international passengers. First by country of origin. Second between disembarking passengers and those in transit. These differences are important because of the different spending patterns and lengths of stay.

A distinction is needed between Western Cape and ‘out of province’ national passengers. It can be expected that any expenditure made by someone from the Western Cape would be at the expense of some other expenditure. Most typically tourist expenditure in Cape Town would simply displace a similar type of expenditure elsewhere in the province. Hence expenditure by people from the Western Cape is excluded. ‘Out of province’ South Africans must be treated differently. They would need to travel to Cape Town and possibly stay overnight. Their expenditure accrues to the Western Cape and is included in Western Cape income. However, at a national level their expenditure is also displacement and is excluded from South African income.

Crew also needed to be differentiated between national and international for similar reasons.

Vessel related expenditure is straightforward and includes port fees, fuel, food & beverages and other supplies.

Figure 1: Conceptual Approach



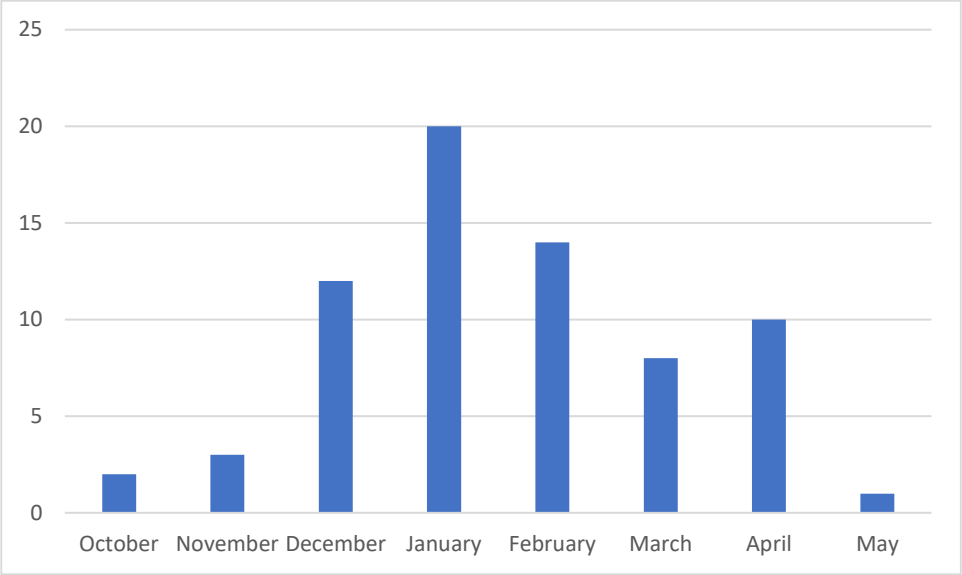
2.2 Data and Estimates

The section starts with a description of the vessels that arrived in the Cape over the 2022-23 season. This is followed by a description of the vessel types which is important because this allows a distinction between local and international passengers and length of stay. This leads into the expenditure data which forms the basis of the macroeconomic calculations.

2.2.1 Vessel Arrivals

The Cape cruising season stretched from October 2022 to May 2023 with a high season over December to February. There was some uptick in April. This is illustrated in Figure 2. At the height of the season, January, twenty vessels docked at the Cape. This was followed by fourteen in February. December was the third busiest month with twelve vessels and April fourth with ten.

Figure 2: Vessel Arrivals - Monthly



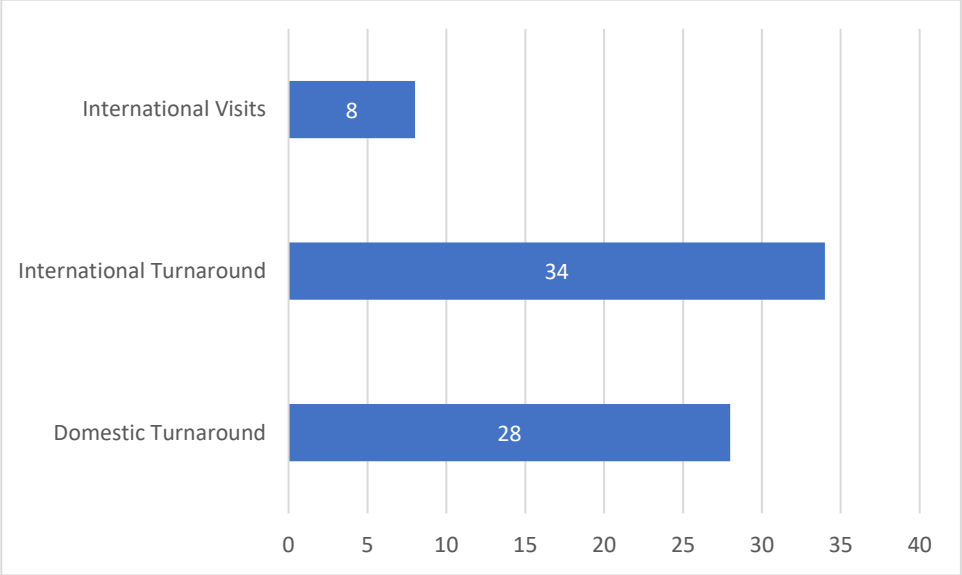
Source: (Wesgro - Cruise Cape Town, 2023)

2.2.2 Vessel Type

Five types of cruise vessels docked in Cape Town. These are domestic volume ships operating turnaround voyages for South Africans, international volume ships also operating turnaround voyages but aimed almost exclusively at the international market, international visiting volume ships, international elite luxury ships and international expedition ships. The latter three are similar

in that they visit Cape Town as part of a broader international cruise. The vessel sizes and purpose of voyage differ but for this analysis can be grouped together. There are thus three main vessel categories. These, and the number of arrivals, are illustrated in Figure 3.

Figure 3: Vessel Arrivals by Type



Source: (Wesgro - Cruise Cape Town, 2023).

There were 28 domestic turnaround arrivals. These are marketed almost entirely at the South African market. They are 'out and back' voyages that start and end in Cape Town.

There were 34 international 'turnaround' journeys, made up of volume and elite luxury ships. These voyages are marketed almost exclusively at the international market. They sail the Southern African coast and make extensive port visits. The voyages start and end in Cape Town. Visitors on turnaround vessels embark and disembark in Cape Town. This means they must travel to Cape Town, probably stay in Cape Town and possibly visit other attractions in South Africa.

There were eight international 'visit' arrivals. A visiting vessel is one that calls at the Cape on a long voyage and departs. Passengers on visitor vessels generally see the sights of Cape Town, return to their vessel and sail away. Some do embark and disembark when the vessel is in Cape Town, but most are transit passengers.

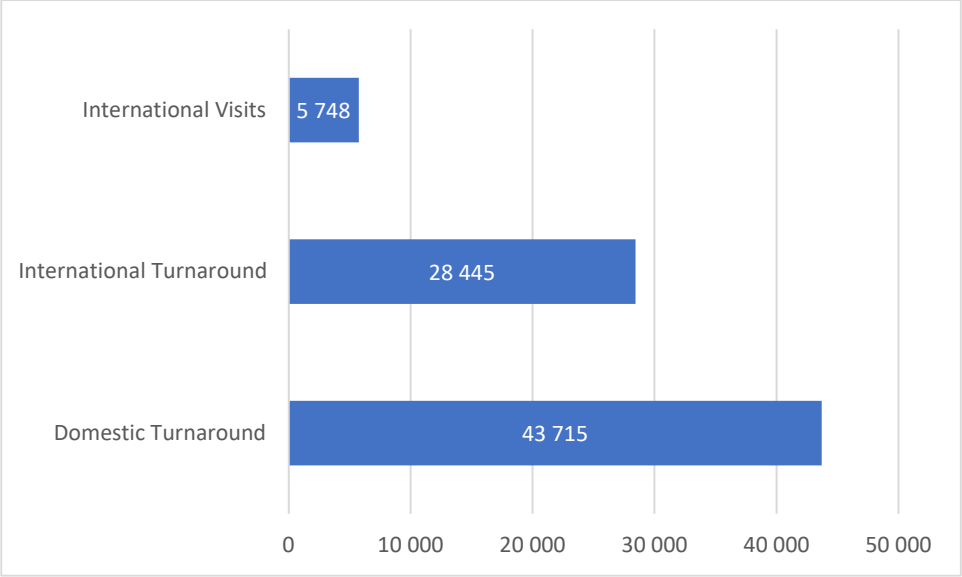
2.2.3 Passenger Information

The analysis makes a distinction between three types of passengers – international, those from the Western Cape and 'out of province' South Africans.

2.2.3.1 Numbers

Passenger numbers were calculated from those embarking, disembarking or in transit. It is obviously incorrect to sum embarking and disembarking passengers on turnaround voyages because they are largely the same people. The number of disembarking passengers was used in the passenger calculations. Embarking passengers were included on the last voyage because they had been in Cape Town and were on the last voyage out of the country. For want of a better term they are called 'key' passengers[5]. Key passengers, by type of vessel, are shown in Figure 4.

Figure 4: Key Passengers by Vessel



There were 77 908 key passengers. Domestic volume vessels make up the bulk at 43 715 passengers. This is 56% of the total. There were 28 445 international turnaround passengers, accounting for a further 37%. There were 5 748 international visiting passengers, making up the final 7%.

[5] *Key passengers are different to the passenger movements reported by the V&A Waterfront*

Included in these numbers were 8 982 transit passengers. Many, if not all, transit passengers leave the vessel to tour the Western Cape but return to the vessel in the evening.

2.2.3.2 National and International Passengers

It is important to differentiate between national and international passengers because they have different onshore spending patterns. It is expected that the bulk of passengers on domestic volume vessels are South African. This follows from the fact that these voyages are marketed in South Africa and make few port calls while on a voyage. A 100% South African passenger composition was assumed in the absence of better information.

Table 1: South African Passengers

	% SA	Rationale
Domestic Volume	100%	Domestic Volume targets local markets with limited SA Port visits
International Volume - Turnaround	1.8%	International Volume targets international markets. Manifest has 1.8% SA
International Volume - Visit	1.8%	Assumed as above
International Expedition vessels	1.8%	Assumed as above
International Elite luxury	0.1%	International Volume targets international markets. Manifest has 0.1% SA

The proportion of South Africans on board international vessels is based on passenger manifestos that were provided by some cruise liners. There were 0.1% South Africans on elite luxury vessels and 1.8% on international volume vessels. No information was available for expedition vessels and it was assumed that these would be the same as international volume vessels. These assumptions are summarised in Table 1.

Table 2: Passengers by Origin

	Data Source	Europe	North America	South America	Asia	Middle East	Oceania	Africa	South Africa
Domestic Volume	Assumed								100%
International Volume - Turnaround	Wesgro	47.1%	42.5%	0.2%	0.7%	4.7%	2.7%	0.3%	1.8%
International Volume - Visit	Wesgro	97.5%	0.2%	0.3%		0.1%		0.1%	1.8%
International Expedition vessels	Wesgro	97.5%	0.2%	0.3%		0.1%		0.1%	1.8%
International Elite luxury	Wesgro	99.8%		0.1%					0.1%

The final important piece of information in this section is the origin of passengers by vessel which is given in Table 2. Apart from South Africans on domestic volume vessels, the bulk of passengers on international vessels are from Europe. The only difference is with international turnaround vessels where there is a fairly even split between Europeans and North Americans. There is a sprinkling of visitors from other areas, most notably Middle Eastern passengers on international turnaround vessels.

2.2.3.3 South African and Western Cape

Just as it is important to differentiate between South African and International passengers it is equally important to differentiate between Western Cape and 'out of province' passengers.

It can be expected that the expenditure of people from the Western Cape on a cruise is likely to be at the expense of some other type of expenditure, typically other leisure activities. This is a displacement effect. As a result, it was necessary to remove all Western Cape passengers from the economic estimates because their expenditure would be at the expense of other expenditure in the province. This was done by excluding passenger related costs like food, water, etc. Costs like fuel and harbour fees were included because they are incurred irrespective of passenger numbers.

The challenge is that the proportion of Western Cape passengers is not known. So, the proportion was estimated by deduction using the following approach. MSC operates from both Cape Town and Durban. The more populated and richer parts of South Africa are closer to Durban than Cape Town. It can therefore be expected that Durban would be the port of choice for a cruise for those South Africans. This means that while the Western Cape only makes up a small part of the total population it will make up a far larger part of cruise passengers. The proportion is not known and 50% was assumed.

2.2.4 Crew Information

There were 21 000 crew visits on domestic and 20 800 on international vessels giving a total of 41 800. Crew manifests for international vessels showed that 1.5% were South African. It could not be determined how many South Africans crewed domestic vessels and a 25% proportion was assumed.

2.2.5 Direct Expenditure

There are three types of expenditure. First is passenger onshore spending. Second is onshore crew expenditure. Third is expenditure by the cruise vessels.

2.2.5.1 Passenger Expenditure

Passenger expenditure is a function of length of stay and onshore spending. These were modelled on the typical behaviour of domestic and international tourists. These data sources are given in Table 3. Western Cape residents were excluded because of displacement effects.

Table 3: Length of Stay and Expenditure Data Sources

International passengers	SA Tourism (2022): Tourism Performance Annual Report 2021
International transit passengers (per day)	SA Tourism (2022): Tourism Performance Annual Report 2022
South African 'out of province' passengers	SA Tourism (2022): Tourism Performance Annual Report 2023
Western Cape excluded	Displacement

For international passengers it was assumed that their onshore stay would be the same as an international tourist less time on board. For example, the average American tourist visits South Africa for 16.4 days. So, this passenger would stay in the country for ten days if the voyage was 6.4 days. It is possible that some international passengers may not stay and a 25% allowance was made for this possibility.

Domestic trips to the Western Cape are 3.6 days, which is marginally shorter than the average duration of the domestic turnaround voyages (South African Tourism, 2022, p. 126). 'Out of province' passengers would need to travel to and from Cape Town and would possibly spend some time in the city. It was assumed that these passengers would spend an extra two days in Cape Town. Western Cape residents' length of stay is immaterial because of displacement effects. These assumptions are summarised in Table 4.

Table 4: Passenger Length of Stay

Passenger Length of Stay Before/After Voyage	
Domestic Volume - South African 'out of province' passengers	Half of national tourist length of stay (2 days before / after voyage)
Domestic Volume - Western cape passenger	Displacement therefore excluded
International Volume - Turnaround	Embarking & disembarking: International tourist length of stay less time on board
International - Visit (Volume, Elite & Expedition)	Embarking & disembarking: International tourists for length of 'visit'
International transit passengers	Duration of vessel visit in port
International passengers	25% leave immediately after voyage

Passenger expenditure differs by place of origin and type of passenger and is given in Table 5. For example, average tourist expenditure varies between R20 700 for Asian and R32 000 for Middle Eastern visitors. This expenditure was pro-rated by length of stay to convert tourist stay to passenger stay. The same pro-rata was done for transit passengers. South African tourists typically spend R4 700 on a two-day visit.

Table 5: Passenger Expenditure by Origin

	Europe	*North America*	*South America*	*Asia*	*Middle East*	*Oceania*	*Africa (Air)*	*South Africa*
International passengers (per visit) in 2019	R27 186	R26 830	R20 419	R20 775	R32 053	R24 099	R22 187	
International transit passengers in 2019 (per day)	R1 599	R1 636	R1 245	R971	R1 919	R1 639	R1 103	
South African 'out of province' in 2021 (per visit)								R4 706

The final piece of information is the distribution of expenditure for different passengers, shown in Table 6. This is important for the macroeconomic calculations. It can be expected that transit passengers will sleep on board and have no accommodation expenditure. They will typically not have substantial medical expenditure. A South African tourist spends less on shopping and more on transport.

Table 6: Passenger Expenditure by Type

Passenger Expenditure Distribution							
	Shopping	*Food*	*Accomm.*	*Leisure*	*Transport*	*Medical*	*Other*
International passengers	31.6%	20.7%	18.0%	12.2%	11.0%	0.8%	5.6%
International transit passengers	39.0%	25.5%		15.1%	13.5%		6.9%
South African 'out of province' passengers	7.0%	25.0%	24.0%	2.0%	40.0%		2.0%

2.2.5.2 Crew

Crew length of stay was treated the same as transit passengers. They visit Cape Town while the vessel is in port. Shipping agents suggested that 20% of the crew are given shore-leave at any one time[6].

Table 7: Crew Composition

	Assumptions	
Domestic Volume	25% South African	Advised by Wesgro
International Volume - Turnaround	100% international crew	Advised by Wesgro
International Volume - Visit	100% international crew	Advised by Wesgro
International Expedition vessels	100% international crew	Advised by Wesgro
International Elite luxury	100% international crew	Advised by Wesgro

Crew expenditure is based on the average daily expenditure of international visitors, excluding accommodation and medical. This amounts to R1 130 per crew member per day. Spending by South African crew was not known and this was assumed to be 10% of international crew – the equivalent of a modest meal.

[6] *Pers. Comm – email from Wesgro dated 2023/06/06*

Table 8: Crew Expenditue

International crew	As per International transit passengers	
South African crew	Unknown	Assumed 10% of international crew (cost of a single meal ashore)

2.2.5.3 Vessel Expenditure

Vessel related costs are port fees, refuelling, fresh water, sludge and recycling offloading, stores including food and beverages and passenger related services. These, for this study, were based either on known fees or international experiences as shown in Table 9.

Table 9: Vessel Expenditure

Type	*Data Source*
Port fees	Calculated
Liner passenger expenditure	International Data Transfers
Fuel	
Food & Beverage	
Stores	
Other	

Port fees were based on the Transnet National Ports Authority Tariff Handbook (TNPA, 2022). These include light dues, South African Maritime Safety Authority (SAMSA) levies, vessel traffic service (VTS) charges, pilotage services, tug assistance and attendance, berthing services, running of vessel lines, port dues, berth dues, refuse collection, the V&A Waterfront passenger levy, port passenger fees and baggage handling fees. Port fees were calculated for every vessel and compared to known port fees of some cruise vessels. The total value and distribution of the fees given in Table 10.

Table 10: Western Cape Cruise Liner Port Fees

Category	Amount	%
Light Dues	R1 129 188	2%
SAMSA	R1 503 895	3%
VTS	R1 873 148	4%
Pilotage	R1 505 756	3%
Tug Assistance	R7 284 180	14%
Berthing	R1 423 259	3%
Lines	R296 789	1%
Port Dues	R5 348 486	11%
Berth Dues	R982 515	2%
Refuse	R1 792 957	4%
V&A Fee	R10 939 088	21%
Passenger Fee	R5 913 217	12%
Baggage Handling Fee	R10 897 932	21%
Total Port Fees	**R50 890 408**	**100%**
Average per Vessel Visit	R727 006	

The cruise liner industry generated over R50m in port fees, which is an average of a little over R700 000 per vessel. The largest items are the V&A fees and baggage handling and tug assistance.

Only one vessel supplied information on fuel expenditure. This was R175 per gross ton which is R9.8m for the average vessel size of 55 700 gross tons. An international perspective is given in Table 11. The available data is for Brazil, Mexico and India. These three countries were used because they are a better fit with South Africa than North America or Europe. There were a total of 487 cruise visits to those countries with a total fuel expenditure of $239m. This gives an average cost of $0.5m per visit. This, converted to Rands, is R9.3m – virtually the same as the supplied information of R9.8m.

Table 11: Fuel Expenditure – International Experiences

	Port Visits	Fuel Expenditure	Fuel per Visit
Brazil	103	$71.0m	$0.7m
Mexico	245	$114.0m	$0.5m
India	139	$54.0m	$0.4m
Total / Average	**487**	**$239.0m**	**$0.5m**
Rand Value			R9.3m

Source: (OpenAI, 2023)

Typical passenger related costs are food & beverage; fresh water, sludge offload & recycling; and other stores. These are given in Table 12 for Brazil, Mexico and India.

Table 12: Passenger Dependent Cruise Liner Expenditure

Passenger Expenditure	F&B	Stores
Brazil	$708	$85
Mexico	$204	$32
India	$423	$40
Weighted Average	**$268**	**$36**
Rand Value	R5 101	R675

Source: (OpenAI, 2023)

These international averages were converted to the total provincial cruise season and given in Table 13. Total vessel expenditure is R648m. Spending on food and beverages made up 60%, followed by fuel at 28%, port fees 8% and stores 4%.

Table 13: Total Vessel Expenditure

	Port Fees	Fuel	F&B	Stores	Total
Total Expenditure	R51m	R184m	R386m	R27m	**R648m**
Excluding Western Cape Pax	R51m	R184m	R278m	R19m	**R531m**
Excluding South African Pax	R51m	R184m	R171m	R11m	**R416m**

The table also takes account of Western Cape and 'out of province' displacement. Total expenditure was R648m. A provincial focus would exclude Western Cape passengers and reduce expenditure to a relevant R531m. A national focus would reduce this further to R416m.

2.2.6 Expenditure Summary

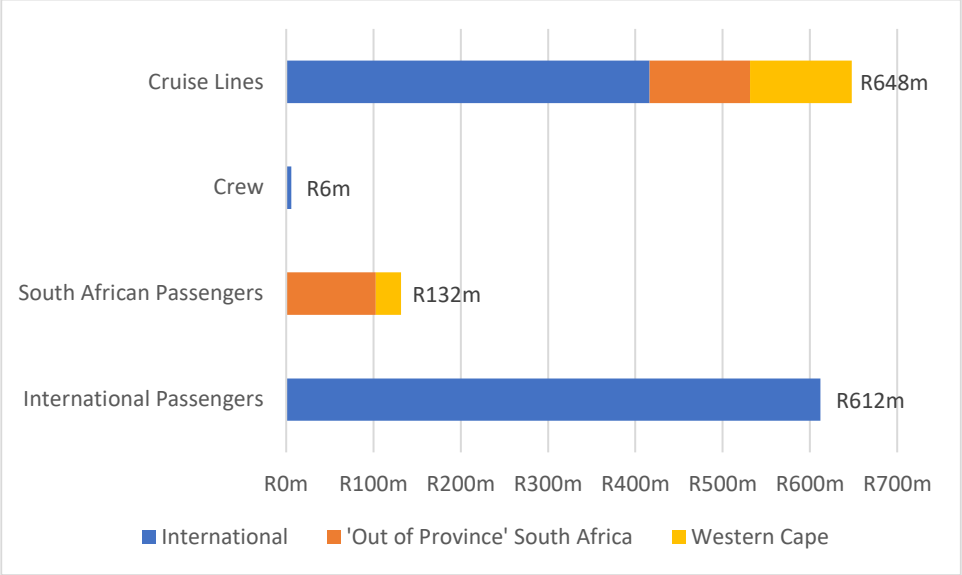
Total expenditure was R1.40bn with the detail given in Table 14. International turnaround vessels made up 56%, domestic turnaround vessels 36% and international visiting ships the remaining 8%.

Table 14: Total Expenditure excluding Displacement

Type of Cruise Ship	Number of Visits	Tourist Expenditure		Crew	Vessels	Total	% of Total
		International	Domestic				
Domestic Turnaround	28	-	R130m	R0m	R371m	R501m	36%
International Turnaround	34	R563m	R1m	R5m	R212m	R781m	56%
International Visits	8	R49m	R0m	R1m	R65m	R115m	8%
Total	**70**	**R612m**	**R132m**	**R6m**	**R648m**	**R1 397m**	
% of Total		44%	9%	0%	46%		

An alternative strategic focus is the components of expenditure illustrated in Figure 5. The largest contributions were from vessel replenishments, at 46%, international passengers at 44% and domestic tourism 9%. The figure also shows whether the expenditure was from international, Western Cape or 'out of province' passengers. Most expenditure, at R1.03bn, is from international passengers. Out of province South Africans contributed R218m and Western Cape passengers R146m.

Figure 5: Composition of Total Expenditure Before Displacement



This is strategic merit in comparing the distribution of expenditure in South Africa and other countries[7]. This is shown in Table 15 . Because there are quite large differences between North America, Europe and the 'rest of the world', the latter has been used as a comparator. It will be noted that the distribution of expenditure is similar. Passengers contributed 47% to the Western Cape industry and 51% elsewhere. Expenditure on vessels lies between 53% and 46% and expenditure by crew is very low.

[7] *Passenger expenditure has been adjusted by removing services paid for by the cruise lines and added to that of the cruise lines themselves, to be compatible with the CLIA definitions.*

Table 15: Global Cruise Expenditure

% of Total	North America	Europe (EU+3)	Rest of World	South Africa
Passengers	31%	19%	51%	47%
Crew	2%	1%	4%	0%
Cruise Lines	67%	81%	46%	53%

Source: (CLIA, 2020, p. 22) *and own calculations*

2.3 Macroeconomic Analysis

There are two parts to this section. The first describes the analytical process. The second explains the differences between the economic contribution to the South African economy and to the Western Cape.

2.3.1 Analytical Process

The actual task of calculating the macroeconomic impact of the season demanded a detailed and multifaceted approach not least because of the so-called multiplier effects. It is well recognised that the simple act of spending – hosting a cruise liner, for example - leads to other economic effects. Refuelling and taking on supplies can lead to increased production in those industries. Increased demand for fuel and food, in turn, leads to increased demand for processing which uses raw material, water, electricity and so on.

These are the so-called multiplier effects. While this process unfolds, each industry employs more people and pays more wages. Employees, in turn, spend their income and cause further multiplier effects through the economy. Measuring this is further complicated by the fact that different industries demand different skills. This leads to different wage structures across the various industries. People at different income levels have different spending patterns. Thus, the change in overall spending is dependent on which industries are affected.

Input-output analysis was used for the measurement of the macroeconomic impact of the cruise liner season. This meant that all expenditure in and around the season be identified, estimated and linked to the Standard Industrial Classification of all Economic Activity (SIC codes). In addition, estimates had to be made of the likely items of expenditure because of wage payments.

Measuring the economic contribution of the season was done in four stages. The first was to identify relevant expenditure. This was done in the previous section. Second was to assign an

SIC code to the different expenditure types. Third was to decompose and apportion labour and profit into income categories and use this to estimate spending by income group. The final step was to bring all the SIC coded items together. The total multiplier effect is the aggregate SIC code spending on plant, material and consumption.

In a nutshell, the economic estimate includes the direct cost of the cruise season, and travel and related expenditure. The multiplier estimates include all the backward economic linkages for the season and forward economic linkages where, for example, people spend their salaries.

Direct jobs were calculated using the South African Social Accounting Matrix (SAM). The SAM gives average sector salaries and turnover. Direct jobs were calculated from these proportions given the calculated sectoral spending. Indirect jobs were calculated using the same principles as GDP calculations.

2.3.2 Differences between Western Cape and South African Contributions

The analysis made a distinction between three types of passengers – international, those from the Western Cape and those from the rest of South Africa. The macroeconomic analysis requires a distinction between Western Cape and South African passengers. This has been referred to above but is explained more fully here.

2.3.2.1 Estimating Western Cape Economic Contribution:

The spending of international passengers on the tourist offerings in the Western Cape is included in Western Cape Gross Domestic Product – Regional (GDP-R). The Western Cape economy will also benefit from the spending of ‘out of province’ South Africans. This therefore is also part of the Western Cape GDP-R.

It can be expected that the expenditure of people from the Western Cape will be at the expense of some other expenditure, typically leisure activities. This is a displacement effect. Therefore, Western Cape passengers are excluded from Western Cape GDP-R. This was done by excluding on board passenger related costs. This means vessel expenditure on food, water, etc.

2.3.2.2 Estimating South African Economic Contribution

The spending of international passengers on the tourist offerings in South Africa is larger than their spending in the Western Cape and is included in GDP.

The spending by South African passengers, irrespective of whether they are from the Western Cape, is excluded from South African GDP. This is because their expenditure would have been at the expense of other expenditure and is therefore a pure displacement effect. This was done by excluding domestic passenger related costs like food, water, etc.

2.4 Future Data Needs

Part of this analysis was based on international data transfers and assumptions. It is suggested that the following information be sourced directly from shipping agents and through passenger surveys to make future assessments more robust.

1. Cruise Liner information:
    i. Local crew employed.
    ii. Expenditure on fuel, food & beverage and stores.
    iii. The proportion of South African passengers from the Western Cape.
2. Passenger Surveys:
    i. Whether they have or will be staying on in South Africa as part of an extended visit, and the duration of the overall visit.
    ii. Whether they would return to South Africa in the next five years (very likely, likely, unlikely, very unlikely).
    iii. Their spending profile.
    iv. For South African passengers outside of the Western Cape, the duration of their visit.

3 Economic Contribution

This section is the culmination of the report. It brings together the contribution to incomes, jobs, foreign exchange (forex), taxes and household incomes. It also makes a distinction between the Western Cape and South Africa.

Further it was explained in Section 2.2.3.3 why the Western Cape cannot just be treated as a subset of South Africa in this type of analysis. In brief there are two differences. The first is that international passengers would visit other sites outside of the Western Cape. This would make the international contribution larger in South Africa than in the Western Cape. The second is that there would be a contribution to the Western Cape from 'out of province' South Africans, whereas the same would not be true for national domestic tourism because it is a total displacement effect.

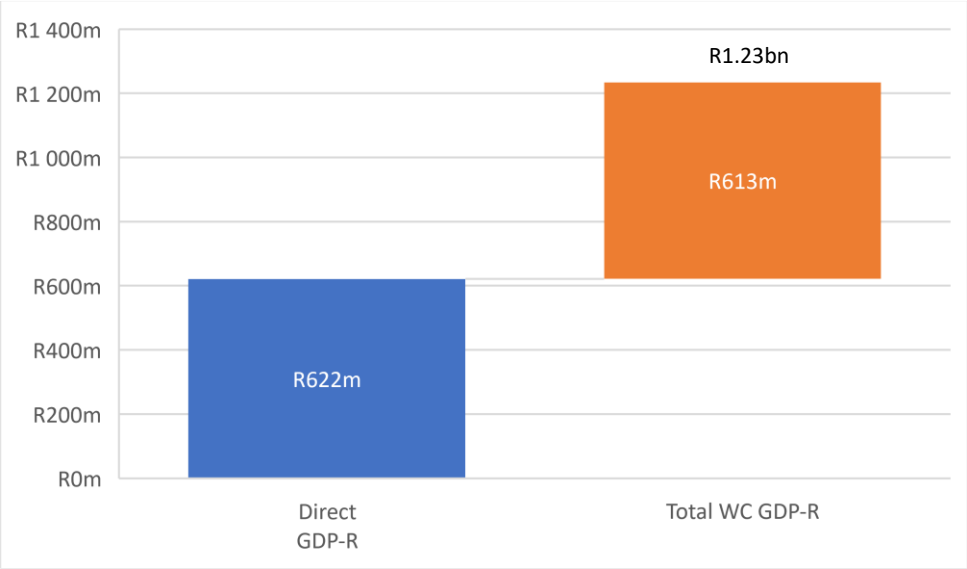
3.1 Western Cape Economic Contribution

The Western Cape equivalent of GDP is GDP-R. At a provincial level this is the broadest measure of economic contribution and is the total value of all final goods and services, which is fundamental to the economic quality of life of people. The second provincial macroeconomic indicator is employment.

3.1.1 Gross Domestic Product - Regional

The 2022-23 cruise liner season contributed R1.23bn to Western Cape GDP-R, illustrated in Figure 10. This consists of a R622m direct contribution and a R613 indirect and induced contribution.

Figure 6: Western Cape GDP-R Distribution



The industry has multiple contributing stakeholders and role players. The most important are international passengers, followed by the cruise lines themselves, 'out of province' passengers and crew. Their respective contribution to GDP-R is illustrated in Figure 7. International passengers, at R593m, contributed 48%. This is followed by the cruise lines where their R522m contributed 42%. The contribution from domestic passengers was R113m (9%) and crew was R7m (1%).

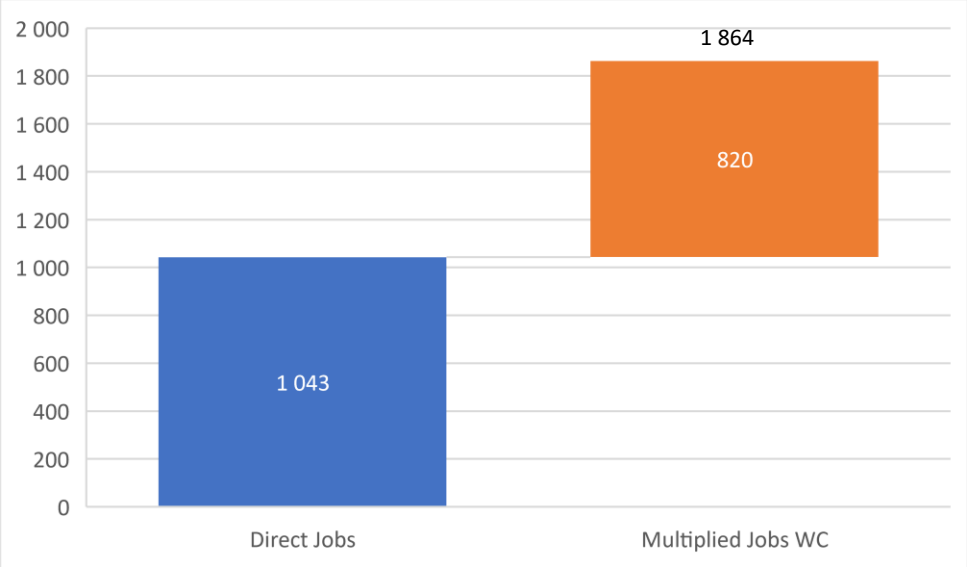
Figure 7: Western Cape GDP-R Contributors

3.1.2 Provincial Employment

Jobs are important. This is the case both with direct jobs from the industry or indirect and induced jobs from multiplier effects. Clearly a seasonal industry cannot be expected to create permanent jobs. The convention is to report 'full-time annual job equivalents'. This means that, for example, there would be one full-year job equivalent from 52 one-week jobs.

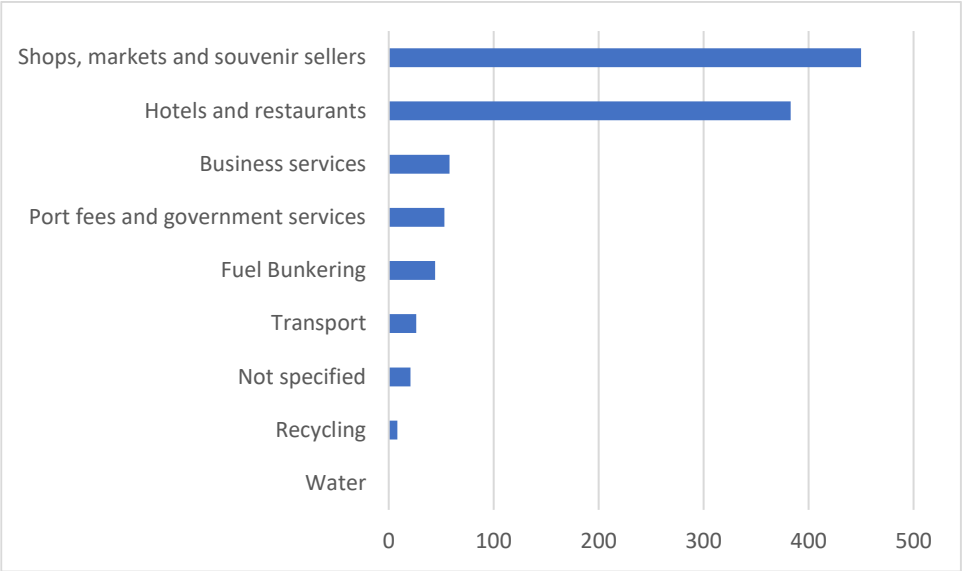
As with economic contribution, two perspectives are reported. These are the job distribution provincially and then by sector.

Figure 8: Direct and Total Jobs



The industry created 1 043 direct jobs in the Western Cape. The multiplier effects increased this to 1 864 total (direct, indirect and induced) jobs. This is illustrated in Figure 8.

Figure 9: Western Cape Direct Employment by Sector



The direct job distribution is shown in Figure 9. Here 43% were at shops, markets and souvenir sellers. This was followed by hotels and restaurants with 37%. Support services had 6%, while port fees & government services followed closely with 5%. The remaining 10% was distributed across the fuel bunkering, transport, etc.

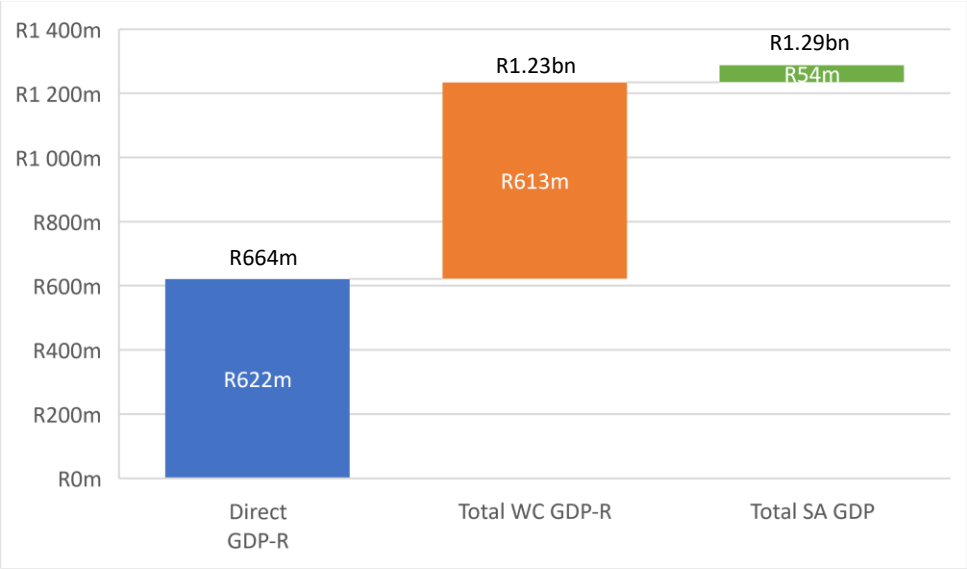
3.2 South African Economic Contribution

As with the contribution to the provincial economy, this section reports the contribution to national GDP and jobs. It then goes further to report the generation and usage of foreign exchange and the contribution to taxes and household incomes.

3.2.1 Gross Domestic Product

GDP is the broadest measure of economic contribution. This is the total value of all final goods and services and is fundamental to the economic quality of life of people. The 2022-23 cruise liner season contributed R1.29bn to South African GDP. This excludes ‘out of province’ South African passengers but includes international tourist expenditure outside the Western Cape.

Figure 10: GDP Distribution



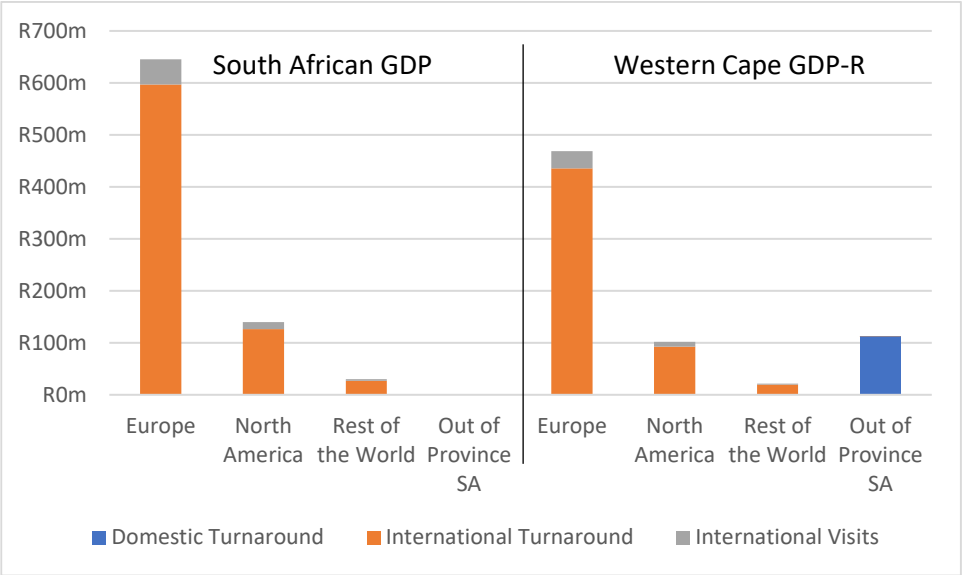
The detail of the contribution by source and beneficiary is summarised in Table 16.

Table 16: Contribution to Gross Domestic Product

	Direct	Total GDP	
	GDP-R	Western Cape	South Africa
Domestic Passengers	R53m	R113m	
International Passengers	R278m	R593m	R816m
Crew	R3m	R7m	R8m
Cruise Lines	R287m	R522m	R465m
Total	**R622m**	**R1 234m**	**R1 288m**

International passengers, at R816m, contributed 63% to national GDP. This is followed by the cruise liners where their R465m contributed 36%. The contribution from crew was R8m (1%).

Figure 11: Passenger Expenditure Economic Contribution

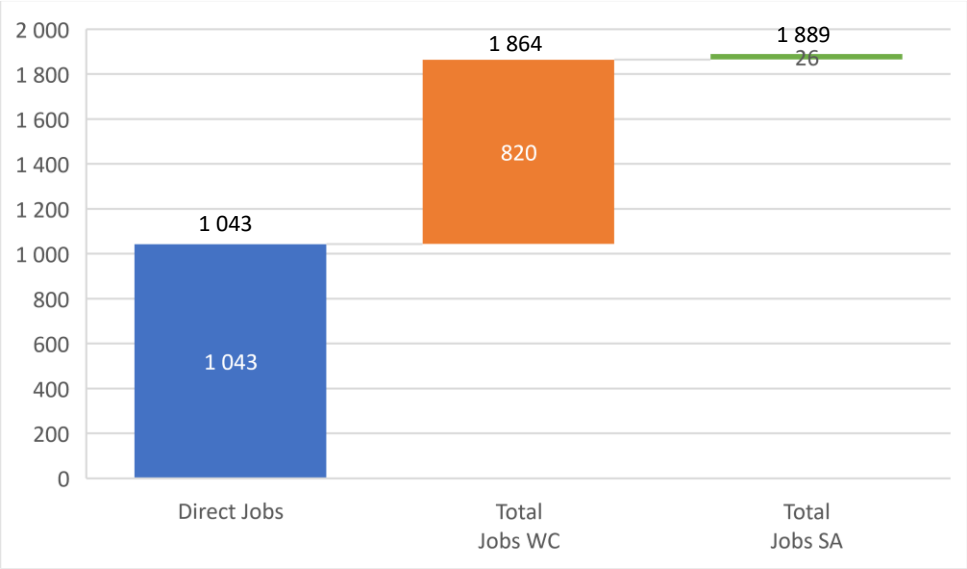


A strategic comparison of the contribution to GDP and GDP-R by passenger origin is provided in Figure 11. European passengers on international turnaround vessels and from Europe contribute the most with R600m to GDP and R430m to GDP-R. North American passengers on the same vessels contributed R127m and R93m respectively. 'Out of province South Africans contributed R112m to Western Cape GDP-R.

3.2.2 Employment

The industry created 1 889 jobs nationally and excludes domestic tourism. This is illustrated in Figure 12 and summarised in Table 17.

Figure 12: Direct and Total Jobs



International passengers are the largest job creator. Their expenditure created 1 060 full-time jobs, 56% of the total. Spending by the cruise liners added 577, 31%. The hiring of locals as crew and crew expenditure added a further 252, 13%.

Table 17: Jobs

	Direct Jobs	Total Jobs	
		Western Cape	South Africa
Domestic Passengers	49	129	
International Passengers	374	791	1 060
Crew	246	251	252
Cruise Lines	375	692	577
Total	**1 043**	**1 864**	**1 889**

3.2.3 Foreign Exchange

South Africa has a serious current account deficit problem and any contribution to growing foreign exchange is welcome. Over the cruise season a total of R1 034m forex came into the country and R303m was used (on fuel, for example). This means that there was a net R731m forex inflow. In this instance international visitors accounted for 63% and the cruise liners 36%. This is reported in Table 18.

Table 18: Foreign Exchange

	Foreign Exchange		
	Earnings	Use	Net
Domestic Passengers			
International Passengers	R612m	R151m	R461m
Crew	R6m	R1m	R5m
Cruise Lines	R416m	R152m*	R265m
Total	**R1 034m**	**R303m**	**R731m**

** Excludes domestic passenger profit repatriation*

Any profit that was remitted internationally by domestically operating liners could not be included in the estimates.

3.2.4 Taxes and Household Income

Two additional macroeconomic benefits are reported. These are taxes and household income, listed in Table 19.

Table 19: Taxes and Household Income

	Taxes	Household Income
Domestic Passengers		
International Passengers	R95m	R311m
Crew	R1m	R3m
Cruise Lines	R47m	R186m
Total	**R144m**	**R501m**

The season generated R144m for the national fiscus of which R95m, 66%, had international origins. Taxes generated by the cruise lines, R47m, made up 33% of all taxes. Included in this is R9m from port fees. Crew accounted for the remaining 1%.

The season added R501m to household incomes, again with the lion's share of R311m coming from international passengers. International passengers contributed 62% and the cruise lines a further 37%. Crew accounted for the remaining 1%.

4 International and Local Comparators

Numbers are all very well in themselves, but it helps to see them against national and international comparators.

4.1 National Comparators

Two groups of national comparators were selected. The first gives the equivalent economic contribution to provincial and national income and jobs. The second compares this to spending by international holiday makers in the country and all visitors to the Western Cape. Income and job data is for 2022, the latest available data set.

The aggregated national comparators are given in Table 20 where the final column is the most important. The recent cruise season added R1.23bn to provincial GDP-R. This is the equivalent of a 0.13% contribution. It also added R1.29bn to national GDP which is a 0.02% contribution. The season created 1 864 provincial jobs which are 0.07% of total Western Cape jobs. It added 1 890 national jobs, 0.01% of South African jobs.

Table 20: Aggregate National Comparators

Contribution To:	**Amount**	**Cruise Season**	**Relative Contribution**
Western Cape GDP-R (2022)	R917bn	R1.23bn	0.13%
South African GDP (2022)	R5 827bn	R1.29bn	0.02%
Western Cape Jobs	2 595 785	1 864	0.07%
South African Jobs	15 934 000	1 889	0.01%

The final, and more direct comparators are against direct national spending by international holiday makers, on the one hand, and tourist spending in the Western Cape. The former could be sourced directly from Tourism SA (South African Tourism, 2022, p. 96) while the latter was estimated from the Provincial Economic Review and Outlook (PERO) and includes international and domestic tourists (Western Cape Government Provincial Treasury, 2020, p. 70). Tourism spending is for 2019, which is the latest data unaffected by the covid lockdowns and is scaled to 2023 prices. These comparisons are shown in Table 21.

Table 21: Tourist Comparators

Spending by: ***(2022/23 Prices)***	**Amount**	**Cruise Direct Spending**	**Relative Contribution**
International Holiday Makers in South Africa (2019)	R40bn	R0.6bn	1.53%
Western Cape International and Domestic Visitors (2019)	R31bn	R0.6bn	1.88%

The first comparison is between direct onshore expenditure by international passengers and direct spending by all international holiday makers. In 2019 international holiday makers spent R40bn (in 2023 prices) in the country. In the 2023 cruise season international passengers spent R0.6bn. This is a 1.53% equivalent.

The second comparison is to Western Cape directly. In this instance, the available data was for all visitors to the Western Cape (domestic and international) for all purposes (holidays, visiting friends and family, business, etc.). In 2019 these visitors spent R31bn. In the 2023 cruise season international and 'out of province' passengers spent R0.6bn. This is a 1.88% equivalent. This is an understatement because a better comparator would be only holiday makers to the Western Cape rather than all visitors.

4.2 International Comparators

It was argued in section 1 that South Africa should be compared against other emerging markets like Mexico, India and Brazil. Table 22 gives this comparison.

In Brazil the industry contributed 0.03% to both GDP and jobs in 2019 – the latest available data. The contribution in China and India is very low. The is probably more the result of high populations and, for China, high GDP. Mexico's comparators at 0.1% and 0.02% are possibly the result of its location next to a high cruising market from the US.

In all of this the Western Cape Cruising industry can hold its head high. Nationally the industry made a 0.02% contribution to GDP and a 0.01% contribution to job creation. This is well ahead of China and India. It is comparable to Brazil and lags Mexico

Table 22: Cruise Liner Economic Contribution – Selected Countries

	Cruise line industry as percent of:	
	Total GDP	**Total jobs**
Brazil 2019	0.03%	0.03%
Mexico	*0.10%*	*0.02%*
China	*0.004%*	*0.001%*
India	*0.0002%*	*0.0000%*
South Africa	0.02%	0.01%
	Provincial GDP-R	**Provincial Jobs**
Western Cape	0.13%	0.07%

Sources:

Brazil - Cruise Lines International Association (CLIA)

Countries in italics OpenAI

WC: This analysis and Wesgro & SARB

When viewed from a Western Cape perspective the results are even more spectacular. The 2022-23 Cruise Season contributed 0.13% to the Western Cape economy and 0.07% to employment.

5 Summary

The contribution of the 2022-23 Western Cape cruise industry is presented in Table 23.

Table 23: 2022-23 WC Cruise Liner Season Summary

Vessel Numbers	70
Domestic Turnaround	28
International Turnaround	34
International Visits	8
Passengers	77 908
Domestic Turnaround	43 715
International Turnaround	28 445
International Visits	5 748
Crew	41 784
Total Expenditure	R1 397m
International Passengers	R612m
Domestic Passengers	R132m
Crew	R6m
Cruise Lines	R648m
Macroeconomic Contribution	
Western Cape GDP-R	R1 234m
South African GDP	R1 288m
Direct jobs	1 043
Total Western Cape jobs	1 864
Total South African jobs	1 889
Fiscus	R144m
Household Income	R501m
Foreign Exchange	R731m

There were 70 vessels that called at the Cape, carrying 78 000 individual passengers. Most passengers were in domestic turnaround vessels, followed by international turnarounds. There were 5 700 passengers in international vessels visiting the Cape on their way to and from other international ports.

The season generated R1.4bn in expenditure, of which the majority was from the cruise line operators and international passengers. This expenditure resulted in:

- A R1.23bn contribution to Western Cape GDP-R and R1.29bn to South African GDP.

- Over 1 000 people in the Western Cape owed their employment directly to the cruise industry. Multiplier effects increased this to over 1 800 in the province and nearly 1 900 nationally. One provincial job was created for every 30 passengers, This compares well to the international norm of 24.

- Other important macroeconomic indicators are a R144m contribution to the fiscus, the generation of R0.5bn in household income and R731m in foreign exchange.

6 References

CLIA. (2017). *CRUISE INDUSTRY OCEAN SOURCE MARKET REPORT - AUSTRALIA 2017.*

CLIA. (2018). *THE ECONOMIC CONTRIBUTION OF THE INTERNATIONAL CRUISE INDUSTRY IN CANADA.*

CLIA. (2018). *ECONOMIC IMPACTS IN BRAZIL.*

CLIA. (2020). *The Economic Contribution of the International Cruise Industry Globally in 2019.*

CLIA. (2020). *The Economic Contribution of the International Cruise Inudstry in the United States in 2019.* Phillipsburg: Cruise Lines International Association.

CLIA. (2023). *State of the Cruise Industry 2023.* Cruise Lines International Association.

OpenAI. (2023, 05 05). Create a table using the same countries that show cruise liner expenditure on food and beverage, fuel, harbour fees, stores, etc.

South African Tourism. (2022). *Tourism Performance 2021 Annual Report (January-December 2021).* Johannesburg: South Africa Tourism.

TNPA. (2022). *Port Tariffs Twenty First Edition April 2022 to March 2023.* Transnet National Ports Authority.

Wesgro - Cruise Cape Town. (2023). Cruise Cape Town StratEcon Cruise Season Economic Study.xlsx. Cape Town.

Western Cape Government Provincial Treasury. (2020). *Provincial Economic Review & Outlook 2020.* Cape Town: Western Cape Government.