

The Economic Impact of the Proposed Carnival Cruise Line Expansion on Grand Bahama Island

An Economic Impact Assessment
and Cost-Benefit Analysis

Prepared for Carnival Corporation

March 2019



TOURISM
ECONOMICS

AN OXFORD ECONOMICS COMPANY

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Summary and Introduction

Summary

- **This study assesses the economic impact of Carnival Corporation's proposed expansion on Grand Bahama Island.**
- **The potential incremental economic impact of the expansion and increased operations is examined over a 23-year time horizon, with construction and development occurring from 2019 to 2021, followed by 20 years of on-going operations starting in 2022.**
- **Economic impacts are measured in terms of gross output (total business sales), value added (GDP), income, full-time equivalent employment, and the impact on government tax revenues.**

Summary of the proposed development

● Over the 23-year time horizon, Carnival's proposed development on Grand Bahama Island would boost Bahamian employment, income, GDP and government revenues:

- A total investment of B\$170 million
- More than 40 additional calls to Freeport annually, on average
- An estimated 500k incremental cruise passengers annually, on average
- 706 new Bahamian jobs during the development phase
- More than 1,680 new Bahamian jobs annually during on-going operations
- B\$1.5 billion (in B\$2019) increase in Bahamian GDP
- B\$647 million (in B\$2019) in income earned in the Bahamas
- B\$363 million (in B\$2019) increase in Bahamian government revenues, outweighing proposed concessions by a factor of 3.8.

Summary table

Proposed GBI Expansion Economic Impacts				
2019 to 2041 23-year cumulative economic impacts				
	Direct	Indirect	Induced	Total
Development (2019-2021)				
Output (B\$2019, millions)	107.4	35.2	52.3	194.9
Value added (B\$2019, millions)	77.4	20.9	33.0	131.2
Income (B\$2019, millions)	13.6	6.9	12.7	33.3
Employment	354	114	239	706
Operations (2022-2041)				
Output (B\$2019, millions)	1,489.5	313.7	385.6	2,188.8
Value added (B\$2019, millions)	986.7	190.0	241.8	1,418.5
Income (B\$2019, millions)	449.7	67.9	95.8	613.5
Employment (annual average)	1,279	161	248	1,688
Total Project				
Output (B\$2019, millions)	1,596.9	348.8	437.9	2,383.6
Value added (B\$2019, millions)	1,064.1	210.8	274.7	1,549.7
Income (B\$2019, millions)	463.3	74.9	108.6	646.8
Employment (annual average)	1,158	155	247	1,560
23-year ROI Factors				
Government Revenues (B\$2019, millions)			362.7	
Government Concessions (B\$2019, millions)			94.8	
Revenues / Concessions			3.8	
GDP impact / Concessions			16.3	
Source: Tourism Economics				

Proposed Expansion on GBI

Overview of the Project

Overview of the Expansion on GBI

- Carnival Corporation proposes the development of a new cruise port at Freeport, Grand Bahama Island.
- The proposed project includes construction of a two-berth port facility capable of accommodating up to two Super-Post Panamax ships at a time, with up to 6,000 passengers each.
- Management expects the three-year development phase to begin in 2019, and include road construction, maritime and landside engineering, dredging, the development of utilities and electrical infrastructure, and the construction of passenger and employee structures and amenities.

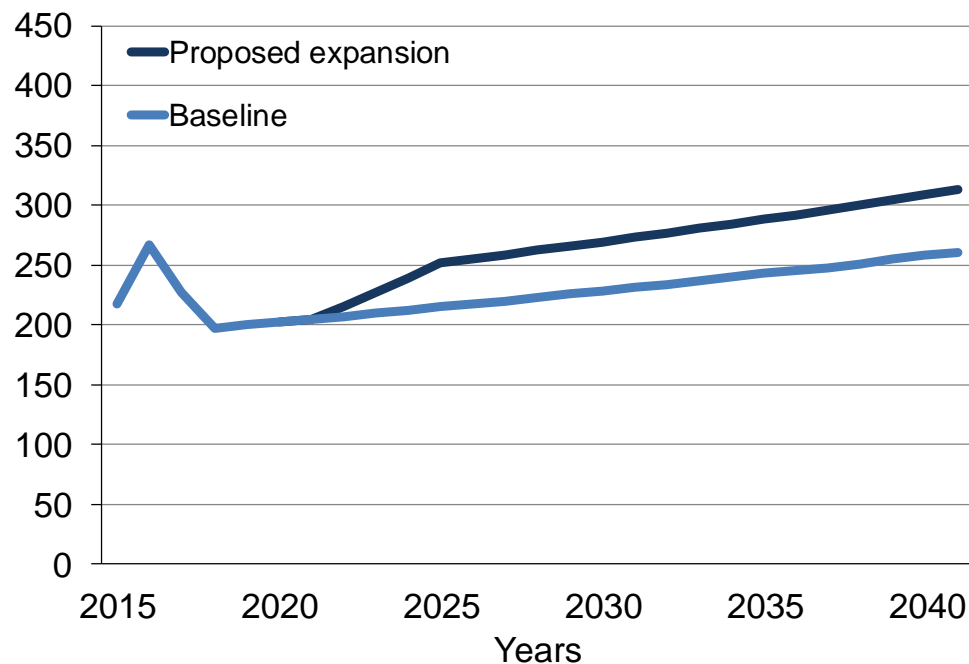
Overview of the Expansion on GBI

- The new port facilities will include retail and food and beverage locales that will promote a uniquely Bahamian experience and local brands.
- The various dining options are expected to provide up to 10,000 meals within a 2 hour time frame, and will be located throughout the property to avoid congestion.
- These retail and dining locales are expected to employ up to 500 workers.
- Recreational offerings will include beach activities, water-based shore excursions, and transportation into Freeport.
- Other amenities will include an interior lagoons, and walking and biking trails.

The project will boost calls to Freeport...

- In 2019, Carnival Corp ships will make approximately 200 calls at Freeport.
- The proposed project includes plans for more than 250 calls by 2025, a 26% increase from current levels.
- The new and expanded port facilities will also be capable of accommodating larger ships than the current port.

Carnival Corp Port Calls to GBI

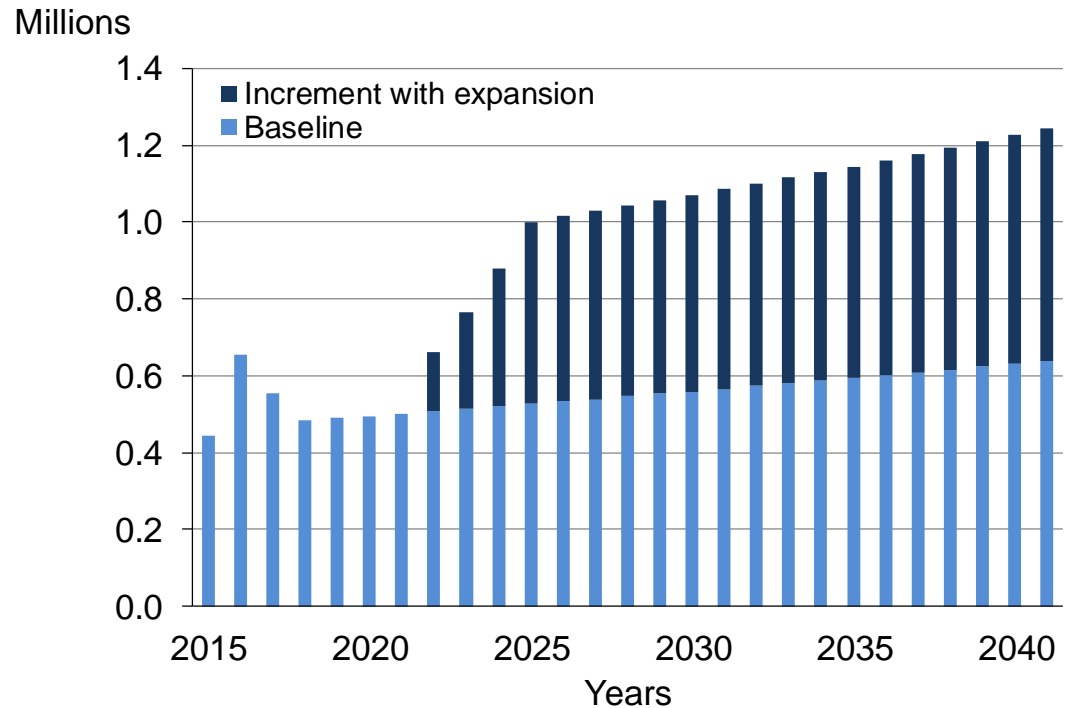


Source: Tourism Economics

...Increase incremental passenger volume...

- With the expanded port facilities, the total volume of cruise passengers arriving to Grand Bahama Island will increase significantly.
- In 2019, Carnival brand ships brought nearly 500,000 passengers to GBI, and plans include boosting this volume to 1 million by 2025, a 100% increase over current levels.

Cruise Pax to Grand Bahama Island



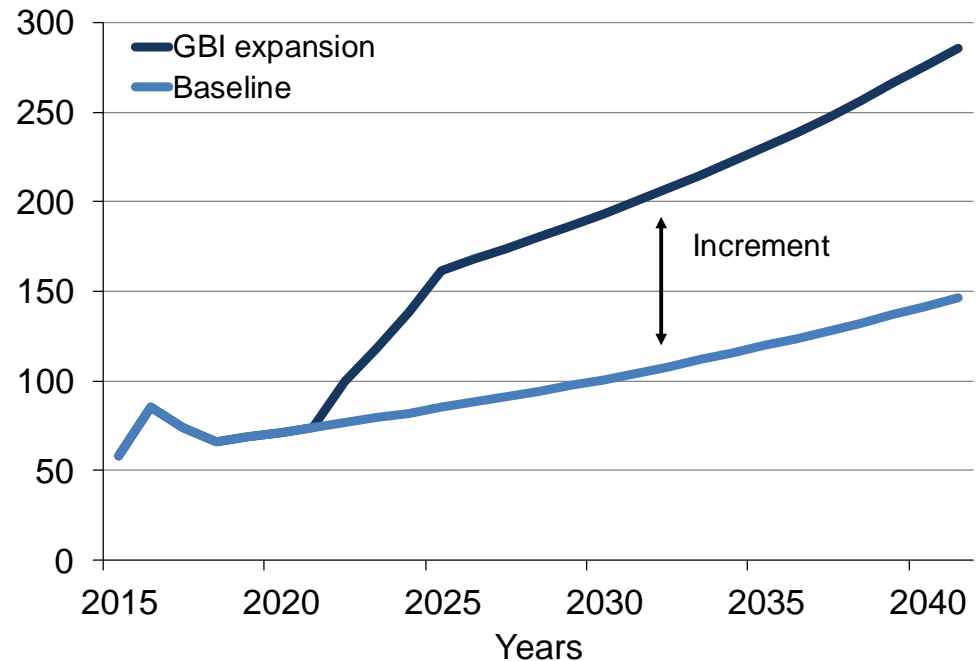
Source: Tourism Economics

...And visitor spending on shore

- Along with more volume of cruise passengers come on-shore visitor spending, which supports Bahamian jobs and income.
- By 2025, new, incremental on-shore spending is expected to amount to more than B\$68 million over the baseline forecast.

Local Direct Passenger and Crew Spending

\$B millions, nominal

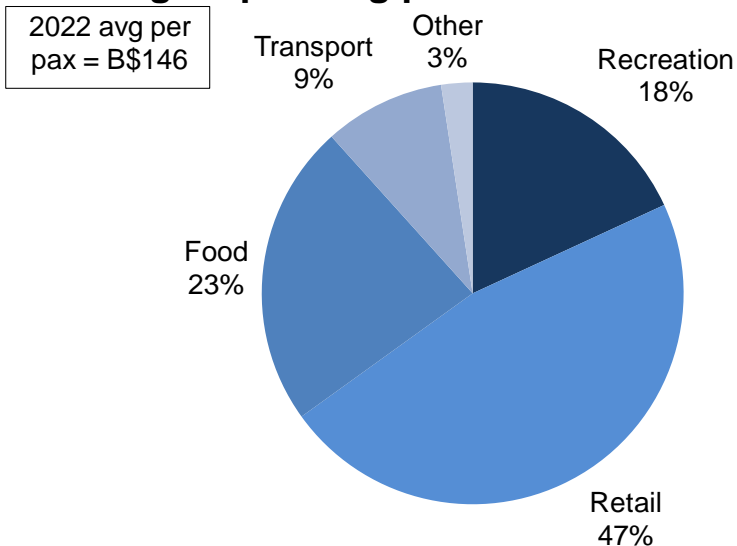


Source: Tourism Economics

Visitor spending profiles

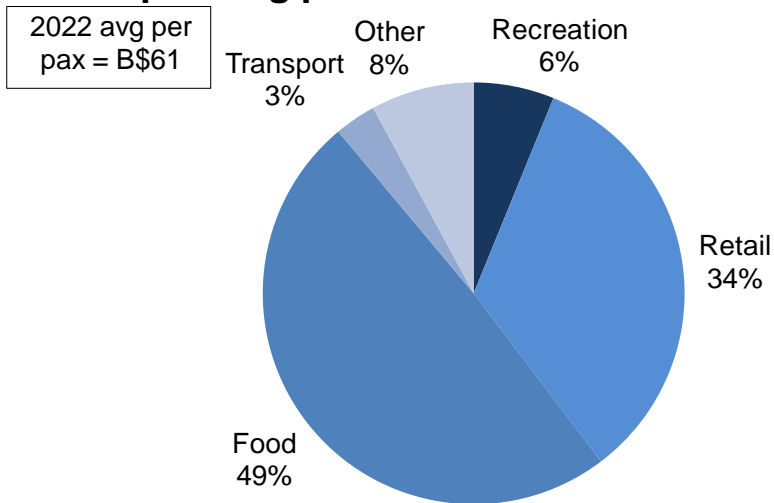
- In 2022, the first year of operations, passengers are expected to spend B\$146 per person on shore, with most spending coming in retail, followed by recreation and food.
- Crews are expected to spend B\$61 on average, primarily on food and beverage, followed by retail.

Passenger spending profile



Sources: FCCA, Tourism Economics

Crew spending profile



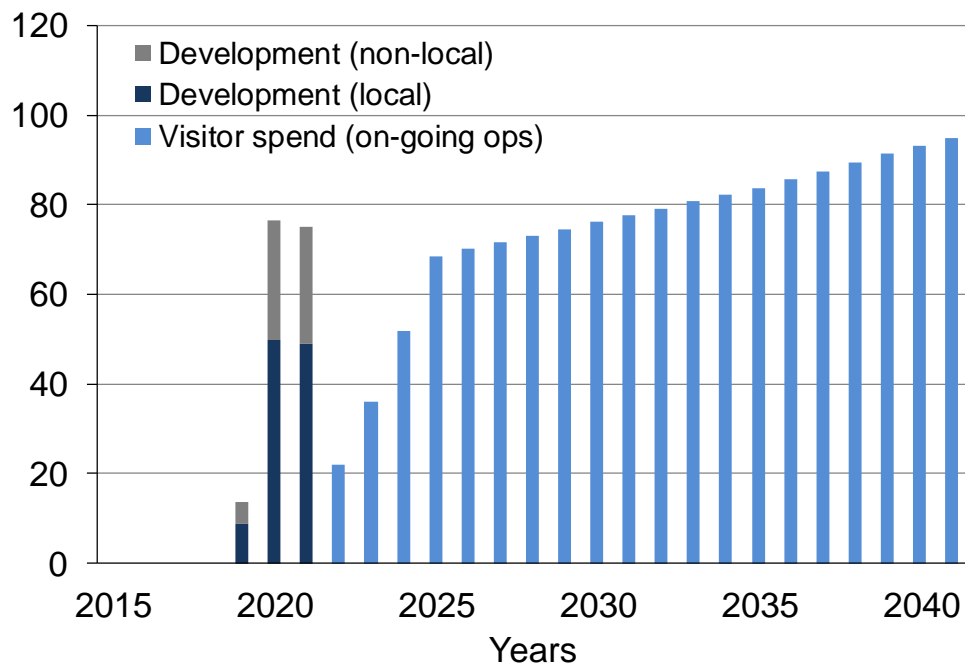
Sources: FCCA, Tourism Economics

Total direct spending

- Construction spending will occur from 2019 to 2021. An estimated 65% of total construction costs are expected to be actual local spending, generating Bahamian jobs and income.
- Operations are expected to begin in 2022 and ramp up to stabilization in 2025.

Schedule of Incremental Direct Spending

Millions of B\$2019



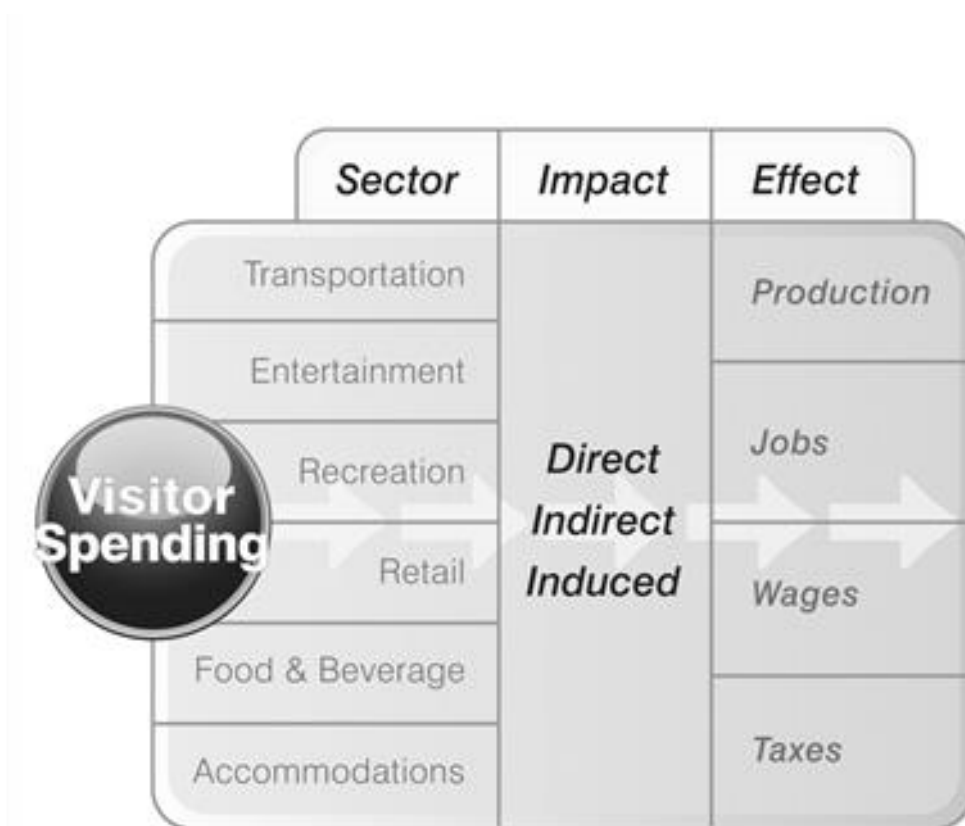
Source: Tourism Economics

Economic Impact Analysis

From 2019 to 2041

Direct spending will generate indirect benefits

- Input-output modeling and Bahamas industry data can track the flow of sales through the economy to estimate total impacts on GDP, employment, income and tax revenues.



Economic impact levels

- **Impacts are measured on three levels:**
 - **Direct impact**: The immediate benefit to businesses providing the goods or services; this captures direct spending at the destination.
 - **Indirect impact**: The secondary benefit to suppliers of goods and services; also called the supply chain effect. For example, the food wholesaler providing goods for a restaurant.
 - **The induced impact**: an additional indirect benefit to the local economy as additional income earned in the economy is in turn spent on goods and services. For example, an employee of the resort spending earned income at other businesses in the economy.

Impact by component: development

- Over a 3-year development and construction period, 2019 to 2021, the proposed project would generate:
 - B\$195 million in output (business sales)
 - B\$131 million in additional value added (contribution to GDP)
 - B\$33 million in additional income
 - On average, 706 annual average jobs on a full-time equivalent basis

Grand Bahama Island Expansion: Development Impacts				
One year impact, 2019-2021				
	Direct	Indirect	Induced	Total
Development phase				
Output (B\$2019, millions)	107.4	35.2	52.3	194.9
Value added (B\$2019, millions)	77.4	20.9	33.0	131.2
Income (B\$2019, millions)	13.6	6.9	12.7	33.3
Employment (average)	354	114	239	706
Source: Tourism Economics				

Impact by component: operations

- **With operations beginning in 2022, over a 20-year time horizon operations will generate:**
 - B\$2.2 billion in output (business sales)
 - B\$1.4 billion in additional value added (contribution to GDP)
 - B\$613 million in additional income
 - On average, 1,688 annual average jobs on a full-time equivalent basis

Grand Bahama Island Expansion: Operations Impacts

Cumulative impacts, 2022 to 2041

	Direct	Indirect	Induced	Total
Operations				
Output (B\$2019, millions)	1,489.5	313.7	385.6	2,188.8
Value added (B\$2019, millions)	986.7	190.0	241.8	1,418.5
Income (B\$2019, millions)	449.7	67.9	95.8	613.5
Employment (average)	1,279	161	248	1,688

Source: Tourism Economics

Tax Impact of the Expansion:

Analysis of Revenues and Proposed Concessions from 2019 to 2041

Cost-benefit analysis

- Net incremental benefits to the economy would include a total of B\$363 million (in constant B\$2019) would be generated in government revenue over a 23-year time horizon.
- Government concessions would tally B\$94.8 million in B\$2019.
- Government revenues would exceed concessions by a factor of 3.8.
- The total project GDP impact would exceed concessions by a factor of 16.3.

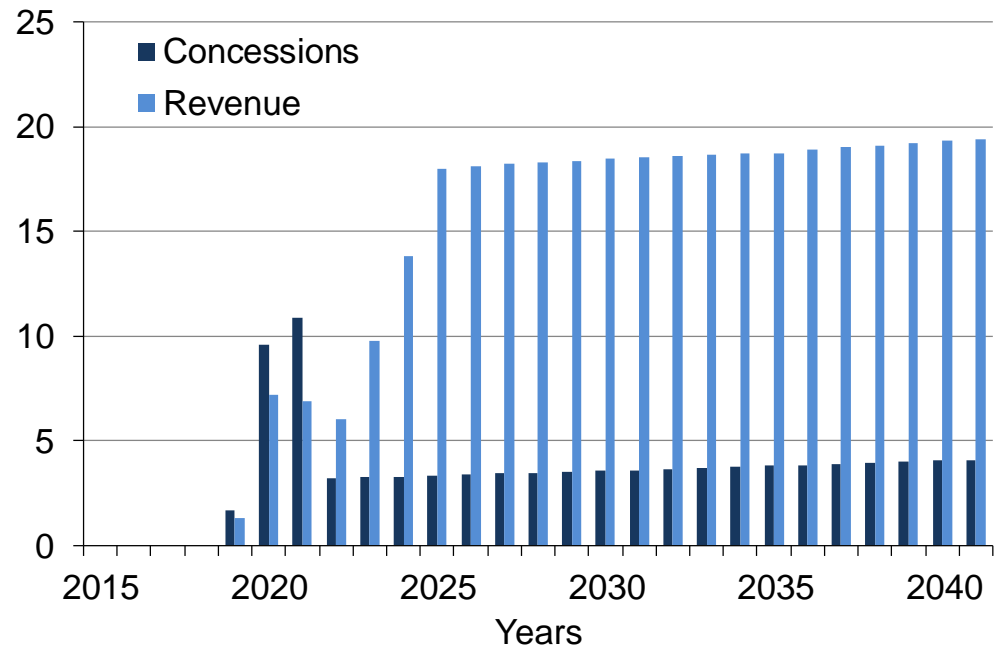
Costs and Benefits to Government	
23-year Cumulative 2019 to 2041	
B\$2019, mils	23-year Sum
Government concessions	
Construction duties exemption	20.1
Real property tax exemption	74.7
Total concessions	94.8
Government revenues	
National insurance	63.4
Operations import duties	20.8
Departure tax	141.1
Annual business license	9.7
Value added tax	127.8
Total revenues	362.7
Revenues / concessions multiple	3.8
GDP impact / concessions multiple	16.3
Source: Tourism Economics	

Government impact: costs versus benefits

- Concessions will be greater than revenues during the construction phase of the project, but significant tax revenues will be generated during the operations phase.
- The key revenue sources will be the departure tax, value added tax, national insurance, and import duties during operations.

Impact on Government of The Bahamas

Revenues versus concessions, B\$2019, millions



Appendices

Methods and Data Sources

About Tourism Economics

Methods and data sources

- Inputs into the economic impact model were generated from several sources, including Carnival Corporation pro forma financial projections for the development and operational phases of the project. Key metrics provided by project managers included capital expenditures by category, projected itineraries and estimates of gross and net passenger arrivals, and on-site revenue projections.
- Estimates of passenger on-shore spending were developed by Tourism Economics based on Carnival revenue projections and passenger survey data compiled by the Florida-Caribbean Cruise Association (FCCA).
- Visitor spending included in the analysis includes only visitor spending that is expected to stay in the Bahamian economy. This all visitor spending at the port facilities and off-site in the broader Bahamian economy.

Methods and data sources

- The total project investment is expected to amount to B\$170 million, but only the estimated local portion of construction spending (65%) is included in impact modeling.
- Tax revenues generated by the project and concessions granted by the government were estimated by Oxford Economics based on current tax and fee rates and concessions likely to be sought by Carnival Corporation. Assumptions include National Insurance at 9.8%, departure tax of B\$18 per head, a VAT of 12%, and a weighted average Business License fee at 0.65% of revenues.
- Management indicates that all new passengers to the new facilities would be incremental to the Bahamas, and would generate new departure tax revenues.
- The volume of cruise passengers was allowed to grow over time based on assumed usage of the additional capacity in the new port. In the baseline, a constraint of 5 calls per week is assumed in 2041, and reflects expected productivity gains and efficiencies to be realized over the long-term. In the project scenario, the constraint incorporated assumes 6 calls per week for both berths (3 each) on average, also achieved gradually over the study time horizon. The increment captured in the analysis is the difference between the projected baseline and the proposed expansion (see page 12 for a visual of the incremental spending).

Methods and data sources

- Other assumptions in the analysis include average inflation of 1.8% per year based on Oxford Economics global model forecasts.
- The value the proposed real property tax exemption is based on the expected incremental land value, estimated by proxy as the total capital expenditures, and a tax rate of 2.0%.
- The new port will be able to accommodate larger ships with a capacity up to 6,000 passengers. The project scenario incorporated these larger ships gradually, accounting for 20% of calls in 2022, and increasing to 50% of calls at stabilization in 2025, with this share remaining constant beyond 2025.
- Oxford Economics used a proprietary input-output model to complete the economic impact modeling. The model is based on industry output, value added, income, and employment data generated by The Bahamas Department of Statistics and the Bahamas Ministry of Finance.
- Custom adjustments to the I-O model were made to account for staffing levels during the development and operations phases on Grand Bahama Island.

About Tourism Economics

- Tourism Economics, headquartered in Philadelphia, is an Oxford Economics company dedicated to providing high value, robust, and relevant analyses of the tourism sector that reflects the dynamics of local and global economies. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, project feasibility analysis, tourism forecasting models, tourism policy analysis, and economic impact studies.
- Our staff have worked with over 100 destinations to quantify the economic value of tourism, forecast demand, guide strategy, or evaluate tourism policies.
- Oxford Economics is one of the world's leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics is founded on a reputation for high quality, quantitative analysis and evidence-based advice. For this, it draws on its own staff of more than 250 highly-experienced professional economists; a dedicated data analysis team; global modeling tools; close links with Oxford University, and a range of partner institutions in Europe, the US and in the United Nations Project Link.
- For more information: www.oxfordeconomics.com or info@tourismeconomics.com.

Grand Bahama Island
Foreign Arrivals by Air & Sea

YEAR	AIR ARRIVALS	SEA LANDED	TOTAL ARRIVALS
2018	74,479	596,266	670,745
2017	70,692	543,878	614,570
2016	125,784	710,972	836,756
2015	159,825	804,483	964,308
2014	127,944	656,582	784,526
2013	89,475	688,325	777,800
2012	106,685	732,805	839,490
2011	99,807	718,482	818,289
2010	113,613	667,396	781,009
2009	125,147	453,665	578,812
2008	161,714	396,463	558,177
2007	188,579	399,992	588,571
2006	200,054	446,641	646,695
2005	209,081	442,721	651,802
2004	263,234	466,398	729,632
2003	294,057	336,814	630,871
2002	301,830	333,809	635,639
2001	286,528	347,104	633,632
2000	283,653	392,445	676,098
1999	247,898	420,756	668,654
1998	256,404	553,456	809,860
1997	277,059	583,521	860,580
1996	295,675	657,499	953,174
1995	317,350	601,093	918,443
1994	348,261	551,313	899,574
1993	361,479	803,961	1,165,440
1992	316,126	746,340	1,062,466
1991	313,505	772,592	1,086,097
1990	410,147	765,390	1,175,537
1989	437,360	712,223	1,149,583
1988	487,089	682,824	1,169,913
1987	455,178	617,537	1,072,715
1986	430,100	460,850	890,950
1985	408,170	340,890	749,060
1984	376,180	250,590	626,770
1983	363,060	304,030	667,090
1982	398,140	272,480	670,620
1981	412,640	71,740	484,380
1980	454,910	85,130	540,040
1979	433,920	74,250	508,170
1978	401,930	67,260	469,190
1977	333,530	20,800	354,330
1976	343,180	38,990	382,170
1975	320,150	29,730	349,880
1974	336,170	13,910	350,080
1973	375,070	53,610	428,680
1972	361,080	111,480	472,560
1971	355,180	187,890	543,070

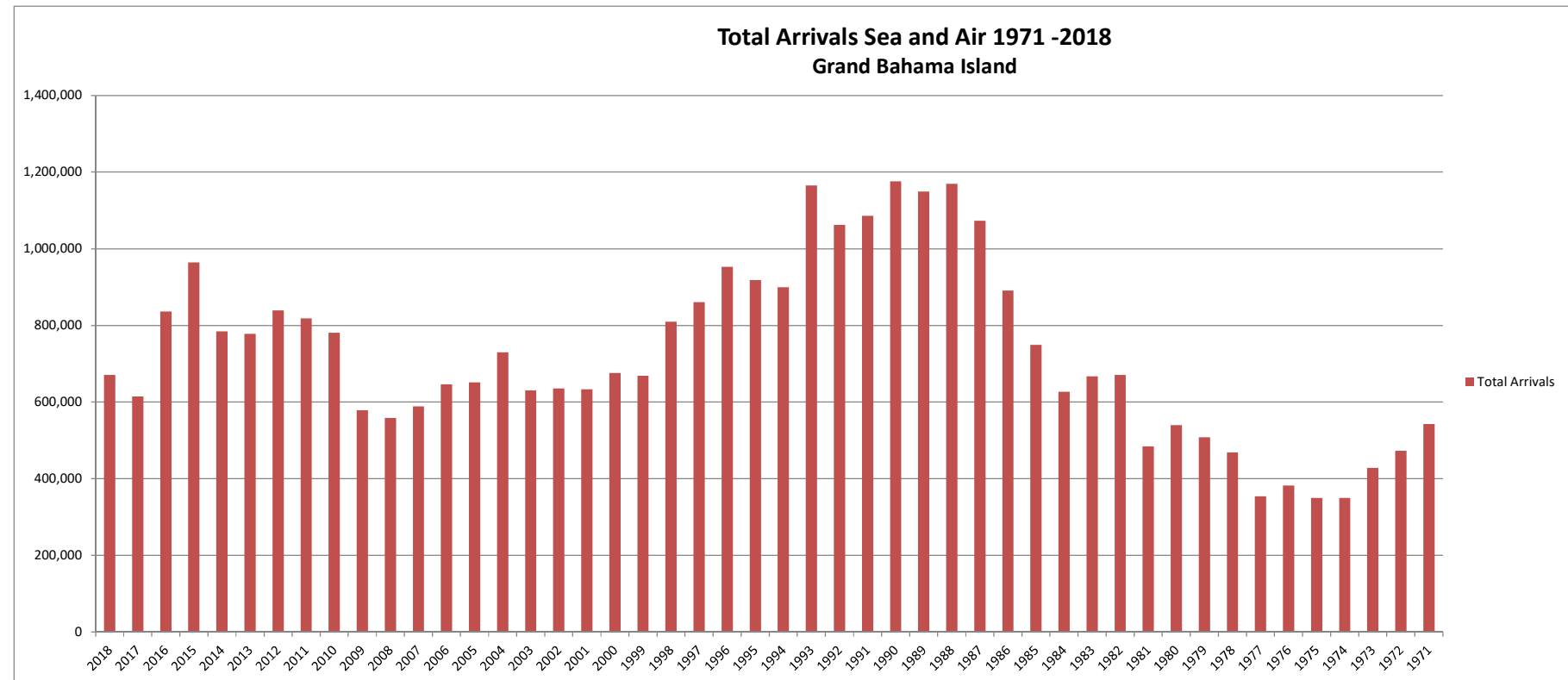
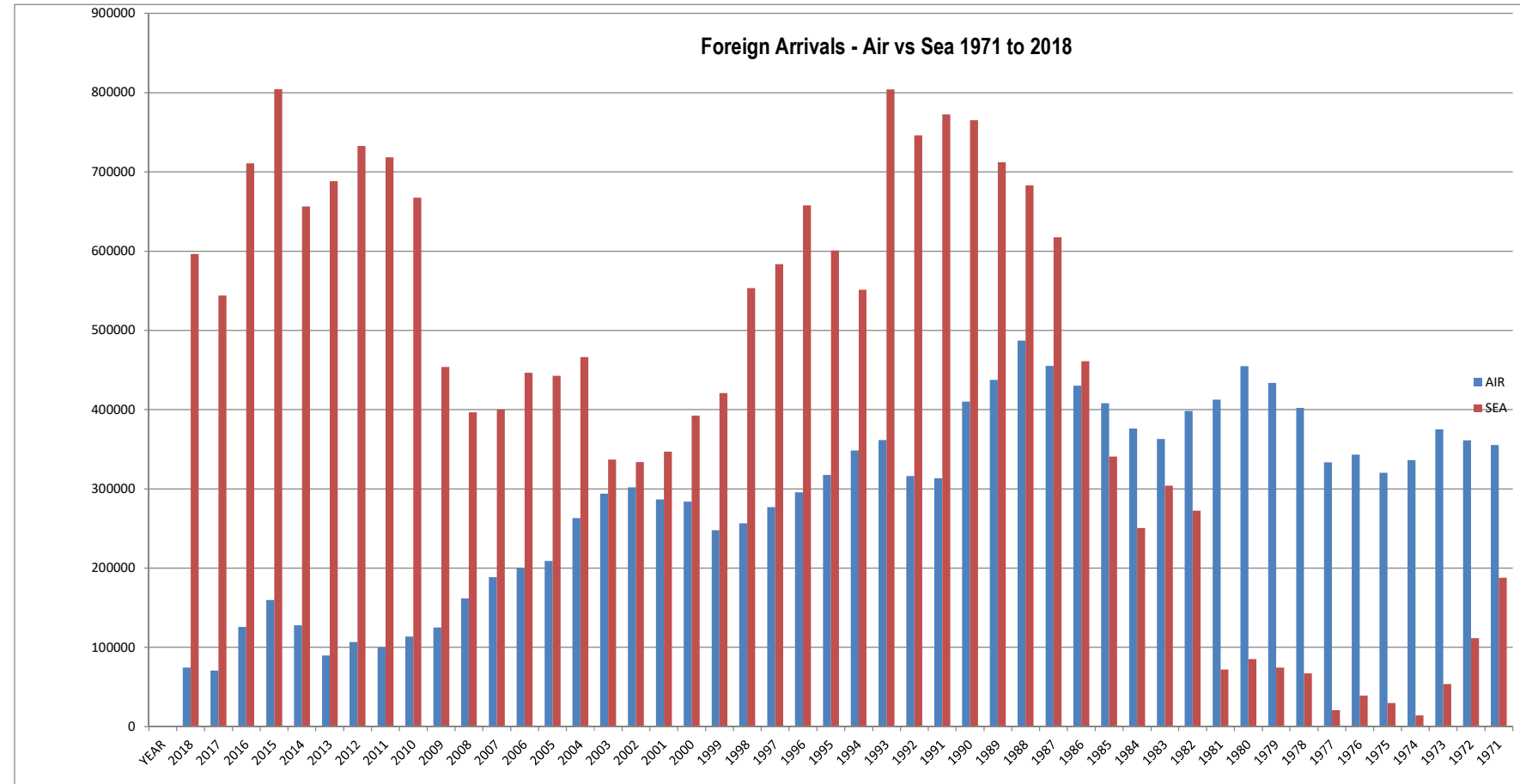


Chart 2. Foreign Arrivals 1971 to 2018
Carnival Grand Port Project
Sharp Rocks Point, Grand Bahama

Freeport, Bahamas
Foreign Arrivals YTD

YEAR	AIR ARRIVALS	SEA LANDED	CRUISE ARRIVALS	TOTAL ARRIVALS
2018	73,792	59,680	514,112	647,584
2017	70,198	55,960	467,289	593,447
2016	125,126	74,155	614,594	813,875
2015	159,317	82,771	698,142	940,230
2014	127,557	72,385	563,470	763,412
2013	89,475	72,658	598,993	761,126
2012	106,685	65,097	649,834	821,616
2011	99,180	72,699	628,886	800,765
2010	112,914	77,919	574,500	765,333
2009	124,451	56,756	376,502	557,709
2008	159,549	64,548	312,780	536,877
2007	184,806	68,628	290,441	543,875
2006	198,263	81,263	339,913	619,439
2005	209,081	94,478	321,582	625,141
2004	263,172	114,918	327,933	706,023
2003	294,057	107,102	203,312	604,471
2002	301,830	109,516	196,923	608,269
2001	286,513	110,117	210,709	607,339
2000	283,653	120,629	248,164	652,446
1999	247,898	131,987	266,396	646,281
1998	256,397	227,693	304,626	788,716

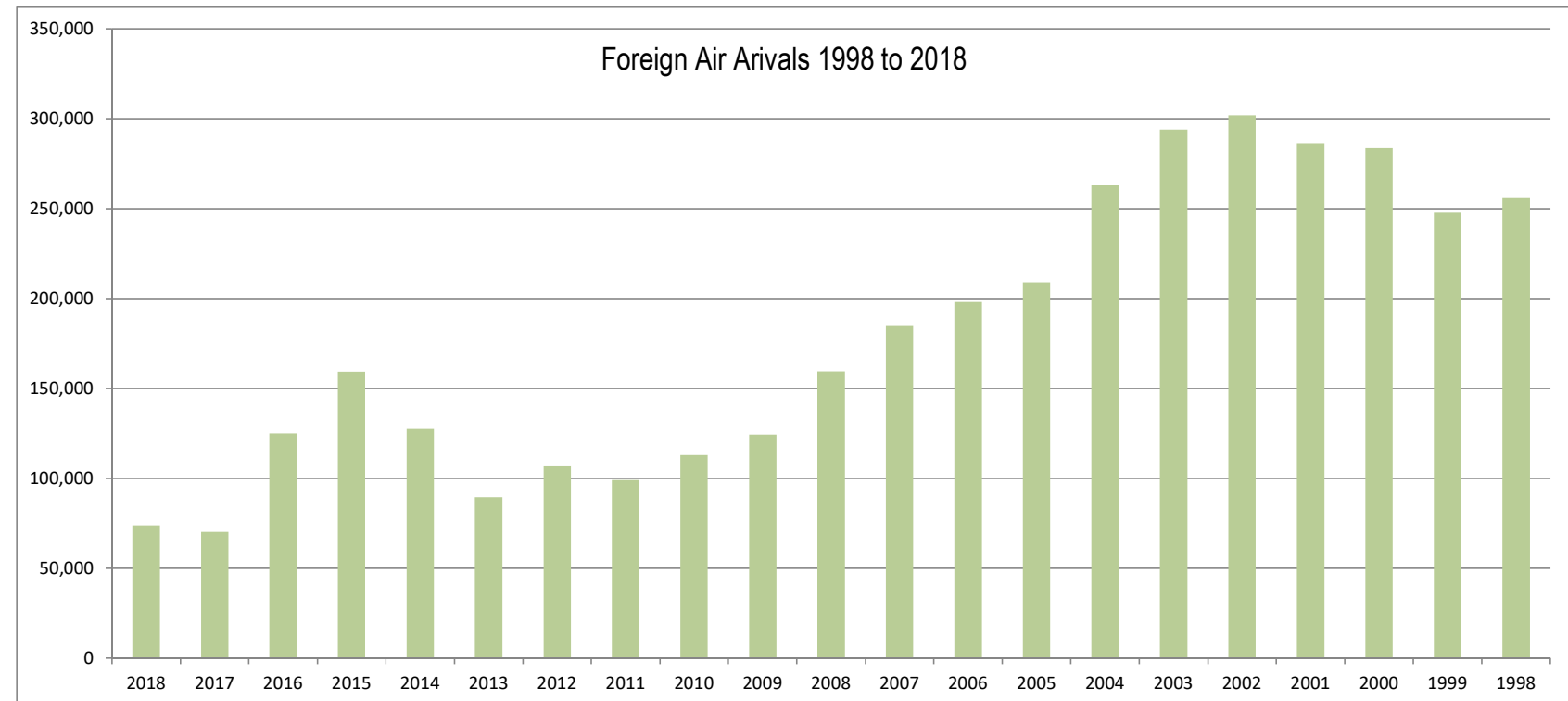
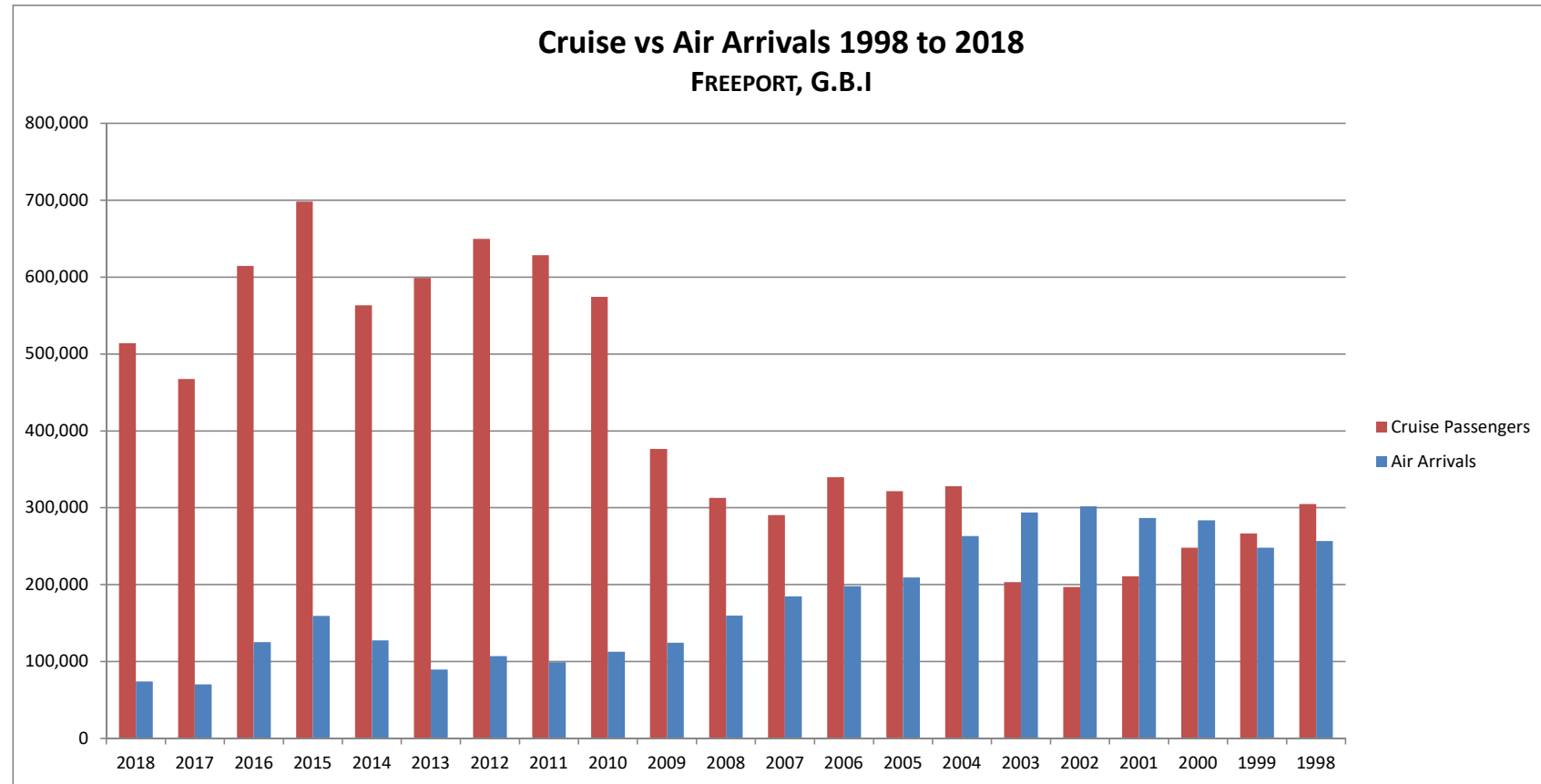


Chart 3. Foreign Arrivals 1998 to 2018
Carnival Grand Port Project
Sharp Rocks Point, Grand Bahama