TOURISM ECONOMICS

The Economic Impact of the Development of the St. John Marina Coral Bay, USVI

Report prepared for:

The Summer's End Group, LLC

TOURISM ECONOMICS
AN OXFORD ECONOMICS COMPANY

Contents

1 Company Background

1.1 Tourism Economics / Oxford Economics

Tourism Economics is an Oxford Economics company with a singular objective: combine an understanding of tourism dynamics with rigorous economics in order to answer the most important questions facing destinations, developers, and strategic planners. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, destination recovery plans, tourism forecasting models, tourism policy analysis, and economic impact studies.

With over four decades of experience of our principal consultants, it is our passion to work as partners with our clients to achieve a destination's full potential.

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 enjoys a reputation for high quality, quantitative analysis and evidence-based advice. For this, its draws on its own staff of 30 highly-experienced professional economists; a dedicated data analysis team; global modeling tools, and a range of partner institutions in Europe, the US and in the United Nations Project Link. Oxford Economics has offices in London, Oxford, Dubai, Philadelphia, and Belfast.

1.2 Key factors underpinning Tourism Economics' work

Travel industry expertise

Tourism Economics has vast experience in providing actionable and credible analysis of travel activity. Our combined team has substantial direct hands-on experience in destination visitor economic impact.

Modeling expertise

Tourism Economics and its partner, Oxford Economics, are founded on state-of-the-art modeling expertise. This is best evidenced by the Oxford global economic model which is used by blue chip companies and governments around the world, in addition to the US Treasury, World Bank and IMF. Our Tourism Decision Metrics forecasting model is the most rigorous of its kind, taking into account both economic and destination determinants.

Economic and tourism databases

Our global tourism database of origin-destination visitor flows and spending has the best country and indicator coverage of any private sector provider through our partnerships with the UNWTO, PATA, and the CTO along with our internal updates of the most recent trends. The Oxford Economics global model covers 190 countries and is updated constantly by our data team in Oxford.

Senior staffing

Tourism Economics operates as a boutique tourism consulting company in one important sense: we assign senior staff at the center of each and every project. Our project directors are integrally involved in every stage of work and are directly involved in its development. The principals who represent our work are the same who conduct the work. We have found this to be an optimal way to sustain high quality and maintain close relationships with our clients. It is also the way we enjoy working.

1.3 Previous studies in the Caribbean and Associated Islands

Tourism Economics has conducted work across the Caribbean over recent years, spanning all sectors of the regional economy. Key projects include:

- Economic Impact of a Potential Port in the Bahamas
- Economic Impact of Financial Services Sector in The Bahamas and the Cayman Islands.
- Policy scenario analysis of property tax introduction in the Cayman Islands.
- Economic impact of tourism sector in Bermuda, St. Lucia, and The Bahamas.
- Economic impact of 30 resort, real estate, and marina developments across the region.
- Economic impact of tourism in the Caribbean (CHTA, WTTC)
- Scenario analysis of LNG energy infrastructure investment in The Bahamas.
- Market study for the Caribbean Tourism Organization.
- Tax reform and economic impact analysis for Jamaica.
- Economic development strategy for Montserrat.

2 Introduction

The Yacht Club at Summer's End ("YCSE" or "the Yacht Club") is planning the development of a marina at Coral Bay, St. John. The proposed Yacht Club, also known as St. John Marina, will be a 144 wet slip, full service marina which will consist of both docks and upland components being developed by the Summer's End Group, LLC on St. John in the US Virgin Islands ("USVI").

The proposed project presents a combination of construction and ongoing operational economic impacts, supporting national GDP, employment, household income, and government revenues in St. John and the US Virgin Islands. These benefits will be realized through direct on- and off-site visitor spending as well as through the supply chain (indirect impacts) and through the consumption of employees sustained by the development (induced impacts).

Tourism Economics, an Oxford Economics company, has been retained to assess the economic benefits attributable to the proposed marina project.

3 Project Details

The Yacht Club at Summer's End (YCSE) is a 144 wet slip, full service marina consisting of both docks and upland components being developed on St. John, USVI by The Summer's End Group, LLC. The proposed facility is designed to offer a safe, quiet dockage for boats ranging in size from 30' – 160'+. The marina docks accommodate the needs of local power and sail boat owners, fleet charter, sport fishing, motor yachts and nearly all types of transient boats.

According to industry standards, the Yacht Club at Summer's End is a smaller, medium size marina (100-249 slips). The facility is to be located on property specifically zoned for marinas, W-1 Waterfront Pleasure.

Figure 3.1: View of Proposed St. John Marina in Coral Harbor

Source: Summer's End Group, LLC (2017)

3.1 Docks

The proposed marina facility is divided into two zones; the North Zone and the South Zone. The marina will consist of a total of 144 wet slips with total marina berthing footage amounting to 9,666 total feet, as shown in Figure 3.2 below.

- **North Zone**:
  - Consists of 3 piers hosting vessels featuring lifts on slip section A and standard docking on slip section B, sailing vessels on slip sections C & D, and sport fishing vessels and sail overflow on slip sections E & F.
  - Located at the end of E/F slip sections is the fueling station.
  - Depths range from 5 to 14 feet and services vessels primarily 30 to 80 feet long.
- **South Zone:**
  - Primarily for larger yachts and mega yachts 75 feet to 160+ feet in length.
  - Select slips will feature in-slip fueling and pump-out. Draft of up to 18' available.

Figure 3.2: Berthing Summary for St John Marina

BERTHING SUMMARY

BOAT LENGTH	DISTRIBUTION									QTY.	TOTAL BERTHING
L:(*ft*)	%	A	B	C	D	E	F	G	H		FOOTAGE
30'	1%				2					2	60
35'	17%		23		1					24	840
40'	15%		21							21	840
40' CAT	7%			10						10	400
45'	10%				14					14	630
50' CAT	8%			11						11	550
50'	2%		2	1						3	150
55'	8%				11					11	605
75'	3%						5			5	375
80'	1%			2						2	160
88'	1%	2								2	176
100'	10%	8				2	5			15	1500
110'	2%						3			3	330
120'	1%						1			1	120
130'	1%						1			1	130
140'	8%					4	4	4		12	1680
160'	5%					4	3			7	1120
SUMMARY	100%									144	

TOT. MARINA FOOT
9666.00'

AVG. BOAT LENGTH
67.13'

Source: Techno Marine (2017)

Figure 3.3: Proposed Layout for St John Marina

BERTHING SUMMARY

*BOAT LENGTH L:(ft)	%	DISTRIBUTION A	B	C	D	E	F	G	H	QTY.	TOTAL BERTHING FOOTAGE
30'	1%				2					2	60
35'	17%		23		1					24	840
40'	15%		21							21	840
40' CAT	7%			10						10	400
45'	10%				14					14	630
50' CAT	8%			11						11	550
50'	2%		2	1						3	150
55'	8%				11					11	605
75'	3%					5				5	375
80'	1%			2						2	160
88'	1%	2								2	176
100'	10%	8				2	5			15	1500
110'	2%						3			3	330
120'	1%						1			1	120
130'	1%						1			1	130
140'	8%					4	4	4		12	1680
160'	5%					4	3			7	1120
SUMMARY	100%									144	

TOT. MARINA FOOTAGE: 9660.00'

AVG. BOAT LENGTH: 67.13'

*NOTE: ALL REPRESENTED BOAT LENGTHS ARE INDICATIVE OF MAXIMUM BOAT SIZE FOR EACH BERTH

ANNUAL OCCUPANCY CHART

DOCKS	SLIP SECTIONS	SLIP COUNT	ANNUAL OCCUPANCY %
B	A	23	80%
	B	23	85%
C	C	12	50%
	D	12	50%
D	E	14	59%
	F	14	53%
A	G	10	32%
E	H	10	39%
F	I	8	38%
	J	13	29%
G	K	5	30%
H		BOARDWALK	N/A
TOTAL SLIPS →		144	

BOAT DIMENSIONS

LENGTH (ft) FEET	*BEAM (ft) FEET	LENGTH (m) METERS	*BEAM (m) METERS
30'	10.80'	9.14'	3.29'
35'	12.02'	10.67'	3.66'
40'	13.17'	12.19'	4.01'
40' CAT	19.66'	12.19'	5.99'
45'	14.32'	13.72'	4.36'
50' CAT	26.25'	15.24'	8.00'
50'	16.38'	15.24'	4.99'
55'	17.06'	16.76'	5.20'
75'	19.65'	22.86'	5.99'
80'	20.29'	24.38'	6.18'
88'	21.29'	26.82'	6.49'
100'	22.88'	30.48'	6.97'
110'	24.15'	33.53'	7.36'
120'	25.47'	36.58'	7.76'
130'	26.47'	39.62'	8.07'
140'	28.05'	42.67'	8.55'
160'	30.64'	48.77'	9.34'

*BASED ON TOBIASSON 1989 BOAT PROFILE CURVE

Source: Techno Marine (2017)

Having met all territorial legal requirements, on Oct. 1, 2014 the project received Tier 1, Coastal Zone Management Major Land and Water Permit approval. These permits were confirmed on April 5, 2016 by the U.S. Virgin Islands Board of Land Use Appeals.

The Yacht Club at Summer's End will provide services currently unavailable to the St. John boating community:

- Sanitary wastewater pump-out
- EPA regulated fuel dock and select in-slip fueling
- 24 hour around the clock security by uniformed personnel
- Concierge and personal provisioning services
- Closed circuit video surveillance on land & water
- Solid and hazardous waste disposal service
- Potable water, electrical and Wi-Fi services

3.2 Mixed Use Complex

The marina docks will be supported by a 2.65 acre, mixed use upland complex which is a combination of purchased and long term leased property consisting of four parcels with 880 feet of water frontage and approximately 1,200 feet of road frontage along Route 107.

The project includes renovation of several buildings which have been vacant for several years. Main components of the mixed use complex include the following:

- U.S. Customs and Border Protection Office
- Local Fish and Farmers' Market
- Local entertainment
- Local handmade arts and crafts
- Marina management offices
- Concierge services
- Restaurants and bars

Figure 3.4 provides details for the proposed zoning building use schedule for the various components of the mixed use complex.

The mixed use complex will include various infrastructure and aesthetic improvements, including:

- Moving overhead utilities underground
- Resurfacing damaged roadway
- The addition of sidewalks

- Attractive hardscape and landscape features
- Raised crosswalks for increased pedestrian safety
- New bus stop
- 400+ feet of scenic boardwalk
- Public waste receptacles throughout
- New taxi loading and queuing areas

Figure 3.4: Proposed Zoning Building Use Schedule at St. John Marina

Summer's End Group, LLC (2017)

Existing Use	Proposed Use	Permitted Use	Total Footprint (SF)	Restaurant (Seats)	Marina Slips (Slips)	Marina Office (SF)	Employees (Employees)	Apartments (Units)
NA	Golf Cart Parking	Y	0					
Retail Concession	Retail Concession	Y	2505				4	
Restaurant Kitchen	Restaurant Kitchen	Y	350	60			8	
Public Restrooms Bathroom	Public Restrooms Bathroom	Y	240					
Retail Concession	Remodeled Retail Multi Use Office	Y	2455			350	6	
Tavern Restaurant Seating	Tavern Restaurant Seating	Y	1355	18			2	
NA	Connection	Y	500		45			
NA	Retail Farmers Market	Y	1205				10	
NA	Retail	Y	4945	50	50		10	
NA	Retail Restaurant Apartments	Y	5052		50		20	3
NA	Retail Apartments	Y	2184				13	3
Hotel	Office Shower Apartments	Y	915			350	2	2
Restaurant	Restaurant	Y	1325	5			6	
Total			23,031	133	145	700	81	8

Additionally, The Yacht Club at Summer's End will be providing solid and water waste disposal in Coral Harbor. At present many boaters are discharging wastewater directly into the bay resulting in an increases in nutrients which degrades water quality. . The pump out facility will be the first such facility on St. John.

3.3 YCSE Amenity and Infrastructure Improvements

The Yacht Club at Summer's End will also include a number of amenities and infrastructure improvements, including sidewalks, landscaping improvements, concrete patios and pads, trash and fuel enclosures, and various improvements to Route 107. Total estimated improvements amount to more than $3.4 million, as shown below.

Figure 3.5: Estimated YCSE Improvement and Amenity Costs

Parking, Drives, and Estate Road	Cost
6" Concrete (Wire Mesh reinforcement) poured in place	$980,000
Trench Drains (Conc PIP)	$30,000
Pervious Pavers	$120,000
Route 107 Improvements	**Cost**
Finish Grade	$11,250
8" Reinforced Concrete poured in place	$630,000
Raised Crosswalks	$37,500
Stamped Crosswalks (not raised)	$2,500
Utilities (Phase I)	**Cost**
Electric Relocation	$200,000
Stormwater Management	**Cost**
Inlets	$6,000
Piping	$20,000
Culverts	$20,000
Underground Basin	$255,000
Basin Landscaping	$10,000
Permanent Erosion Control Blanket	$187,500
Site Improvements	**Cost**
Sidewalk	$220,000
Landscaping	$50,000
Concrete/Paver Patios & Pads	$112,500
Trash & Fuel Enclosure	$30,000
Boardwalk	$506,338
Total Public Improvements	**$3,428,588**

Summer's End Group, LLC (2017)

3.4 Mitigation Expenditures

Mitigation items at St. John Marina will include monitoring station set up, baseline, water samples, monitoring, and other items. Based on preliminary estimates, total one-time mitigation expenditures will amount to nearly $0.9 million, while annual recurring mitigation expenditures will amount to more than $0.2 million, as shown in Figure 3.6.

Figure 3.6: Estimated Mitigation Expenditures

Mitigation Expenditures	One Time Cost	Recurring Annually
Seagrass Mitigation		
Set up of stations	$2,500	
Baseline	$6,000	
Photoquadrat Baseline	$12,000	
Monitoring	$36,000	
Relocation of seagrass	$216,613	
Mangrove Mitigation		
Trees, Mangroves, Planting	$20,500	
Monitoring/Maintenance First 2 years	$108,000	
Monitoring/Maintenance Last 3 years	$108,000	
Turtle Strike Mitigation		
Turtle study funding 3rd Party		$33,000
Seagrass/Coral Protection		
Reef/Shallow Seagrass Informational Buoys	$10,000	
NPS Informational Buoys (4)	$10,000	
Watershed Enhancement - Repair of Existing Projects	$75,000	
Watershed Enhancement - Annual Maintenance		$25,000
Environmental Education		
Website and Materials	$20,000	
Education and Informational Placards	$20,000	
Part Time NPS Resource Officer Funding		$20,000
Long Term Monitoring Water Quality		
Water Samples		$135,000
Environmental Restoration Coral Harbor		
Boat Removal	$150,000	
Driver Bay Cleanup/Location of Mooring Footprints	$58,500	
Total Mitigation Expenditures	**$853,113**	**$213,000**

Summer's End Group, LLC (2017)

4 Project Location: St. John and the U.S. Virgin Islands

U.S. Virgin Islands (USVI) are located at the northern end of the Lesser Antilles abutting both the Caribbean Sea and Atlantic Ocean. Less than 2 ½ hours from Miami, the U.S. Virgin Islands consists of 3 major islands; St. Croix, St. Thomas and St. John.

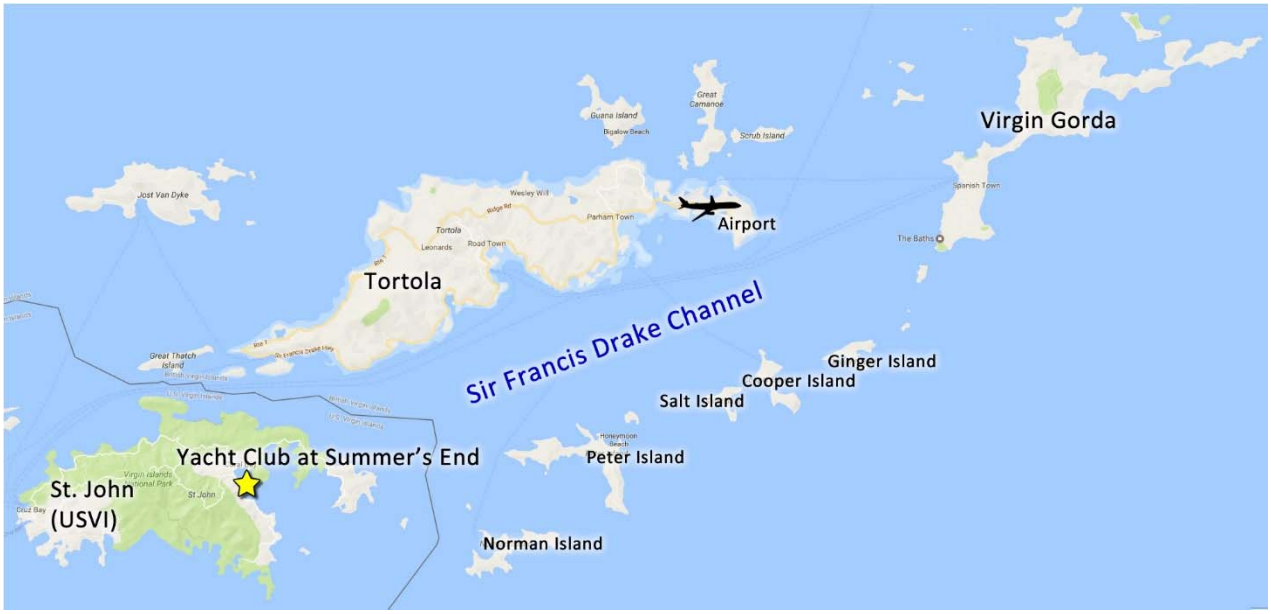
Gateway to the finest yachting and sailing waters worldwide, St. John is the preferred destination to one of the world's largest charter fleets located at nearby Tortola, BVI. St. John is the smallest of the 3 largest U.S. Virgin Islands at 19.61 sq. mi. approximately 2/3 of St. John's land mass has been designated as a national park. National park waters combined with those of the Coral Reef National Monument total 18,358 acres of federally protected submerged lands of St. John's coastal waters.

Figure 4.1: Regional Map Outlining Proposed Project Located in St. John in the US Virgin Islands

Source: Google Maps & Tourism Economics (2017)

The northern coast of St. John borders Drake's Channel which is surrounded by more than a dozen islands and offers some of the finest sailing and yachting waters.. Sharing this border with St. John, the British Virgin Islands ("BVI") have taken advantage of their location and hosts the largest combined charter yacht fleet in the world. The addition of a customs facility at Coral Bay will make it convenient for charters to come to St. John.

Figure 4.2: Regional Map Outlining Project Location and Sir Francis Drake Channel



Source: Google Maps & Tourism Economics (2017)

According to the government of the BVI's website; *"The bulk of the tourism income in the British Virgin Islands is generated by the yacht chartering industry."* BVI government officials have identified the charter industry's contribution to their economy at US $100 million.

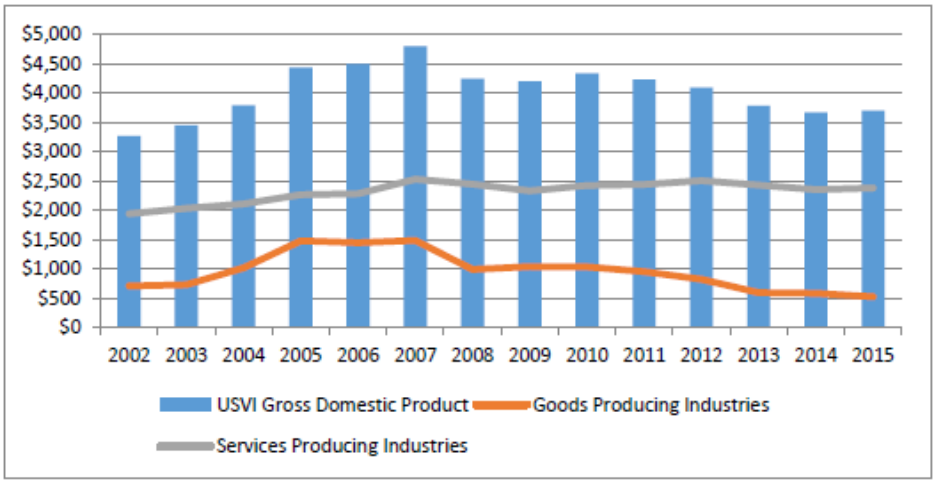
4.1 Macroeconomics Indicators

According to the Bureau of Economic Research[1], "Current macroeconomic indicators show the U.S. Virgin Islands economy is emerging from a deep contraction wrought by the recession…but the pace of progress has been slow, subpar, and uneven."

Between 2007 and 2014, USVI GDP (Gross Domestic Product) declined by 24%, from $4.8 billion to $3.7 billion, according to the Bureau of Economic Analysis (BEA) at the U.S. Department of Commerce.

The BEA also noted that the Virgin Islands economy continues to contract, although at a much slower rate since recovering in 2010. The latest estimates of GDP for the U.S. Virgin Islands "show that real GDP (GDP adjusted to remove price changes) decreased 0.6% in 2014" as shown in Figure 4.3. In comparison, BEA noted that real GDP for the U.S. (excluding the territories) increased 2.4 percent in 2014.

Figure 4.3: U.S. Virgin Islands Gross Domestic Product, Goods Producing Industries, and Services Producing Industries (2002 to 2015, US$ Millions)

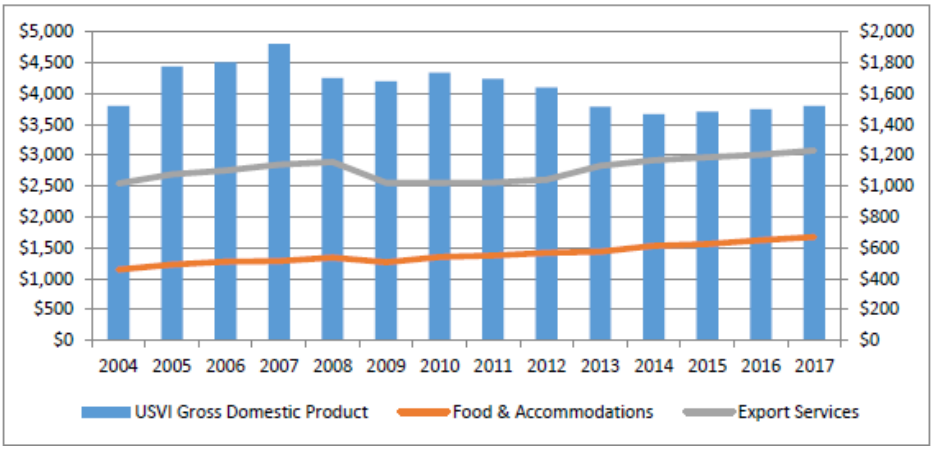


Source: Bureau of Economic Analysis, U.S. Department of Commerce (2016)

The BEA noted that "exports of services, which consists primarily of spending by tourists, contributed positively to the economy," with the "growth in tourism reflected by an increase in visitor arrivals of 4.2 percent" in 2014. Over the ten year period, the Exports of Services averages $1.1 billion annually, being fuelled by Food & Accommodations expenditures that average approximately $550 million annually, as shown in Figure 4.4

[1] U.S. Virgin Islands Economic Review, Bureau of Economics Research (2016)

Figure 4.4: U.S. Virgin Islands Gross Domestic Product, Goods Producing Industries, and Services Producing Industries (2002 to 2015, US$ Millions)



Source: Bureau of Economic Analysis, U.S. Department of Commerce (2016)

According to the U.S. Virgin Islands Department of Labor, Bureau of Labor Statistics, the unemployment rate in the USVI in 2016 was 11.1%. In 2010, the unemployment rate in the U.S. Virgin Islands was 8.1%, which was lower than the national U.S. unemployment rate of 9.6%. Since 2010 the national unemployment rate dropped from 9.6% to 4.9% in 2016, while the unemployment rate in the USVI increased from 8.1% in 2010 to 11.1% in 2016. In 2016, the unemployment rate in the U.S. Virgin Islands was more than double the national unemployment rate in the United States.

The unemployment rate in the USVI reached a high of 15.1% in 2013. In 2013 the Maho Bay Campground closed in May, resulting in a job loss of 60 jobs on St. John. In September 2014, Scotia Bank closed their branch on St. John, resulting in a loss of an additional 30 jobs. Since those closings, no major changes to the St. John economy have materialized to replace those lost 90 jobs on an island whose population is just a little over 4,000.

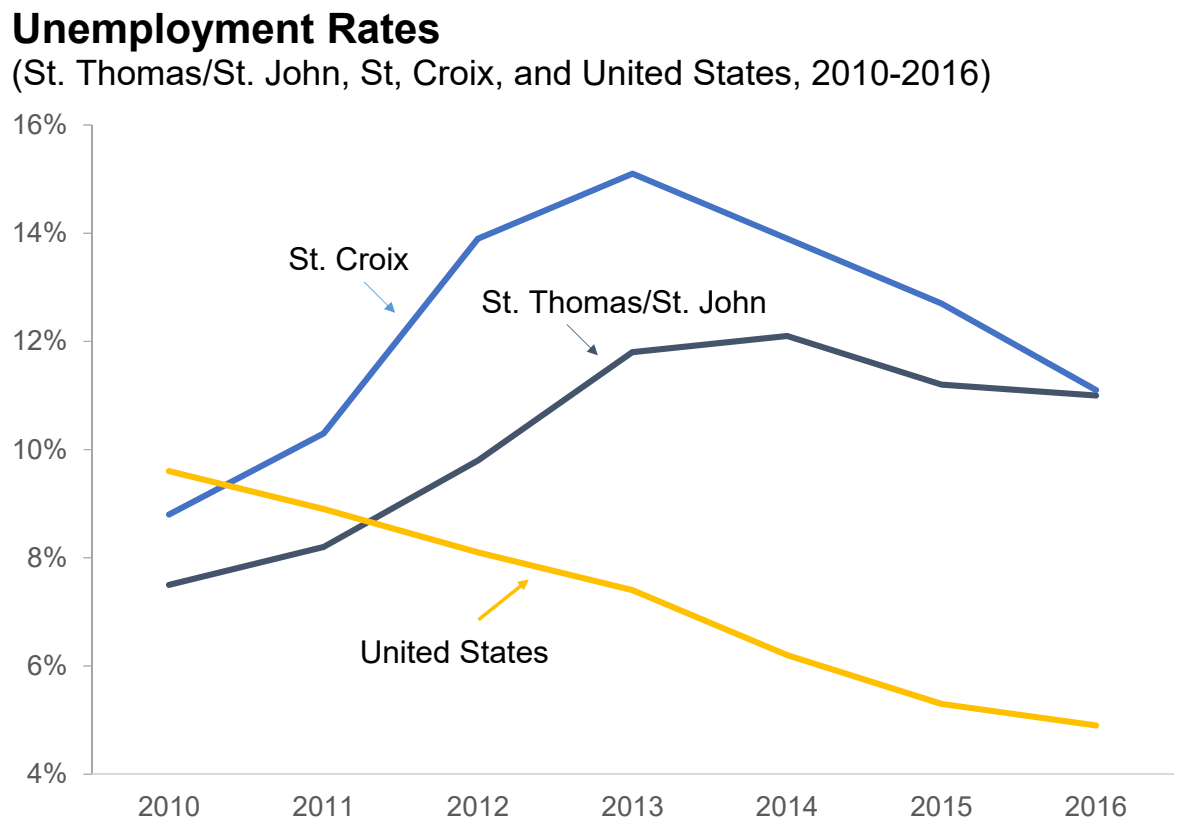
As the unemployment rate in the USVI declines, employment is increasing averaging 46,000 jobs. Currently, employment is improving at a slow pace in both St. Thomas/St. John and St. Croix districts as private sector employment in the trade, transportation and tourism sectors slowly improve.

Figure 4.5: Unemployment Rates in the United States, St. Thomas/St. John & St. Croix (2010 to 2016)

Area	2010	2011	2012	2013	2014	2015	2016
US Virgin Islands	8.1%	8.9%	11.7%	13.4%	13.0%	11.9%	11.1%
St. Thomas/St. John	7.5%	8.2%	9.8%	11.8%	12.1%	11.2%	11.0%
St. Croix	8.8%	10.3%	13.9%	15.1%	13.9%	12.7%	11.1%
United States	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%

Source: U.S. Virgin Islands Department of Labor, Bureau of Labor Statistics (2017)

Figure 4.6: Chart of Unemployment Rates in the United States, St. Thomas/St. John & St. Croix (2010 to 2016)

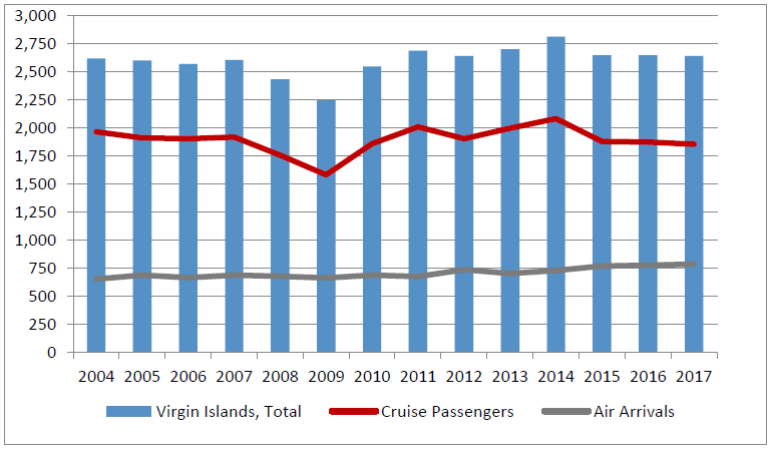


Source: U.S. Virgin Islands Department of Labor, Bureau of Labor Statistics (2017)

4.2 Tourism & Hospitality Industries

Overall visitor arrivals to the U.S. Virgin Islands are currently down 2.6% from 2015 levels. Following the arrival of approximately 2.1 million cruise passengers in 2014, the Virgin Islands Bureau of Economic Research (BER) reported a substantial decline in cruise passenger arrivals. The average annual arrivals for cruise ship passengers usually totals 1.9 million passengers, in sharp contrast to annual air arrivals that usually averages 700 thousand air visitor arrivals on an annual basis. In 2015, BER reported close to 770 thousand air visitor arrivals to Virgin Islands, improving economic conditions in the Leisure & Hospitality industries.

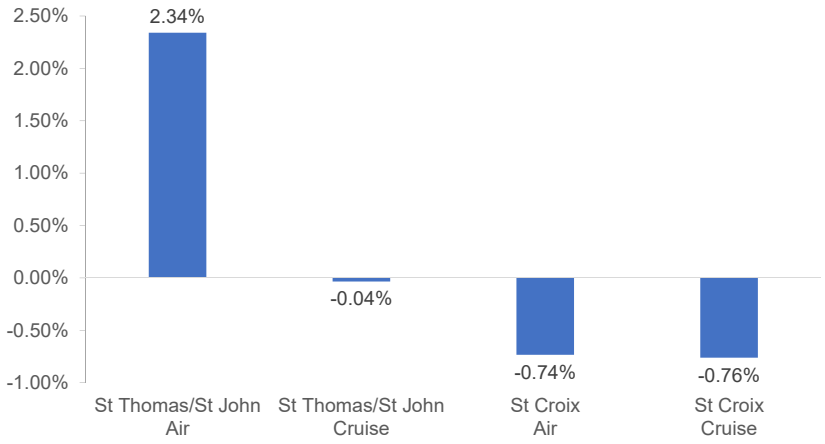
Figure 4.7: U.S. Virgin Islands Total Visitors, Cruise Passengers, and Air Visitor Arrivals (2004 to 2017, Thousands of Visitors)



Source: U.S. Virgin Islands Bureau of Economic Research, Oxford Economics (2017)

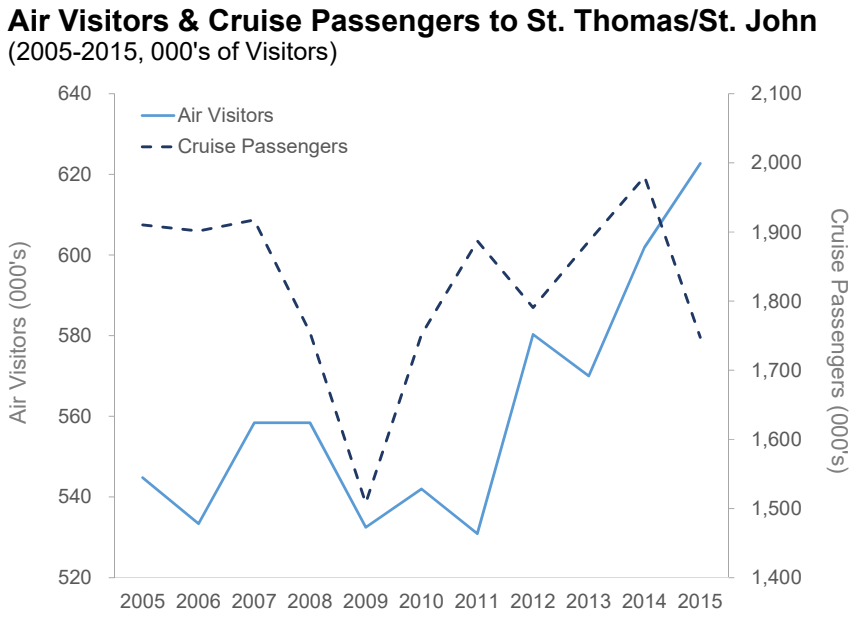
With St. John tourism resources, increasing air visitor arrivals will drive new demand for tourism related services, potentially demanding more recreational products associated with the St. John marina development project. As shown in Figure 4.7, air arrivals to St. Thomas/St. John grew at an annual rate of 2.34% between 2010 and 2015. In comparison, cruise passengers to St. Thomas/St. John contracted 0.04 percent, while air arrivals to St. Croix and cruise passengers to St. Croix contracted 0.74% and 0.76%, respectively, between 2010 and 2015.

Figure 4.8: Growth in U.S. Virgin Islands Air & Cruise Visitors (CAGR, 2010-2015)



Source: U.S. Virgin Islands Bureau of Economic Research, Oxford Economics (2017)

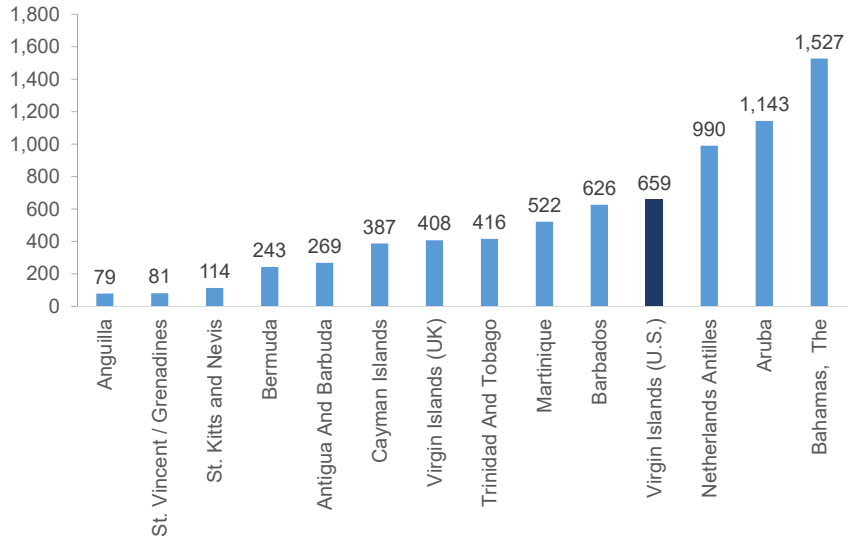
Figure 4.9: Air Visitors & Cruise Passengers to St. Thomas & St. John (2005-2015, 000's of Visitors)



Source: U.S. Virgin Islands Bureau of Economic Research (2017)

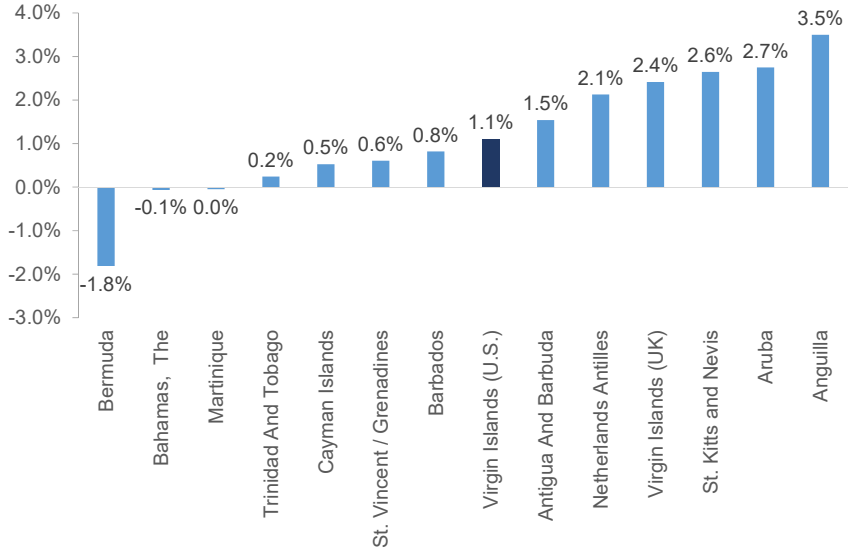
In 2016, the USVI welcomed nearly 660,000 overnight tourist arrivals. Despite the USVI's relatively high level of overnight tourist arrivals compared to other Caribbean markets, growth in USVI overnight tourist arrivals is relatively low, posting just 1.1% annual growth between 2000 and 2016.

Figure 4.10: Overnight Tourist Arrivals (2016, 000's of Visitors)



Source: Tourism Economics (2017)

Figure 4.11: Growth in Overnight Tourist Arrivals (CAGR, 2000-2016)

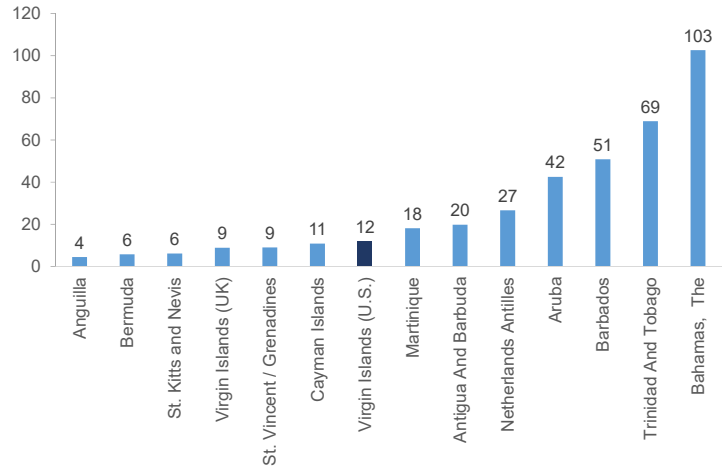


Source: Tourism Economics (2017)

In 2016, the travel and tourism industry supported an estimated 12,000 total jobs, placing it in the middle of the pack compared to other Caribbean markets. Travel and tourism employment in the USVI plummeted from 17,000 jobs in 2008 to less than 11,000 jobs in 2014, representing a decline of 6.1% on an annual basis.

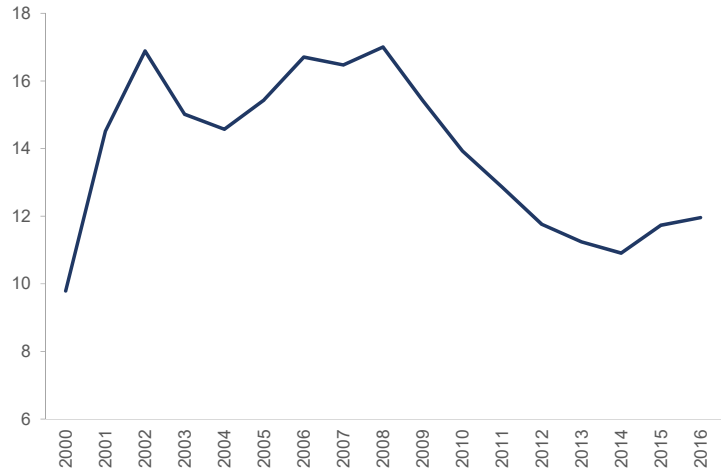
Overall, more than one-third of all workers in the travel and tourism industry lost their jobs over this time period. The travel and tourism industry rebounded in 2015, posting 7.6% growth over 2014 levels, and estimates indicate 1.9% year-on-year growth for 2016. Projects like the marina will complement existing resources on St. John and the entire USVI and will help drive growth as the travel and tourism industry continues to slowly rebound.

Figure 4.12: Travel & Tourism Industry Employment (2016, 000's of Employees)



Source: Tourism Economics (2017)

Figure 4.13: Travel & Tourism Industry Employment in the U.S. Virgin Islands (2000-2016, 000's of Employees)



Source: Tourism Economics (2017)

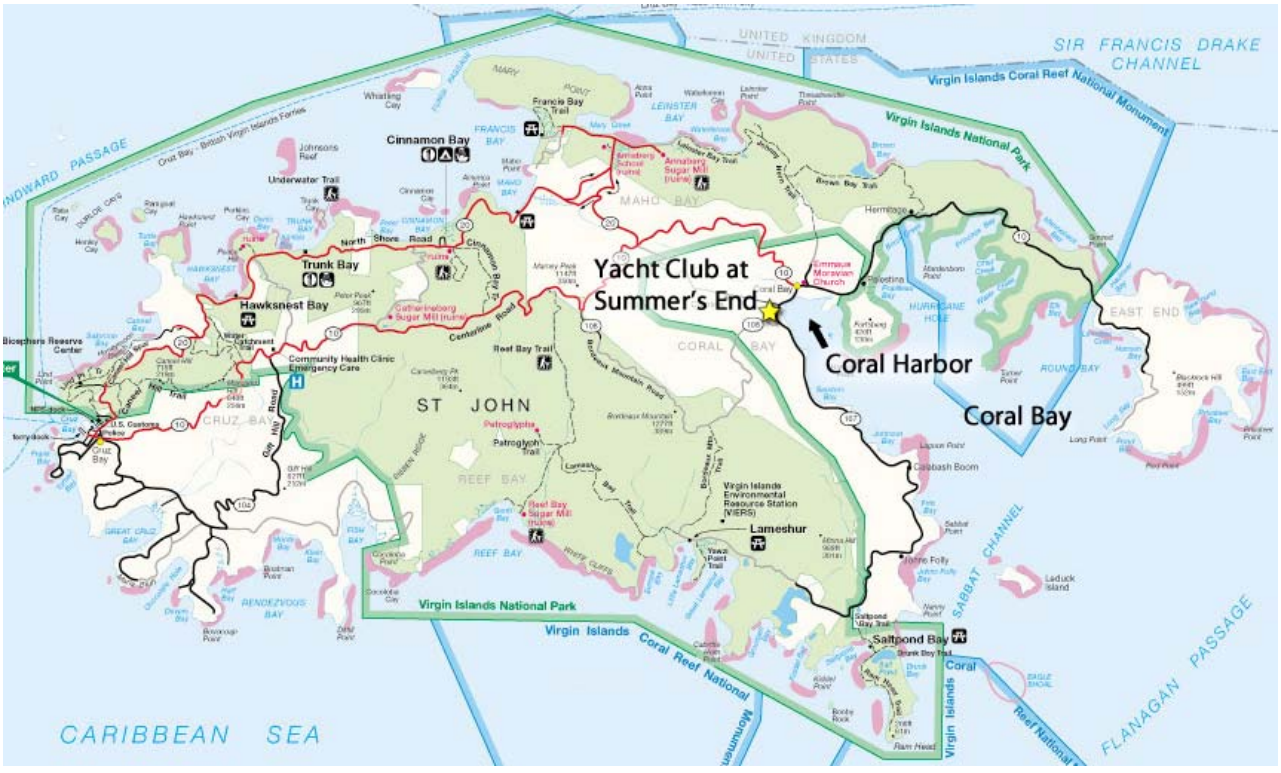
4.3 Coral Bay & Coral Harbor

Coral Harbor has a long history as a seaport dating back to the beginning of the 1700's. According to the World Atlas[2], in "1718 Erik Bredal, governor of St. Thomas, took formal possession of St. John in the name of the King of Denmark and the Danish West India Company, construction of a fort began, plantation era began using labor of enslaved Africans." Fortsberg, the ruins of the Danish fort overlooks the entrance to Coral Harbor today.

It is important to draw a distinction between Coral Bay and Coral Harbor.

Coral Bay is defined by the U.S. Virgin Islands Code as the area north of a line drawn between Lagoon Point and Long Point. According to a 2012 NOAA research report, Coral Bay measures 13.3 square kilometers, or 3,286.5 acres.

Figure 4.14: Map of St. John



Source: www.stjohnusvi.com & Tourism Economics (2017)

[2] http://www.worldatlas.com/webimage/countrys/namerica/caribb/usvirginislands/vitimeln.htm

Figure 4.15: Map of St. John Detailing Coral Bay and Coral Harbor

Source: www.stjohnusvi.com & Tourism Economics (2017)

According to USVI Department of Planning & Natural Resources, Coral Harbor is defined as the waters north of a line drawn between Pen Point and Fortsberg, just northwest of Harbor Point. Through GIS modeling, DPNR has determined Coral Harbor to measure 97.164514 acres.

Coral Harbor was selected as St. John's first port and town as it is a natural deep water harbor. Fortsberg fort was built to protect the harbor, whose ruins remain today. A customs office was built overlooking the harbor in order to collect tariffs and taxes on goods going through the busy port.

As seen on the map of St. John, Figure 4.14 on page 23, the National Park has protected waters as well as land. When combing National Park waters with those of the Coral Reef National Monument, St. John is surrounded by 18,353 acres of federally protected submerged lands.

4.3.1 Marina Size and Slip Mix Determined by Local Needs and Economics

The Yacht Club at Summer's End was designed to serve the needs of local boaters on St. John and provide provisioning, and most important to the environment, proper solid and wastewater disposal.

Also critical for the environment is remediation of submerged and abandoned boats and security with an eye to compliance of both territorial and federal laws and regulations. YCSE will provide all of the above services in addition to assisting with

environmental mitigation and remediation of decades of abuse in Coral Harbor by non-compliant boaters.

To assist in providing a better environment for Coral Harbor and Coral Bay, the St. John marina has committed funds for ongoing mitigation and monitoring of the environment both on sea and land. This expense will come from revenues generated by slip rental and other services.

In order to keep slip rates affordable for local boaters and in line with other area marinas, YCSE's slips for larger yachts in the marina's South Club generates revenues which effectively pay for current remediation, and future mitigation and monitoring, while helping to offset project operational costs and ensuring competitive rates for local vessels. In a smaller facility enough revenue could not be generated to provide affordable rates for local vessels nor improvement of the environment of Coral Harbor.

A market analysis for St. John Marina prepared by Marine Management & Consulting N.V. provides a comprehensive breakeven analysis for the North and South Marinas.

4.3.2 Trend Line for Coral Harbor

Coral Harbor is currently occupied by over 100 non-compliant boats and an illegal, unsafe and environmentally harmful floating dingy docks. These range from boats tied to federally protected mangroves, illegal anchoring and mooring, and a daily deluge of untreated human waste water being dumped into once pristine waters, to name only a few of the many problems plaguing the bay.

The pictures below depict illegal boating activities in Coral Harbor including boats in mangroves, illegal floating dingy dock and sunken & abandoned vessels.

Figure 4.17: Pictures of Illegal Boating Activities in Coral Harbor

Source: SEG

Due to a lack of enforcement, Coral Harbor has been populated in an unorganized, inefficient and unsafe manner. The harbor's overcrowding has become so prolific that it has now spilled over into adjacent Johnson's Bay, where mooring and anchoring is prohibited by USVI code and is occupied by over 20 boats.

Figure 4.18: Boats illegally moored and anchored in Johnson's Bay

Working with USVI DPNR and other territorial and federal agencies, the Yacht Club at Summer's End is committed to environmental restoration of local waters, establishing order and security, and restoration of an economy to better help and support native St. Johnians.

4.4 Virgin Islands National Park

St. John is home to the Virgin Islands National Park, which covers approximately 60% of St. John and is famous for scuba diving and snorkeling and has miles of hiking trails through the tropical forest. The park is an important tourist attraction, welcoming an average of over 450,000 visitors per year between 2007 and 2016[3].

[3] National Park Service Annual Recreation Visits Report, 2007-2016

Figure 4.19: Map of St. John detailing the Virgin Islands National Park

Source: (2017)

In 2015, the Virgin Islands National Park welcomed more than 438,000 total recreation visits, generating approximately $621.2 million in total visitor spending. As the proposed St. John marina welcomes new visitors to St. John, it will also generate new visits to the National Park. Assuming the proposed marina drives a five percent increase in current visitation levels, it will generate nearly 22,000 new visits to the national park, along with $31.1 million in visitor spending, as shown in Figure 4.20.

Figure 4.20: Virgin Islands National Parks Visitation and Visitor Spending (2015) and Estimated Increased Visitation and Spending Attributable to Proposed St. John Marina

Description	Total Recreation Visits	Total Visitor Spending ($ Millions)
Current Visitation at Virgin Islands National Park	438,371	$621.2
Increase due to St. John Marina (5%)	21,919	$31.1
New Total with St. John Marina	**460,290**	**652**

Source: National Park Service & Tourism Economics (2017)

Park leadership, along with the group Friends of the Virgin Islands National Park, worked to install moorings in the National Park. Since the beginning of the program, the Friends group has installed 340 moorings, beginning in 1999 with 180 moorings for overnight use in ten bays around St. John.

While the majority of the moorings at the National Park are for boats up to a maximum of 60 feet in length, the most recent moorings installed are for boats between 60 and 100 feet in length, indicating the need to meet demand in the fastest growing segment of the market, larger yachts.

4.5 Charter Industry in the USVI

In the 1970's, 80's and early 90's the USVI was a dominant player in the yacht charter industry, but due to regulations imposed by the U.S. Coast Guard in 1993, the USVI's participation was all but eliminated in the decades that followed. Local experts estimate the contribution by the charter industry to the USVI economy to be at approximately $18 million, representing a loss to the local economy of more than $70 million. Prior to the regulations, the contribution of the charter industry to the USVI economy approached $100 million.

In December 2015, an act of the U.S. Congress modified the limitations imposed on the commercial charter industry by the U.S. Coast Guard in the USVI allowing the territory to now compete on a level playing field with the BVI for this extremely large and valuable segment of the tourist economy.

Figure 4.21: Images of yachts at charter



Source: Charterworld.com (2017)

Former USVI governor, John P. de Jongh, Jr. commented in an interview to media outlet VI Source regarding the importance of the charter industry to the USVI economy;

> *"Restoration of this important sector of our economy will offer a milieu of technical and entrepreneurial opportunities in the boating industry. This legislation is a critical first step in our journey to regain our position as the world's leader in this important industry sector."*

He added that before the USCG imposed rule of 1993, the recreational marine segment was responsible for contributing more than $100 million to the USVI economy and hundreds of jobs on an annual basis.

Coral Harbor's proximity to Drake's Passage and the BVI make it the perfect location for a marina from which both USVI sailing and motor charter vessels could begin to claim a portion of the vibrant recreational boating industry.

5 Economic & Fiscal (Tax) Impacts

5.1 Economic Impact Model

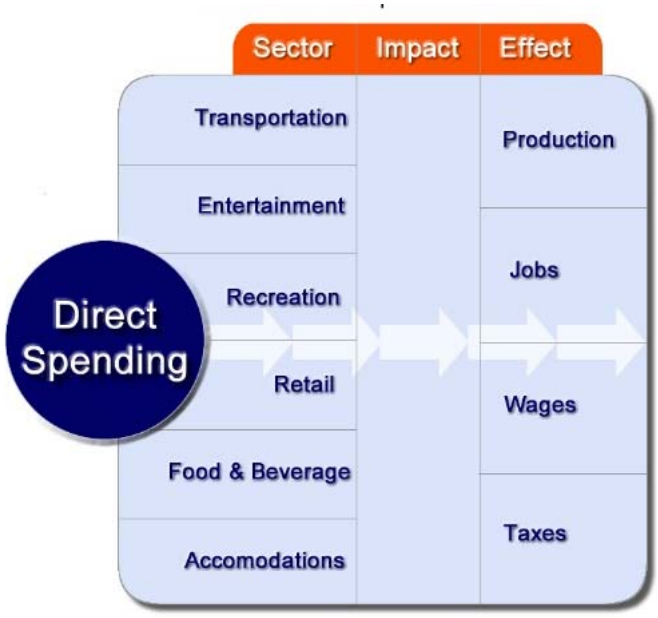
The first step in calculating the economic and impacts of the St. John marina is to identify the main components that would positively impact the economy of the USVI

- One-time pre-development, development, and construction costs
- Annual marina operations

The various phases and components of St. John Marina will generate economic activity not only within the local economy of Coral Bay and St. John, but also in the broader economy of the U.S. Virgin Islands. Direct spending and job creation will generate additional downstream economic impacts, as spending flows through the economies of Coral Bay, St. John and the USVI.

For example, during the development period, and during annual operations of the proposed marina, YCSE will spend a portion of its construction and operating budget in the local economy. They will hire local suppliers and purchase local goods, and YCSE employees, as well as employees at the on-site restaurants, retailers, and other businesses, will spend their earnings on local goods including food and beverage, entertainment, retail, etc.

Figure 5.1: Illustration of Economic Impact Model Flow



The economic impacts of each component outlined above were estimated using a regional Input-Output (I-O) model based on IMPLAN (www.implan.com) models. IMPLAN is recognized as one of two industry standards in local-level I-O models. The IMPLAN model used in the analysis is the most recent available model for the US Virgin Islands and is based on 2015 economic data for the USVI.

An I-O model represents a profile of an economy by measuring the relationships among industries and consumers. For example, an I-O model tracks the flow of a visitor's restaurant expenditures to wages, profits, capital, taxes and suppliers.

The supplier chain is also traced to food wholesalers, to farmers, and so on. In this way, the I-O model allows for the measurement of the direct and indirect sales generated by a restaurant meal.

The model also calculates the induced impacts of tourism. These induced impacts represent benefits to the economy as employees of tourism sectors spend their wages in the local economy, generating additional output, jobs, taxes, and wages.

IMPLAN is particularly effective because it calculates these three levels of impact – direct, indirect, and induced – for a broad set of indicators. These include the following:

- Spending
- Wages
- Employment
- Territory Taxes

The modeling process begins with aligning the expenditure measurements with the related sectors in the model (e.g. sports & recreation, restaurants, retail, and entertainment). The model is then run to simulate the flow of these expenditures through the economy. In this process, the inter-relationships between consumers and industries generate each level of impact for each economic indicator (sales, wages, employment, etc.).

The research team also compared the impact results from the IMPLAN model to economic impact multipliers for the travel and tourism industry in the USVI maintained by the World Travel & Tourism Council (WTTC), as well as impact multipliers from Tourism Economics.

5.2 Construction

The development phase of the project will generate one-time economic impacts as spending on marina construction and development of the upland mixed use complex ripple through the economy. Based on information provided by Summer's End Group, LLC, total development costs for the proposed St. John marina will amount to an estimated $43.4 million, as shown in Figure 5.2.

Figure 5.2: Estimated Development Budget for St. John Marina (US $ Millions)

Description	Amount (US $ Millions)
Total Amount of Lease, Purchase, and Option Costs	$6.1
Mitigation	$2.6
Permitting, Legal EIA, and Engineering	$5.3
Development Cost North Marina	$7.0
Development Cost South Marina	$7.3
Development Cost Shared	$3.5
Civil and Site Work	$5.1
Development Cost Upland	$5.0
General Conditions	$1.4
Total Predevelopment & Development Costs	**$43.4**
Percentage of Development Costs Spent Locally	**50%**
Total Development Costs Spent Locally in USVI	**$21.7**

Source: Summer's End Group, LLC (2017)

Since a considerable portion of construction materials and inputs will originate outside the Virgin Islands[4], we conservatively estimate the 50% of development costs ($21.7 million) will be spent locally and generate impacts in the economy of the USVI.

[4] For example, all parts of the Marina are manufactured outside the U.S. Virgin Islands and will be shipped to St. John Marina where they will ultimately be assembled.

5.2.3 One-Time Economic Impacts Attributable to Development Phase

As shown in Figure 5.3, we estimate that $21.7 million in St. John Marina development costs will generate $0.8 million in indirect impacts and $7.2 million in induced impacts, resulting in a total one-time economic impact of approximately $29.7 million. This total economic impact of $29.7 million will include $19.2 million in total labor income, supporting 240 total jobs (including 176 direct jobs, 6 indirect jobs, and 58 induced jobs).

Figure 5.3: One-Time Economic Impacts Attributable to the Development of St. John Marina (US $ Millions and Total Jobs)

Description	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impacts
Economic Output ($ Millions)	$21.7	$0.8	$7.2	$29.7
Labor Income ($ Millions)	$15.7	$0.5	$3.0	$19.2
Employment	176	6	58	240

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

5.2.4 Industry Distribution of One-Time Economic Impacts

Figure 5.4 outlines the distribution of one-time economic impacts across major industries. As shown, the construction and utilities industry is the most impacted industry, with $17.5 million in total economic output, $10.8 million in total labor income, and 157 total jobs. The business services industry follows with $4.9 million in total economic output and 24 jobs. The FIRE (finance, insurance and real estate) industry benefits from nearly $2.8 million in total economic output and 4 total jobs.

Figure 5.4: Industry Distribution of One-Time Economic Impacts Attributable to the Development of St. John Marina (US $ Millions and Total Jobs)

Industry	Total Output	Total Labor Income	Total Jobs
Construction and Utilities	$17,549,344	$10,831,441	157
Business Services	$4,928,890	$5,378,186	24
Finance, Insurance and Real Estate	$2,808,941	$363,457	4
Retail Trade	$1,208,770	$666,760	17
Food & Beverage	$700,852	$362,692	13
Education and Health Care	$688,706	$617,781	10
Communications	$390,698	$88,444	1
Personal Services	$327,967	$213,542	4
Wholesale Trade	$282,012	$246,514	4
Manufacturing	$238,787	$52,345	1
Other Transport	$222,611	$116,404	2
Recreation and Entertainment	$189,369	$80,336	2
Lodging	$124,146	$61,267	1
Gasoline Stations	$53,406	$45,848	1
Government	$15,991	$19,141	0
Agriculture, Fishing, Mining	$7,083	$6,562	0
Air Transport	$0	$0	0
TOTAL	**$29,737,574**	**$19,150,721**	**240**

Source: Tourism Economics (2017)

5.2.5 Fiscal (Tax) Impacts Attributable to Development Phase

The economic impacts attributable to one-time development expenditures will generate significant fiscal (tax) impacts as they cycle through the economy. We estimate that the development phase will generate more than $622,000 in territory taxes, including approximately $182,000 in excise and use taxes, $149,000 in personal income taxes, $153,000 in property taxes, $66,000 in corporate taxes, $26,000 in social security taxes, and $47,000 in other taxes and fees.

Figure 5.5: Fiscal (Tax) Impacts Attributable to One-Time Development Expenditures ($ Millions)

Territory Taxes	
Description	Tax Revenue
Excise & Use Taxes	$181,731
Personal Income Taxes	$149,104
Property Taxes	$152,871
Corporate	$65,806
Social Security	$26,272
Other taxes and fees	$46,551
Total State & Local Taxes	**$622,335**

Source: Tourism Economics (2017)

5.3 Operational Expenditures at Yacht Club at Summer's End

Annual operations at the St. John marina will generate ongoing impacts in the local economy. The marina will hire local workers and purchase goods and services from local businesses. In addition, the restaurants, provisioner, and retailers in the upland mixed use complex will also make purchases from local vendors. Based on preliminary estimates from Summer's End Group LLC, total marina expenditures in the first year of operations will amount to approximately $6.2 million[5].

Figure 5.6: Annual Marina Operational Expenditures Included in Economic Impact Model

Operating Expenses	Year 1
Employee Compensation	$915,757
Administration	$586,396
Bank Fees	$554,189
Land Leases	$359,692
Utilities	$260,550
Mitigation	$213,000
Insurance	$106,818
Maintenance	$70,121
Management Fees	$1,026,916
Gross Receipts Tax	$1,026,916
Admin/Security on Dockage	$1,093,205
Total Operating Expenses	**$6,213,560**

Source: Summer's End Group, LLC (2017)

[5] Operational expenditures do not include $3.3 million in debt service costs and $2.5 million in reserves, which are excluded from the economic impact model.

Summer's End Group estimates the YCSE will employ 20 FTE (full time equivalent) employees, including managers, technicians, and other positions, as outlined in Figure 5.7. It is important to note that these include jobs employed directly by the Yacht Club and do not include jobs at the various restaurants, retailers, and other business in the upland mixed use complex.

Figure 5.7: Estimated FTE Jobs at the Yacht Club at Summer's End

Function	FTE
Marina Manager (US)	1
Assistant Manager	1
Accountant	1
Concierge / Clerk	3
Dock Manager	1
Dock Assistants	5
Maintenance Manager	1
Maintenance Techs	1
Security Chief	1
Security guards	5
Total	**20**

Source: Summer's End Group, LLC (2017)

5.3.1 Economic Impacts Attributable to Annual Operations (First Year of Operations)

As shown in Figure 5.8, we estimate that $6.2 million in St. John Marina operational expenditures will generate $0.5 million in indirect expenditures and $1.6 million in induced expenditures, resulting in a total economic impact of approximately $8.3 million in the economy of Coral Bay, St. John and the USVI.

This total economic impact of $8.3 million will include $1.2 million in total labor income (including $0.9 million in direct labor income, $0.1 million in indirect labor income, and $0.2 million in induced labor income, supporting 25 total jobs (including 20 jobs at the Yacht Club and 5 additional indirect and induced jobs).

Figure 5.8: Economic Impacts Attributable to Operational Expenditures at the Yacht Club at Summer's End (First Year of Operations, US $ Millions and Total Jobs)

Description	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impacts
Economic Output ($ Millions)	$6.2	$0.5	$1.6	$8.3
Labor Income ($ Millions)	$0.9	$0.1	$0.2	$1.2
Employment	20	1	4	25

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

The resulting output multiplier for annual operations at the Yacht Club is 1.33 ($8.3 million total output impact divided by $6.2 million in direct operational expenditures in the first year of operations = 1.33). This implies that each dollar spent on annual operations will generate an additional $0.33 in indirect and induced expenditures in the economy of the USVI.

5.3.2 Industry Distribution of Economic Impacts in the First Year of Operations

Figure 5.9 outlines the distribution of economic impacts across major industries. As shown, the recreation and entertainment industry (which includes marinas) is the most impacted industry, with $2.4 million in total economic output, $0.3 million in total labor income, and 11 total jobs. The FIRE (finance, insurance and real estate) industry follows with $2.2 million in total economic output and 3 jobs. The business services industry benefits from $2.2 million in total economic output and 8 total jobs.

Figure 5.9: Industry Distribution of Economic Impacts Attributable to the First Year of Operations at St. John Marina (US $ Millions and Total Jobs)

Industry	Total Output	Total Labor Income	Total Jobs
Recreation and Entertainment	$2,356,199	$915,757	11
Finance, Insurance and Real Estate	$2,230,580	$138,471	3
Business Services	$2,180,601	$343,948	8
Construction and Utilities	$562,885	$50,092	0
Retail Trade	$258,008	$40,261	1
Food & Beverage	$159,855	$23,538	1
Education and Health Care	$147,627	$37,467	1
Communications	$116,118	$9,373	0
Personal Services	$83,226	$15,657	0
Wholesale Trade	$44,416	$10,986	0
Other Transport	$43,632	$6,575	0
Lodging	$32,914	$4,575	0
Manufacturing	$26,613	$1,209	0
Gasoline Stations	$11,425	$2,775	0
Government	$7,585	$2,569	0
Agriculture, Fishing, Mining	$1,914	$497	0
Air Transport	$0	$0	0
TOTAL	**$8,263,597**	**$1,603,751**	**25**

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

5.3.3 Comparison to Tourism Economics and WTTC Multipliers

The U.S. Census bureau classified marinas under NAICS code 713930, which falls under the two-digit NAICS code 71 for arts, entertainment, and recreation. The World Travel & Tourism Council (WTTC) considers art, entertainment, and recreation part of the broader "travel and tourism" industry. WTTC is the global authority on the economic and social contribution of travel and tourism, and each year it quantifies the economic impact of travel and tourism for more than 180 countries and 25 regions of the world.

In its 2016 study, "Travel & Tourism: Economic Impact 2015, US Virgin Islands," WTTC found that the travel and tourism in the USVI generated a direct impact of $551.0 million, resulting in a total impact of $1,385.7 million. Dividing the total impact of US$1,385.7 million by the direct impact of US$551.0 million yields an output multiplier of 2.51, which indicates that each $1 spent on Travel and Tourism results in an additional $1.51 in indirect and induced expenditures in the economy of the USVI.

Tourism Economics also analyzed economic impact multipliers for the US Virgin Islands and came up with an impact multiplier of 1.64, implying that each $1 spent on travel and tourism results in an additional $0.64 in indirect and induced expenditures in the economy of the USVI.

Overall, the resulting IMPLAN output multiplier of 1.33 for annual operations at the Yacht Club is conservative compared to the 2.65 output multiplier for travel & tourism in WTTC's research and Tourism Economics' output multiplier of 1.64.

The charts on the following pages compare the total economic impacts and job impacts based on the IMPLAN multipliers, Tourism Economics multipliers, and WTTC multipliers. While all of the results are within acceptable ranges of economic impact analysis, the IMPLAN multipliers represent the most conservative impacts across the three estimates.

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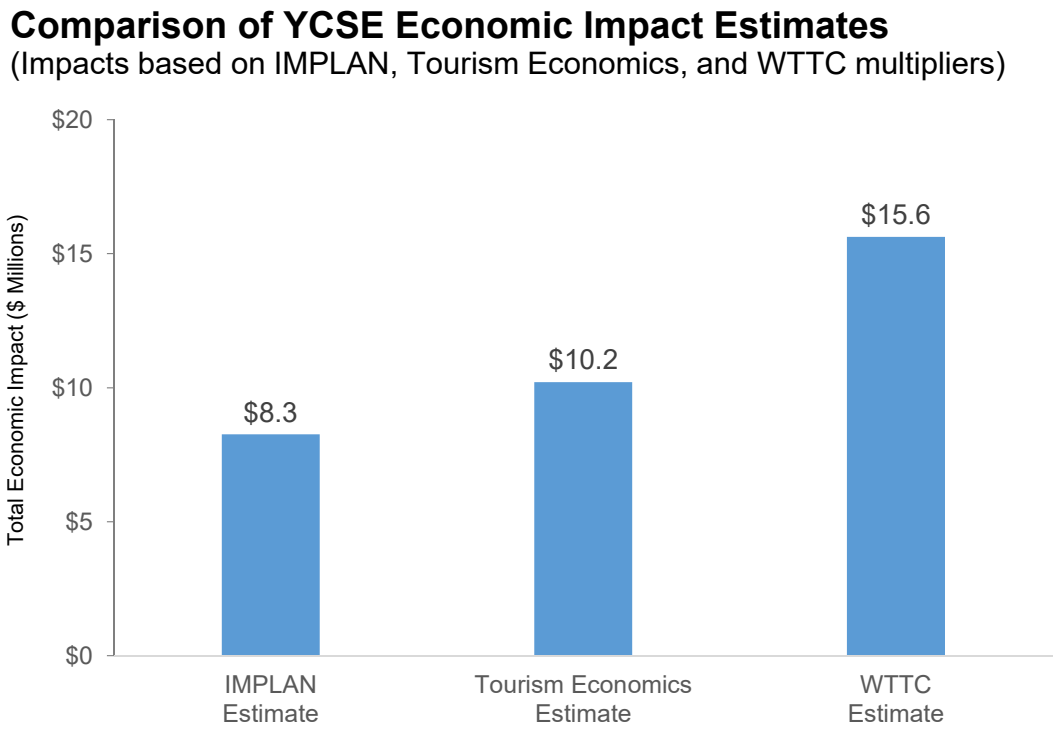
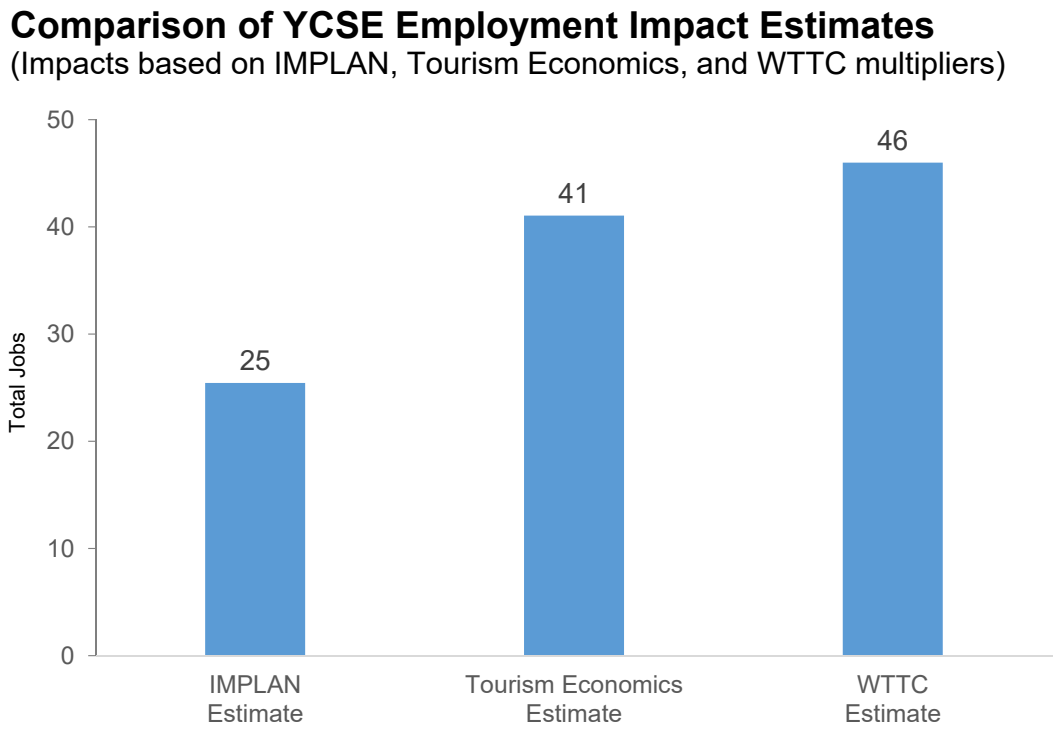
Figure 5.10: Comparison of St. John Marina Annual Operational Economic Impacts Based on IMPLAN, Tourism Economics, and WTTC Multipliers



Source: Tourism Economics (2017)

Figure 5.11: Comparison of St. John Marina Annual Operational Job Impacts Based on IMPLAN, Tourism Economics, and WTTC Multipliers



Source: Tourism Economics (2017)

5.3.4 Summary Economic Impacts, Years One Through Five

Figure 5.12 summarizes the annual economic impacts attributable to the YCSE's first five years of annual operational expenditures. Over the first five years of operations, the St. John marina will generate a total economic impact of $34.0 million, including $6.4 million in labor income, supporting 28 annualized jobs.

Figure 5.12: Annual Economic Impacts Attributable to Operational Expenditures at the Yacht Club at Summer's End (First Five Years of Operations, US $ Millions and Total Jobs)

Description	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impacts
Year 1				
Economic Output ($ Millions)	$6.21	$0.50	$1.55	$8.26
Labor Income ($ Millions)	$0.92	$0.08	$0.18	$1.17
Employment	20	1	4	25
Year 2				
Economic Output ($ Millions)	$6.73	$0.54	$1.68	$8.95
Labor Income ($ Millions)	$0.99	$0.08	$0.20	$1.27
Employment	22	1	5	28
Year 3				
Economic Output ($ Millions)	$6.73	$0.54	$1.68	$8.95
Labor Income ($ Millions)	$0.99	$0.08	$0.20	$1.27
Employment	22	1	5	28
Year 4				
Economic Output ($ Millions)	$6.97	$0.56	$1.74	$9.27
Labor Income ($ Millions)	$1.03	$0.09	$0.20	$1.32
Employment	22	1	5	29
Year 5				
Economic Output ($ Millions)	$7.35	$0.59	$1.83	$9.77
Labor Income ($ Millions)	$1.03	$0.09	$0.20	$1.32
Employment	22	1	5	29
Total Impacts, Years 1 through 5				
Economic Output ($ Millions)	$33.99	$2.73	$8.49	$45.21
Labor Income ($ Millions)	$4.96	$0.42	$0.98	$6.35
Employment (Annualized jobs)	22	1	5	28

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

5.3.5 Fiscal (Tax) Impacts Attributable to First Year of Operations

The economic impacts attributable to the first year of operations will generate significant fiscal (tax) impacts as they cycle through the economy. We estimate that the first year of operations will generate more than $185,000 in territory taxes, including approximately $56,000 in excise and use taxes, $32,000 in personal income taxes, $47,000 in property taxes, $30,000 in corporate taxes, $7,000 in social security taxes, and $13,000 in other taxes and fees.

Figure 5.13: Fiscal (Tax) Impacts Attributable to First Year of Operations ($ Millions)

Territory Taxes	
Description	Tax Revenue
Excise & Use Taxes	$55,884
Personal Income Taxes	$31,939
Property Taxes	$47,008
Corporate	$30,046
Social Security	$7,299
Other taxes and fees	$13,064
Total State & Local Taxes	**$185,240**

Source: Tourism Economics (2017)

5.4 Upland Mixed-Use Complex

As outlined in Section 2.2, the marina docks at the proposed Yacht Club at Summer's End will be supported by a 2.65 acre, mixed use upland complex. After lying dormant for many years, several of the existing buildings in the upland complex will be renovated and will be home to new local businesses. Based on data provided by Summer's End Group LLC, main components of the mixed use complex include a fish and farmers' market, U.S. Customs and Border Protection office, office space, various restaurants and retailers.

These businesses will create jobs and bring money into the local economy. Figure 5.14 outlines the proposed uses, approximate square footage estimates, restaurants seats, employees, and apartment units for the various components of the upland mixed use complex.

As shown, the various businesses in the upland complex will employ an estimated 81 total jobs.

Figure 5.14: Proposed Zoning Building Use Schedule at St. John Marina

Existing Use	Proposed Use	Permitted Use	Total Footprint (SF)	Restaurant (Seats)	Marina Slips (Slips)	Marina Office (SF)	Employees (Employees)	Apartments (Units)
NA	Golf Cart Parking	Y	0					
Retail Concession	Retail Concession	Y	2505				4	
Restaurant Kitchen	Restaurant Kitchen	Y	350	60			8	
Public Restrooms Bathroom	Public Restrooms Bathroom	Y	240					
Retail Concession	Remodeled Retail Multi Use Office	Y	2455			350	6	
Tavern Restaurant Seating	Tavern Restaurant Seating	Y	1355	18			2	
NA	Connection	Y	500		44			
NA	Retail Farmers Market	Y	1205				10	
NA	Retail	Y	4945	50	50		10	
NA	Retail Restaurant Apartments	Y	5052		50		20	3
NA	Retail Apartments	Y	2184				13	3
Hotel	Office Shower Apartments	Y	915			350	2	2
Restaurant	Restaurant	Y	1325	5			6	
Total			23,031	133	144	700	81	8

Source: Summer's End Group, LLC (2017)

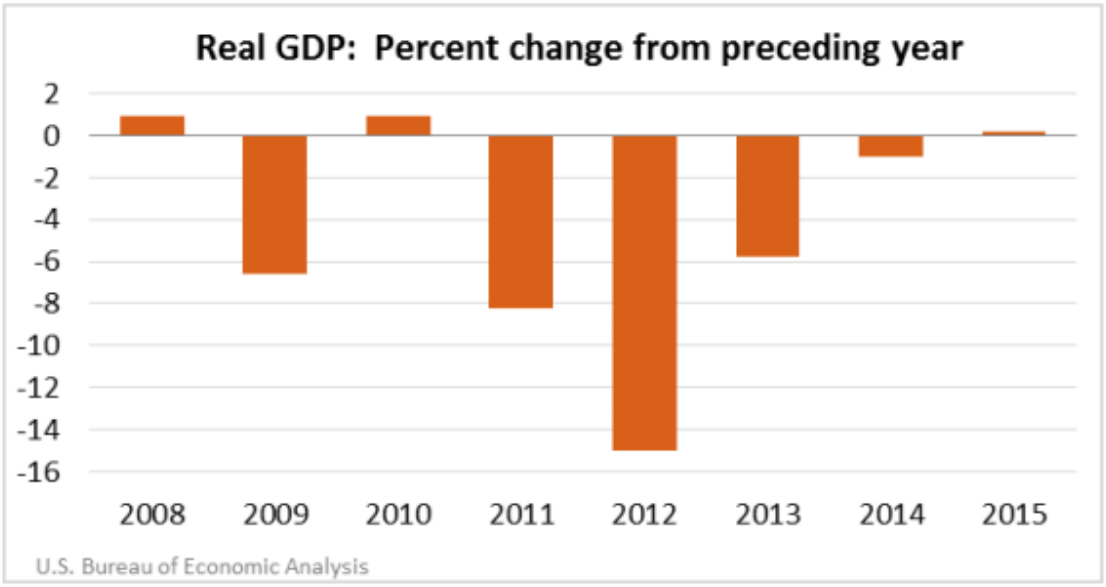
6 Analysis of Community Impacts

Aside from the economic benefits attributable to the development phase and annual operations, the Yacht Club at Summer's End will also generate positive community impacts in Coral Bay and St. John.

The proposed Summer's End marina would be an economic incubator for a native population, who because of economic decline has been decreasing due to the lack of jobs and opportunities

In recent years, the economy of the USVI has been volatile. Between 2011 and 2015, real GDP decreased by 7.8 percent. In 2015 real GDP increased by a slight 0.2 percent, compared to the United States' GDP growth of 2.6 percent. In addition, exports also decreased significantly, contracting 41 percent between 2011 and 2015. In 2015 alone, total exports decreased 80 percent.

Figure 6.1: USVI Real GDP (Year-on-year % Change, 2008-2015)



Source: Bureau of Economic Analysis (2017)

The unemployment rate in the USVI increased from 7.1% in 2005 to 13.4% in 2013. The unemployment rate decreased to 13.0% in 2014, and decreased again in 2015 to 12.0%. The number of jobs in manufacturing on the USVI decreased over 20 percent between 2011 and 2015.

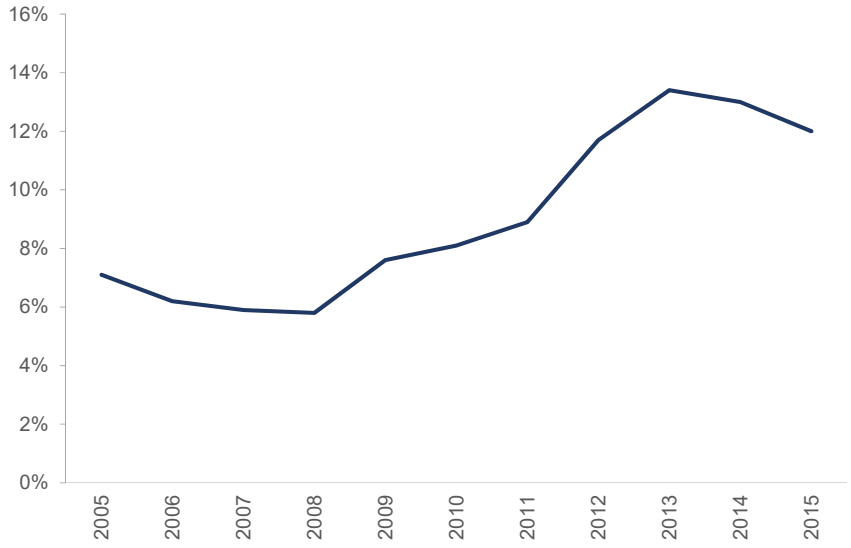
One of the world's largest oil refineries based in the USVI shut down in 2012, driving this decrease in jobs. In the same year, refined petroleum exports to the U.S.

plummeted by 90 percent. However, employment within leisure and hospitality remained fairly consistent between 2011 and 2015, which indicates a steady tourism industry.

In 2013, the Maho Bay Campground closed in May costing St. John 60 jobs. In September of the following year, Scotia Bank closed their St. John branch, causing St. John to lose an additional 30 jobs. Since those closings, no major changes to the local economy in St. John has materialized to replace those lost 90 jobs on an island whose population is just a little over 4,000. This was difficult for many St. Johnians as most of those jobs were held by local residents.

As outlined in Section 4, by creating synergies with existing tourism and hospitality resources, the St. John marina will generate much needed jobs for the unemployed residents of St. John, Furthermore, the potential economic impacts attributable to the marina can help continue the trend of positive GDP growth for the USVI in 2017.

Figure 6.2: USVI Unemployment Rate (2005-2015, Percent)



Source: U.S. Virgin Islands Bureau of Economic Research (2017)

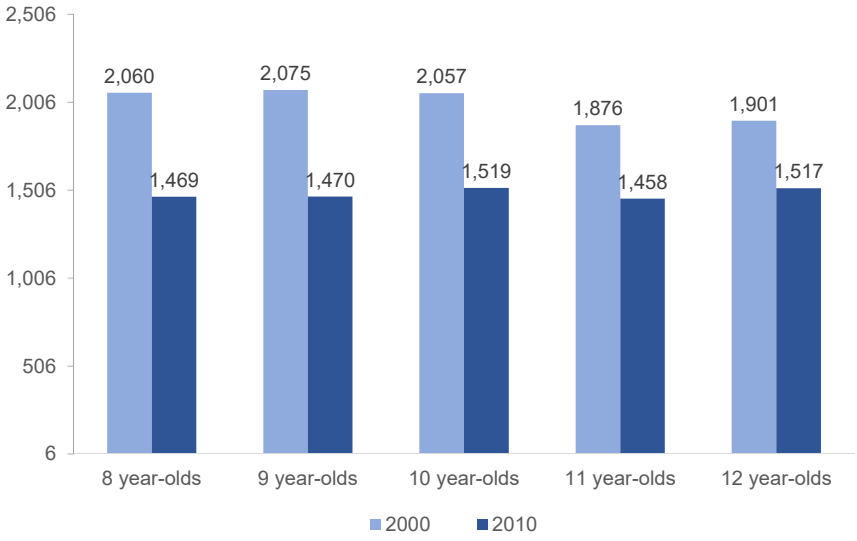
A 2010 U.S. census found that 22 percent of the population in the Virgin Islands lives in poverty. Fifty percent of those living under the poverty level were families led by single mothers. The Congressional Research Service discovered that on average, children living in female-headed families were more likely to live in poverty than children living in two-parent households.

According to the 2014 USVI Kids Count Data Book, approximately 31% of USVI children live below the poverty level. In addition, the 2016 Kids Count Data Book indicates a 29% unemployment rate for recent black high school graduates.

The exodus of local residents is evidenced by a sharp decline in the child population. According to U.S. Census Bureau statistics, the child population on St. John dropped a staggering 21% between the 2000 and 2010 censuses. In their report, "U.S. Virgin Islands Kids Count Data Book 2014", the Community Foundation of the Virgin Islands cited and commented on this loss of child population this way:

> "*Many young families move away from the Virgin Islands to look for educational or job opportunities elsewhere, leaving behind an older population with fewer young children*."

Figure 6.3: Decline in Students in the USVI (2000 & 2010)



Source: U.S. Census Bureau (2017)

As a result of the loss of indigenous population, a disastrous trend line in the Cultural & Heritage Tourism category has been established in Coral Bay virtually eliminating locals from participating in the USVI tourist economy.

6.5 Property Values

Due to the overall lack of economic growth, property values in Coral Bay have declined, and native St. Johnians have left Coral Bay in search of better economic opportunities.

Located near the mixed use upland portion of the proposed Yacht Club, the originally Voyages building sold for $4 million approximately six years ago and was purchased in 2016 for slightly over $1 million. This nearly 75% drop is one of but many examples of the dramatic drop real estate values that have been experienced in Coral Bay and other nearby areas of St. John as a result of economic strangulation.

Like the plight of Voyages, the closure of Coral Bay's only public school, Guy S. Benjamin Elementary, is another example of the economic decline St. John has suffered under for nearly a decade.

Figure 6.4: Comparison of Communities Based Around Full Service Marinas Catering to International Voyagers (Median Home Value, Pre-Economic Crisis and Current Value)

Marina	Area	Median Value, Pre-Economic Crisis (May 2007)	Present Median Value (May 2017)	% Change
Yes	Montauk, NY	$821,000	$925,500	13%
Yes	Newport, RI	$380,000	$412,000	8%
Yes	Marina Del Rey, CA	$822,000	$983,100	20%
Yes	Eastlake (Seattle), WA	$437,000	$591,400	35%
Yes	Mission Bay (San Diego)	$696,000	$765,800	10%
Yes	NE Coconut Grove, FL	$599,000	$634,900	6%
Yes	South Point, (South Beach) FL	$605,000	$738,900	22%
Yes	Harbor Beach (Fort Lauderdale)	$957,000	$1,028,600	7%
Yes	Palm Beach, FL	$753,000	$880,600	17%
	Marina communities average	**$674,444**	**$675,578**	**14%**
	USA average	**$196,000**	**$198,000**	**1%**

Marina	Area	Median Value, Pre-Economic Crisis (December 2007)	Present Median Value (December 2016)	% Change
No	St. John, USVI	$1,982,914	$1,041,606	-47%
Yes	St. Thomas, USVI	$703,900	$566,500	-20%
Yes	St. Croix, USVI	$415,900	$352,200	-15%

Source: Zillow (2017), http://www.islandiarealestate.com/statsummary.cfm (2017), http://www.american-virgin-slands.com/Team_Times_Market_Report.htm (2017)

Figure 6.4 compares median home values for communities based around full service marinas catering to international voyagers. The chart compares home values across communities and calculates the percentage change in median home values from before the economic crisis to the present day.

As shown, the average home value increased 14% over the given time period in communities with marinas. The average percentage increase in the entire United States was 1%. In comparison, property values in St Thomas and St Croix, which both have marinas, have declined 20% and 15%, respectively, since before the economic crisis. Property values in St John lost nearly half of their value, declining 47% over the given time period.

The addition of the St. John Marina, will bring much needed improvements to Coral Harbor. The planned public improvements, new facilities, renovated structures, retail opportunities, and property rentals, along with the associated positive economic and job impacts, will all contribute to halting the decline of property values in and around Coral Harbor.

6.6 Positive Business Impacts

As previously outlined, the proposed marina docks will include a 2.65 acre, mixed use upland complex which is a combination of purchased and long term lease parcels from generational St. Johnians who are also principals in the project. After lying dormant for many years, several of the existing buildings on the land will be renovated.

Previous economic downturns, accompanied by a small minority of non-native Coral Bay residents who have strongly opposed any local economic development for over a decade, had caused many businesses in Coral Bay to close. Some of the affected businesses included a gas station, T & C Real Estate, Lily's Market, Voyages restaurant, Island Blues bar & grill, Kaleidoscope Video, Cases by the Sea, and Guy Benjamin Elementary School.

Expectations arising from the potential construction of the St. John marina have already generated positive economic impacts in the village of Coral Bay. Examples include:

- Previously defunct Lily's Market has been upgraded with the opening of Dolphin Market in the same location in the Coco Loba complex.

- The former location of Cases by the Sea has been leased to a new sandwich shop.
- Closed for over a year, Island Blues bar and grill has been targeted for reopening under a new name and management.
- Because of the potential impact of a significant increase in visitation and subsequent visitor spending attributable to the proposed Yacht Club at Summer's End, a developer based in St. Thomas is reopening the previously neglected and dilapidated Voyages building which will feature a new restaurant and retail offerings.

Figure 6.5: Comparison of Voyages building Before and After Reopening

Voyages Before Reopening (Source: SEG)

Voyages After Reopening (Source: SEG)

6.7 Job Training and Mentorship

The Yacht Club at Summer's End will provide mentorship and internship programs for local students to help them develop their professional careers in the marine industry and beyond. Additionally, a scholarship program will be established in support of advanced education for local students further preparing them for successful, productive lives. The mentorship, internship and scholarship programs will be supported by an annual budget of up to $50,000 to ensure their success.

7 Conclusion

The Yacht Club at Summer's End (YCSE) is a 144 wet slip, full service marina consisting of both docks and upland components being developed on St. John, USVI by The Summer's End Group, LLC. The proposed facility is designed to offer a safe, quiet dockage for boats ranging in size from 30' – 160'+. The marina docks accommodate the needs of local power and sail boat owners, fleet charter, sport fishing, motor yachts and nearly all types of transient boats. According to industry standards, the Yacht Club at Summer's End is a smaller, medium size marina (100-249 slips). The facility is to be located on property specifically zoned for marinas, W-1 Waterfront Pleasure.

As noted by the Bureau of Economic Research[6], "Current macroeconomic indicators show the U.S. Virgin Islands economy is emerging from a deep contraction wrought by the recession…but the pace of progress has been slow, subpar, and uneven." While the unemployment rate in the USVI has declined, it still lags far behind the US unemployment rate. As of 2016, the unemployment rate in the USVI was 11.1% compared to 4.9% in the US. Travel and tourism represents an important industry in the USVI, and projects like YCSE will complement existing resources on St. John and the entire USVI, helping to drive growth as the USVI economy continues to rebound.

One-time development costs for St. John Marina will generate a total economic impact of $29.7 million, including $19.2 million in total labor income. One-time impacts will also include 240 total jobs and more than $622,000 in territory tax revenue.

Figure 7.1: Summary One-Time Economic Impacts Attributable to the Development of St. John Marina (US $ Millions and Total Jobs)

Description	One-Time Economic Impacts Attributable to Development
Total Economic Impact ($ Millions)	$29.7
Total Labor Income ($ Millions)	$19.2
Total Jobs	240
Total Territory Tax Revenue	$622,335

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

In the first of year of operations, St. John Marina will generate a total economic of $8.3 million, including $1.2 million in labor income, supporting 25 jobs. Total territory tax revenue will amount to approximately $185,000. Over the first five years of operations, the total economic impacts attributable to St. John Marina will amount to $45.2 million,

[6] U.S. Virgin Islands Economic Review, Bureau of Economics Research (2016)

including $6.4 million in total labor income, supporting approximately 28 annualized. Total territory tax revenue over the first five years will exceed $1.0 million.

Figure 7.2: Summary Annual Economic Impacts Attributable to Operational Expenditures at the Yacht Club at Summer's End (First Five Years of Operations, US $ Millions and Total Jobs)

Description	Year 1 Impacts	Year 2 Impacts	Year 3 Impacts	Year 4 Impacts	Year 5 Impacts	Total Impacts, Years 1 through 5
Total Economic Impact ($ Millions)	$8.3	$9.0	$9.0	$9.3	$9.8	$45.2
Total Labor Income ($ Millions)	$1.2	$1.3	$1.3	$1.3	$1.3	$6.4
Total Jobs (Annualized)	25	28	28	29	29	28
Total Territory Tax Revenue	$185,240	$200,630	$200,630	$207,903	$219,046	$1,013,448

Source: Tourism Economics (2017). Note: Totals may not add due to rounding.

Beyond the economic and fiscal impacts attributable to construction costs and annual operations, the proposed marina will also generate important impacts within the local community of St. John. As previously noted, the marina will be located in Coral Harbor. Coral Harbor's proximity to Drake's Passage and the British Virgin Islands makes it the perfect location for a marina from which both USVI sailing and motor charter vessels could begin to claim a portion of the vibrant recreational boating industry. In addition to its prime location, The Yacht Club at Summer's End was designed to serve the needs of local boaters on St. John and provide provisioning, and most important to the environment, proper solid and wastewater disposal. To assist in providing a better environment for Coral Harbor and Coral Bay, the St. John marina has committed funds for ongoing mitigation and monitoring of the environment both on sea and land.

An important aspect of St. John Marina is that it will bring much needed improvements to Coral Harbor, an area that has experienced declines in property values, population, and jobs over recent years. The planned public improvements, new facilities, renovated structures, retail opportunities, and property rentals, along with the associated positive economic and job impacts, will all contribute to revitalization in and around Coral Harbor.

Overall, the proposed Yacht Club at Summer's End will generate a combination of economic and fiscal impacts, as well as positive community impacts, that will drive economic growth and revitalization within the local community of Coral Harbor and the broader economy of the US Virgin Islands.

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