# **U.S. Virgin Islands**

The U.S. Virgin Islands (USVI) is comprised of three large islands-St. John, St. Thomas, and St. Croix-and several small islands, all of which are part of the Virgin Islands Archipelago. Politically, the USVI is divided into three counties, St. John, St. Thomas, and St. Croix (Figure 18). St. Croix, the largest (approximately 215 square kilometers) and most populated island supports large industries such as tourism and oil refining. St. Thomas is the territory's capital and home to the port

## **Key Facts**

- 111,991 Population (2008)
  - 162 Population Density (2008) (persons per sq km)
  - 54 Number of residents per square kilometer of potential coral reef habitat within the 180 meter depth curve. (2008)
- 40,648 Households (2000)

50,202 Housing Units (2000)

of Charlotte Amalie. St. John is located approximately four miles east of St. Thomas and is accessible only by boat (as it has no airport). Most of the land on St. John is parkland and undeveloped. Tourism is the largest industry in both St. Thomas and St. John Counties.

The coral reefs found offshore of St. Thomas and St. John are distributed patchily around the islands and are described as fringing and patch formations. A developed barrier reef system surrounds St. Croix on its eastern and southern shores. Further offshore, bank reefs and patch reefs can be found at greater depths (21). The extent of coral reef habitat surrounding USVI is summarized in Table 24 and illustrated in Figure 26.

	St. Thomas,		
Habitat Type	St. Croix	St. John	Total
Depth Curves (sq km)			
18 Meter Line	226.3	117.8	344.1
180 Meter Line	373.7	1,691.7	2,065.5
Mapped Coral Habitat <sup>1</sup> (sq km)			
Coral Reef Hardbottom	233.9	64.7	298.6
Submerged Vegetation	72.5	88.0	160.5
Unconsolidated Sediment	12.4	11.40	23.8
Other Delineations	4.2	3.0	7.2

Table 24. Approximate area (in square kilometers) of coral reef habitat surrounding the USVI. Source: Rohmann et al., 2005.

# Population

In 2000, the population of the USVI reached 108,612 people; in 2008 it is estimated to be just under 112,000 (35, 49). St. Croix County contains 49% of the population, St. Thomas County 47%, and St. John County 4%. From 1970 to 2008, the entire USVI population increased by over 48,000 people, or 77%. St. Thomas County showed the greatest absolute increase, growing by over 23,200 people, and St. John County showed the fastest rate of growth at 171% (49).

By 2015, the population is projected to increase by over 3,000 people, with St. John growing by 11% percent and St. Croix and St. Thomas Counties growing by 2% each. Figure 27 presents this expected change by county (49).

In 2008, the population density was estimated to be 162 persons per square kilometer. The most densely populated county was St. Thomas with approximately 650 persons per square kilometer. The most populated city in the USVI, Charlotte Amalie, is located on the southwestern side of St. Thomas. The second most densely populated county was St. Croix with a density of 98 persons per square kilometer (49). Figure 26 illustrates the concentrations of population in relation to adjacent coral reef habitats.



A beach on St. John Island. Credit: Dana Wusinich-Mendez, NOAA Office of Ocean and Coastal Resource Management

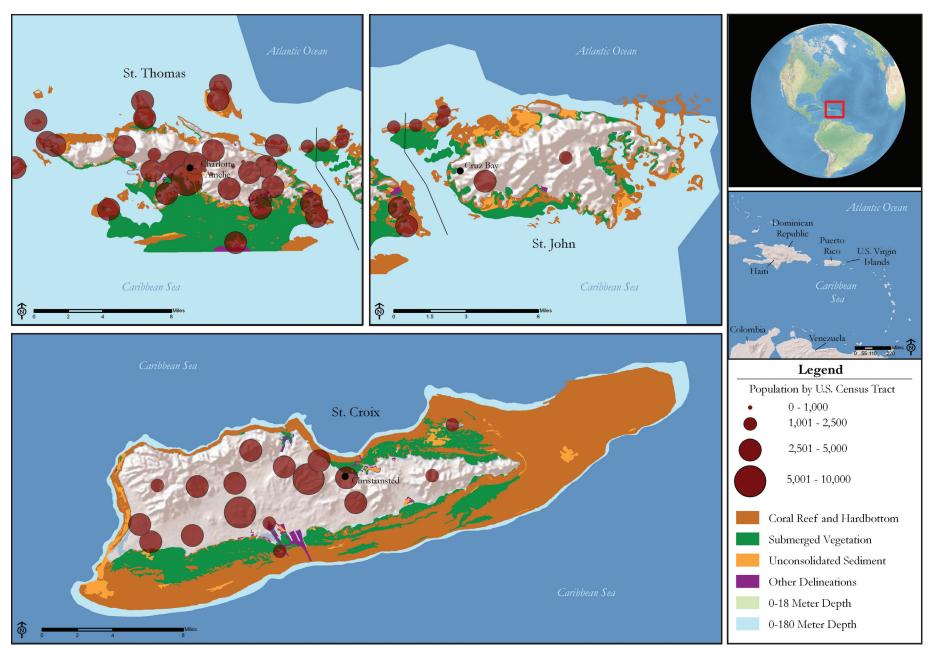
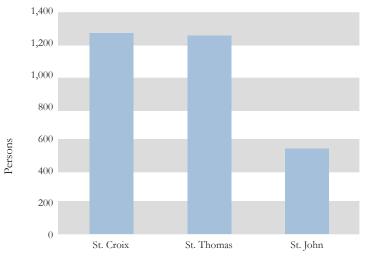


Figure 26. Population of USVI by U.S. Census tract adjacent to coral reef habitat. The population markers are shown at the center of each tract and should not be interpreted as exactly where population resides.

Source: U.S. Census Bureau, 2000; Rohmann et al., 2005.



County

Figure 27. Expected population change in USVI from 2008 to 2015 by county. Source: Woods and Poole Economics, Inc., 2007.

Table 25 presents the ratio of the area of potential coral reef habitat and mapped coral reef habitat to the number of residents in the study area. When compared to other study areas, USVI has the lowest number of residents per square kilometer of potential coral reef habitat within the 0-180 meter depth curve. However, when considering this fact, the

Habitat Type	Area of Coral Reef Habitat in USVI	Persons Per Sq Km of Potential Coral Reef Habitat in 2008
Depth Curves (sq km)		
18 Meter Line	344.1	325
180 Meter Line	2,065.5	54
Mapped Coral Habitat <sup>1</sup> (sq km)		
Coral Reef Hardbottom	298.6	375
Submerged Vegetation	160.5	698
Unconsolidated Sediment	23.8	4,706
Other Delineations	7.2	15,554

Table 25. Ratio of the area of potential coral reef habitat and mapped coral reef habitat to population in USVI.

Source: Woods and Poole Economics, Inc., 2007; Rohmann et al., 2005.

significance of the very large number of visitors to the USVI should be taken into account (see the Highlighted Issue sidebar on page 50).

#### Gender

In 2000, the population was 48% males and 52% females. This ratio was consistent across all counties. Of individuals greater than 15 years of age, 42% were married, 41% had never been married, and approximately 12% had been divorced (35).

#### Race/Ethnicity

In 2000, the population was comprised primarily of black or African American individuals, who made up approximately 76% of the population. The remaining population was white (13%), other (6%), two or more races (3%), and Asian (1%) (35).

## Age

Thirty-two percent of the total population in 2000 ranged in age from 0-17, followed by the age groups 45-59 (21%), 35-44 (14%), 25-34 (13%), 18-24 (8%), 60-69 (8%), 70-79 (4%), and 80+ (2%). This was generally consistent across the two most populated islands, St. Croix and St. Thomas. On St. John, individuals aged 45-59 outnumbered those aged 0-17 (35).



An underwater scene off St. John, July 2005. Credit: NOAA CCMA Biogeography Team

#### Households

In 2000, the total number of households in the USVI was 40,648. Sixty-six percent of these were family households; of these, 36% were two-person and 25% were three-person households. These percentages were generally the same across all counties. Most non-family households contained only one person (88%) (35).

#### Language

The primary language spoken in the home was English (68%), followed by Spanish or Spanish Creole (20%), French or French Creole (10%), and other languages (2%) (35).

#### Place of Birth

Of the total population, 48% were born in the USVI, 34% were born in a foreign country, 14% were born in the United States, and 4% were born in Puerto Rico or another U.S. island area. The county with the highest number of individuals born in the USVI was St. Croix with 23% (35).

#### Income

In 2000, the average median household income was approximately \$26,925 per year. This is shown in Figure 28. Approximately 32% of the population was living below the poverty level (35).

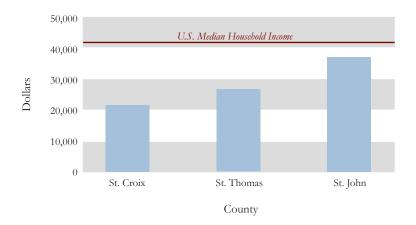


Figure 28. Median household income in USVI in 2000 by county. Source: U.S. Census Bureau, 2000.



Boating is a prominent commercial and recreational activity in communities along the coast. Credit: Dana Wusinich-Mendez, NOAA Office of Ocean and Coastal Resource Management

# Highlighted Issue: Tourism and Recreation

Tourism and recreation can include numerous activities directly affecting coral reef habitat such as snorkeling, scuba diving, boating, fishing, and collecting reef species. Resorts, marinas, and cruise ship operations may indirectly affect coral reef habitat due to increases in oil spills, sedimentation, sewage discharge, nutrient pollution and other effects (46).

The USVI are a popular tourist destination, having an average of over 600,000 land visitors per year from 2000 to 2005, plus in the same time period an average of almost two million cruise ship passenger arrivals per year (34, 44). Additionally, the number of tourist arrivals to St. Thomas and St. John quadrupled between 1970 and 2000 (21). Although St. Thomas and St. John represent some of the best examples to demonstrate a negative impact from tourism on the marine environment, it is extremely difficult to attribute this decline in environmental quality to a specific tourist activity (46).



Cruise ships at the Crown Bay Cruise Ship Port in St. Thomas Credit: Don Hebert, U.S. Virgin Islands Port Authority

## Education

In 2000, 26% of the adult population (25 years of age and over) had a high school diploma. Approximately 18% had some college or an associate's degree and 17% held a bachelor's degree or higher. This distribution is broken down by gender in Figure 29. In all education attainment categories, females outnumbered males excluding those that have not received a high school diploma (35).

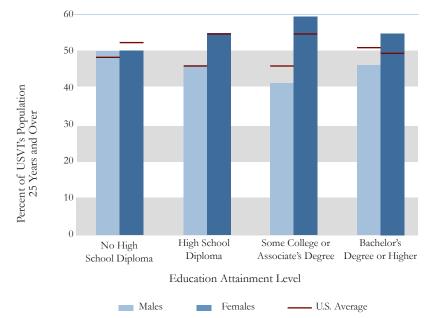


Figure 29. Education attainment by gender for the population 25 years and over in USVI in 2000. Source: U.S. Census Bureau, 2000.

## **Employment**

In 2000, 43% of the civilian population 16 years of age and over were employed. This percentage represents 46,000 people (35). The industries that employed the most people are listed in Table 26.

#### Commute to Work

For the civilian population 16 years of age, 51% worked on the island of St. Thomas, 42% on St. Croix, and 6% on St. John. The primary means of transportation to work were driving alone in a private vehicle (54%)

Industry Percent Employ	
Arts; entertainment; recreation; accommodation and food services	16
Educational; health and social services	14
Retail trade	14
Public administration	11
Construction	11
Transportation and warehousing; and utilities	7
Professional; scientific; management; administrative and waste management services	7
Manufacturing	6
Other services (except public administration)	5
Finance; insurance; real estate and rental and leasing	5
Information	2
Wholesale trade	2
Agriculture; forestry; fishing and hunting; and mining	1

Table 26. Percent of the population 16 years of age and over employed by industry in USVI in 2000. Source: U.S. Census Bureau, 2000.

and carpooling in a private vehicle (24%). These were followed by public

transportation (11%), walking (6%), working at home (2%), and other means of transportation (2%) (35).

# **Housing and Development**

#### Housing Units

There were a total of 50,202 housing units in the USVI in 2000. Of the total housing units, 37% were owner occupied, 44% were renter occupied, and 18% were reported as vacant. St. John County contained the fewest units (5% of the total), while St. Croix and St. Thomas each accounted for about half of the remaining 95% (35).

## Plumbing Facilities

In 2000, only about 5% of the housing units lacked complete plumbing facilities (35).

## Source of Water

In 2000, the use of cisterns, tanks, or drums accounted for 52% of the total water source for housing units. Of the total housing units, 46% were connected either to a public water system or to a public water system with cistern supplementation. About 2% of housing units used public standpipes or other unspecified means of water source (35).

#### Sewage Disposal

In 2000, just fewer than 52% of housing units had public sewer connections, while 45% were on septic tank or cesspool systems. Just under 4% of units were reported as using other means of sewage disposal. St. John County had the lowest total number of septic tanks/cesspools among the three counties, but it also had the highest percentage (78%) of units on septic tanks/cesspools (35).

#### Building Permits<sup>2</sup>

Data for building permits was not readily available for the USVI.

## Tourism

From 2000 to 2005, an average of 604,593 tourists per year (excluding same-day visitors) visited the USVI. Most of the visitors (89%) were from the Americas (34). Furthermore, during this same time period there was an average of 1,916,233 cruise ship passenger arrivals per year (44).



St. Croix reef scene, USVI. Credit: NOAA CCMA Biogeography Team