

# ST. KITTS & NEVIS

## NDPBA SUBNATIONAL PROFILE



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PARISH PROFILE

# ST. KITTS & NEVIS SAINT PAUL CHARLESTOWN

Area: 3.60 km2

# RISK AND VULNERABILITY



COMPONENT SCORE

**MULTI-HAZARD RISK (MHR)** 

- Very Low Score: 0.347 • Rank: 13/14

Score: 0.631 • Rank: 2/14

**MULTI-HAZARD EXPOSURE (MHE)** 

**RESILIENCE (R)** 

- Very High

- Low



Total Population (2022) **1,888** 



Population Under Age 15 22.1%



Housing Built Prior to 2000 67.9%



Households without Home Insurance **49.4%** 



Coastline Exposure to Local or Global Threats 80.2%



#### VULNERABILITY (V) - Moderate

Score: 0.491 • Rank: 8/14

Score: 0.302 • Rank: 11/14



#### COPING CAPACITY (CC) - Very High Score: 0.752 • Rank: 2/14



RANK: 11 / 14 PARISH SCORE: 0.302



**Raw MHE** 0.111

**Relative MHE** 0.492

#### **ESTIMATED EXPOSURE TO EACH HAZARD:**



**Coastal Flooding** 2%

**4**0

Buildings Exposed: 3% Critical Infrastructure Exposed: 9%



Earthquake 100%

**2**,350

Buildings Exposed: 100% Critical Infrastructure Exposed: 100%



**Hurricane Winds** 100% 2,350

Buildings Exposed: 100% Critical Infrastructure Exposed: 100%



Landslide 0%

**2** 0

Buildings Exposed: 0% Critical Infrastructure Exposed: 0%



**Extreme Heat** 100%

# 2.350

Buildings Exposed: 100% Critical Infrastructure Exposed: 100%



Flash Flood 5%

**116** 

Buildings Exposed: 3% Critical Infrastructure Exposed: 9%



Sea Level Rise



Buildings Exposed: 3% Critical Infrastructure Exposed: 9%



Tsunami 50% **1**,180

Buildings Exposed: 56% Critical Infrastructure Exposed: 66%

NOTE: Population exposure values for Saint Kitts and Nevis are estimated using PDC's AIM model. Values may differ from Census population.

#### PARISH PROFILE



RANK: 11 / 14 PARISH SCORE: 0.302

#### ESTIMATED EXPOSURE TO EACH HAZARD (CONTINUED):



Volcano **100% 2**,350

Buildings Exposed: **100%** Critical Infrastructure Exposed: **100%** 



Buildings Exposed: **0%** Critical Infrastructure Exposed: **0%** 



#### RANK: 8 / 14 PARISH ASSESSED SCORE: 0.491

**BANK: 11/14 PARISH ASSESSED** 

RANK: 1/14 PARISH ASSESSED

Vulnerability in Saint Paul Charlestown is primarily driven by Household Infrastructure Vulnerability and Economic Dependence. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Economic Dependence**

**44.9** Economic Dependency Ratio 8.9% Population Age 65 and Over **22.1%** Population Under Age 15

1

**15.5%** Youth Bulge (population ages 15-24)

SCORE: 0.413



# Environmental Pressures

**0.00** Average Annual Population Change

513.1 8 Population C Density E: (persons per to sq km) G

80.2% Coastline Exposure Lo Local or Global Threats

**5.9%** Tree Cover Loss

SCORE: 0.781



#### Household Infrastructure Vulnerability

1 SCORE: 0.505 RANK: 9/14 PARISH ASSESSED

**67.9%** Housing Built Prior to 2000 91.2% Households with Flush Toilets **49.4%** Households without Home Insurance **89.5%** Households with Piped Water

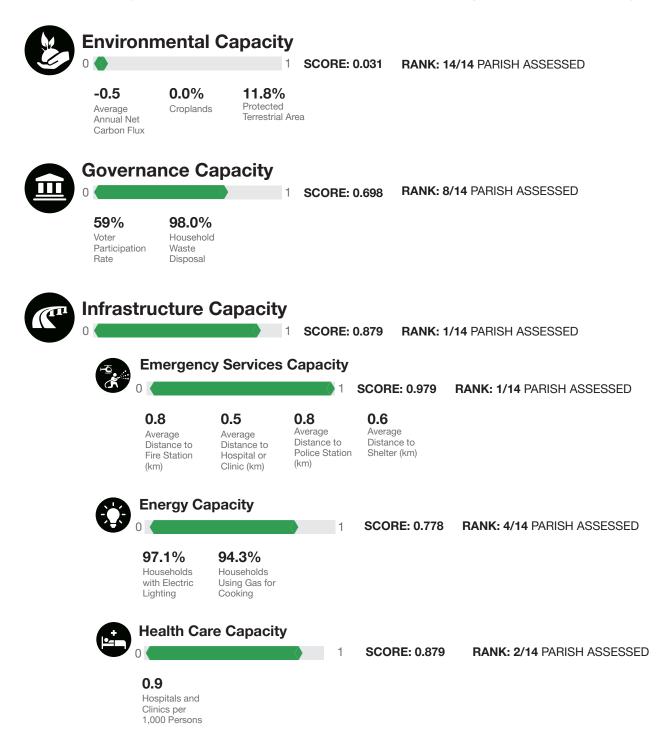
#### PARISH PROFILE



# ISLAND CAPACITY (IC)

#### RANK: 3 / 14 PARISH ASSESSED SCORE: 0.740

Saint Paul Charlestown exhibits weaker Island Capacity in the areas of Energy Capacity and Environmental Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.

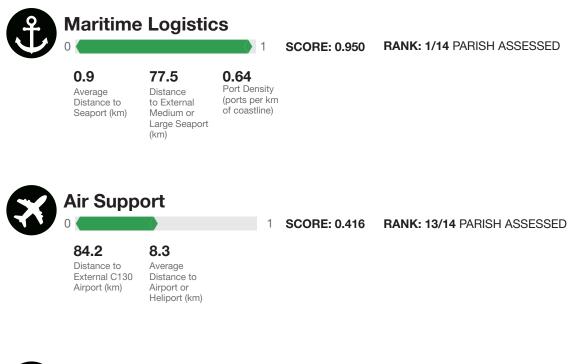


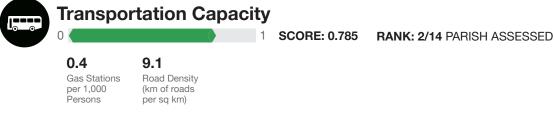


# LOGISTICS CAPACITY (LC)

RANK: 1 / 14 PARISH ASSESSED SCORE: 0.764

Saint Paul Charlestown exhibits weaker Logistics Capacity in the areas of Air Support and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.









Coping Capacity measures the systems, means, and abilities of people and societies to absorb and respond to disruptions in normal function. Coping Capacity of St. Kitts & Nevis was calculated by using a combination of Island Capacity and Logistics Capacity.

# RANK: 2 / 14 PARISH ASSESSED SCORE: 0.752



Resilience in St. Kitts & Nevis was calculated by using a combination of Vulnerability and Coping Capacity (including both Island Capacity and Logistics Capacity).

# RANK: 2 / 14 PARISH ASSESSED SCORE: 0.631

## **KEY FACTORS INFLUENCING RESILIENCE**

Saint Paul Charlestown's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



#### Household Infrastructure Vulnerability

Populations living in older housing, and prior to the enactment of modern building codes, are more susceptible to structural damage and losses as a result of hazard impacts. Furthermore, households without home insurance are more likely to face increased financial burdens and experience delays in disaster recovery processes. In addition, households experiencing access constraints to clean water and sanitation are challenged to maintain a standard of living that meets basic household needs, and face significant demands on daily routines that effectively limit their response and recovery capacity as well as the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



#### **Economic Dependence**

Households with dependent populations, such as the very young and elderly, or young people with limited means and opportunities often lack available financial resources to invest in mitigation and preparedness measures that facilitate short- and long-term recovery. Furthermore, these populations can experience difficulty mobilizing and evacuating in a timely fashion and therefore become even more susceptible to harm during times of disaster. Plans and strategies must consider the special accommodations and care considerations for these populations during response and recovery, including evacuation and sheltering.



#### **Air Support**

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



#### **Transportation Capacity**

Dense road networks and refueling locations facilitate the evacuation of populations during a disaster and increase the ability of response stakeholders to access affected populations. Improved transportation capacity supports the ability to distribute resources before, during, and after a disaster.

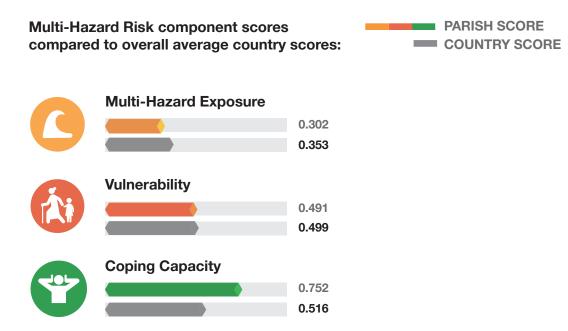
HAZARD-SPECIFIC RISK (HSR)		
	Coastal Flooding	RANK: 8 / 14 PARISH ASSESSED SCORE: 0.337
-MM-	Earthquake	RANK: 14 / 14 PARISH ASSESSED SCORE: 0.452
	Extreme Heat	RANK: 14 / 14 PARISH ASSESSED SCORE: 0.452
	Flash Flood	RANK: 10 / 14 PARISH ASSESSED SCORE: 0.158
Q	Hurricane Winds	RANK: 14 / 14 PARISH ASSESSED SCORE: 0.452
MÈ	Landslide	RANK: 13 / 14 PARISH ASSESSED SCORE: 0.000
	Sea Level Rise	RANK: 6 / 14 PARISH ASSESSED SCORE: 0.350
	Tsunami	RANK: 5 / 14 PARISH ASSESSED SCORE: 0.405
R	Volcano	RANK: 9 / 14 PARISH ASSESSED SCORE: 0.546
B	Wildfire	RANK: 9 / 14 PARISH ASSESSED SCORE: 0.000



## **MULTI-HAZARD RISK (MHR)**

13 / 14 RANK WITHIN PARISH Score: 0.347

Saint Paul Charlestown's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability and Very High Coping Capacity scores.





**Better solutions.** Fewer disasters.

# Scifer

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