

ST. KITTS & NEVIS

SAINT THOMAS LOWLAND

NDPBA SUBNATIONAL PROFILE



ST. KITTS & NEVIS SAINT THOMAS LOWLAND

Area: 18.20 km2



RISK AND VULNERABILITY

COMPONENT SCORE



MULTI-HAZARD RISK (MHR)

- Very Low

Score: 0.364 • Rank: 11/14



Total Population (2022)

2,265



RESILIENCE (R)

- High

Score: 0.620 • Rank: 4/14



Population Under Age 15

19.3%



MULTI-HAZARD EXPOSURE (MHE)

- Low

Score: 0.332 • Rank: 10/14



Housing Built Prior to 2000

64.9%



VULNERABILITY (V)

- Very Low

Score: 0.348 • Rank: 12/14



Households without Home Insurance

49.0%



134

COPING CAPACITY (CC)

- High

Score: 0.588 • Rank: 5/14



Coastline Exposure to Local or Global Threats

34.6%



MULTI-HAZARD EXPOSURE (MHE)

RANK: 10 / 14 PARISH

SCORE: 0.332



MHE 0.332

Raw MHE 0.140

Relative MHE 0.525

ESTIMATED EXPOSURE TO EACH HAZARD:



Coastal Flooding

5%

4 138

Buildings Exposed: 4%

Critical Infrastructure Exposed: 20%



Hurricane Winds

100%

2,680

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Earthquake

100%

2,680

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

11%

306

Buildings Exposed: <1%

Critical Infrastructure Exposed: 3%



Extreme Heat

100%

2.680

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Sea Level Rise

4%

103

Buildings Exposed: 3%

Critical Infrastructure Exposed: 20%



Flash Flood

3%

83

Buildings Exposed: 2%

Critical Infrastructure Exposed: 0%



Tsunami

50%

1,330

Buildings Exposed: **50%**

Critical Infrastructure Exposed: 63%

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 10 / 14 PARISH

SCORE: 0.332

ESTIMATED EXPOSURE TO EACH HAZARD (CONTINUED):



Volcano

100%

2,680

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Wildfire

0%

& 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



VULNERABILITY (V)

RANK: 12 / 14 PARISH ASSESSED

SCORE: 0.348

Vulnerability in Saint Thomas Lowland 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

SCORE: 0.118

RANK: 14/14 PARISH ASSESSED

37.3 Economic Dependency Ratio

7.9% Population Age 65 and

19.3% Population Under Age 15

15.0% Youth Bulge (population ages 15-24)



Environmental Pressures

113.7

SCORE: 0.461

RANK: 6/14 PARISH ASSESSED

0.00 Average Annual Population

Change

Population Density (persons per sq km)

34.6% Coastline Exposure to Local or Global Threats

7.0% Tree Cover Loss



Household Infrastructure Vulnerability



1 SCORE: 0.552

RANK: 8/14 PARISH ASSESSED

64.9% Housing Built Prior to 2000

88.0% Households with Flush Toilets

49.0% Households without Home Insurance

89.1% Households with Piped Water



ISLAND CAPACITY (IC)

RANK: 10 / 14 PARISH ASSESSED

SCORE: 0.478

Saint Thomas Lowland exhibits weaker Island Capacity in the areas of Health Care Capacity and Governance Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



Environmental Capacity

0.0%

Croplands

0

SCORE: 0.151 RANK: 12/14 PARISH ASSESSED

-2.5
Average
Annual Net
Carbon Flux

14.6%

Protected Terrestrial Area



Governance Capacity

1 SCORE: 0.240 RANK: 12/14 PARISH ASSESSED

55%Voter
Participation
Rate

97.2%Household Waste Disposal



Infrastructure Capacity

1 SCORE: 0.651 RANK: 7/14 PARISH ASSESSED

-<u>5</u>

Emergency Services Capacity

0 SCORE: 0.833 RANK: 4/14 PARISH ASSESSED

3.3 Average

Average Distance to Fire Station (km) 1.2
Average
Distance to
Hospital or
Clinic (km)

1.3 Average Distance to Police Station (km) **0.8**Average
Distance to
Shelter (km)



Energy Capacity

SCORE

SCORE: 0.734 RANK: 7/14 PARISH ASSESSED

95.9% Households with Electric

Lighting

95.9% Households Using Gas for Cooking

Health Care Capacity

0 1

SCORE: 0.386 RANK: 6/14 PARISH ASSESSED

0.4

Hospitals and Clinics per 1,000 Persons



LOGISTICS CAPACITY (LC)

RANK: 3 / 14 PARISH ASSESSED

SCORE: 0.699

Saint Thomas Lowland exhibits weaker Logistics Capacity in the areas of Air Support and Maritime Logistics. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.



Maritime Logistics

0 1

SCORE: 0.744 RANK: 2/1

RANK: 2/14 PARISH ASSESSED

1.3
Average
Distance to
Seaport (km)

77.5
Distance to External Medium or Large Seaport (km)

0.28Port Density (ports per km of coastline)



Air Support

0

1 SCORE: 0.518 RANK: 7/14

RANK: 7/14 PARISH ASSESSED

84.2 Distance to External C130 Airport (km) **5.1**Average
Distance to
Airport or
Heliport (km)



Transportation Capacity

0 SCORE: 0.745 RANK: 3/14 PARISH ASSESSED

0.8Gas Stations per 1,000
Persons

5.3Road Density (km of roads per sq km)



Warehouse Access

0

SCORE: 0.791 RANK: 5

RANK: 5/14 PARISH ASSESSED

Average
Distance to
Warehouse

(km)

77.5
Distance to
CDEMA SubRegional Focal
Point (km)



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: 5 / 14 PARISH ASSESSED

SCORE: 0.588



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

RANK: 4 / 14 PARISH ASSESSED

SCORE: 0.620

KEY FACTORS INFLUENCING RESILIENCE

Saint Thomas Lowland's score and ranking are due to Very Low Vulnerability combined with 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.



Health Care Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



HAZARD-SPECIFIC RISK (HSR)

	Coastal Flooding	RANK: 3 / 14 PARISH ASSESSED SCORE: 0.463
\\rangle	Earthquake	RANK: 12 / 14 PARISH ASSESSED SCORE: 0.462
	Extreme Heat	RANK: 12 / 14 PARISH ASSESSED SCORE: 0.462
	Flash Flood	RANK: 11 / 14 PARISH ASSESSED SCORE: 0.098
	Hurricane Winds	RANK: 12 / 14 PARISH ASSESSED SCORE: 0.462
Ž	Landslide	RANK: 9 / 14 PARISH ASSESSED SCORE: 0.144
	Sea Level Rise	RANK: 3 / 14 PARISH ASSESSED SCORE: 0.462
(C)	Tsunami	RANK: 6 / 14 PARISH ASSESSED SCORE: 0.404
\$\frac{\lambda}{3}	Volcano	RANK: 8 / 14 PARISH ASSESSED SCORE: 0.560
	Wildfire •	RANK: 9 / 14 PARISH ASSESSED SCORE: 0.000



MULTI-HAZARD RISK (MHR)

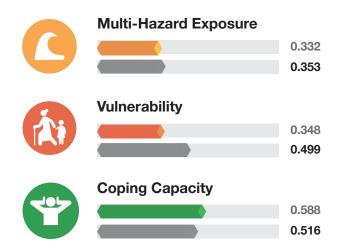
11 / 14 RANK WITHIN PARISH

Score: 0.364

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

Multi-Hazard Risk component scores compared to overall average country scores:







Better solutions. Fewer disasters.

Safer Morida

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org