

# DOMINICA SAINT JOHN

## NDPBA SUBNATIONAL PROFILE



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PARISH PROFILE



Area: 59.1 km2



#### **RISK AND VULNERABILITY** COMPONENT SCORE

**RESILIENCE (R)** 

- High

- High

- Low

- High



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

- Low Score: 0.425 • Rank: 8/10

Score: 0.621 • Rank: 3/10

Score: 0.518 • Rank: 3/10

Score: 0.375 • Rank: 7/10

**COPING CAPACITY (CC)** 

Score: 0.617 • Rank: 3/10

**VULNERABILITY (V)** 

**MULTI-HAZARD EXPOSURE (MHE)** 



Total Population (2011) 6,422



Coastal Population Concentration 80.7%



Poverty Rate 10.2%



Households with Reduced Water Availability 21.2%



Coastline Exposure to Local or Global Threats **61.3%** 

.

38

# **MULTI-HAZARD EXPOSURE** (MHE)

**RANK: 3 / 10 PARISHES ASSESSED** SCORE: 0.518



**Raw MHE** 0.402

**Relative MHE** 0.635

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



**Coastal Flooding** 

7% **475** 

Buildings Exposed: 10% Critical Infrastructure Exposed: 15%



Earthquake 100%

**2** 7,040 Buildings Exposed: 100% Critical Infrastructure Exposed: 100%



**Hurricane Winds** 100% **7,040** Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%

Landslide 5%

**4** 331 Buildings Exposed: 3% Critical Infrastructure Exposed: 11%



**Extreme Heat** 43%

## **3.040**

Buildings Exposed: 36% Critical Infrastructure Exposed: 22%



Sea Level Rise



Buildings Exposed: 7% Critical Infrastructure Exposed: 8%





2.650

Buildings Exposed: 56% Critical Infrastructure Exposed: 69%



Tsunami 19% **1**,350

Buildings Exposed: 33% Critical Infrastructure Exposed: 40%

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

#### PARISH PROFILE

## MULTI-HAZARD EXPOSURE (MHE)

RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.518

## ESTIMATED EXPOSURE TO EACH HAZARD (CONTINUED):



Volcano 96% 26,740

Buildings Exposed: **97%** Critical Infrastructure Exposed: **99%** 



Buildings Exposed: 2% Critical Infrastructure Exposed: <1%



#### **RANK: 7 / 10 PARISHES ASSESSED SCORE: 0.375**

RANK: 10/10 PARISHES ASSESSED

Vulnerability in Saint John is primarily driven by Environmental Stress and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

SCORE: 0.000

1

1



## Economic Constraints

46.7 Economic Dependency Ratio

0

10.2% Poverty Rate



## **Environmental Stress**

SCORE: 0.826 RANK: 1/10 PARISHES ASSESSED

<b>80.7</b> %	61.3%	65.0%
Coastal Population Concentration	Coastline Exposure to Local or Global Threats	Tree Cover Loss



## Household Infrastructure Vulnerability

1 SCORE: 0.118 RANK: 9/10 PARISHES ASSESSED

9.5% Housing Built Prior to 2003

n



#### Household Composition and Vulnerable Health 1

9.7%

Over

Population

Age 65 and

1

SCORE: 0.196 RANK: 10/10 PARISHES ASSESSED

3.8% Prevalence of Disability (per 100 persons)

0.5% Institutionalized Population

22.1% Population Under Age 15



## **Population Pressures**

108.7

Population

(persons per sq km)

Density

2.3% Average Annual Population Change

18.6% Youth Bulge (population ages 15-24)

SCORE: 0.736

RANK: 1/10 PARISHES ASSESSED

#### PARISH PROFILE



## **ISLAND CAPACITY (IC)**

#### **RANK: 4 / 10 PARISHES ASSESSED SCORE: 0.576**

RANK: 4/10 PARISHES ASSESSED

Saint John exhibits weaker Island Capacity in the areas of Emergency Service and Health Care Capacity and Environmental Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



## **Environmental Capacity**

SCORE: 0.399 1 RANK: 3/10 PARISHES ASSESSED 20.1% 0.04% 93.2 44.7% Protected Protected Croplands Net Carbon Terrestrial Area Coastlines Flux

1 SCORE: 0.651

2.5

(km)



## **Emergency Service and Health Care Capacity**

0.7 Average Distance to Shelter (km)

1.1 Average Distance to Hospital or Clinic (km)

2.5 Average Distance to Fire Station (km)

0.7 Hospitals and Average Distance to Clinics per Police Station 1,000 Persons

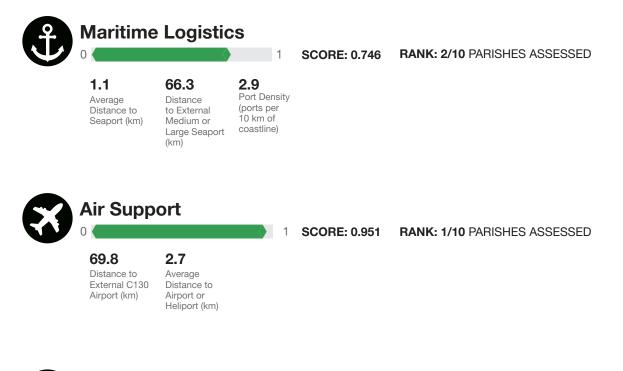
**PDC** Global 42

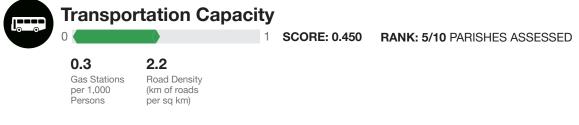


## LOGISTICS CAPACITY (LC)

RANK: 2 / 10 PARISHES ASSESSED SCORE: 0.659

Saint John exhibits weaker Logistics Capacity in the areas of Transportation Capacity and Warehouse Access. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.







Point (km)

(km)

CORE: 0.489 RANK: 8/10 PARISHES ASSESSED



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

# RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.617



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

# RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.621

## **KEY FACTORS INFLUENCING RESILIENCE**

Saint John's score and ranking are due to Low Vulnerability combined with High Coping Capacity scores.

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



## **Environmental Stress**

Environmental stressors such as the depletion or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of the population.



## **Population Pressures**

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



## **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.



## Warehouse Access

Efficient storage, movement and delivery of resources are key to effective humanitarian assistance and disaster relief operations. Access to both local and regional supply chains can significantly improve the speed and quality of response operations, reducing the negative social and economic impacts of an emergency.

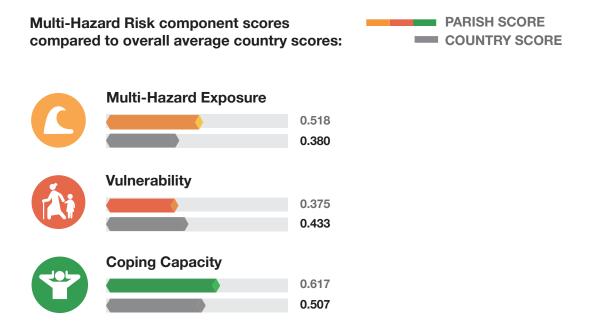
HAZ	ARD-SPECIFIC	RISK (HSR)
	Coastal Flooding	RANK: 1 / 10 PARISHES ASSESSED SCORE: 0.499
-Mp	Earthquake	RANK: 8 / 10 PARISHES ASSESSED SCORE: 0.502
	Extreme Heat	RANK: 5 / 10 PARISHES ASSESSED SCORE: 0.397
	Flash Flood	RANK: 1 / 10 PARISHES ASSESSED SCORE: 0.537
Q	Hurricane Winds	RANK: 8 / 10 PARISHES ASSESSED SCORE: 0.502
MÈ	Landslide	RANK: 10 / 10 PARISHES ASSESSED SCORE: 0.089
	Sea Level Rise	RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.459
	Tsunami	RANK: 1 / 10 PARISHES ASSESSED SCORE: 0.614
₹ <sup>2</sup>	Volcano	RANK: 4 / 10 PARISHES ASSESSED SCORE: 0.505
	Wildfire	RANK: 5 / 10 PARISHES ASSESSED SCORE: 0.164



## MULTI-HAZARD RISK (MHR)

8 / 10 RANK AMONG PARISHES Score: 0.425

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





**Better solutions.** Fewer disasters.

# Sofer

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