THE BAHAMAS

NEW PROVIDENCE

NDPBA ISLAND PROFILE

PDC | GLOBAL

THE BAHAMAS
NEW PROVIDENCE

CAPITAL: NASSAU

Area: 80 sq. mi (207.2 sq. km)

RISK AND VULNERABILITY
COMPONENT SCORE

MULTI-HAZARD RISK (MHR) - Very Low
Score: 0.316 • Rank: 14/17

RESILIENCE (R) - Very High
Score: 0.627 • Rank: 1/17

MULTI-HAZARD EXPOSURE (MHE) - High
Score: 0.542 • Rank: 4/17

VULNERABILITY (V) - Low
Score: 0.419 • Rank: 12/17

COPING CAPACITY (CC) - Very High
Score: 0.822 • Rank: 1/17

Population (2010 Census)
246,329

Population in Poverty
28.6%

Average Annual Foreign Arrivals Per Capita
15.7

Households with Piped Water
92.4%

Prevalence of Crowded Housing
29.2%

*For more information on data and components please visit: https://bit.ly/2LqVoUO

MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 17 ISLANDS
SCORE: 0.542

MHE
0.542

Raw MHE
0.962

Relative MHE
0.121

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Note: Population values from PDC's All-hazard Impact Model (AIM) leverage 2020 estimates for The Bahamas. Values may exceed 2010 Census population.

Tropical Cyclone Winds
100.0%
270,273
$31.6 Billion

Storm Surge
41.8%
113,050
$7.9 Billion

Flooding
7.8%
21,140
$618.5 Million

Wildfire
1.9%
5,014
$173.4 Million

Landslide
0.9%
2,414
$581.5 Million

Sea Level Rise
0.0%
0
$100 Thousand

VULNERABILITY (V)

RANK: 12 / 17 ISLANDS ASSESSED
SCORE: 0.419

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

Environmental Stress

0 — 1 **SCORE: 0.697** **RANK: 4/17** ISLANDS ASSESSED

74.1% Coral reef exposed to local threats
88.6% Coral reef exposed to thermal stress
27.9% Tree cover loss
1.2 per mi. (0.75 per km) Historical hurricane hits per length of coastline

Household Composition Vulnerability

0 — 1 **SCORE: 0.051** **RANK: 17/17** ISLANDS ASSESSED

2.6% Disability
6.0% Elderly population (65+)

Clean Water Access Vulnerability

0 — 1 **SCORE: 0.492** **RANK: 8/17** ISLANDS ASSESSED

92.4% Households with piped water
96.1% Households with flush toilets
5.9% Households with shared toilet facilities

Housing and Transportation Vulnerability

0 — 1 **SCORE: 0.475** **RANK: 6/17** ISLANDS ASSESSED

29.2% Crowded housing
18.7% Population without private vehicle
32.7% Housing built before 1980

Economic Constraints

0 — 1 **SCORE: 0.312** **RANK: 11/17** ISLANDS ASSESSED

48.4 Economic dependency ratio
$107 Government benefits received (Bahamian Dollars)
53.6% Non-wage earning population
28.6% Poverty rate

Gender Inequality

0 — 1 **SCORE: 0.259** **RANK: 14/17** ISLANDS ASSESSED

0.76
Ratio female to male income

1.04
Ratio female to male avg. years of school

15
Adolescent birth rate (per 1,000)

Population Pressures

0 — 1 **SCORE: 0.647** **RANK: 4/17** ISLANDS ASSESSED

16.8%
Average population change (2000 - 2010)

15.7
Average annual foreign arrivals per capita

48,338.9
Average annual foreign arrivals per sq. mile

9.1
Migration per 100 persons

ISLAND CAPACITY (IC)

RANK: 3 / 17 ISLANDS ASSESSED
SCORE: 0.640

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

Economic Capacity

0 — 1 **SCORE: 0.627** **RANK: 5/17** ISLANDS ASSESSED

0.4%
Households receiving remittances

$17,700
Median income, Bahamian dollars

Environmental Capacity

0 — 1 **SCORE: 0.327** **RANK: 10/17** ISLANDS ASSESSED

2.0%
Protected areas

27%
Coastline protected by natural habitat

0.12 oz. per sq. ft (35.8 g per sq. m)
Standing fish stock

Infrastructure Capacity

0 — 1 **SCORE: 0.772** **RANK: 2/17** ISLANDS ASSESSED

Health Care Capacity **SCORE: 0.367** **RANK: 10/17** ISLANDS ASSESSED

11.7
Physicians per 10,000

33.0
Nurses & midwives per 10,000

1.2
Clinics per 10,000

87.7%
DTP3 Vaccine coverage rate

Transportation Capacity **SCORE: 1.000** **RANK: 1/17** ISLANDS ASSESSED

11.76 mi per sq. mi (7.31 km per sq. km)
Road density

Communications Capacity **SCORE: 0.909** **RANK: 2/17** ISLANDS ASSESSED

63.0%
Internet access

98.9%
Mobile coverage

Emergency Services Capacity **SCORE: 0.648** **RANK: 6/17** ISLANDS ASSESSED

1.14 mi (1.83 km)
Average distance to police station

0.99 mi (1.59 km)
Average distance to shelter

1.6
Shelter capacity per 100 persons

Energy Capacity **SCORE: 0.938** **RANK: 3/17** ISLANDS ASSESSED

97.3%
Households with electricity

89.9%
Households with liquid propane gas

LOGISTICS CAPACITY (LC)

RANK: 1 / 18 ISLANDS ASSESSED
SCORE: 1.000

Logistics Capacity describes the ability of the island to ensure efficient storage, movement, and delivery of resources key for effective humanitarian assistance and disaster relief operations. Logistics Capacity is driven by distances to a major airport, major seaport, and disaster warehouse.

0 mi (0 km)
Distance to port

0 mi (0 km)
Distance to airport

0 mi (0 km)
Distance to warehouse

COPING CAPACITY (CC)

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

RANK: 1 / 17 ISLANDS ASSESSED
SCORE: 0.822

RESILIENCE (R)

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

RANK: 1 / 17 ISLANDS ASSESSED
SCORE: 0.627

HAZARD-SPECIFIC RISK (HSR)

Tropical Cyclone Winds	**RANK:** 15 / 17 ISLANDS ASSESSED	**SCORE:** 0.373
Storm Surge	**RANK:** 14 / 17 ISLANDS ASSESSED	**SCORE:** 0.327
Flooding	**RANK:** 9 / 17 ISLANDS ASSESSED	**SCORE:** 0.280
Wildfire	**RANK:** 6 / 17 ISLANDS ASSESSED	**SCORE:** 0.259
Landslide	**RANK:** 12 / 17 ISLANDS ASSESSED	**SCORE:** 0.299
Sea Level Rise	**RANK:** 16 / 17 ISLANDS ASSESSED	**SCORE:** 0.218

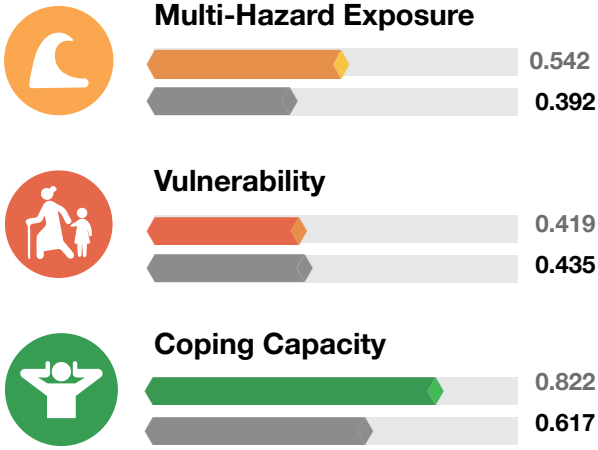
MULTI-HAZARD RISK (MHR)

14 / 17
RANK WITHIN ISLANDS
Score: 0.316

New Providence's score and ranking are due to High Multi-hazard Exposure combined with Low Vulnerability and Very High Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

NEW PROVIDENCE SCORE
COUNTRY SCORE



NEW PROVIDENCE RECOMMENDATIONS

1

Environmental Stress

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

New Providence has the 4th highest Environmental Stress ranking, driven by the 2nd highest rate of forest cover loss 28%) between 2000 and 2019, and the 4th highest number of hurricane hits per kilometer of coastline. The island has the highest single-hazard exposure to hurricane winds in the islands.

Ensure climate change adaptation strategies are incorporated into island-level and national planning. Understand climate change risks, including susceptibility to sea-level rise and storm surge. Provide education and training on sustainable development practices to both private and public entities to minimize negative impacts on the environment.

Closely monitor forest cover change and loss of natural vegetation. Develop programs to encourage replanting of natural vegetation and protection of natural areas that provide environmental buffers and/or mitigate against hazard impacts.

NEW PROVIDENCE RECOMMENDATIONS

2

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.

New Providence ranks 4th highest in overall Population Pressures in The Bahamas, with the 2nd highest density of foreign arrivals per square mile, 4th highest migration rate, and 4th highest rate of population change (17%). Significant 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.

Monitor the expansion of informal migrant settlements and unsustainable and unplanned building development in New Providence and the strain placed on the island's infrastructure and services. Implement sustainable development practices that anticipate the requirements of a growing population and consider exposure to future hazards such as hurricanes, storm surge, landslides, wildfires, flooding, and the impacts of climate change. Use a multi-stakeholder approach to address issues of sustainable housing development, social services, economic inclusion, public safety, and emergency management.

Conduct annual reviews and updates of response plans to ensure that evacuation, alert and warning procedures, and shelter operations can adequately serve residents, migrants, and visitors. Build contingencies into existing plans to manage seasonal increases in populations.

NEW PROVIDENCE RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the 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.

Despite having the highest population and three of the four hospitals in the Commonwealth, New Providence has the 8th lowest overall Health Care Capacity due to the fewest number of clinics per 10,000 persons, and the 3rd lowest DTP3 vaccination coverage. The increased need for medical services during the COVID-19 pandemic has placed a strain on existing health care systems. Those systems already operating at or near full capacity may be overwhelmed by the additional needs of a disaster-affected population.

Led by the Ministry of Health and Wellness, and engaging public and private sectors, evaluate the requirements to improve access to quality routine, preventative, and emergency health care services for the population of New Providence. Develop a plan to incrementally improve service delivery, reach underserved populations, expand health care infrastructure, and attract health care providers and staff to meet the health care needs of the growing population.

NEW PROVIDENCE RECOMMENDATIONS

4

Emergency Service Capacity

Societies establish capacities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services in New Providence will increase the capacity for disaster management and response.

Overall Emergency Service Capacity in New Providence could be improved by increasing shelter capacities. The island has the 4th highest Multi-Hazard Exposure ranking in The Bahamas and ranks 3rd lowest for shelter capacity per 100 persons. The sheltering of evacuees from other islands on New Providence, such as occurred during Hurricane Dorian, could severely overburden already limited shelter capacities during a disaster. The shelter limitations of surrounding islands should also be considered should there be a need to evacuate the considerable population of New Providence given its very high exposure to hurricane winds.

Ascertain realistic shelter requirements for New Providence and establish a task force to identify existing structures and assess their suitability for serving as shelters during an emergency. Consider dual-use options in planning new developments to better accommodate the sheltering needs of the population during a disaster. Include special considerations in disaster management and sheltering plans for those with chronic health conditions, mobility challenges or other disabilities. These individuals will require extra precautions to protect against transmission of COVID-19 or other communicable diseases during sheltering.

Develop and/or update storage plans for the island to strategically locate and warehouse disaster equipment and shelter supplies to boost overall shelter capacities.

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Better solutions.
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