Assessment of the effects and impacts of the COVID-19 pandemic in The Bahamas







Assessment of the effects and impacts of THE COVID-19 PANDEMIC in THE BAHAMAS





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Acronyms

AMCS Alternative Medical Care Site
BPL Bahamas Power and Light
BHTV Bahamas Health Travel Visa
CARICOM Caribbean Community

CDC U.S. Centers for Disease Control and Prevention

CPI Consumer Price Index

CRED Center for Research on the Epidemiology of Disasters

COVAX World Health Organization's COVID-19 Global Access Facility

COVID-19 Novel Coronavirus (2019-nCoV)
DoE Department of Education
DPH Department of Public Health
DRM Disaster Risk Management

ECLAC Economic Commission for Latin America and The Caribbean

EOC Emergency Operation Center
 EMDAT International Disaster Database
 GBPC The Grand Bahama Power Company
 GBUC Grand Bahama Utility Company

GBV Gender-Biased Violence
GDP Gross Domestic Product
GII Gender Inequality Index
HCR Harvest Control Rules
HDI Human Development Index

IDB Inter-American Development Bank

MAMR Ministry of Agriculture & Marine Resources

MoE Ministry of Education MoF Ministry of Finance

MoHW Ministry of Health and Wellness
MSMEs Micro, Small and Medium Enterprises

MTIA Ministry of Tourism, Investment and Aviation
NCCC National Coordination Committee on COVID-19

NCDs Non-communicable diseases

NHIA National Health Insurance Authority

NIB National Insurance Board
OB/GYN Obstetrics/Gynecology
OUt-Of-Pocket Payments

OxCGRT Oxford COVID-19 Government Response Tracker

PAHO-WHO Pan American Health Organization- World Health Organization

PHA Public Hospitals Authority
PMH Princess Margaret Hospital
RAT Rapid Antigen Testing
RBPF Royal Bahamas Police Force
RMH Rand Memorial Hospital

RT-PCR Real Time Reverse Transcription—Polymerase Chain Reaction

SDG Sustainable Development GoalsSDI Spatial Data InfrastructureUN-WTO World Tourism Organization

VAT Value Added Tax

WHO World Health Organization
WSC Water & Sewerage Corporation



Preface

The Bahamas is one of the most disaster-prone countries in the world. In the period 2015-2019, four major hurricanes struck this Caribbean nation causing losses of more than US\$4.0 billion, and unquantifiable loss of lives and livelihoods. Disasters also slow national and economic progress.

In September 2019 Hurricane Dorian devastated the island of Abaco and part of Grand Bahama. It was the most costly disaster in the country's recent history. Recovery and reconstruction works began before the pandemic, but reconstruction efforts have been impacted by different economic and resource challenges that have been exacerbated due to COVID-19.

The COVID-19 pandemic has disrupted the world's economic order and global public health. Social distancing measures to curb the spread of the virus created significant challenges for global economic activity. Sectors such as tourism—which depend on the movement of people—virtually shut down. The economy of The Bahamas is heavily reliant on tourism, which accounts for approximately 50% of the country's Gross Domestic Product (GDP). The pandemic also highlighted the country's socio-economic vulnerability as businesses and citizens felt the crunch These impacts highlighted the need for comprehensive Disaster Risk Management (DRM) and Health Risk Management (HRM) among other strategies and instruments to serve the country better.

The Inter-American Development Bank (IDB) is proud of its long-standing partnership with the Government, businesses, and people of The Bahamas towards improving lives and future outcomes.

Given the impact of COVID-19 on the health of citizens and the main productive sectors of the economy, the IDB responded to support recovery. The IDB formed a pilot team –Preparedness, Recovery and Reconstruction Country Team (P2RCT)– for the coordination of DRM and HRM matters in The Bahamas. P2RCT is supporting the country as it improves its response and resilience to natural disasters and other disaster events with the potential to negatively impact the country's already compromised social and economic development. Through a partnership with the Economic Commission for Latin America and the Caribbean (ECLAC), the Bank deployed a team of local and international research experts to the evaluate and collect pertinent data to prepare this report and to provide recommendations that could inform the creation of a sustainable Health Risk Management (HRM) framework.

National losses due to COVID-19 for the period 2020-2023 were estimated at BSD 9.5 billion. Note that although there was no infrastructure destruction, this is 2.7 times the cost of damages and losses due to Hurricane Dorian. The two disasters, caused by external shocks (Hurricane Dorian and the COVID-19 pandemic) are estimated to have cost the country BSD 13.1 billion. This puts the Bahamas in an even more vulnerable situation as the 2022 hurricane season begins.

Within this report there is a comprehensive overview of the effects that COVID-19 has had on the economy of The Bahamas and an accounting of the losses, broken down by sector. It analyzes key vulnerabilities and threats, and compiles findings from assessments with recommendations to build resilience in a way that honors the nation's past, while advancing the present, and preserving its future. The IDB in alignment with its HRM framework and strategy, and our Vision 2025 strategy, presents this Damage and Loss Assessment report on the effects of COVID-19 to help strengthen national initiatives for a more resilient country.

Daniela Carrera-Marquis

Representative
Country Office Bahamas (CBH)

Summary

From 1970 to 2019, according to the International Disaster Database EMDAT from CRED (2022), 20 disasters occurred in The Bahamas, all associated with hydrometeorological hazards, 18 storms and two floods. It is a noteworthy fact, the recent increase in the frequency of disasters, since 2001, fourteen storms became disasters in the country. These disasters caused a total of 423 deaths and 54,910 population affected.

The most catastrophic disaster in the history of Bahamas was Hurricane Dorian. The damaging effects were estimated to last several years. The estimated overall impact was approximately BSD 3.5 billion¹, IDB-ECLAC (2020a)². This was also, the deadliest hurricane, 370 deaths³. The storm had different impacts across the northern part of the Lucayan Archipelago, as well as across sectors. Housing suffered the most damage, while the tourism sector bore most of the losses. The effects of the disaster on the private sector were 88 % of the total. Abaco suffered 87 % of the losses and 76 per cent of the damage.

The estimated impact of Hurricane Dorian is one percentage point of the GDP. This resulted in a decrease in salaries of BSD 42 million and capital income of BSD 59.9 million. The situation was different when the focus is on local economic activity. In the case of Abaco, the impact was estimated at 7.1% of its GDP. Taking place on that island, 47 percent and 60 % of the country's remuneration and capital decrease, respectively. In Grand Bahama, the impact was 1.9 of its GDP. The reconstruction efforts were estimated to last many years.

This was the situation in the Bahamas before the start of the COVID-19 pandemic. Note that the worst meteorological disaster that the country has suffered was followed, six months apart, by what has been the most catastrophic disaster in economic terms and in terms of deaths in the country's history. This pandemic overlapped and negatively affected the rebuilding process in Grand Bahama and Abaco.

As of 2020, the Bahamas had not experienced any epidemics⁴. This changed with the COVID-19 pandemic. According to the Ministry of Health and Wellness delineation's waves, The Bahamas has experienced four waves of COVID-19:

- The first was from March 9 to June 4, 2020, with 13 weeks.
- The second was from July 2, 2020, to March 4, 2021, with 35 weeks
- The third was from March 5 to December 4, 2021, with 39 weeks.
- The fourth started on December 5, 2021 and was ongoing (by the time this report was written).

By Epi Week⁵ 4, 2022, The Bahamas accounted for over 32 thousand cases confirmed. Specifically, by January 24th, 2022, The Bahamas accounted 32,238 confirmed cases and 731 deaths.

Even though the first wave exhibited the highest case fatality rate, the third wave concentrated almost 43% of the cases and reached the highest mortality rate per 100,000 (135.9) during the two years of pandemic analyzed. Moreover, New Providence concentrated around 75% of the confirmed cases because it is the island with a higher population (based on the 2010 Census, 70% of the population lived there). Despite the third wave having a similar duration to the second wave, 39 and 35 weeks, respectively, the third wave had

¹ These BSD, like the entire document, are expressed at 2021 prices. The exchange rate between the USD and BSD is 1.

² Between 2015 and 2017, the Bahamas were affected each year by a hurricane, Joaquin (2015), Matthew (2016), and Irma (2017). IDB-ECLAC did an assessment of the effects and impacts of each of them. The overall effect of these disasters was BSD 870 million at 2021 prices.

³ This information is from EMDAT. At the time of the evaluation, October 2019, 67 dead had been officially registered, and there were 282 missing.

⁴ Between 1970 and 2019, 23 epidemics occurred in the insular Caribbean, of which 12 were viral and 11 bacterial.

The countries or territories affected were Cuba, the Dominican Republic, Guadaloupe, Haiti, Jamaica and Martinique.

 $^{^{5}}$ The Bahamas identifies and enumerate each week from the beginning of the pandemic by Epi Week Numbers.

a more considerable incidence of cases in the Family Islands. To illustrate, the Family Islands has reported only 3,363 cases during the pandemic; the third wave accounted for almost 58% of those cases and exhibited the highest mortality rate.

The COVID-19 pandemic in The Bahamas has affected more women than men; women accounted for 53% of the total confirmed cases. Furthermore, around 43% of the cases reported were people between 20 and 39 years old. During the third wave, more than one-fifth of the confirmed cases were people between 30 and 39 years.

The variable Omicron triggered a sharp and unseen rise in the number of cases since the last two weeks of 2021. In fact, the first week of January 2022 the positivity rate reached 53%. This situation highlights the shifts in the contagious pace that characterizes the fourth wave. However, The Bahamas was not an isolated case, the COVID-19 pandemic experimented the same the pattern in the rest of world with the variable Omicron.

Compared with other Caribbean countries, by January 2022, The Bahamas is the third country with the highest total confirmed cases, after Belize and Barbados, accounting for over 52 and 45.22 thousand of total confirmed cases, respectively.

A pandemic has particular characteristics. It is a disaster that can last for years. On the contrary, an earthquake lasts seconds or minutes, the passage of a Hurricane could last hours and in an extreme case a few days. As of April 2022, the COVID-19 pandemic is more than two years old and four waves old, and its completion is still uncertain. It is a phenomenon that has a national and global connotation, unlike other disasters that have a local character. Lastly, a pandemic does not imply the destruction of infrastructure, so its total effects will only include additional losses and costs.

In the specific case of COVID-19, estimates of the economic effects were made for the Bahamas for the period 2020-2023. Losses were estimated at BSD 9.5 billion at 2021 prices (Table 0-1). An event such as a pandemic is not insurable, so no percentage of these losses was covered by insurance.

Note that despite no infrastructure destruction, this is 2.7 times the cost of damages and losses of Hurricane Dorian and between the two disasters they add up to BSD 13.1 billion. This puts the Bahamas in a vulnerable situation before the start of the new hurricane season.

The vast majority of losses, 84%, are concentrated between 2020 and 2021. The worst year was 2020 as 48% of losses occurred. The private sector bore 93% of the losses. The most affected sector were the productive sectors that in those years suffered 91% of the total losses. The infrastructure sectors experienced 7% of the losses and the social sectors 2%. Tourism was the most affected subsector, suffering 91% of the losses of the productive sectors. Note that Tourism is an activity that encompasses various economic activities such as hotels, bars and restaurants, entertainment, internal transportation and shopping. The most affected subsector within infrastructure was the Transportation subsector, which registered 88% of the losses.

Regarding additional costs, information was only provided in three sectors: Education, Tourism and Health. It is worth noting the health costs of fiscal year⁶ 2020/2021. The sum of the expenses to respond to the COVID-19 pandemic on the health sector represented in 2021 approximately 14% of the total budget of the Ministry of Health and Wellness. The economic impact of the pandemic on that Ministry expenditures is critical. The total amount of expenses to care for the pandemic represents 109% of the approved estimates for the Department of Public Health for FY 2020-2021.

In broad terms, the economy is expected to return to its pre-pandemic level only by 2024, mainly because of the gradual pace of recovery in the tourism sector and the long-lasting effects of COVID-19 in this sector.

⁶ The fiscal year in Bahamas starts July 1 of the current year and ends up June 30 of the following year.

After growing modestly by 2.3% in 2021, the last ECLAC forecast for The Bahamas real growth GDP is projected to be 8.5% in 2022. The IMF forecasts a lackluster growth between 2023 and 2026 of an average of 1.7% per year. Thus, the recovery is projected to be gradual, with risks towards the downside due to the country's vulnerability to natural disasters.

The estimated losses for the 2020-2023 are approximately BSD 9.6 billion. According to this estimate, aggregated loses in wages of employees and workers will reach BDS 2.4 billion for the indicated period, or 4.9% of GDP per year in average; loses in the operating surplus of BDS 2.0 billion, or 4.0% of GDP per year in average, and loses in mixed income of US\$ 0.1 billion, or 0.1% of GDP. The impact on employment of these loses will be around 30 thousand jobs. This is equivalent to 14.7% of the labor force of the country and is consistent with a raise the unemployment rate up to 25.6% at the initial stages of the COVID-19 pandemic.

Table o 1: ECONOMIC LOSSES PER SECTOR (in BSD million)

	2020	2021	2022	2023
Social sectors	68.9	86.8	10.8	0.0
Health	0.0	0.0	0.0	0.0
Education	18.2	19.2	10.8	0.0
Housing	50.7	67.6	0.0	0.0
Productive sectors	4,217.6	3,068.7	1,303.7	113.1
Tourism	3,637.1	2,910.3	1,241.5	88.9
Commerce	578.6	158.4	62.2	24.2
Fisheries	1.9	0.0	0.0	0.0
Infrastructure	299.3	281.9	90.1	4.3
Transportation	269.0	248.9	73.4	3.4
Water and Sewerage	18.1	22.8	14.4	0.6
Electricity	12.2	10.3	2.3	0.3
Total	4 , 585.7	3,437.6	1,404.6	117.5

Source: Assessment team.

Below is a summary of each sectoral chapter:

Health

Additional costs of the health sector related to COVID-19 were approximately BSD 50 million at 2021 prices. Those costs were related to: a) prevention; b) treatment; c) other; d) infrastructure upgrade; e) crosscutting; f) death management; g) general supplies. Significant disruptions to hospital utilization yielded negative magnitudes of change that far exceed the pre-COVID-19 findings. Specifically, in FY2019/2020, when compared to the prior 5-year pre-COVID-19 average, disruption in access to services resulted in an almost homogeneous decline. Service types experiencing the most significant disruptions were critical care, psychiatry, and internal medicine services, with 29%, 22% and 22% declines, respectively.

Education

The losses in the education sector register a total of BSD 48.2 million, 51% of which is due to the reduction in days of classes and 49% because tuition fees lost in the private sector. Additional costs have been estimated at about BSD 2.4 million. These costs consider the expenses that educational institutions and the Ministry of Education (MoE) of the Bahamas had to incur to restore the service, first offering virtual modality, then hybrid and ultimately face to face, as it happened since the 2019-2020 academic year until the 2021-2022 period.

Housing

According to the baseline analysis, 3,096 homes were rented by foreigners who left the country. Using the 2021 baseline home value as a base plus the land value, the loss of those rentals can be estimated in the amount of BSD 118,325 million in those 20 months, representing 0.94% of GDP in 2021. The most significant impact on the reduction of income from rental housing is noticeable in New Providence for a total of BSD82.4 million, Grand Bahama with BSD 16.6 million, Abaco with BSD 5.2 million, and Eleuthera with BSD5.0 million.

Tourism

The tourism activity suffered a severe impact worldwide because of the COVID-19 pandemic. The reductions in mobility and the fear of traveling had a profound effect, particularly in destinations that required air or sea travel. The Bahamas' main activity is tourism and got severely impacted due to the pandemic. Total losses in tourism are estimated at almost BSD 7.9 billion. Most of them consequence from the fall in stopover visitors, about BSD 6.4 billion. Also, The Bahamas got a severe blow from the temporary cessation of operations of the cruise lines, which produced over BSD 1 billion in losses. The rest of the lost income corresponds to boat stopover and excursionist, totaling BSD 373 million. The additional costs total BSD 87 million.

Commerce

The commerce sector got severely impacted due to the COVID-19 pandemic. The total losses in the commercial sales to residents due to the COVID-19 pandemic are BSD 823 million. A portion of this is related to the fact that residents spending got impacted first due to the curfews and lockdowns, and then due to a decline in household income. Another part of this is directly related to tourism, that experienced a great decline during the first year of the pandemic.

Fishery

Fishery is an important activity for the Bahamas, both economically and culturally. The impact of the COVID-19 pandemic in the sector was reduced and circumscribed to some staples. The main fishing staple (spiny lobster) was unaffected. The estimated losses are BSD 1.86 million, mostly in snapper and groupers.

Water and Sewerage

The restrictions pushed by the Bahamas' Government in response to the COVID-19 pandemic changed the patterns of residential and non-residential water and sewerage customers. For example, lockdowns instantaneously reduced water consumption in those companies or agencies that started home office. At the same time, residential consumption presented two different effects: an increase, given the suddenly high number of people isolated at home, but also a reduction, since the international borders were closed, and owners and renters ultimately vacated many second houses during a period of restrictions (with limited water consumption). Total loss for this sector rises to BSD 55.8 million, which is the combination of residential and non-residential customers. This value considers the losses of 2020 and 2021 and the projected losses for 2022 and 2023. The losses are calculated as the difference between the projected consumption in a COVID-19-free context and the projected consumption under COVID-19, considering 2020 and 2021 actual consumptions.

Transportation

Due to the Government restrictions related to the COVID-19 pandemic, the transportation system suffered a dramatic demand decrease in 2020, especially in the airport traffic and the recreational marine flow (cruises and general pleasure vessels). This situation generated a decrease in the usage of airports and marine piers according to the restrictions implemented by the Bahamas's Government. For this sector, the estimated losses are approximately BSD 595 million for the whole country, which are mainly caused by the decrease in tariff payments by air and marine passengers at airports and navy piers (92%). The rest is related to the fall in the collection of aircraft landing fees, cruises fees cargo vessels fees.

Power

Losses were estimated at BSD 25 million, of which 90% occurred between 2020 and 2021. The pandemic response measures caused people to stay in their homes longer and their electricity consumption increased, above what was expected prior to the pandemic. This makes the billing exceed that of the baseline. On the contrary, border closures and other mobility restriction measures reduced non-commercial turnover. Losses for this concept reached BSD 36 million but were partially offset by the increase in household consumption.

Methodology

The assessment of the effects and impacts of the COVID-19 pandemic in The Bahamas follows the Disaster Assessment Methodology adapted to assess an epidemic developed by the Economic Commission for Latin America and the Caribbean.

The methodology allows standardized data collection and analysis on a sectoral basis, applying the same criteria to every sector under study. In this regard, the following concepts are used in the assessment ⁷:

- (i) Effects: Damage, Losses and Additional costs
 - Damage: the effect the disaster has on the assets of each sector, expressed in monetary terms. Assets may include buildings, machinery, equipment, transportation, furnishings, roads, ports, stocks of final and semi-finished goods, among others.
 - Losses: goods that go unproduced and services that go unprovided during a period running from when the disaster occurs until full recovery and reconstruction are achieved.
 - Additional costs: outlays required to produce goods and provide services due to the disaster.
 These represent a response by both the public and the private sectors and could be additional spending or a shifting of the expenditure.

(ii) Impacts: consequences of the effects on macroeconomic variables, such as GDP, public finance, and balance of payments.

In the case of assessing the effects and impacts of an epidemic, the main difference with the standard methodology is that it does not imply the destruction of the capital stock of an economy (like an earthquake), so there is no damage. Moreover, it is relevant to keep in mind that there are two types of epidemics that we may face when conducting an assessment: 1) those that do not involve quarantines or other social distancing measures; 2) those whose control involves such measures.

Another critical difference is regarding the description of the event. The description of the event in the case of an epidemic deals with the characterization of its previous outbreaks. Since a new virus caused the COVID-19 pandemic, the background refers to the demographic and socioeconomic characteristics of the country's population because there were no previous references about how the disease would evolve. On the contrary, the demographic and socioeconomic characterization offers a baseline to identify the vulnerabilities that can be exacerbated or limit the response capacity to deal with the emergency caused by the pandemic. Furthermore, the description of the event includes the description of the affected population. The assessment includes the following sectors: (i) the social sector analysis focuses on the description of the event and the affected population, housing, health, and education; (ii) the infrastructure sector comprises transportation, electricity, and water and sanitation and (iii) the productive sectors analyzed are tourism, commerce, and fishery.

This evaluation was carried out under the political coordination of the Interamerican Development Bank in The Bahamas, under the direction of the Country Representative, Ms. Daniela Carrera-Marquis, and the technical coordination of ECLAC. The assessment team's work had to be carried out remotely, given the mobility and meeting restrictions imposed on a consequence of COVID-19. Based on information collected primarily through virtual meetings. The evaluation used official data provided by the government and public information available. In this sense, the IDB Office in the Bahamas and its team played a relevant role in facilitating contacts, organizing meetings, participating in them, and actively participating throughout the evaluation process.

⁷ ECLAC (2014). Handbook for disaster assessment. See https://www.cepal.org/sites/default/files/publication/files/36823/S2013817_en.pdf

However, the main limitation of the assessment was access to information, as it will be detailed in each pertinent sector. Due to unavailability during the evaluation or not yet collected/produced in the country, the team overcame this limitation by creating reasonable assumptions where data was unavailable and combining it with official information to estimate the effects of the COVID-19 pandemic as presented in each section.

The Event



Description of the COVID-19 pandemic in the Bahamas and its response

A. The Bahamas' Socioeconomic Characterization

According to the last census available⁸, the population of The Bahamas in 2010 was 351,461 inhabitants: 70% living in New Providence, 14.6% in Grand Bahamas, and 15.3% in the Family Islands. From the Family Islands, the most inhabited ones were Abaco (4.9%), Eleuthera (2.33%), Andros, and Exuma (see table I-1).

Table I 1: POPULATION BY ISLAND AND GENDER 2010

	Popul	By ge	ender	
Island	Total	%	Male	Female
All Bahamas	351,461	100	170,257	181,204
New Providence	246,329	70.09	117,909	128,420
Grand Bahama	51,368	14.62	24,996	26,372
Abaco	17,224	4.90	8,902	8,322
Acklins	565	0.16	320	245
Andros	7,490	2.13	3,769	3,721
Berry Islands	807	0.23	461	346
Bimini	1,988	0.57	1,063	925
Cat Island	1,522	0.43	808	714
Crooked Island	330	0.09	168	162
Eleuthera	8,202	2.33	4,058	4,144
Exuma and Cays	6,928	1.97	3,468	3,460
Harbour Island	1,762	0.50	873	889
Inagua	913	0.26	465	448
Long Island	3,094	0.88	1,535	1,559
Mayaguana	277	0.08	143	134
Ragged Island	72	0.02	44	28
Rum Cay	99	0.03	52	47
San Salvador	940	0.27	469	471
Spanish Wells	1,551	0.44	754	797

Source: Census of population and housing 2010 -1st release.

Between 2020 and 2022, the population of The Bahamas was estimated between 389,000 and 397,000 inhabitants. Table I-2 presents the results for the period 2020-2022 using the medium variant, which is qualified as "the 'most probable variant' that an expected annual growth at an average annual rate of 0.97%9." Around 51% of the population are women. Indeed, by 2020 the number of males per 100 females was 94.5 (the sex ratio, see table I-3.)

The last census was conducted digitally on September 7, 2021; however, this assessment could not access the preliminary information. See https://stats.gov.bs/census/

The Department of Statistics (2010), using separate projections with specific assumptions of fertility, mortality and migration, offered a set of projections about how the Bahamas population will change.

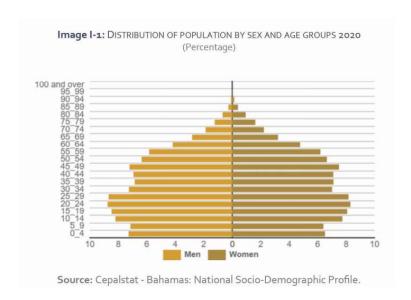
Table I 2: POPULATION PROJECTIONS 2020-2022

		2020			2021			2022	
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	389.41	188.61	200.8	393-45	190.73	202.72	397.36	192.6	204.76

Note: Using projection highlights (medium)

Source: Population Projections 2010-2040. Department of Statistics. Ministry of Finance

ECLAC (2018) estimated that in 2020 the population's median age was 32.3 years old. Along the same line, The Bahamas had 41.5 people of inactive age for every 100 people of working age (see Table I-3.) Between 2015-2020, the total fertility rate in the Bahamas (number of children per woman) was 1.83, while the proportion of people older than 65 years old was 12.5 in 2015. As a result, ECLAC (2018) classified the Bahamas as a country in a moderately advanced stage of aging because it presents a global fertility rate that is below the replacement level: 2.08 and 1.7 children per woman, while the percentage of older people range between 10% and 14%. Moreover, ECLAC (2018) foresees that in 2030, the Bahamas will be on a very advanced stage of aging in just 13 years; by 2030-2035, the proportion of older people will be over 20%, and the total fertility rate¹⁰ by 2030-2035 will be 1.76. The estimated aging rate by 2030 is 104.2, which is over the average for Latin Americans and the Caribbean countries (79.4).



Regarding vital statistics available, the rates presented in table I-3 represent records from the Registrar General's Department "within three years from the actual date the event took place." Thus, for 2017, The Bahamas registered 4,017 births and 2,372 deaths, and the natural increase is the difference between live births and deaths. The rates presented in table I-3 are per 1,000 population, expressing the relationship between the number of those events and the total population. To illustrate, during 2017, the live birth rate was 10.6, while the rate of deaths was 6.3. In the case of the number of marriages (3,574), it includes the total number (resident and non-resident marriages.)

¹⁰ Expresses the relationship between the number of older than 65 years old and the number of children and young people than 15 years old

Table I 3: SOCIOECONOMIC INDICATORS FOR THE BAHAMAS

Indicator	Value	Year
Population Structure ^a		
Dependency ratio (per 100)	41.5	
Median age of population	32.3	
Sex ratio (per 100)	94.5	2020
Old/young ratio (per 100)	35.9	
Child/woman ratio (per 100)	25.1	
Percentage of women of childbearing age	53.2	
Vital Statistics b		
Livebirths (rate)	10.6	
Deaths (rate)	6.3	
Infant Deaths (rate)	17.2	2017
Natural Increase (rate)	4.3	
Marriages (rate)	9.47	
Human Development ^c		
Human Development Index (HDI)	0.814	
Life Expectancy at birth	73.9	2010
Mean years of schooling	11.4	2019
Gender Inequality Index (GII)	0.341	
Labor Force ^d		
Participation rate	82.9%	May 2019
Participation rate - Women	76.8%	
Unemployment Rate	9.5%	
Households ^{ef}		
Number of Households	106,645	
Women Head of household	42%	May 2019
Mean Income Household	BSD 47,212	,
Median Income Household	BSD 33,352	
Mean Household size ^f	3.2	2013
Poverty and Inequality ^f		
Incidence of Poverty	12.5%	
Poverty gap	3.2	2013
Gini Coefficient	0.414	ŭ

Source: Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, 2019 revision and United Nations, World Population Prospects 2019 [online database] https://population.un.org/wpp/. See <a h

b bitstream/handle/11362/45198/4/S1900739 mu.pdf
Source: Vital Statistics Provisional Report from The Bahamas. Volume I, No. 16.

Source: UNDP. See https://hdr.undp.org/sites/default/files/Country-Profiles/BHS.pdf

d,e Source: The May 2019 Labour Force and Household Income Survey. The Department of Statistics.

f Source: Household Expenditure Survey 2013 Report (2016).

The Human Development Index (HDI) summarizes changes in three indicators:

- life expectancy at birth (70.2)
- mean years of schooling (12.9)
- the Gross National Income per capita expressed in 2017 PPP\$ (33,747)

The Bahamas has been showing progress: the HDI's value increased from 0.797 in 2000 to 0.814 in 2019. As a result, in 2019, The Bahamas was classified as a very high human development category (people can have a long life, access to knowledge, and a decent standard of living,) reaching a position 58 out of 189 countries in the world. The Bahamas HDI's value for 2019 is below the average of other countries classified as a very high human development (0.898) but above countries in Latin America and the Caribbean (0.766.) Similarly, the Gender Inequality Index (GII) reflects gender-based inequalities interpreted "as the loss in human development due to differences in female and male achievements" measurement through three indicators: maternal mortality (70,) adolescent birth rate (30,) and the share of the parliamentary seats held by women in parliament (21.8.) The GII value for the Bahamas in 2019 was 0.341, ranking the country in position 77 out of 162^{11, 12}.

In May 2019, according to the statistics available, the labor force in The Bahamas was 237,525 people (52% of them were men) distributed as follows: 69% in New Providence, 14% in the Grand Bahama, and 6% in Abaco. Around 48% of the labor force are between 25 and 44 years old. Regarding educational attainment, 57% of the total labor force had complete secondary and 22% university. The employed labor force in all The Bahamas was 214,890, 64% private employee and 21% employee from the government or a corporate associated to the government. 15% declared to be self-employed. Around 7% of the employed labor force does not have Bahamian citizenship, and the employed persons worked mainly for the following industrial groups: the Community, social and personal services (35%), hotels and restaurants (18%,) and wholesale and retail (14%)¹³.

In May 2019, the unemployment rate was 9.5% (women had 9.9% and men 9.2%) in May 2019. Grand Bahama had an unemployment rate over the national average (10.9%), as well as the women in New Providence (10.2%), while the men in Grand Bahama (13.6%) accounted for the highest rate of unemployment in the country. The higher number of unemployed were between 25 and 34 years old (5,955,) followed by people between 20 and 24 years old (4,725.) 52% of those unemployed declared to have 12 months or more without work, and 30% reported duration of layoff over three months but less than 12. The main reason for leaving the last job was completing the job or contract, or because business ceased operation (28%.); however, the main reason for women was resigned or personal reasons (33%.) The Bahamas accounted for 1,990 discouraged workers¹⁴, with 1,380 that worked before¹⁵.

The Labour Force Report from May 2019 indicated that the number of households in The Bahamas was 106,645. 42% of them had a woman as the head, Abaco the island with the lowest rate of women as head of household (35%.) In addition, 73% of the head of households were employed while almost 18% declared not to be in the labor force. The mean income for those employed was BSD 48,353, BSD 34,584 for the unemployed, and BSD 45,060 for those out of the labor force. The mean income of the households in The Bahamas was BSD 47,212, and the median income (P50) was BSD 33,352. Families with women as a head

¹¹ UNDP (2020) Briefing note for countries on the 2020 Human Development Report. The Bahamas. See https://hdr.undp.org/sites/default/files/Country-Profiles/BHS.pdf.

¹² Due to lack of relevant data, the Multidimensional Poverty Index (MPI), the Gender Development Index (GDI) and the Inequality-adjusted HDI (IHDI) are not calculated for The Bahamas.

¹³ The May 2019 Labour Force and Household Income Survey. Department of Statistics.

¹⁴ According to the International Labour Organization (ILO), a discouraged worker is a "person without work and available for work yet were not actively seeking work because they are not hopeful about their prospects of finding work."

¹⁵ The May 2019 Labour Force and Household Income Survey. Department of Statistics.

had lower incomes than those with men. For example, the median household income for women was BSD 26,720 while for men was BSD 39,000. 45% of the head of households in The Bahamas was married or under common law, and 36% was single or never married. Lastly, 63% of the homes reported having a computer, 60% access to internet services, 65% fixed telephone, and 96% television¹⁶.

Table I 4: POPULATION DISTRIBUTION, BY QUINTILE AND ACROSS REGION – 2013 (Percentages within quintile)

		Consumption quintile				
Region	Overall	1	2	3	4	5
New Providence	72.6	73.1	67.3	67.3	78.1	77.6
Grand Bahama	14.4	10.6	16.8	18.9	10.9	15.3
Family Island	13.0	16.4	15.9	13.8	11.0	7.1
Total	100.0	100.1	100.0	100.0	100.0	100.0

Source: Bahamas Household Expenditure Survey (2013).

Table I-4 shows how The Bahamas' population was distributed by consumption quintile and across the region in 2013, referencing "whether a specific region is under or over-represented in each quintile. [In this case], New Providence is over-represented in the poorest quintile and the two richest. [... While] Grand Bahama is under-represented in the quintile 1 and 4, [... and the population] in the Family Islands was under-represented in the richest quintiles." Moreover, the Household Expenditure Survey in 2013 highlighted 17:

- Uneven distribution of expenditure across the country. To illustrate, 50.3% of the people in the Family Island region belonged to the two bottom quintiles, which means that those households spent less than households in other regions. In comparison, in Grand Bahama, 14.6% belonged to the first quintile and 21.1% to the highest quintile.
- "The higher quintile population was differentiated from the lower quintile population by marital status, education, and nationality." For example, in quintile I, the mean age was 25, 59.1% single, 56.2% completed high school, and 80% were Bahamians, while 18.4% were from Haiti. By contrast, in the wealthiest quintile, the mean age was 39, 43.7% were married, 41.6% completed high school, 29.1% completed college, 90.2% were Bahamians, and 4.7% were from the US, Canada, and the UK.
- 87.7% of the population has Bahamian nationality; Haitians are the second-largest group (7.5%.)
- The living conditions of the migrants varied across nationalities. For instance, migrants from Haiti were more likely to be in the first and second quintile (75.7%), while migrants from the USA, Canada, and the UK were more likely (78.3%) to belong to the higher quintiles (4 and 5.)
- The mean household size was 3.2, New Providence was 3.4, Grand Bahama was 3.1, and the Family Islands were 2.8. The number of members decreased the per capita consumption: 62.9% of the households with one person were in the quintile 5, whereas 40.9% with six or more members were in the quintile 1.

The latest official poverty estimations for The Bahamas are from the Household Expenditure Survey in 2013, showing an increase in the incidence of poverty in comparison with 2001 (9.3%). At the national level, the

¹⁶ The May 2019 Labour Force and Household Income Survey. Department of Statistics.

¹⁷ Bahamas' Household Expenditure Survey 2013.

incidence of poverty was 12.5%; however, across regions, the incidence levels varied: Family Islands had the highest (17.2%) incidence of poverty with around five points over the national average. In comparison, Grand Bahama had the lowest with 9.4%. Although New Providence had an incidence of poverty very similar to the national level (12.4%), this region concentrated 71.5% of the people classified as poor. Breaking down by nationality, 37.7% of the people from Haiti were classified as poor, having the highest incidence of poverty (three times the national average), while nationals only 11.1% and people from the USA, Canada, and the UK 4.9%. Furthermore, the Household Expenditure Survey in 2013 presented the incidence of poverty by the following characteristics of the head of household classified as poor: women (9.7), common-law as marital status (17.1), Haiti nationality (27.9), age between 15 and 24 years old (16.7), no education (24.9), household size bigger than seven members (32.1), with at least one child under 14 years old (14.3).

The Gini index is a measure of inequality across the population. It ranges between 0 and 1; a value of 0 is perfect equality while a value of 1 is perfect inequality. In the case of The Bahamas, the Gini coefficient estimated in 2013 was 0.414. New Providence had higher levels of inequality (0.425) while Grand Bahama had the lowest (0.369). The level of household per capita consumption expenditure in the first decile was B\$ 2,929 and in the wealthiest decile (10) was B\$ 41,076.

Moreover, The Bahamas 2013 Household Expenditure Survey also presented estimations of inequality by consumption expenditure category. Thus, education (0.727,) alcoholic beverages, tobacco and narcotics (0.704,) recreation and culture (0.682,) and health (0.675) presented the highest level of inequality (over the Gini coefficient for total consumption expenditure in the country.) By contrast, the food and non-alcoholic beverages (0.341) was the only one below the total.

In September 2019, The Bahamas was severely affected by Hurricane Dorian. Specifically, the most significant impact was on Grand Bahama and Abaco and some impact on New Providence. IDB/ECLAC (2020a) estimated that approximately 29,472 persons were affected by damage to their homes and assets¹⁸. In December 2019, through the Labour Force Survey, the Government attempted to provide some insight into the impact of hurricane Dorian. The results showed that approximately 3,360 persons relocated to New Providence; 83% were from Abaco and the rest from Grand Bahama. Around 54% of the persons relocated were women. The survey asked if they would return to their island, so 32% answered yes within 12 months, while 34% declared they would not be sure if they would return. By contrast, 16% reported that they did not intend to return. For the people who intend to return to their island, the main reasons to remain in New Providence were the cost of rebuilding (60%) and availability to get building supplies there (40%). Conversely, the main reasons for people who did not intend to return were uncertainty about the conditions on the island (48%), cannot afford to rebuild (36%), found a job (28%), or built a new home (27%) in New Providence¹⁹.

Civil Society in The Bahamas consists of various organizations representing different causes. These organizations can be community groups, NGOs, labor unions, faith-based organizations, professional associations, and foundations. Civil Society Organizations in The Bahamas are mainly active in the environment, education, health, including mental, gender, persons with disabilities, labor unions, small businesses, hotel associations, and animal protection and care²⁰.

¹⁸ Moreover, the assessment reported "67 confirmed deaths and 282 persons still missing as of October 18, 2019. The number of related injuries recorded by the health authorities was over 200 a week after the passage of the hurricane. Approximately 4,861 persons were registered by the Department of Social Services during the evacuation process IDB/ECLAC (2020a)

¹⁹ PRESS RELEASE Preliminary Results Labour Force Survey New Providence December 2019. Department of Statistics.

²⁰ Civil Society Bahamas and The Bahamas Humane Society.

B. The COVID-19 pandemic in numbers

This section is based and used the information received from the Ministry of Health and Wellness (MoHW), publicly available information, and previous assessments up to January 31st, 2022All the meetings with the MoHW were held virtually, given the sanitation context.

1. Primary Affected Population

ECLAC defines the primary affected population in a pandemic as the following²¹:

"The primary affected population is the people who got the disease: the confirmed cases, how many died, how many went to intensive care, and how many recovered. [...] In the case of COVID-19, it is equally desirable to measure the people who could have been infected but were asymptomatic. In the case of a pandemic, the description of the event implies an estimation of the population affected."

To delineate waves within the pandemic, the MoHW used the article "Methods to determine the end of an infectious disease epidemic²²." However, the MoHW highlighted that the origins of each COVID-19 wave cannot be linked to an index case or exposure, so it is not possible to identify the exact beginning date. Consequently, the MoHW made "an approximation of this date based on average time from exposure, average time of onset of symptoms to specimen collection and changes in the daily number of persons testing positive for COVID-19²³." Table I-5 presents The Bahamas's waves using the approach described:

Likely start date Likely end date **Total Weeks** Wave 1st March 8, 2020 June 4, 2020 13 2ndJuly 2, 2020 March 4, 2021 35 March 5, 2021 December 4, 2021 39 4th December 5, 2021 Ongoing on January 31, 2022

Table I 5: COVID-19 WAVES IN THE BAHAMAS

Source: Ministry of Health and Wellness.

Figure I-1 shows the evolution of the pandemic through the number of incidents and cumulative COVID-19 cases and identifies the waves defined by the government classification. Compared with other Caribbean countries, by January 2022, The Bahamas is the third country with the highest total confirmed cases, after Belize and Barbados, accounting for over 52,000 and 45,220 of total confirmed cases, respectively. Conversely, Anguilla and Saint Kitts and Nevis account for around 2.36 and 5.45 thousand cases. All those countries exhibited a sharp increase in the number of daily new confirmed COVID-19 cases per million people since the last days of December 2021, becoming the highest number of cases during the pandemic²⁴. It is relevant to mention that the rest of the world has exhibited the same trend.

²¹ FCL ΔC (2022)

²² Source https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7123060/

²³Source: MoHW – Disaster Damage and Loss Assessment COVID-19 Impact Contribution.

²⁴ Source OurWorld in Data.

35,000 3 500 3.000 30.000 25.000 2,500 2.000 20.000 15,000 1.500 1.000 500 5.000 2021-13 2021-16 2021-10 2021-Incident number of cases ■ Wave 3 Wave 4 Cumulative number of cases

Figure I 1: NUMBER OF INCIDENT AND CUMULATIVE COVID-19 CASES BY SPECIMEN COLLECTION DATE - ALL BAHAMAS (Epi Week 11-2020 to Epi Week 4-2022)

Source: Assessment team with information from Ministry of Health and Wellness.

By Epi Week 4, 2022, The Bahamas accounted for over 32 thousand cases confirmed. Even though the first wave exhibited the highest case fatality rate²⁵, the third wave concentrated almost 43% of the cases with the highest mortality rate per 100,000²⁶ (135.9) during the two years of pandemic under analysis (see Table I-6). Moreover, New Providence concentrated around 75% of the confirmed cases because it is the island with a higher population (based on the 2010 Census, 70% of the population lived there). Despite the third wave having a similar duration to the second wave, 39 and 35 weeks, respectively, the third wave had a more considerable incidence of cases in the Family Islands. To illustrate, the Family Islands has reported only 3,363 cases during the pandemic; the third wave accounted for almost 58% of those cases and exhibited the highest mortality rate.

Table I-7 shows that the COVID-19 pandemic has affected more women than men; women accounted for 53% of the total confirmed cases. Furthermore, around 43% of the cases reported were people between 20 and 39 years old. During the third wave, more than one-fifth of the confirmed cases were between 30 and 39 years.

The evolution of the pandemic in The Bahamas can be summarized as follows:

The first wave accounted for 102 total cases between March 8 and June 4, representing 25.6 cases per 100,000 population. April was the month with more new daily cases registered, reaching the higher number of 7

²⁵ Proportion of patients who died from COVID-19 among all individuals diagnosed with COVID-19.

The mortality rate per 100,000 measures the number of COVID-19 related deaths in The Bahamas, based on the mid-year population projection in 2020 of 398,200.

Table I 6: STATISTICS BY WAVE AS AT EPI WEEK 4 2022

Wave	Cases	Percentage of cases	Total Deaths	Case Fatality Rate ²⁷	Mortality Rate per 100,000		
	All Bahamas						
Wave 1	102	0.3%	11	10.8	2.8		
Wave 2	8,147	26.5%	174	2.0	44.7		
Wave 3	14,481	42.5%	529	3.9	135.9		
Wave 4	9,550	32.0%	45	0.3	11.8		
Total	32,280	100%	759	2.3	195.3		
		New Pro	vidence				
Wave 1	80	0.3%	8	10.0	2.1		
Wave 2	6,099	23.8%	137	2.2	35.2		
Wave 3	11,253	43.9%	401	3.6	103.0		
Wave 4	8,193	32.0%	25	0.3	6.4		
Total	25,625	100%	571	2.2	146.7		
		Grand E	Bahama				
Wave 1	8	0.2%	2	25.0	0.5		
Wave 2	1,240	37.7%	27	2.2	6.9		
Wave 3	1,321	40.1%	79	6.0	20.3		
Wave 4	723	22.0%	15	2.1	3.9		
Total	3,292	100%	123	3.7	31.6		
		Family	Islands				
Wave 1	14	0.4%	1	7.1	0.3		
Wave 2	808	24.0%	10	1.2	2.6		
Wave 3	1,907	56.7%	49	2.6	12.6		
Wave 4	634	18.9%	5	0.8	1.3		
Total	3,363	100%	65	1.9	16.7		
		Unknow	n Islands				
Wave 1	0	0.0%	0	0.0	0.0		
Wave 2	26	10.9%	0	0.0	0.0		
Wave 3	59	24.8%	0	0.0	0.0		
Wave 4	153	64.3%	1	0.7	0.3		
Total	238	100%	1	0.4	0.3		

Source: Ministry of Health and Wellness.

confirmed cases in a day on April 7 and April 23. As section III of this chapter explains, the first wave in The Bahamas exhibited few cases due to stringent measures that limited mobility and social gatherings applied by the government during the first stage of the pandemic. Although the timeframe of the first wave fits with the first wave of other countries like Italy, the UK, and the United States, the number of confirmed cases per 100,000 population during this time framework was very low (18.14) compared with the peak observed in those countries. For example, between February 29 and June 1, New York City reported 2,263 cases per 100,000 population and a peak weekly mean of 5,132 patients per day by the week of March 29, 2020²⁸.

See https://www.cdc.gov/mmwr/volumes/6g/wr/pdfs/mm6g46a2-H.pdf
 Proportion of cases who died from a COVID-19 among all individuals diagnosed with COVID-19.

Gender Age Male Female 60-69 0-9 10-19 20-29 +08 30-39 40-49 50-59 70-79 50 18.2 W1 50 2.5 13.5 21.1 17.5 10.2 2.9 2.5 1.5 3.6 W2 20 17.2 8.3 2 49 51 0.9 4.1 23 19.5 1.8 6.6 18.5 18.7 16.5 21.9 2.2 W3 45 55 9 3.7 6.5 17.8 24.9 14 2.2 1 W4 45 54 2.5 7.4 23.4 Total 46 1.8 6.1 20.6 18.7 16 8.1 1.8 53 22.6 3.3

Table I 7: GENDER AND AGE DISTRIBUTION OF COVID-19 CASES BY WAVE (Percentage)

Source: Ministry of Health and Wellness.

The second wave ended up with more than 8,000 cases between July 2, 2020, and March 4, 2021 (primarily concentrated in Grand Bahama and New Providence), reaching 2,159 total cases per 100,000 population during this period. The timeline of this wave fits with a period of gradual reopening implemented by the government. The second wave peaked at 310 new daily cases on October 10, 2020, representing 72.1 cases per 100,000 population. In the middle of October, New Providence was the epicenter for COVID-19 cases in the country: On October 18, had 68 out of 70²⁹ of the newly confirmed cases³⁰, and on October 20, it accounted for 104 out to 128 of the new cases³¹. The number of new cases decreased in January 2021 and kept that trend during February.

The third wave was between March 5 and December 4, 2021. The total number of cases increased from 9,364 on April 10 to 22,825 on December 5, representing 5,751 total cases per 100,000 population. The third wave reached 527 new cases on August 16, 2021, which means 132.77 per 100,000 population. Similarly, the total number of deaths attributed to COVID-19 during the third wave increased from 189 on April 10 to 695 on December 5. The new deaths by COVID-19 reached a milestone on September 2, registering 31 deaths that day.

During the third wave New Providence was the epicenter of the COVID-19 new cases. On July 23, during a COVID-19 Update Press Conference³², the Ministry of Health stated that New Providence accounted for 361 out 450 cases the previous week, representing 80% of the new cases in The Bahamas. Similarly, the Minister indicated that cumulative cases in Grand Bahamas kept rising, pushing hospital beds at capacity. In fact, in October, Minister of Health and Wellness, Dr. Michael Darville, described July and August as "the worst spike in COVID cases and deaths so far seen in [the] country³³." By the second half of November, Pan American Health Organization – World Health Organization (PAHO-WHO) reported "decrease in the incidence of new COVID-19 cases, COVID-19 related deaths, and hospitalizations³⁴".

The fourth wave started approximately on December 5, 2021, triggered by the highly contagious Omicron variable. This opportunity, there was an increase in travel-related cases, and on December 24, an increase in confirmed cases concentrated (92%) in New Providence³⁵. It is relevant to highlight that during January 2022, the number of confirmed cases skyrocketed (as can be observed in Figure I-1). By December 24, 2021, the total number of confirmed cases was 23,539. By January 24, 2022, The Bahamas had 32,238 confirmed cases. In other words, the total cases per 100,000 population increased from 5,930 to 8,097 in a month. This wave is under development by the time of writing this assessment.

²⁹ MoHW. COVID-19 Report Update #201.

³⁰ Samples identified between 24 and 48 hours after the swabbing date.

³¹ MoHW. COVID-19 Report Update #203.

 $^{{\}color{blue} {\tt 32} See https://www.youtube.com/watch?v=ccVosLlp394\&t=2293s\&ab_channel=TheOfficeofthePrimeMinisterTheBahamas} \\ {\color{blue} {\tt 32} See https://www.youtube.com/watch?v=ccVosLlp$

³³ See https://opm.gov.bs/government-launches-successful-free-covid-19-testing-pilot-program-on-inagua/

³⁴ Situation Report in The Bahamas and Turks and Caicos Islands November 26th, 2021, by PAHO-WHO.

³⁵ Situation Report in The Bahamas and Turks and Caicos Islands December 24, 2021, by PAHO-WHO.

Confirmed Cases

By January 24, 2022, The Bahamas accounted for 32,238 confirmed cases and 731 deaths. New Providence concentrated almost 79% of the total cases, followed by Grand Bahama with around 10% of the patients (see Table I-8.)

TABLE I-8: TOTAL CONFIRMED CASES OF COVID-19 IN THE BAHAMAS

Island	Total Confirmed Cases
New Providence	25,426
Grand Bahama	3,264
Abaco	769
Bimini & Cat Cay	271
Eleuthera	796
Berry Islands	139
Exuma	511
Inagua	85
Andros	357
Long Island	139
Cat Island	131
Acklins	41
Crooked Island	34
Mayaguana	21
Ragged Island	0
San Salvador	18
Locations Pending	236

Source: Ministry of Health and Wellness. COVID-19 Report Update #669.

In The Bahamas, the results of newly confirmed cases are reported within twenty-four (24) to forty-eight (48) hours after the swabbing date. It is important to highlight that the number of confirmed cases must be lower than the number of infections due to limited testing. For instance, this assessment could not obtain information about asymptomatic people or patients with moderate symptoms that (for any cause) did not access health care.

During a pandemic, frontline workers such as healthcare staff, police, and employees from essential services account for a relevant share of the confirmed cases. The assessment identified the following references regarding frontline workers affected by COVID-19 during the first and third wave of the pandemic in The Bahamas:

• First wave: the MoHW, in his update on the COVID-19 response in The Bahamas to the House of Assembly on April 6, 2020, stated that almost 1 in 5 confirmed cases (18%) had been health care workers, two (2) have had to be hospitalized. More than 50 health care workers have been identified as contacts of diagnosed/confirmed cases and required quarantine. According to PAHO-WHO, by April 24, 2020, health care workers accounted for 20% of the total number of cases in The Bahamas at the time³⁶.

³⁶ Situation Report in The Bahamas and Turks and Caicos Islands April 24th, 2020, by PAHO-WHO.

Third wave: at the end of August, around 85 police officers were quarantined due to COVID-19 exposure. In fact, during the first week of September, according to PAHO-WHO, "Uniformed Officers of the Royal Bahamas Police Force (RBPF) and Defense Force (RBDF) account for 205 confirmed COVID-19 cases. The RBDF New Entry Training Group is on quarantine on an RBDF vessel, and training ceased after more than 85% of the recruits tested positive for COVID-19³⁷".

Hospitalized

Figure I-2 shows the trend of the number of people hospitalized with moderate symptoms or moderate ill and those required to be in the intensive care unit. Although this report is weekly, it does not represent new incoming patients. Most of those cases received attention in healthcare institutions located in New Providence and Grand Bahama. The information available, such as the daily COVID-19 report, does not present information about the desegregation by gender of hospitalizations and the number of patients discharged from the hospital.

During the third wave, specifically during the critical months of July and August 2021, the average number

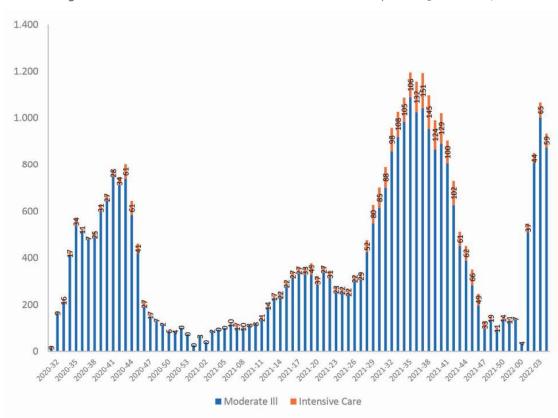


Figure I 2: HOSPITALIZED RT-PCR CASES BY EPI WEEK (Epi Week 31-2020 to 4-2022)

Source: Assessment team with information from the Ministry of Health and Wellness.

of people hospitalized was 77 and 140 patients, respectively. On July 28, the number of hospitalized patients reached 106. On July 30, there were 17 patients in the intensive care unit (the intensive care unit averaged eight patients during July.) In August, the number of people who required hospitalization increased, reaching a peak of 170 in the hospital on August 26. The average of hospitalized people during the month was 140.

³⁷ Situation Report in The Bahamas and Turks and Caicos Islands September 4th, 2020, by PAHO-WHO.

Similarly, on August 16, the country reached another milestone with 19 patients in the intensive care unit. As Figure I-2 shows, between Epi Week 32 and 41, 2021, The Bahamas registered the higher number of people in the intensive care unit during the two years of pandemic analyzed in this assessment. The epi week 37, 2021, recorded 151 people in the ICU. The number of people in the hospital started to decrease in October.

Deaths

Figure I-3 presents the number of new deaths attributed to COVID-19 and shows that the more significant increase in fatalities was during the epi week 30 and 40, 2021, coinciding with the third wave in August and September. To illustrate, on September 2, the number of deaths by COVID-19 reached 31 people. Compared with other Caribbean countries, The Bahamas shows 5.4 new deaths attributed to COVID-19 per million people, while Saint Kitts and Nevis has 21.04, Anguilla 9.45, Antigua and Barbuda 7.24. By contrast, Barbados and Belize present the lowest with 1.99 and 2.47 respectively. Nevertheless, the total deaths attributed to COVID-19 per 1,000,000 people in The Bahamas is the highest (1.88 thousand) among those countries, followed by Grenada and Belize with 1.86 and 1.55 thousand respectively.

The number of people recovered is the difference between the total confirmed cases and total deaths. By January 24, 2022, The Bahamas accounted for 31,509 cases recovered. It is worth highlighting that this

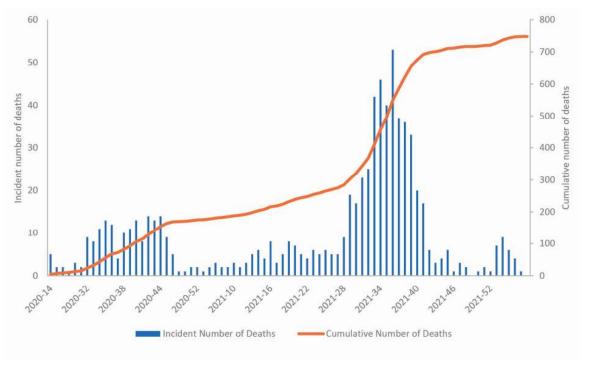


Figure I 3: NUMBER OF DEATHS

Source: Assessment team with information from the Ministry of Health and Wellness.

method does not identify people suffering long-term COVID-19 or other long-term effects associated with the disease. The assessment did not identify data about it.

³⁸ Source: OurWorld in Data.

• COVID-19 testing

Another relevant information to describe the pandemic is the weekly RT-PCR positive results that defined the number of confirmed cases recorded in the official data. However, let us highlight that this variable is subject to the test capacity of each country and how accessible those tests are to the public. For example, the number of tests depends on costs, access, and legal constraints (like mandatory isolation.) Nevertheless, the weekly positive results identify shifts in the data trend.

Table I 9: WEEKLY NEW RT-PCR AND RAT POSITIVE RESULTS UP TO JANUARY 29, 2022 – ALL BAHAMAS

Epi Week	R 39	RAT (BHTV) ^{4°}	RAT (Other)	Epi Week	RTPCR	RAT (BHTV)	RAT (Other)
2021-12	186	25	2	2021-34	728	29	407
2021-13	190	21	25	2021-35	664	21	633
2021-14	232	16	50	2021-36	667	17	505
2021-15	310	29	96	2021-37	565	6	321
2021-16	355	25	103	2021-38	647	5	379
2021-17	347	9	84	2021-39	490	2	354
2021-18	329	7	76	2021-40	380	1	294
2021-19	340	5	67	2021-41	275	2	138
2021-20	335	8	73	2021-42	203	3	121
2021-21	243	10	63	2021-43	130	3	92
2021-22	171	17	33	2021-44	82	2	52
2021-23	179	6	59	2021-45	80	0	51
2021-24	161	6	59	2021-46	69	0	37
2021-25	234	8	80	2021-47	88	5	66
2021-26	301	8	140	2021-48	68	7	95
2021-27	303	19	167	2021-49	81	6	119
2021-28	469	23	174	2021-50	208	3	146
2021-29	621	57	253	2021-51	1,044	1	860
2021-30	748	35	250	2021-52	2,656	0	3,250
2021-31	865	45	341	2022-1	2,966	152	4,780
2021-32	860	55	515	2022-2	1,691	106	1,609
2021-33	887	36	390	2022-3	765	75	760
				2022-4	340	46	413

Table I-9 shows the evolution of the weekly RT-PCR and the RAT (Rapid Antigen Testing) positive results; the last one accounts for the people who required Bahamas Travel Health Visa and then got positive for COVID-19. Table I-9 presents information from approximately the second half of March 2021 to the last week of January 2022.

³⁹ RT-PCR: real time reverse transcription–polymerase chain reaction.

 $^{^{\}rm 40}$ RAT: rapid antigen testing / BHTV: Bahamas health travel visa.

The sharp and unseen rise in the number of cases that the variable Omicron triggered since the last two weeks of 2021 shows up on Figure I-4, which includes the preliminary COVID-19 PCR positivity rates between the Epi Week 41-2021 to 4-2022 (from approximately the second half of October 2021.) On the first week of January 2022, the positivity rate reached 53%.

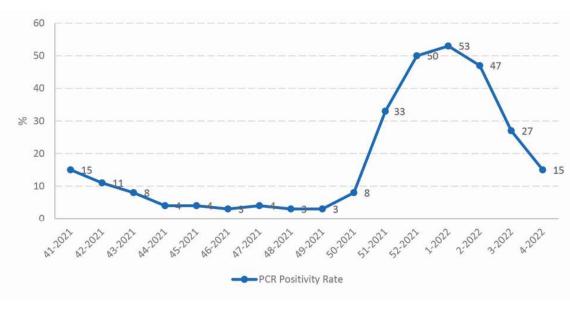


Figure I 4: PRELIMINARY COVID-19 PCR POSITIVITY RATES BY EPI WEEK (Epi Week 41-2021 to 4-2022)

Source: MoHW.

Even though the fourth wave is still ongoing (and it is not advisable to analyze it before its completion,) the assessment team included in this report the early data available to highlight the shifts in the contagious pace that characterizes the new wave.

2. Secondary Affected Population

ECLAC defines the secondary affected population in a pandemic as follows⁴¹:

- "The secondary affected population is the people within the affected area who suffer other consequences of the epidemic associated with social distancing measures, such as:
- a) loss of employment or decrease in wages due to a reduction in the production of the company in which they worked or the bankruptcy of those companies.
- b) loss of income of merchants due to the decrease in activity or the bankruptcy of companies.
- c) children and adolescents who miss classes.
- d) people who lose family and friends.
- e) victims of domestic violence during the confinement period.
- f) patients who had to postpone their medical care due to the congestion of health services."

⁴¹ ECLAC (2022b).

During the last two years, the COVID-19 pandemic has had multiple and transversal effects on the population due to the social distance measures to contain the pandemic's spread. In this section, the assessment reports consequences on some dimensions that other stakeholders had measured.

Education: The Bahamas schools were closed for at least 102 days (at least five months,) and only 12,885 attended school online in the first week and 11,671 in the second week, from the 26,000 registered students. Consequently, each student has lost about 358 hours of classes since the school closures, including the 2019-2020, 2020-2021, and 2021-2022 academic years. With the total number of registered students as the baseline, at least 18.7 million class hours were lost (52,306).

Unemployment: According to the NIB, from April 2020 to Jan 2022, there were 7,262 claims from self-employed persons in the Tourism sector who lost their income due to the pandemic, beneficiaries of a total of BSD 15,663,634.88 in payments from April 2020 to Jan 2022.

Social Assistance: The Social Protection Management Information System of the Department of Social Services reported that 4,763 households received some kind of social assistance (see table I-10) between March 2020 and December 2022 due to the COVID-19 fallout. Around the 75% of the households had a female as a head of household.

Type of Assistance	Female	Male	
Financial Assistance - Utility Disaster	332	104	
Food - Disaster	2,477	876	
Housing - Rental Disaster	475	191	
Uniform - Disaster	293	15	
Total	3,577	1,186	

Table I 10: NUMBER OF HOUSEHOLDS BY GENDER

Source: The Social Protection Management Information System - Department of Social Services.

During a disaster are other effects on people that are difficult to quantify. Mental health concerns, for example, include anxiety, confusion, depression, and post-traumatic stress. Even though The Bahamas government offered crisis center hotlines during the pandemic, this assessment couldn't access any data that accounted for public records about mental health reported by the citizens. Those cases will surely increase (as it happened worldwide) due to the loss of income, death of families, lockdowns, and other causes. Similarly, an increase in domestic violence is expected due to the lockdowns, especially on women and children. Again, this assessment did not identify data in The Bahamas to express this trend.

Another effect that the pandemic has caused worldwide, and expected in The Bahamas, is increased life-threatening symptoms due to noncommunicable diseases. Since the public health workers who treated NCDs were reassigned to respond to COVID-19 cases⁴², there is a lapse in routine health care for persons with these diseases. This assessment did get data that accounted this situation.

⁴² NCDs and COVID19 – PAH/WHO https://www.paho.org

⁴³ See https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker

^{44 &}quot;The index records how the response of governments has varied over all indicators in the database, becoming stronger or weaker over the course of the outbreak. It is calculated using all ordinal indicators."

See https://github.com/OxCGRT/covid-policy-tracker/blob/master/documentation/index_methodology.md

C. Government response to the COVID-19 pandemic

The Oxford COVID-19 Government Response Tracker (OxCGRT)⁴³ that helps to understand the evolution of the response during the pandemic, especially during the disease's spread periods, shows that between March and July 2020, The Bahamas reached a government response index⁴⁴ over 80 (100 is the highest,) that corresponds with the first wave. For example, The Bahamas declared a completely new lockdown⁴⁵ between April 8 to April 14, with a 24-hour curfew after it. Moreover, during April, the Government established weekend shutdowns, starting Fridays at 9 pm and ending at 5 am on Mondays. Overall, The Bahamas kept



Image I 2: THE BAHAMAS' COVID-19 TRAJECTORY

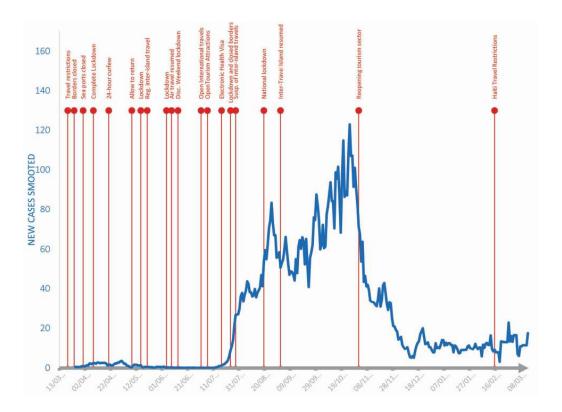
 $Source: Oxford\ COVID- 19\ Government\ Response\ Tracker.$

a response index around 60 after July 2020 and over 70 during the first nine months of 2021 (see image I-2.) Most of those measures were implemented during 2020 and 2021 and adjusted based on health indicators and islands defined in different schedules indicated on the subsequent Emergency Orders and amendments. The schedule criteria were defined by the Ministry of Health COVID-19 Emergency Operation Center (EOC) at the beginning of the first wave applying multiple standards to determine which island would be on each schedule. For example, the EOC considered qualifiers like the COVID-19 burden for the Family Islands (incidence of cases and clusters, hospital capacity bed, and health care workers⁴⁶.) Consequently, during both years, the Government kept curfews and weekend lockdowns modified as needed with strict penalties for those who did not comply. However, on November 13, 2021, those measures were discontinued. Figure I-5 shows the evolution of cases and the main measurements adopted by the Government. Similarly, Table I-11 offers a summarized timeline about the main measures adopted by The Bahama's government during 2020 and 2021.

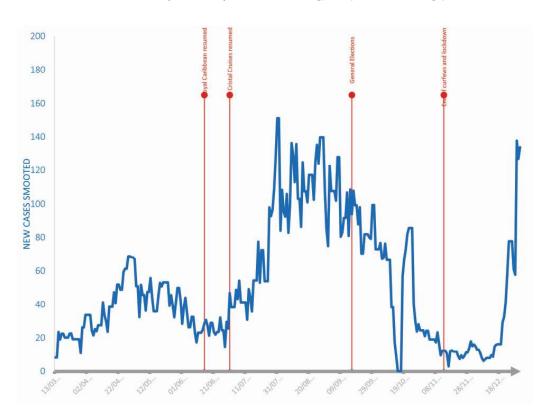
 ⁴⁵ Similar measures were implemented during May and June. For instance, another lockdown was implemented from May 15,2020,
 46 until May 18, 2020 5:00 am and during Labor Day holiday weekend from 9:00 pm on June 4 to June 6 at 5:00 am.
 46 Source: Ministry of Health and Wellness – Disaster Damage and Loss Assessment COVID-19 Impact Contribution.

Figure I 5: EVOLUTION OF COVID-19 CASES AND GOVERNMENT MEASUREMENTS

PANEL A: First year of the pandemic (March 13th, 2020, and March 13th, 2021)



PANEL B: Second year of the pandemic (March 13, 2021, and December 31, 2021)



Source: Assessment team with information from OurWorldData and The Bahamas public sources.

Table I 11: TIMELINE OF THE MAIN GOVERNMENT'S MEASURES TO CONTAIN THE SPREAD OF COVID-19

Date	Measures
February 2, 2020	Residents returning to The Bahamas who have a history of travel to China within 20 days of commencing travel, WILL be quarantined on arrival in The Bahamas for up to fourteen (14) days
March 15, 2020	First case of COVID
March 17, 2020	Proclamation of Emergency With effect from the 17th day of March 2020, a state of public emergency exists in The Bahamas. Emergency Orders: 24 hours curfew, closure of borders, schools and business.
March 19, 2020	Travel restrictions for Europe, the United Kingdom and Ireland. This is in addition to restrictions already in place for China, Iran, Italy and South Korea.
March 31, 2020	All sea ports should be closed to regional and international travel No visitors shall be pemitted to enter and disembark (including transiting) Restrictions on domestic travels: mail boat, sailing inter island (all of those have some exemptions) A curfew is imposed every day or 24 hours.
April 3, 2020	Complete lockdown starting Wednesday, 6 until Monday 8, April 2020.
April 6, 2020	Complete lockdown starting Wednesday, 8 until Tuesday 14, April 2020.
April 19, 2020	24-hour curfew since Monday 20 at 5 am until Friday 24, April at 9 pm
April 27, 2020	Weekday curfews and weekend lockdowns will continue until health officials advise otherwise.
May 5, 2020	First stage of reopening plan (essential business.)
May 8, 2020	Return of Bahamian nationals and residents to The Bahamas.
May 15, 2020	Lockdown from May 15 to 18, 2020.
May 17, 2020	Many pleasure boats have been anchored offshore in Bahamian waters for well beyond 14 days. Boaters will be allowed to come ashore to conduct routine business, while practicing physical distancing protocols.
May 20, 2020	Registration for inter-island travel (to travel back home.)
May 22, 2020	Second part of the reopening plan (first stage.)
June 2, 2020	Curfew hours 9 pm to 5 am weekdays and 24 hours during the weekend and holidays. Transition to the third phase of reopening of economy.
June 8, 2020	Lockdown measures during Labor Day holiday weekend from June 4 at 9 pm to June 6 at 5 am. Fourth stage of reopening. Domestic and commercial air travel resumed.
June 13, 2020	Weekend lockdown will be discontinued.
June 22, 2020	Curfew 10 pm to 5 am from Monday to Sunday.
June 29, 2020	Opening of some public beaches.
July 1, 2020	Opening to international travels. Changes in restrictions of international travel since 12:00 am on July 1, 2020 Allows citizen of Bahamas, legal residents, or visitors to enter to The Bahamas with RTPCR COVID 19 test 10 days before and upon arrival.
July 3, 2020	Entry of international travels. Travel restrictions lifted from passengers from China, Europe, Iran, and Korea.
July 6, 2020	Tourism attractions, excursion and tours resumed operations.
July 17, 2020	Electronic Health Visa for all incoming travelers.
July 21st, 2020	Effective 5:00 pm on July 21, no international travel, whether by air or sea, commercial or private shall be permitted into or out of Grand Bahama.

July 22, 2020	Border closure to international commercial flights and commercial vessel carrying passengers from USA 47 .
July 23, 2020	Lockdown from July 23 to August 7 in Grand Bahama.
July 24, 2020	Lockdown effective from Friday, July 24 at 9: 00 pm to Monday, July 27, 2020, at 5:00 am. It shall apply to all Islands of The Bahamas except Grand Bahama. International and domestic travel into and out of any island shall be prohibited except with the approval of Competent Authority.
July 27, 2020	Daily curfew from 7:00 pm to 5:00 pm am.
July 28, 2020	Suspension of inter-island travel.
August 14, 2020	At the end of the quarantine period a RTPCR Covid 19 molecular test shall be required. The mandatory quarantine for visitors must be on a government appointed facility.
August 19, 2020	National lockdown extended to Grand Bahama to New Providence.
August 31, 2020	Private and Public bus transportation resume activity (at 50% capacity).
September 1, 2020	Inter-island travel resumes.
October 16, 2020	Weekend lockdown
November 1, 2020	Reopening of tourism sector. Quarantine requirements are discontinued (negative COVID test it is required.)
February 15, 2021	Restriction for travelers coming from Haiti ⁴⁸ .
January 28, 2021	Canada banned flights to Bahamas until April 30, 2021.
May 27, 2021	14 days of lockdown in some islands.
June 15, 2021	Royal Caribbean resumed operations.
July 1, 2021	Cristal Cruises resumed operations.
August 1, 2021	New travel requirements for incoming visitors.
September 3, 2021	Effective from Friday, September 3, 2021, until November 1, 2021, cruise ships on a passenger trip shall not be permitted to enter a port in The Bahamas (including a private stop), unless everyone are fully vaccinated before embarking. It also stablishes some exceptions.
September 16, 2021	General Elections
October 13, 2021	Residents will no longer require travel health visa.
November 13, 2021	Curfews and lockdowns are discontinued

Source: Assessment team with information from The Bahamas public sources.

Based on the government's classification, below there is a description of each wave and the evolution of the Government response.

1. First wave of the pandemic

Since the Novel Coronavirus (2019-nCoV) declaration as a Public Health Emergency of International Concern by the World Health Organization (WHO) on January 30, 2020, the Government of The Bahamas took preventive measures to address the potential threat (see Box I-1, which offers a context of the early stage of the pandemic in the world.) For that reason, since then, the Government imposed a quarantine of 14 days to every resident returning to The Bahamas with a history of travel to China within 20 days of commencing travel.

 $^{^{47}}$ This travel restriction was lifted soon (before July 31.) 48 This travel ban was extended until June 10, 2021.

Box I 1: EARLY DAYS OF THE COVID-19 PANDEMIC IN THE WORLD

The COVID-19 pandemic started in Wuhan (Hubei Providence,) China, at the end of 2019. On December 31, 2019, the regional authorities in Wuhan confirmed cases of pneumonia of unknown cause. Within days, Chinese researchers identified the pathogen: a new coronavirus 'different from previous human coronaviruses that were previously discovered, Wee & McNeil, Jr. (2020). At that moment it was unknown whether there was a human-to-human transmission or the full extent of the transmission. There are still questions from the international community about the origin of the pandemic. The first case recorded of COVID-19 outside China was in Thailand. The person was a traveler from Wuhan⁴⁹.

On January 30, 2020, the WHO declared the novel coronavirus outbreak (2019-nCoV) a Public Health Emergency of International Concern (PHEIC.) At that moment, just 7,736 cases worldwide had been confirmed. Even though China accounted for almost all of them, there were 82 confirmed cases in 18 other countries⁵⁰. On February 2, 2020, the first death outside China was reported. It was a 44-year-old man in The Philippines. During the last week of February, Italy experienced a significant increase in cases to become the first major outbreak in Europe. As a result, Italy closed schools and locked down ten towns in the southeast of Milan. Meanwhile, the second outbreak outside China happened in Iran. The WHO declared a pandemic for COVID-19 on March 11, 2020. In March 2020, governments worldwide implemented extreme measures to slow the spread of the virus, such as border closures and lockdowns. By the end of the month, the United States had reached the most significant number of confirmed cases, surpassing China and Italy, Wee & McNeil, Jr. (2020).

Subsequently, on February 7, 2020, the Ministry of Health declared the novel coronavirus (2019-nCoV) an infectious or contagious disease and China an infected place for six months. On March 3, the Ministry of Foreign Affairs advised not to travel and discourage non-essential trips to areas declared by the WHO of high risk of exposure to the virus. Moreover, the Ministry also highlighted that "persons who must travel should expect to be routinely screened and tested [... and even] quarantined" when they returned to The Bahamas.

After the WHO declared the COVID-19 a world health pandemic on March 11, 2020, The Bahamas Government increased its measures to address it at the national level. The Prime Minister appointed the National Coordination Committee on COVID-19 (NCCC) co-chaired by Dr. Peral McMillan, Chief Medical Officer, and Mr. Matt Aubry, Executive Director, Organization for Responsible Governance. The NCCC also included government officials from Health, Tourism, and Education ministries, stakeholders, civil society members, port, and union representatives. The NCCC is part of the Government's preparedness and response plan to COVID-19⁵¹. On March 16, 2020, Italy, Iran, and South Korea were infected. Then, on March 20, 2020, the Ministry of Health incorporated the United Kingdom, Members of the European Union, and Ireland to that list.

After the confirmation of Covid 19 in the territory on March 13 that the Most Honorable Cornelius Alvin Smith, Governor-General of the Commonwealth of The Bahamas, declared a state of emergency with effect on March 17, 2020. The first case was a 61-year-old resident of New Providence with no relevant travel history and unknown exposure to the virus.

⁴⁹ See https://www.who.int/news/item/13-01-2020-who-statement-on-novel-coronavirus-in-thailand

⁵⁰ Novel Coronavirus (2019-nCOV) – Situation Report 10 – WHO. See

⁵¹ See https://opm.gov.bs/prime-Minister-appoints-covid-19-national-committee/

Since then, the Government of The Bahamas increased its measures through The Emergency Powers (COVID-19) Regulations and initially earmarked nearly BSD 5 million for healthcare response that allowed it to respond quickly to the health crisis triggering a plan to mitigate the spread of the virus following international standards. The main measures implemented by the Government were:

- Entry bans to all travelers. No visitor shall enter and disembark (both national and international.)
- Closure of schools on March 16, 2020.
- Closure of businesses (with some exemptions) and setting of shopping schedules.
- Closure of tourist facilities.
- Daily 24-hours curfews.
- Every person shall remain confined to their residence to avoid contact outside except the essential workers defined.
- Every human establishment shall ensure a physical distance of no less than six feet.
- Supermarkets were encouraged to set a specific shopping time for seniors.
- All seaports shall be closed to regional and international seafaring and private boating.
- Postponement of national sports events until further notice.
- Cancelation of large gatherings.
- Closure of all public beaches.
- Mandatory face mask for all when accessing essential services.

The Prime Minister justified those measures in his national address on March 23, 2020, as follows: "We cannot afford to let this deadly and dangerous virus spread widely in our country. If we do, we will have many deaths⁵²." His main argument was that other countries with more resources than The Bahamas (like in Europe) were "having the greatest difficulty fighting this virus." He acknowledged that even though "the emergency orders are difficult for some," they were necessary, and prevention was their most important strategy.

Besides the mobility restrictions implemented to encourage social distance during the early stage of the pandemic, the Government also allocated an "additional BSD 11 million to cover detection, isolation, treatment and other COVID-19 mitigation activities [...], BSD 10 million to provide for a temporary unemployment benefit, administered through the National Insurance Board, for self-employed persons working in the tourism industry [...] and, BSD 4 million to provide food assistance and social support for displaced workers directly impacted by the virus, through the Ministry of Social Services ⁵³". Moreover, The Bahamas Development Bank (BDB) worked with the Government and other agencies to deliver immediate relief to businesses impacted by the COVID-19 pandemic. By March 25, 2020, the BDB offered to current clients (in good standing with The Bank who were negatively affected by the pandemic) a three-month deferral against repayment of credit facilities⁵⁴.

On April 6, 2020, in his update on the COVID-19 response in The Bahamas to the House of Assembly, the Minister summarized the government's capacity to manage the COVID-19 pandemic:

- Contact tracing and the surveillance team remain a priority and ongoing activity.
- Informed of the adequate supply of personal protective equipment (PPE) for six months⁵⁵". Furthermore, the MoHW in his update on the COVID-19 response in The Bahamas to the House of Assembly on April 6, 2020, summarized the Government's capacity to manage the COVID-19 pandemic as follows:

⁵² National Address (2) – COVID-19. The Most Hon. Dr. Hubert Minnis Prime Minister – March 23, 2020.

⁵³ Press Release - Projected Contraction in Tourism Activity to have Adverse Impact on the Bahamas' Foreign Exchange Reserves Position. Authored by: Llonella Gilbert. Date: March 18, 2020. Source: Bahamas Information Services.

⁵⁴ Press Release. Authored by: Bahamas Development Bank Public Affairs Department. Date: March 25, 2020. Source: The Bahamas Development Bank (BDB).

 $^{^{55}}$ Situation Report in The Bahamas and Turks and Caicos Islands April 17, 2020, by PAHO-WHO.

- Contact tracing and the surveillance team remain a priority and on-going activity.
- Informed that The Bahamas had adequate supplies of personal protective equipment (PPE) for six months⁵⁶.
- Completing the modular unit at the Princess Margaret Hospital (PMH) represents a tangible increase in the country's capacity to care for COVID-19 patients.
- The country's evaluation and in-patient management capabilities have improved in six New Providence and Grand Bahamas hospitals and health centers. To illustrate, Doctor Hospital West had 18 rooms, and South Beach Health Centre (both located in New Providence) opened a floor plan for 24 beds.
- The country has three isolation pods for transporting suspected COVID-19 cases.

In addition, during his speech, the Minister of Health also acknowledged real constraints to upscaling molecular testing because there is a limited supply of test kits and human resources. Along the same line, he thanked the donation received by the Embassy of the People's Republic of China of 1,000 test kits to confirm suspected COVID-19 cases⁵⁷. Similarly, PAHO-WHO donated laboratory supplies to support real-time PCR laboratory testing to expand testing capacity to two additional islands ⁵⁸.

On April 6, 2020, the Ministry of Agriculture and Marine Resources (MAMR) announced the Emergency Food Production Plan due to the "country's dependence on imports which exceed 90% of what [The Bahamas] consume in general and food in particular." Regardless, there were adequate food stocks in the short to medium term; reduced exports of essential agriculture products from other countries to satisfy domestic demands were anticipated. Consequently, the plan detailed a strategy to accelerate food production with a required budget of BSD 1,626,939.70 million. Moreover, the MAMR stated that "through the IDB Dorian facility [they] would designate BSD 1 million to catalyze agriculture on Abaco and Grand Bahama⁵⁹" and through the regular budget, the Ministry would fund the cleaning and preparation of the land for farmers in the rest of The Bahamas. The proposed plan also included other actions such as providing farm inputs (more than BSD 400,000 cost,) technical assistance, reparations of three packing houses, identification of storage facilities, and strategies to deal appropriately with agricultural products.

On April 13, 2020, during a national address, the office of the Prime Minister highlighted that "in the last seven days, The Bahamas Feeding Network distributed BSD 40,000 in food vouchers and between BSD 10,000 and BSD 15,000 in food parcels. Hands for Hunger has distributed 50,000 lbs. of donated food, BSD 5,000 in Non-perishables and are budgeting about BSD 20,000 for food vouchers⁶⁰." Additionally, the address announced: (i) changes in the shopping schedule and opening hours for grocery stores and pharmacies; (ii) the Government would appoint a Food Security Taskforce.

On April 14, 2020, the Minister of Health announced that "the Government committed to provide physicians with a \$5,000 fee for those working on health frontline response and offered the provision of a life insurance benefit of BSD 100,000 should a health care worker contract the COVID-19 virus and experience an untimely death⁶¹."

⁵⁶ However, on May 1, PAHO-WHO reported that "The Ministry of Health (MOH) has a one-month supply of personal protective equipment (PPE) and there are ongoing efforts to procure more". See Situation Report in The Bahamas and Turks and Caicos Islands May 1, 2020, by PAHO-WHO.

⁵⁷ Minister of Health in his update on the COVID-19 response in The Bahamas to the House of Assembly on April 6, 2020

⁵⁸ Situation Report in The Bahamas and Turks and Caicos Islands April 17, 2020, by PAHO-WHO.

⁵⁹ To illustrate, the MAMR plans to support: (i) 19 farmers in Grand Bahama and 40 on Abaco with a cost of BSD 479,600.

⁶⁰ See National Address COVID-19 Response Update. The Most Hon. Dr. Hubert A. Minnis. Prime Minister. Monday 13, April 2020.
Office of the Prime Minister. Cecil Wallace-Whitfield Centre. West Bay Street.

⁶¹ Press Release. Response to the Commonwealth of The Bahamas Trade Union Congress Bahamas Union on the Crisis in the Workplace for Medical Workers - Update #39. Authored by: Ministry of Health. Source: Ministry of Health. Date: April 14, 2020.

During a press conference on April 19, the Prime Minister offered a status about the two programs the National Insurance Board (NIB) implemented to offer financial assistance to affected individuals. The first is the standard unemployment benefit for workers who contribute to the insurance scheme, with over 14,600 unemployment claims processed and unemployment benefits payments around BSD 7 million. The second is a government-sponsored unemployment assistance program for self-employed individuals⁶² that has approved, so far, 3,400 applications with an associate paid of BSD 1.96 million. Both programs have served more than 18,000 applications and paid out under BSD 9 million. At the time, the NIB continues processing claims.

The Prime Minister indicated that the Ministry of Finance allocated around BSD 25 million to small businesses for payroll support (so far, 111 of 601 firms had been awarded financing.) He claimed that the Government also contributed around BSD 30 million in direct grants to pay salaries for 5,000 employees over three months through a Tax Credit and Deferral Programme. Taken together, the Government disbursed BSD 60 million in funding to medium and large Bahamian businesses⁶³.

On April 27, 2020, the Prime Minister stated that The House approved a resolution extending the emergency powers in The Bahamas (up to May 30, 2020), introducing a fine of up to BSD 20,000-or five-year imprisonment or both for those who break quarantine protocols. Moreover, the Prime Minister gave an update about the Government response to the pandemic, highlighting the following actions:

- Development of a model to predict the pandemic curve (cases and death) with the support of a team from PAHO-WHO.
- Appointment of a National Food Committee, led by Mrs. Susan Holowesko Larson, to steer the coordination and collaboration with many stakeholders to increase food distribution nationally and fairly⁶⁴. In addition, the Committee should oversee the status of food supply chains to the country and recommend actions to keep them viable.
- Announced the details of the Rental Assistant Program to assist individuals who have rental obligations. The program was limited to residential rentals for those whose employment or income was impacted by the pandemic. Those who qualify⁶⁵ could postpone a portion⁶⁶. In addition, the Committee should oversee the status of food supply chains to the country and recommend actions to keep them viable.

Announced the details of the Rental Assistant Program to assist individuals who have rental obligations. The program was limited to residential rentals for those whose employment or income was impacted by the pandemic. The NCC would be responsible for the guidelines to qualify and recommending the timing of each phase based on health metrics⁶⁷.

During April, the health authorities offered guidelines for the people who develop symptoms, such as a call to the 511 lines or health provider, what to expect from the different types of tests available, and identification of health care centers for mild, moderate, or urgent care. During this time, the Ministry of Health also promoted blood drives to encourage donations. Furthermore, they started to explore introducing rapid tests with an initial stock of 10,000 kits to validate if those tests correlate with their "gold standard method (the RT-PCR)" to improve the country's testing capacity⁶⁸.

 $^{^{62}}$ A category of persons normally unable to receive unemployment assistance from NIB.

⁶³ Press conference remarks. Update on COVID-19 Response. The Most Hon. Dr. Hubert Minnis. Prime Minister. Sunday 19, April 2020. Office of the Prime Minister. Cecil Wallace Building. West Bay Street

⁶⁴ The Bahamians vulnerable to food insecurity due to COVID-19 were newly unemployed, self-employed individuals (whose businesses are adversely affected), senior citizens, school children and some patients.

⁶⁵ The rental property must be inside The Bahamas. The rent must be BSD 2,000 per month or less. The tenant must be a Bahamian citizen or legal resident and demonstrate that their income or employment was affected by the COVID-19 pandemic.

Gaussifying renters and landlords can decide the amount to defer.

⁶⁷ NCC provides advice and recommendations in several matters related to the pandemic.

Dr. the Hon. Duane Sands. Minister of Health. COVID-19 Update Press Conference. The Ministry of Health. Thursday, 16 April 2020.

A Measured Plan for Re-Opening Economy Contingent on advice of Health Officials 27 April 2020 Phase 2 Phase 1b Phase 3 Phase 4 Phase 5 Phase 1a ESSENTIAL SERVICES & HURRICANE PREPAREDNESS DELIVERY & CURBSIDE SERVICE & CONSTRUCTION **EXPANDING OPERATIONS** BEGINNING THE NEW NORMAL MOVING FORWARD **RE-STARTING TOURISM** & OPENING THE BORDERS Economic Introduce non storefront business operat with essential staff require allow the business to func Increase businesses that scale up to operate via de Must have posted protoc and train staff. Number of Home & Hardware, nurse and auto parts stores permitted 2 days in store. eries and auto pa es can expand to ne delivery and cu Manage lines in store and outside with markers and security staff. Property management, ar Landscaping, Monday - Fri Expanding education operations with social distancing protocols. Manufacturing of PPE and sanitizers, Monday - Friday. Social Tourism and transportation Worship services with strict social distancing and masks. Limited educational op Relax restrictions on exercising even further Social Exercise 90 minutes in neighborhood, Monday Friday Re-open beaches and public parks with social distancing. Restrictions lifted on movement Lockdown Friday 9 PM -Monday 5 AM.

Image I 3: A MEASURED PLAN FOR RE-OPENING ECONOMY

Source: Office of the Prime Minister of The Bahamas.

The reopening phase started during early May in the southern islands (Ragged Island, Rum Cay, Mayaguana, Inagua, Crooked Island, Acklins, and Long Cay) with normal daily activities, nightly curfews, and lockdown measures. On May 18, Cat Island, Long Island, Abaco, and Andros resumed commercial activities. The Ministry of Health implemented a protocol for the approval and monitoring of inter-island travels for those islands. Those who get the consent would have an Authorization Travel Card to travel to the Family Islands⁶⁹.

On May 5, the Prime Minister was announced to temporarily assume the position of Minister of Health after the resignation of Dr. Duane Sands due to the breach of the protocols (border closures) allowed to disembark a plane with six American permanent residents with a donation of COVID-19 tests.

The repatriation of Bahamian citizens and residents started on May 8 with approximately 200 people from South Florida, United States⁷⁰. There were two more flights scheduled for May 21 and May 23. They all had to meet the required protocols such as COVID-19 negative test, book directly through Bahamas Air, and quarantine for 14 days⁷¹.

On May 17, 2020, the Prime Minister announced in a national address that the country was in Phase 1B of the national reopening and that the Government started to introduce components of Phase 2. In his speech, the Prime Minister announced the following measures:

- New schedules to facilitate hurricane preparedness.
- Resorts, airports, and seaports were finalizing the necessary health and safety protocols for a reopening.
- Pleasure boats that have been anchored offshore in Bahamian waters for well beyond 14 days are allowed to come ashore to conduct routine business.
- Complete lockdown for Bimini starting on Monday 18 at 9 pm, until Saturday, May 30 at midnight to slow down and control the spread of the virus.

At the end of May is announced the extension of the emergency orders up to June 29, 2020. Moreover, during May, the MoHW received the following donations: (i) medical supplies with PPE from the People's Republic

⁶⁹ Applications started on May 20, 2020.

⁷⁰ Situation Report in The Bahamas and Turks and Caicos Islands May 15, 2020, by PAHO-WHO.

⁷¹ NATIONAL ADDRESS. The Most Hon. Dr. Hubert Minnis. Prime Minister. May 17, 2020.

of China and (ii) 4,000 nasopharyngeal and RNA extractions kits from PAHO-WHO. During this period, the health care workers accounted for 23.7% of the confirmed COVID-19 cases ⁷². The Ministry of Health created an application to monitor people in quarantine, particularly those who returned to the country.

On June 2, 2020, The Bahamas had already transitioned to the third phase of the reopening economy. It means that: (i) non-essential businesses were able to operate with minimal staff and (ii) the relaxation of some social gatherings. The fourth phase started on June 8, resuming domestic flights and travels by aircraft, ferry, or sailboat. Furthermore, preschools and infant daycares were permitted to open⁷³ and parks and beaches opened in Eleuthera, Exuma, Harbour Island, and San Salvador ⁷⁴.

By the end of June, the country had transitioned to phase five of the reopening plan, so public servants and employees of any statutory body had to return to work on June 29. Although the government implemented a new and more flexible schedule for businesses during this month, entertainment facilities remained closed. However, since June 29, public beaches and parks in New Providence, Paradise Island, Grand Bahama, and Bimini islands have opened⁷⁵.

According to the MoHW ⁷⁶, the first wage of COVID-19 registered 102 cases between March 8 and June 4. During this period, the Government took several actions in different dimensions to address the pandemic and started to transition to a gradual reopening, as we have described previously.

2. Second wave of the pandemic

Even though the Government extended the state of emergency up to July 31, 2020, and daily curfews remained in effect, since July 1, 2020, also reduced some restrictions⁷⁷:

- Entry of international travelers is allowed.
- Taxi services and private and public buses resumed operations with 50% capacity.
- Gyms and spas opened.
- Passengers from China, Europe, Iran, and Korea can enter.
- Operation of tourism facilities, attractions, and excursions⁷⁸ (excluding discotheques, casinos, and cinemas) are allowed.
- Introduced changes in the rules for restaurants and food vendors⁷⁹.

In the middle of July, the government implemented an electronic health visa for all incoming travelers, who required a negative COVID-19 test to ask for it.

However, the number of cases started to increase after the country reopened its borders. For example, the Grand Bahama COVID-19 task force met on July 11 to evaluate the increasing number of new cases. Two weeks later, Grand Bahama was designated a "hotspot" and placed into 2-weeks lockdown from July 23 to August 7, 2020. Inter-island travel to and from Grand Bahama was not permitted (only emergency or essential travel,) and since July 21, international trips either⁸⁰. The increase of the new cases triggered out to resume some restrictions such as⁸¹:

⁷² Situation Report in The Bahamas and Turks and Caicos Islands, May 22 and 29, 2020, by PAHO-WHO.

⁷³ Except in Bimini, Grand Bahama, New Providence, and Paradise Island.

⁷⁴ Situation Report in The Bahamas and Turks and Caicos Islands, June 12, 2020, by PAHO-WHO.

⁷⁵ Situation Report in The Bahamas and Turks and Caicos Islands, June 26, 2020, by PAHO-WHO.

 $^{^{76}}$ Source: Ministry of Health and Wellness – Disaster Damage and Loss Assessment COVID-19 Impact Contribution.

Emergency Power (COVID 19) (NO.5), Order, 2020.

⁷⁸ Emergency Power (COVID 19 Pandemic) (NO.2) Order, 2020.

⁷⁹ Emergency Power (COVID 19) Regulations, 2020 (Chapter 34) and Emergency Powers (COVID 19 Pandemic) (Amendment

⁽NO.4) Order, 2020.

80 Emergency Power (COVID 19 Pandemic) (NO.2) Order, 2020.

Situation Report in The Bahamas and Turks and Caicos Islands July 24, 2020, by PAHO-WHO.

- Closure of public beaches and parks, hotels, or resorts on Athol Island, Grand Bahama, New Providence, Paradise Island, Rose Island, and cays surrounding New Providence since July 20⁸².
- Closure of borders for international commercial flights and commercial vessels carrying passengers from the United States of America (USA) since midnight, July 22. The Government lifted this restriction on July 28.
- Ban of ferry boat operations between East End, Grand Bahama, Crown Haven, and Abaco.
- Ban of inter-island travel (except Acklins, Crooked Island, Long Cay, and Mayaguana) since July 2883.

Only essential businesses could operate from August 4 to August 19, 2020. By August 14, only Acklins, Crooked Island, Inaqua, Long Cay, Long Island, Mayaguana, Ragged Island, and Rum Cay had resumed regular activities and inter-island travel between them. Because of a tropical storm expected during the weekend of August 22, the Government modified the lockdown measures for New Providence to allow citizens to prepare better for the lockdown and the storm. Furthermore, it extended emergency orders through September 30, 2020⁸⁴. In August, the Government also amended the emergency powers orders to update schedules for some businesses. The amendments also included new requirements such as mandatory quarantine for visitors in a government appointed facility and a negative RT-PCR test after the quarantine⁸⁵ Since August 31, other businesses (curbside, delivery food services for restaurants) and private and public transportation resumed operations⁸⁶.

During this time, The National Food Distribution Task Force continued providing food assistance for those in need. The government received the following donations: (i) clothes, toiletries, and food goods from SuperClubs Breezes, Grace Food, and GraceKennedy Money Services, (ii) BSD 1.5 million in food from the Lyford Cay Foundation.

At the end of August, the number of hospitalizations was 170. According to PAHO-WHO, there was a concern about the increase of hospitalizations and the limited bed capacity in New Providence. Consequently, on August 27, an Alternative Medical Care Site (AMCS) was established at a local hotel in New Providence for mild to moderate cases⁸⁷.

In addition, around 85 police officers were in quarantine due to COVID-19 exposure. In fact, during the first week of September, according to PAHO-WHO, "Uniformed Officers of the Royal Bahamas Police Force (RBPF) and Defense Force (RBDF) account for 205 confirmed COVID-19 cases. The RBDF New Entry Training Group was guarantined on an RBDF vessel, and training ceased after more than 85% of the recruits tested positive for COVID-19 ⁸⁸." This situation illustrates the vulnerability of essential workers (besides the health care workers) to be exposed to the virus and the additional challenges imposed on the government for offering critical services that require human interaction.

Starting on September 1, 2020, the Government relaxed some restrictions. For example, updated and extended shopping hours and private medical and dental care operations. In addition, inter-island travel resumed, and in-person religious services resumed. The change in the islands listed in each schedule during September illustrates how a more significant part of the country started to enjoy more flexibility. For instance, on September 10, 2020, the First Schedule (with more flexible measures) was integrated by the following islands (it includes surrounding island or cay): Chub Cay, Harbour Island, Long Cay, Long Island, Ragged

⁸² Emergency Power (COVID 19 Pandemic) Regulations, 2020 and Emergency Power (COVID 19 Pandemic) (Beaches) (NO. 2) Order, 2020.

Emergency Power (COVID 19 Pandemic) (NO.3) Order, 2020.

⁸⁴ Situation Report in The Bahamas and Turks and Caicos Islands August 7, 14, 21 and, 28, 2020, by PAHO-WHO.

⁸⁵ Emergency Powers (COVID 19 Pandemic) (NO.3) (Amendment) (NO.4) Order, 2020.

⁸⁶ Situation Report in The Bahamas and Turks and Caicos Islands September 4, 2020, by PAHO-WHO.

⁸⁷ Situation Report in The Bahamas and Turks and Caicos Islands August 28, 2020, by PAHO-WHO. 88 Situation Report in The Bahamas and Turks and Caicos Islands September 4, 2020, by PAHO-WHO.

Island, Rum Cay, San Salvador, and Spanish Wells⁸⁹. By September 25, the First Schedule incorporated to the previous list the following islands: Acklins, Andros, Berry Islands, Bimini, Cat Islands, Crooked Island, Eleuthera, Exuma, Inagua, Mayaguana, and Grand Bahama. At the time, only Grand Bahama had a curfew. This measure did not apply to the rest of the islands in the First Schedule. By contrast, the islands listed in the Second Schedule had a daily curfew from 10 pm to 5 am ⁹⁰ and were authorized to work remotely from home (it applied to businesses and offices and public service.)

In September, The Bahamas received the following donations 91:

- \$750,000 from The United States Government, through the International Federation of Red Cross, and The Bahamas Red Cross Society to purchase personal protective equipment, critical supplies, hand-washing stations, and provision of mental and psychosocial support services.
- \$677,000 from a grant to PAHO-WHO from the Canadian Government to provide PPEs, laboratory supplies, and support the development of the online contact tracing.
- Primers and probes from PAHO-WHO to the National Reference Laboratory to make up to 30,000 real-time PCR tests.

The parliament approved a further extension to the Emergency Orders through October 31, 2020. By October 9, 2020, only Abaco (excluding Green Turtle Cay, Grand Cay, Man-O-War Cay, and Elbow Cay,) New Providence (excluding Rose Island,) and Paradise Island were listed in the Second Schedule. Consequently, the Government strengthened mobility restrictions for this group due to increasing new cases. A 24-hour curfew entered in force from 7:00 pm, October 9, to October 13 at 5:00 am. Then it was extended indefinitely and added with a weekend 24-hour curfew from 7 pm every Friday until 5 am every Monday⁹².

By the middle of October, New Providence was the epicenter for COVID-19 cases in the country. Samaritan's Purse donated a tended patient facility that helped improve New Providence's health care capacity⁹³.

Though New Providence kept being the hotspot of COVID-19 in November, Eleuthera and Exuma started to show increasing confirmed cases. Consequently, the Government implemented weekend lockdown since November 13, from 6:00 pm on Fridays until 5:00 am on Mondays, and banned domestic travel to those islands (excepting emergencies.) By contrast, Grand Bahama was the only island listed in the First Schedule still under curfew, and other restrictions such as beaches and parks only open between 5:00 am and 8:00 pm ⁹⁴.

November 1, 2020, was a milestone in The Bahamas: the reopening of the tourism sector. The mandatory 14-days quarantine for incoming travelers was exchanged for a negative RT-PCR test result collected not later than five days before the arrival⁹⁵. It is essential to highlight that the Travel Health Visa remained a requirement for visitors and domestic travelers, and its fees varied between BSD 40,00 and BSD 60,00 based on the number of staying nights⁹⁶.

The parliament approved further extensions to the Emergency Orders through December 31, 2020, and then through January 31, 2021. During December 2020, Grand Bahama kept a daily curfew from 10:00 pm to 5:00 am. However, the Government allowed religious services into the curfew hours during the holidays from December 24, 2020, through January 3, 2021. The same applied to islands of the Second Schedule. By this time, restaurants located in islands in the First Schedule could provide dinner indoors, and social gatherings

⁸⁹ Emergency Powers (COVID 19 Pandemic) (NO.6) Order, 2020.

⁹⁰ Emergency Powers (COVID 19 Pandemic) (NO.7) Order, 2020.

⁹¹ Situation Report in The Bahamas and Turks and Caicos Islands September 11th and September 25th, 2020, by PAHO-WAHO.

⁹² Emergency Powers (COVID 19 Pandemic) (NO.8) Order, 2020.

⁹³ Situation Report in The Bahamas and Turks and Caicos Islands October 16th, 2020, by PAHO.

⁹⁴ Emergency Powers (COVID 19 Pandemic) (NO.13) Order, 2020.

⁹⁵ Situation Report in The Bahamas and Turks and Caicos Islands November 6th, 2020, by PAHO.

⁹⁶ Emergency Powers (COVID 19 Pandemic) (NO.13) Order, 2020.

of up to 20 persons were allowed in private residences or facilities. By contrast, restaurants in islands in the Second Schedule could only offer curbside pickup or delivery, takeaway, or drive thru. On December 21, the Government announced fines for violation (hosts BSD 2,000, attendance BSD 300) of the guidelines for social gatherings during the Christmas holiday 97 .

On December 25, the Government announced that non-guests with no recent travel history should show a negative COVID-19 RT-PRC test in hotels or commercial accommodations⁹⁸ located on an island in the Second Schedule before check-in or utilizing any facility on the hotel premises⁹⁹. The negative COVID-19 test did not apply for those who wanted to utilize an outdoor facility (such as a beach or golf course), but they must follow the usual health protocols (wear a mask, sanitize hands, and keep six feet away.) According to the Ministry of Tourism, Investment and Aviation (MTIA), the purpose of these new measures was "to safeguard the use of hotels by all persons and mitigate any negative impact the Coronavirus may have on this critical component of our tourism sector¹⁰⁰." Between December 28, 2020, and January 4, 2021, test results were valid for up to seven days since the date on which the test was taken¹⁰¹.

The start of January 2021 showed a declining number of infections and, therefore, the requirements of isolation for frontline workers. Hurricane season ended uneventfully, and public schools reopened on January 4, 2021. However, the islands on the Second Schedule kept virtual instruction going¹⁰². Grand Bahama, Eleuthera, Exuma, and New Providence continued with nightly curfews from 10:00 pm to 5:00 am during January. Nevertheless, on January 20, the Government relaxed some restrictions on the islands in the Second Schedule. It extended the operation hours of some businesses, allowed indoor dining in restaurants, and increased the attendance allowed to indoor funerals and weddings¹⁰³. At the end of the month, the Emergency Orders were extended to May 23, 2021.

February 2021 kept a similar pattern to January. Nevertheless, the two relevant facts of the February were: (i) Schools reopened for face-to-face learning (alternating with virtual schedule until further notice) on Abaco, Eleuthera, Exuma, and New Providence on February 23¹⁰⁴, and (ii) the Government banned "the entry into The Bahamas of any vessel or person, who has departed from Haiti, whether by direct transport routes or by transiting through another jurisdiction, and whether arriving by air or sea shall be prohibited for a period of 21 days commencing at 12:01 on Monday, February 15, 2021¹⁰⁵." In this regard, the Attorney General Carl Bethel explained that the idea was "to mitigate the risk of a surge of COVID-19 cases in The Bahamas as Haitians celebrate carnival, [... due to] we do have a lot of transport from Haiti [...] the ban is in place to cover the carnival period, and I think roughly two weeks after that." Moreover, The Attorney clarified that "outgoing transport would not be affected [because] you can go there, but you can't come back ¹⁰⁶." Lastly, PAHO-WHO reported that the Public Hospitals Authority received a donation of personal protective equipment valued at BSD 150,000 by the State of Qatar in February¹⁰⁷.

3. Third wave of the pandemic

In March 2021, the immediate actions implemented by the Government were: (i) extended the ban that

⁹⁷ Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) Order, 2020.

⁹⁸ It included accommodation offered for let on platforms including Airbnb, HomeAway or VRBO.

⁹⁹ Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) Order, 2020.
¹⁰⁰ BMOTA Press Statement. Authored by: Ministry of Tourism and Aviation. Source: Ministry of Tourism and Aviation. Date: December 28, 2020.

Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) (NO.2) Order, 2020.

Situation Report in The Bahamas and Turks and Caicos Islands January 6, 2021, by PAHO.

Emergency Powers (Covid 19 Pandemic) (Risk Management) (No.4) (Amendment)(No.4) Order, 2021.

¹⁰⁴ Situation Report in The Bahamas and Turks and Caicos Islands February 25, 2021, by PAHO.
105 Emergancy Powers (COVID to Pandemic) Pagulations, 2021, Emergancy Powers (COVID to Pandemic)

Emergency Powers (COVID 19 Pandemic) Regulations, 2021. Emergency Powers (COVID 19 Pandemic) (Risk Managment)

(Amendment) (No. 5) Order, 2021.

¹⁰⁶ See https://ewnews.com/haiti-blocked-ag-says-travel-ban-prompted-by-haitis-carnival ¹⁰⁷ Situation Report in The Bahamas and Turks and Caicos Islands February 25th, 2021, by PAHO.

denies the entry of any vessel or person, who has departed from Haiti for 30 days more on March 12, 2021, (ii) extended the curfew for Grand Bahama, New Providence, Paradise Island, Rose Island, Abaco, and (iii) established special provisions for Easter Sunday (temporary reduction of curfew¹⁰⁸.)

Among the main measures that the Government took during April highlight: (i) extension of the prohibition of travel to and from Haiti for a further period of 30 days since April 12^{109,110}, , and (ii) introduced new travel requirements for international and inter-island travels. For instance, any person who "travel interisland from Abaco, Eleuthera, Grand Bahama, Harbour Island or New Providence and is not fully vaccinated against COVID-19 [...] shall take a COVID 19 antigen test on the fifth day of arrival and submit the result to the Ministry of Health¹¹¹ ." Moreover, it established exemptions for fully vaccinated persons, who no longer needed to present a negative test to request the health visa, as they could show vaccination prove instead. Abaco was still under a nightly curfew between 10:00 pm and 5:00 am, as were Mainland Eleuthera, Mainland Exuma, New Providence, and Grand Bahama (but between 11:00 pm and 5:00 pm¹¹².)

In May 2021, the emergency orders were extended for three months until August 19, 2021. During the first half of May, the Government indicated that a negative COVID-19 PCR test is no longer needed for those who have surpassed the two-week immunity period (it applied for international travelers and people traveling between Abaco, Eleuthera, Grand Bahama, and New Providence). However, the Government kept the nightly curfew for those islands.

On May 16, 2021, through the Emergency Powers (COVID 19 Pandemic) (Management and Recovery) Order, 2021, the Government relaxed some measures establishing specific guidelines and instructions for several businesses and activities (education, tourism, fishery, others) based on the schedule for each group of islands. However, during this period, Grand Bahama kept special measures such as the nightly curfew and ban on wedding receptions. In the case of islands in the Second Schedule¹¹³, the Government continued to prohibit some businesses and activities' reopening, including bars, indoor cinemas, nightclubs, regattas, festivals, spas, jet ski operations. Other activities, such as educational instruction operating face to face, tourism excursions, and others, could run if they meet the health and safety protocols established by the MoHW.

Nevertheless, due to the increase of newly confirmed cases on New Providence, Andros, the Berry Islands, and Cat Island, the Government introduced a curfew for those islands between 8:00 pm, and 5:00 am since May 20¹¹⁴. Moreover, the Government placed a 14-day lockdown on the Bullocks Harbour and Great Harbour Cay in the Berry Islands on May 22, and Cat Island, Central Andros, and North Andros on May 24¹¹⁵. The Prime Minister justified the measure as follows "In these communities, there are no big hospitals or intensive cares units [...] there are a limited number of healthcare professionals, due to the small sizes of the populations. [Consequently,] as a government, we cannot allow Family Island outbreaks of the pandemic get out of control¹¹⁶." After that, the Government permitted harvest crabs and visits to the farms during a specific time slot¹¹⁷.

¹⁰⁸ Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) (NO.7) Order, 2020.

Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) (NO.11) Order, 2021.

This measure was extended again on May 10th for 30 more days. See Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) (NO.13) Order, 2021. Then, it was extended again up to June 10th, 2021.

Emergency Powers (COVID 19 Pandemic) (Risk Management) (NO.4) (Amendment) (NO.12) Order, 2021.

Situation Report in The Bahamas and Turks and Caicos Islands April 29th, 2021, by PAHO.

Abaco (excluding Green Turtle Cay, Grand Cay, Man-O-War Cay and Elbow Cay), Eleuthera (including Harbour Island), Great Exuma, Little Exuma, New Providence (including Rose Island) and, Paradise Island.

Emergency Powers (COVID 19 Pandemic) (Management and Recovery) (Amendment) Order, 2021.

Situation Report in The Bahamas and Turks and Caicos Islands May 27th, 2021, by PAHO.

See https://ewnews.com/locked-in-pm-announces-two-week-lockdown-for-cat-island-and-andros

¹¹⁷ See https://thenassauguardian.com/cat-island-and-north-and-central-andros-lockdown-extended/

By June 10, the number of new cases started a decreasing trend. Still, Grand Bahama and New Providence were under nightly curfews, while Bullocks Harbour and Great Harbour Cay in the Berry Islands, Cat Island, Central Andros, and North Andros remained in lockdown. Regardless of those specific restrictions, June represented an exciting milestone for the tourist sector in The Bahamas: Royal Caribbean International resumed operations as its first cruise set sail from Nassau, the first ship ever to homeport there 118. Soon after, on July 1, Crystal Cruises resumed operations from Nassau and held a Homeporting Inauguration Ceremony. The Hon. Dionisio D'Aquilar, Bahamas Minister of Tourism and Aviation, called it a "momentous day in Nassau," highlighting "months of anticipation, collaboration, and tremendous planning 119."

Effective July 1, the Government established a nightly curfew for North and South Bimini between 7:00 pm and 5:00 am. Even though bars and social gatherings were banned during the curfew, the operation of hotels and cruises was allowed 120. During the COVID-19 Update Press Conference on July 23, the Minister of Health highlighted 121:

- There was severe concern about New Providence, Grand Bahama, Exuma, Bimini, Eleuthera, and Abaco, because most of them have been zero days since the last positive case¹²². New Providence continued to be the epicenter of the COVID-19 new cases, accounting for 361 out 450 cases last week, representing 80% of the new cases in the country. Moreover, she warned that if this trend continued, The Bahamas would be in a similar situation in October 2020.
- In the case of Grand Bahamas, cumulative cases continued raising and hospital beds at capacity with 25 hospitalized the day before. She emphasized that the data showed a steep increase over the last seven days.
- In Bimini and Cat Cay, despite ongoing cases (people in isolation turning into positive cases,) the mitigation measures have made a difference because the data for the 7-day moving average showed stabilization and trending down in the number of cases.
- In the case of Eleuthera, the data showed an upward tick toward the end of the two previous weeks, so it is on the radar for being a cluster of cases. However, the 7-day moving average suggested a possible stabilization. Exuma showed a similar trend.
- The 7-day moving average in Abaco suggested that this island would need a close monitor like Eleuthera and Exuma.

Consequently, on July 26, the Government changed the requirements for inter-island travels and modified schedules and quidelines for business operations and other activities (sports, recreation, weddings, funeral, and religious instructions) for Grand Bahama and New Providence¹²³. July started with around 50 hospitalized but reached 105 before the end of the month, 15 of them in the intensive care unit. On July 30, the Government received a donation of two patient care tents from Samaritan's Purse, increasing the bed capacity by 18¹²⁴.

In early August, the emergency orders were extended until November 13, 2021. At the same time, the Government announced new travel requirements for fully vaccinated people. For instance, fully vaccinated passengers will require a COVID-19 test no more than five days before the embarkation date, proof of vaccination, and a Health Travel Visa. Unvaccinated people of 12 years old or more will require a negative test on travel day and completing an online survey within 14 days after arrival; children between 2 and 11

https://www.seatrade-cruise.com/ship-operations/royal-caribbean-ship-position-begin-nassau-cruise-homeporting-adventure
https://www.seatrade-cruise.com/ship-operations/royal-caribbean-ship-position-begin-nassau-cruise-homeporting-adventure
https://porthole.com/crystal-cruises-resumes-ocean-operation-from-nassau-bahamas/

Emergency Powers (COVID 19 Pandemic) (Management and Recovery)(NO.2) (Amendment) (NO.2) Order, 2020.

¹²¹ See https://www.youtube.com/watch?v=ccVosLlp394&t=2293s&ab_channel=TheOfficeofthePrimeMinisterTheBahamas

By contrast, Acklins and Mayaguana have 323 and 315 respectively without reporting a positive case.

¹²³ Emergency Powers (COVID 19 Pandemic) (Management and Recovery) (NO.2) (Amendment) (NO.4) Order, 2020.

¹²⁴ Situation Report in The Bahamas and Turks and Caicos Islands August 5, 2021, by PAHO.

years old require a negative test no more than five days before 125 travel or to travel between Abaco, Bimini, Exuma, Grand Bahama, Harbour Island, New Providence and North and South Eleuthera¹²⁶.

On August 14, 2020, the Office of the Prime Minister offered a summary of the actions taken during the COVID-19 pandemic as follows¹²⁷:

- Through the National Insurance Board's Unemployment Benefits Programme, about 36,813 people received BSD 84.2 million between March 23 and August 14, 2020.
- On the other hand, the Self-Employed Assistance Programme also paid 7,183 individuals
- BSD 15.5 million.
- By August 11, 2020, the National Food Distribution Programme had 30,649 households and demanded BSD 1 million per week.
- By July 20, the Department of Inland Revenue approved BSD 18 million in tax credits for medium and large-size businesses with 25 employees or more 128.
- The Small Business Development Centre gave BSD 25,908,632.04 in grants or seven-year term loans to 541 small businesses.
- The allocation available (BSD 20 million) in the National Budget of 2020/21 for utility subventions to the Water & Sewerage Corporation was increased.

When the number of cases and, therefore, the number of hospitalized trended upward in August, PAHO-WHO reported that "on August 17, 2021, Doctors Hospital, the private facility assisting with the care of COVID-19 patients advised of shortages in resources at their facilities including human resources and supplies and increase in deaths from COVID-19¹²⁹." Consequently, on August 23, the U.S. Centers for Disease Control and Prevention and the U.S. Department of State advised Americans not to travel to The Bahamas due to a very high level of COVID-19, issuing a Level 4 Travel Health Notice for The Bahamas 130. Regarding the situation, Minister of Health and Wellness, Dr. Michael Darville, said: "[...] in July and August, the country was experiencing the worst spike in COVID cases and deaths so far seen in our country¹³¹."

PAHO-WHO reported that the MoHW received on September 8, 2021, the samples taken between May 6 and August 8, 2021, for genomic sequence by Fiocruz Laboratory in Brazil. The samples identified the variable Delta as the principal one, but they also identified Alpha and Gamma as variants of concern¹³². On September 8, the number of hospitalized patients reached its highest number since April 2020 with 195, and by September 11, 24 people were in the intensive care unit. By the middle of the month, PAHO-WHO reported that the country was challenged "by the limited global supply of Cepheid Test Kits and other supplies required for COVID-19 testing 133."

On September 12, the Government allowed quarantined people registered to vote to participate in the general election of September 16. The general election resulted in a change of government led by Philip David as a Prime Minister on September 17.

https://opm.gov.bs/leader-of-the-oppositions-continued-failure-of-substance-and-support-puts-all-bahamians

¹²⁵ See https://www.baleariacaribbean.com/wps/portal/balcaribbean/balcaribbean/getready/beforetravelling/!ut/p/a1/ldCxDo">https://www.baleariacaribbean.com/wps/portal/balcaribbean/balcaribbean/getready/beforetravelling/!ut/p/a1/ldCxDo">https://www.baleariacaribbean.com/wps/portal/balcaribbean/balcaribbean/getready/beforetravelling/!ut/p/a1/ldCxDo">https://www.baleariacaribbean.com/wps/portal/balcaribbean/balcaribbean/getready/beforetravelling/!ut/p/a1/ldCxDo JADAbqp2GlhSMncTvFIDqqAwK3GDB4kABH4JTXF9hIEGO3Nt-fNqUOEfA6eRciUYWsk3LsOb1T26WGcez63sOMroLnA29Eb SsAcQrAKo_8z71DgMg3pEwwzSu5q98CHyVjBfMwcKKCeCXYggn4KKU6fSPmNUpsQXwNntmbdbqr3YY50013VZDDfu-14WUoszoh6woXlrksIMQzSUoVRBhcalCu2MfR4T6aQ!!/dl5/d5/L2dBISEvZoFBISgnQSEh/

Situation Report in The Bahamas and Turks and Caicos Islands August 19, 2021, by PAHO.

⁻at-risk/.

The Government implemented a Tax Credit and Tax Deferral Employee Retention Programme that offered tax credits/deferrals of up to BSD 600,000 for three months to service non-tax payroll.

¹²⁹ Situation Report in The Bahamas and Turks and Caicos Islands August 26, 2021, by PAHO.

¹³⁰ See https://thepointsguy.com/news/travel-advisory-bahamas/

¹³¹ See https://opm.gov.bs/government-launches-successful-free-covid-19-testing-pilot-program-on-inagua/

¹³² Situation Report in The Bahamas and Turks and Caicos Islands September 9, 2021, by PAHO.

¹³³ Situation Report in The Bahamas and Turks and Caicos Islands September 16, 2021, by PAHO.

During the second half of September, the Government kept a shorter curfew (between 11:59 pm and 5:00 am) in Andros, Abaco, Bimini, Cat Island, Eleuthera, Grand Bahama, and New Providence¹³⁴. Moreover, the Government lifted the requirement of health visas for inter-island travel since October 1, introduced changes based on travelers' vaccination status (with some exempt for those originating in New Providence and Grand Bahama,) and lifted the requirements for secondary testing. It also offered a list of exemptions for obtaining travel health visas for those who wanted to enter The Bahamas, even though all the passengers from incoming cruises must be vaccinated 135.

During October 2021, the number of people hospitalized decreased from 145 on October 1 to 59 on October 31. The number of patients in intensive care units showed the same pattern. However, "Inagua had an outbreak of the virus after the election campaign that [...] resulted in the deaths of several people." For this reason, the Government selected it to launch its free COVID-19 testing program. According to PAHO-WHO, the program tested around 20% of the resident "36". Free testing is a critical component of the Government's new approach because the health officials expect to have a more accurate picture of the pandemic in the country "37".

A successful pilot program in Inagua encouraged the Government to partner with Dr. Tyneil Cargill and his team at Bay Street Medical to continue a second pilot program in North Eleuthera on October 27, specifically in the "settlements of Harbour Island, Gregory Town, and Lower Bogue due to the spike of COVID-19 cases recorded in those areas¹³⁸." The final phase of the pilot program was carried out in the Berry Islands on October 29.

PAHO-WHO reported, "On October 28, 2021, the Chinese Government donated high flow oxygen machines, patient monitors, and ventilators to assist with the COVID-19 response effort ¹³⁹."

The emergency orders expired on November 13, 2021 and were substituted by The Health Services COVID-19) (Prevention and Management of Community Spread) Rules, 2021 and the Health Services (COVID-19) (General) Rules, 2021 that came into operation the same November 13, 2021, that shall be read and construed in conjunction. Additionally, from this day on, curfews and lockdowns were discontinued.

Through the COVID-19 Prevention and Management of Community Spread Rules, 2021, The Health Services defined requirements for citizens, legal residents, and visitors to enter the country; travel health visa, cruise ships, and inter-island travel; mandatory postentry testing and reporting of symptomatic persons; quarantine for persons suspected to have been exposed to COVID-19, and for those who tested positive. Furthermore, it ruled businesses operation, educational instruction, salons, spas, restaurants, public transportation, social gatherings, religious education, and other activities. Those rules kept the list of islands in the Second Schedule as follows: Acklins, Berry Islands, Crooked Island, Eleuthera, Inaqua, and New Providence¹⁴⁰.

Along the same lines, the Health Services defined functions and powers of the Minister and the Advisory Committee and general protocols to prevent the spread of COVID-19. Those rules banned the import and trade of COVID-19 testing supplies without proper authorization. Finally, the Health Services Rules also defined how to enforce the rules, stipulated offenses, and their penalty¹⁴¹.

Since November 13, the requirements to entry to The Bahamas were:

¹³⁴ Emergency Powers (COVID 19 Pandemic) (Management and Recovery) (NO.2) (Amendment) (NO.12) Order, 2021.

Emergency Powers (COVID-19 Pandemic) (Management and Recovery) (No.2) (Amendment)(No.14) Order, 2021.

Situation Report in The Bahamas and Turks and Caicos Islands, October 29, 2021, by PAHO.

¹³⁷ See https://opm.gov.bs/government-launches-successful-free-covid-19-testing-pilot-program-on-inagua/

See https://opm.gov.bs/government-continues-free-covid-19-testing-pilot-program-in-north-eleuthera-29-october-2021/

¹³⁹ Situation Report in The Bahamas and Turks and Caicos Islands October 29, 2021, by PAHO.

See https://opm.gov.bs/wp-content/uploads/2021/11/Health-Services-Covid-19Prevention-and-Management-of-Community-Spread-Rules-202111Nov21.pdf

¹⁴¹ See https://opm.gov.bs/wp-content/uploads/2021/11/Health-Services-Covid-19General-Rules-2021-11Nov21.pdf

- travel health visa,
- negative real-time PCR (or rapid antigen test with no more than five days before the travel),
- proof of vaccination for fully vaccinated travelers.

In the case of inter-island travels, travelers from islands in the Second Schedule had to provide a negative real-time PCR or rapid antigen test.

According to PAHO-WHO, by the second half of November there was a "decrease in the incidence of new COVID-19 cases, related deaths, and hospitalizations¹⁴²."However, the Ministry of Health and Wellness expressed concern about the "very significant and sustained increase in cases in both Europe and the United States" and because the Omicron variable, "significantly more transmissible than Delta" and "a very serious threat indeed 143." Consequently, the Government imposed new travel restrictions on travelers from the following countries from midnight of November 29, 2021: Botswana, Eswatini (formerly Swaziland,) Lesotho, Malawi, Mozambique, Namibia, Zimbabwe, and South Africa. It means that not ordinary residents in The Bahamas that had traveled to, though, or from those countries within the last fourteen days were not allowed to enter. Residents would have to be in mandatory quarantine for fourteen days¹⁴⁴. On December 9, "given the pervasiveness of the Omicron Variant, The Bahamas through the Ministry of Health and Wellness would remove those travel restrictions recently imposed on African countries 145."

4. Fourth wave of the pandemic

On December 1, the MoHW stated that "The Bahamas had experienced a 'difficult' third wave of the COVID-19 pandemic, with the highest death numbers per capita in the region." Hence, the authorities were "preparing for a possible fourth wave of COVID-19 and looking to Germany to share best practices and get technical advice for other measures in combating the pandemic virus 146."

Another milestone for tourism was on December 19th, when Air Canada resumed services to Exuma after a year of suspension¹⁴⁷.

PAHO-WHO reported that the first half of December showed a "decrease in the incidence of new COVID-19 cases, COVID-19 related deaths, and hospitalizations 148." Indeed, the United States Centers for Disease Control and Prevention qualified the travel risk to The Bahamas as moderate (level 2) on December 20. Level 2 "advises that unvaccinated travelers who are at increased risk for severe illness from COVID-19 should avoid non-essential travel and, if travel is necessary, discuss any concerns with a doctor 149." Nevertheless, there was an increase in travel-related cases, and on Christmas Eve, an increase in confirmed cases, concentrated (92%) in New Providence¹⁵⁰. The Prime Minister stated that "the number of cases here is likely to go up quickly and substantially. I am going to tell it to you straight: because Omicron is so contagious, we could be entering the worst phase of the pandemic." During his speech on December 24, 2021, he announced the

¹⁴² Situation Report in The Bahamas and Turks and Caicos Islands, November 26, 2021, by PAHO.

See Press Release: New developments in COVID could bring a new surge to The Bahamas - Important to Prepare Now. Authored by: Ministry of Health and Wellness. Source: Ministry of Health and Wellness. Date: November 29, 2021.

Featured Story: Travel Restrictions as a Result of Omicron - A COVID-19 Variant. Authored by: Ministry of Health and Wellness. Source: Ministry of Health and Wellness. Date: November 29, 2021.

Press Release. Bahamas removes travel restrictions from African countries; Rolls out COVID-19 booster shots. Authored by:

Lindsay Thompson. Source: Bahamas Information Services. Date: December 9, 2021.

Featured Story: Ministry of Healthand Wellness seeking assistance from Germany in COVID-19 fight. Authored by: Lindsay Thompson. Source: Bahamas Information Services. Date: December 1, 2021.

¹⁴⁷ Featured Story: COVID-19 Travel Risk Advisory Rating Lowered for The Bahamas. Authored by: Ministry of Health and Wellness. Date: December 21, 2021.

148 Situation Report in The Bahamas and Turks and Caicos Islands December 17, 2021, by PAHO.

¹⁴⁹ Featured Story: Air Canada Welcomed Back to Exuma. Authored by: Bahamas Information Services. Date: December 20, 2021.

¹⁵⁰ Situation Report in The Bahamas and Turks and Caicos Islands December 24, 2021, by PAHO.

following measures¹⁵¹:

- "Bahamians and visitors must test negative within three days of entering the country, instead of five, and from January 7 on, a negative PCR test will be required for all. Rapid antigen testing remains a critical tool, but a PCR test is more sensitive and can pick up an infection earlier in its course than the antigen test."
- Effective immediately, "indoor gatherings should not have more than 20 people, outdoor gatherings no more than 30."

Moreover, the Prime Minister highlighted some actions that the Government planned to implement:

- Increase outreach so that adults who are vaccinated receive a booster
- Provide technical guidance to businesses, churches, and other gathering sites to make them safe.
- Mobilize multiple field hospitals should the number of hospitalizations grow.
- Continue to progress as quickly as possible to make COVID 19-testing free of charge.

On December 30, the MoHW announced the following additional measures to contain Omicron 152:

- Incorporation of 12 additional doctors.
- Recruitment of 50 additional specialty nurses.
- Temporary acquisition of the Grosvenor Close Nursing Building and renovations planning to transform it into an Infectious Diseases ward.
- Free Rapid Antigen Tests for asymptomatic residents at multiple centers throughout New Providence in a partnership with private sector labs.
- A digital platform to match testing with contact tracing.
- Distribution of free medical grade masks at vaccination sites starting this week in New Providence.

The MoHW informed that they would contact individuals via SMS messaging to notify results and offer instructions for quarantine and follow-ups¹⁵³. On January 6, the Public Hospitals Authority updated protocols to address the increase in COVID-19 cases, mostly over emergency cases¹⁵⁴.

On January 10, Prime Minister offered a National COVID-19 Update. He revealed that during the first week of January, the country saw a significant surge in the case numbers and qualified it as a "new phase of the pandemic" because the variables Delta and Omicron are very transmissible and have triggered skyrocket cases around the globe infecting those who are vaccinated. The positive fact is that "more than 150,000 Bahamians are vaccinated, and nearly all vaccinated people are protected from the worst COVID outcomes." However, it is expected to see high cases counts. As a result, the Government is expanding infrastructure and human resources to meet the anticipated increase in hospitalizations and vaccine and booster access and outreach¹⁵⁵.

By January 12, 2022, the number of active cases was 6,182. Along the same lines, the number of new cases reported was 178; 14 had a history of travel within 14 days. The number of patients hospitalized was 119, seven in the intensive care unit. About 82% of the hospitalized were in New Providence. The number of cases skyrocketed during the following days, so by January 24, the total number of confirmed cases reached 32,238.

¹⁵¹ Featured Story: Prime Minister Davis on strategies to contain Omicron. Authored by: Bahamas Information Services.

Featured Story: Dr. Darville Updates on Omicron Containment Measures. Authored by: Ministry of Health and Wellness. Date: December 30, 2021.

Featured Story: New Contact Tracing Protocols For COVID-19 Cases. Authored by: Ministry of Health and Wellness. Date: January 1, 2022.

¹⁵⁴ Featured Story: PHA Institutions Update Protocols to Address Increase in COVID-19 Case. Authored by: Public Hospitals Authority (PHA). Date: January 6, 2022.

¹⁵⁵ Featured Story: Prime Minister Philip Davis National COVID-19 Update: A New Phase in the Pandemic. Authored by: Bahamas Information Services. Date: January 10, 2022.

5. Vaccination Campaign

On January 17, 2021, the Prime Minister appointed the National COVID-19 Vaccine Consultative Committee. The Committee consisted of different stakeholders "from the public and private sector, including community and religious leaders." The Committee had the mandate of developing the strategy, policies, and activities related to the National COVID-19 Vaccination Plan. Furthermore, it also must "review and guide the vaccinee schedules." Although the Committee was appointed after the first half of January 2021, the Planning Committee for developing The Bahamas' COVID-19 Vaccination Strategy and Plan started a couple of months before. They met for the first time on October 30, 2020¹⁵⁶. For instance, by January 17, the Committee was about to "finalize the operational plan to distribute the vaccine to eligible residents [...]" and started the recruitment of teams of vaccinators. Moreover, the Prime Minister claimed that the Government made a payment to secure vaccines for 20% of the population through the COVID-19 Global Access Facility (COVAX Facility)¹⁵⁷ and expected that the vaccine would be available by the end of the first quarter of 2021. Finally, the Prime Minister highlighted that the vaccines would be voluntary and free. He stated that anyone who gets the shots would receive a certificate that will be a travel requirement in the future 158.

In early February 2021, the Government announced that "starting the second half of February and into the second quarter of 2021," it would receive 100,000 doses of the AstraZeneca vaccine through the COVAX initiative. The first 33,600 doses arrived on March 30, and the remaining 64,200 were expected by May 2021¹⁵⁹. He also claimed that all adults could use this vaccine, according to the WHO¹⁶⁰.

In a public statement on February 21, 2020, the Prime Minister emphasized different aspects regarding the vaccine. To illustrate, he reiterated that: "there will not be a government mandate to take a vaccine. [However, they] strongly urge all who are eligible to get [it. Because] proof of vaccination may be one of the critical measures in helping the tourism industry to bounce back around the world." In addition, he also highlighted that the "distribution and administration of the COVID-19 vaccine will be a huge operational and logistical challenge," qualifying it as "the most complex challenges ever faced by the public health sector." Along the same lines, he explained that despite health officials looking for sites to ensure access and equity distribution, they have already identified between eight and ten approved vaccination sites on New Providence (including drive-thru) and Grand Bahama. He also stated that the government developed a vaccine appointment software to roll out before the vaccine distribution. The priority groups eligible for the COVID-19 vaccine in New Providence and Grand Bahama were healthcare workers, people over 65, uniformed branch members, frontline workers, critical workers in high-risk settings, and other essential service workers¹⁶¹.

The Bahamas received the first 20,000 doses of the AstraZeneca vaccine¹⁶² donated by the Government of India on March 10. This batch is part of a "commitment from India to donate a total of 500,000 doses of the AstraZeneca vaccine to Caribbean Community (CARICOM) countries¹⁶³." In addition, he stated that "the vaccines will be stored at the National Immunization Cold Storage Facility [...] a secure, temperature-

¹⁵⁶ The Government also invited PAHO to participate in this process from the beginning. See Situation Report in The Bahamas and Turks and Caicos Islands November 6, 2020, by PAHO.

 $^{^{157}}$ COVAX is co-led by CEPI, GAVI, and WHO.

 $^{^{158}}$ See <u>https://opm.gov.bs/vaccine-consultative-committee/</u>

¹⁵⁹ See https://opm.gov.bs/remarks-national-address-the-most-hon-dr-hubert-minnis-prime-Minister-and-Minister-of-finance-sunday-7-march-2021/

¹⁶⁰ See https://opm.gov.bs/statement-on-astrazeneca-vaccine/

See https://opm.gov.bs/remarks-national-address-the-most-hon-dr-hubert-minnis-prime-Minister-and-Minister-of-finance-21-february-2021/

¹⁶² It does not require ultra-cold storage, like other brands.

¹⁶³ See https://opm.gov.bs/bahamas-to-receive-first-batch-of-covid-19-vaccines-on-sunday/

controlled, clean, and protected environment," which temperature could be monitored remotely and has a back-up generator supply¹⁶⁴."

The COVID-19 vaccination response started on March 17 after a pilot with 100 individuals on March 14 in New Providence, and by March 21, more than 1,500 persons had received a single dose of the vaccine ¹⁶⁵. On March 28, the Government reported that "63% of those who have received the vaccine are over the age of 60. Others include healthcare workers and staff of the uniformed branches. 42% of persons who received the vaccine were male and 58%, female ¹⁶⁶." By April 26, The Bahamas administrated 25,692 doses of the AstraZeneca COVID-19 on New Providence, Grand Bahama, Eleuthera, and Abaco.

From April 26, the Government opened vaccinations for COVID-19 to all persons 18 years old and older from New Providence, Grand Bahama, and all Family Islands. Appointment requests must be made through a website or directly on-site¹⁶⁷.

According to PAHO-WHO reports, the COVID-19 vaccine rollout commenced on Acklins, Andros, Berry Islands, Cat Island, Crooked Island, Exuma, Inagua, Long Island, Mayaguana, Rum Cay, and San Salvador by the end of April. The United States Embassy supported the rollout, and Life Flight Air Ambulance Services offered their aircraft to transport vaccines and the medical team¹⁶⁸.

The administration started on May 10 in Grand Bahama and New Providence, and by May 12, 627 persons had received the second dose of the AstraZeneca COVID-19 vaccine¹⁶⁹. By May 21, 2021, 44,226 persons received their first dose and 6,016 the second dos3¹⁷⁰.

On June 29, 2021, the CIBC First Caribbean donated BSD 100,000 to The Bahamas' COVID-19 vaccination program to assist the purchase and rollout. The bank donated through the FirstCaribbean International ComTrust Foundation¹⁷¹. The Government also borrowed 5,000 doses from Antigua and Barbuda during late June to speed up the vaccination. On July 21, the country received a donation of 3,496 doses of the vaccine from the British Overseas Territories of Montserrat and Anguilla with the assistance of United Kingdom High Commissioner Sarah Dickson.

On August 3, 2021, The Bahamas received the third batch of vaccines through the COVAX initiative, 33,600 doses of the AstraZeneca vaccine that completed the 100,800 doses the Government had acquired through that mechanism¹⁷². Moreover, Prime Minister Minnis announced that the U.S. Embassy in Nassau donated "four ultra-cold freezers, which are used to store vaccines that require ultra-low temperatures such as Pfizer¹⁷³." The Bahamas also received 128,700 Pfizer vaccines and 38,400 Johnson & Johnson vaccine doses from the United States¹⁷⁴.

Vaccine status by April 22, 2022

According to the IDB' COVID-19 Situational Report from April 19, 2022, The Bahamas acquired 20% of its COVID-19 vaccines from COVAX and 58.1% from donations. As a result, The Bahamas has acquired full doses

See https://opm.gov.bs/remarks-national-address-the-most-hon-dr-hubert-minnis-prime-Minister-and-Minister-of-financesunday-7-march-2021/

Soliday-7-mach 2021/ 165 See https://opm.gov.bs/new-covid-19-vaccination-sites-to-open-this-week-on-new-providence-and-grand-bahama/

See https://opm.gov.bs/statement-from-the-national-covid-19-vaccine-consultative-committee/

¹⁶⁷See https://opm.gov.bs/covid-19-vaccinations-now-open-to-18-and-older/

Situation Report in The Bahamas and Turks and Caicos Islands April 29th, 2021, by PAHO.

¹⁶⁹ Situation Report in The Bahamas and Turks and Caicos Islands May 13th, 2021, by PAHO.

¹⁷⁰ Situation Report in The Bahamas and Turks and Caicos Islands May 27th, 2021, by PAHO.

¹⁷¹ See https://ewnews.com/cibc-firstcaribbean-continues-fight-against-covid-19

¹⁷² The Government will return the vaccines borrowed from Montserrat and Anguilla.

¹⁷³ See https://ewnews.com/plane-reach-3360o-astrazeneca-doses-arrive-from-covax-facility-to-the-bahamas

¹⁷⁴ Situation Report in The Bahamas and Turks and Caicos Islands August 19th, 2021, by PAHO.

for approximately 78% of its population so that they can be wholly immunized. Moreover, by April 2022, only 40.2 people of the 100,000 population of the Bahamas have received two vaccine doses. Furthermore, image I-5 shows that the number of doses ¹⁷⁵ administrated from December 2021 to April 2022 is almost steady.

■ Share of people fully vaccinated against COVID-19
■ Share of people only partly vaccinated against COVID-19 Aruba Anguilla 62% 67% Antigua and Barbuda Belize 4% 55% Barbados 51% 52% Saint Kitts and Nevis 49% 40% Bahamas Grenada 32% 31% Saint Lucia 28% Saint Vincent and the Grenadines 25% Jamaica 0% 10% 20% 30% 50% 60% 70% 80%

Image I 4: SHARE OF PEOPLE VACCINATED AGAINST COVID 19, JANUARY 30, 2022

Source: OurWorld in Data

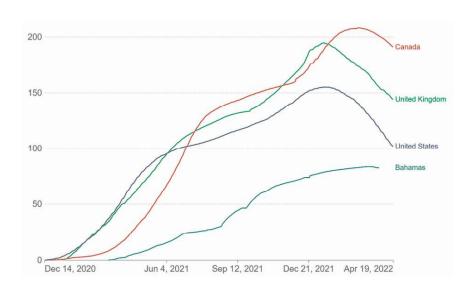


Image I 5: VACCINE DOSES ADMINISTRATED IN THE LAST 12 MONTHS

Source: OurWorld in Data

 $^{^{175}}$ All doses, including boosters, are counted individually.

Social Sectors



Health

One particularity of assessing the COVID-19 pandemic compared to other disasters that have been assessed in Bahamas using the DaLA methodology, such as hurricanes, is the emphasis that must be made in the health sector.

During an epidemic, there is an increase in the demand for and utilization of health services. Also, there is an upward trend in additional costs. Attending the emergency also implies losses for the health sector. The regular provision of health services might be disrupted or postponed because the priority is to satisfy the public health emergency needs.

This assessment includes information until 2020. It is based on the information received from the MoHW. All monetary figures are expressed in 2021 BSD. Meetings with the MoHW were held virtually.

A. Background

Before estimating additional costs and losses, it is worth presenting some background on The Bahamas health system's capacity and its epidemiological profile. This context allows a better understanding of the context in which the COVID-19 pandemic is happening.

1. Description of health sector capacity in The Bahamas

The provision of accessible health services throughout the archipelago is challenging. The Bahamas health sector has significant strengths, healthcare is tax-financed, free for all, and its central policy goal is universal health coverage. However, it is siloed in different health institutions. The MoHW is responsible for the governance and stewardship of the public and private health sectors. It comprises the Department of Public Health (DPH) and the Public Hospitals Authority (PHA). The National Health Insurance Authority (NHIA) is another public healthcare system, MOHW (2010). The MOHW covers approximately 65% of the Bahamas population. DPH delivers public health services through 86 clinics and community centers. The PHA manages the nation's three public hospitals: the Princess Margaret Hospital (PMH) has 400 beds, the Rand Memorial Hospital (RMH) has 85 beds, and a ten primary care clinics network; and the Sandilands Rehabilitation Centre (SRC). PHA hospitals receive patients referred from DPH, PHA clinics, and NHIA. PHA also oversees the National Emergency Medical Services and the Supplies Management Agency. The NHIA operates a public-private model with a 108 physicians' network that delivers primary care services to 87,000 beneficiaries (22% of the population)¹⁷⁶. The population can access private health services through health insurance and out-of-pocket payments (OOP). About 30% of the people are affiliated with private health insurance firms, and in 2019, OOP reached 26.6% of the total health expenditures¹⁷⁷. The country has two private hospitals in New Providence, the Doctors Hospital and the Lyford Cay Medical Facility, and the Okyanos Stem Cell Therapy Centre in Grand Bahama. There are also individual providers. The Bahamas has 19.3 medical doctors and 31.3 nurses/midwives per 10,000¹⁷⁸ people, which makes a density of 50.6 per 10,000, this figure is above the international standard of 44.5 health workers per 10,000 (including physicians, nurses, and midwives), WHO (2017b).

¹⁷⁶ National Health Insurance Authority. <u>https://www.nhibahamas.gov.bs/</u>

World Health Organization. Global Health Expenditure database. Out-of-pocket expenditure (% of current health expenditure) The Bahamas. https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=BS WHO (2017a).

The health care sector in The Bahamas is facing several challenges amid the COVID-19 pandemic. These challenges are related to the fragmentation of its health system, unequal quality of care, and inadequate health facilities and medical equipment conditions due to poor maintenance and the effects of Hurricane Dorian, Randolph and Lafferty (2019). The COVID-19 pandemic is an additional critical challenge. Although the number of cases and deaths is below the regional average, it still represents a significant public health emergency given the limitations of the healthcare services. Moreover, the disruption of preventive and curative care for patients other than COVID-19 cases reduced access to healthcare, particularly for patients with chronic conditions, PAHO-WHO (2021).

Health expenditures are on the rise, although provision of efficient and effective health care is still an unmet goal. Between 2010-2018, the health care expenditures as a share of GDP increased from 5.26% to 6.25%; the domestic general government health expenditure as % of current health expenditure increased from 39% to 50%, signaling a significant public investment, which is also visible in the per capita health expenditures increase from BSD 1,495 to BSD 2,013. Nonetheless, the public healthcare sector faces inefficiencies in the delivery of services. The MoHW and NHIA models coexist and have different organizational characteristics, supply capabilities, and asymmetric health benefits. As a result, the implementation of national policies, programs, and healthcare delivery is fragmented, obstructing the coordination of services. Second, the patients have multiple pathways to receive healthcare such as NHIA, DPH, PHA, private insurance, and independent providers, resulting in services duplication and limited cost control. Third, the growing burden of chronic NCDs contributes to the rising health expenditures since these conditions require long-life medical treatment and highly specialized medical care and the programs to reduce the health risks do not reach adequate coverage.

2. Epidemiological profile

Chronic non-communicable diseases (NCDs) are the top health needs of The Bahamas population. NCDs are highly prevalent, one of every ten adults has diabetes, and four of every ten adults have hypertension. There is an NCD-related gender health gap since more women are obese (women 54.8%, men 31.8%), have hypertension (women 77.5%, men 66.2%) and malignant tumors (women 66.2%, men 47.9%), MoHW (2019). The most common malignancies are prostate, breast, colorectal and cervical cancer, WHO Globocan (2020). Additionally, NCDs are the leading causes of ambulatory and hospital care and cause 63% of disability-adjusted life years, MoHW (2019)¹⁷⁹. As a consequence, the top five leading causes of death are NCDs: ischemic heart disease (52.5 per 100,000 inhabitants), cerebrovascular disease (39.8), prostate cancer (31.9), breast cancer (28.8), and diabetes (27.1). The COVID-19 pandemic represented a heavy burden. In 2020-2022, it caused 198 deaths per 100,000, surpassing the top five causes of death in the country, IDB-SPH COVID-19 (2022).

Appropriate preventive and curative care for NCDs in primary care facilities and hospital settings can reduce health costs¹⁸⁰, and up to 25% of the mortality rates for these conditions¹⁸¹. For example, in The Bahamas more than 70% of breast cancer patients are diagnosed with late stage cancer, which in turn reduces treatment effectiveness and life expectancy and increases the costs of care, whereas early screening increases life expectancy and reduces the costs. The total direct cost of diabetes and hypertension is BSD 34.8 million per year, representing 17.6% of the country's public health expenditures.

The COVID-19 pandemic has been a severe public health emergency. Currently, in The Bahamas, the

¹⁷⁹ Institute for Health Metrics and Evaluation. Global Burden of Disease Tool. http://ghdx.healthdata.org/gbd-results-tool.

¹⁸⁰ See PAHO-WHO (2016) and Kostova et al (2020).

¹⁸¹ See Glacier (2006) and Dugani S. et al. (2017).

COVID-19 pandemic might have a syndemic nature¹⁸². The overlap of high rates of NCDs and COVID-19 suggests a broader syndemic burden since comorbidities, such as NCDs, intersect with nutrition and other determinants of health. NCDs patients are at higher risk of severe COVID 19 related illness and death, and vice-versa, since COVID-19 leads to the neglect of NCDs. The pandemic disrupted the continuity of preventive and curative services for NCDs patients, thus creating a medium-term threat. The disruption of NCDs treatment might increase the risks of acute complications, accelerate chronic complications, raise disability and premature mortality, and demand more healthcare services. Moreover, COVID-19 could have worsened GBV against women and children. Lockdowns, curfews, physical distancing left women isolated from their support networks and increased the barriers to access essential services.

Limited access to healthcare for victims of gender-based violence (GBV) is a challenge. GBV is a pervasive problem; one in three women on average will experience domestic violence in their lives; and among those women that suffered a violent incident that required medical attention, an intimate partner (14%) or a friend or acquaintance (17.8%) caused the injuries. The Bahamas has taken significant strides to increase coordination and response to GBV. Some gains are the existing legislation concerning domestic violence and sexual offenses, national gender policies, programs, services, and protocols, and personnel trained to care for violence victims¹⁸³. In 2013, the Ministerial Oversight Committee and the National Task Force started to oversee national strategic action plans to address GBV. Nonetheless, human, and financial resources are still limited to address the number of persons needing assistance. Up to 22% of households report domestic violence and the COVID-19 pandemic increased this problem by 11.3%. Health care services face shortages in delivering emergency care to GBV victims that can meet their immediate healthcare needs and fulfill their long-term psychological, social, and supportive needs. Currently, there is scarce information regarding adherence to GBV protocols or skills, knowledge, and competencies of health providers.

B. Losses

In the event of an epidemic, the demand for and utilization of health sector services could increase with respect to its baseline scenario, that is, the number of normal medical care. However, this increase occurs in medical care that was not usually provided, to the detriment of those routinely provided by the health system. For example, in the case of COVID-19, many hospitals in different Latin American and Caribbean countries were used exclusively to care for the disease¹⁸⁴. All other activities were disrupted, it is important to measure those services that were not provided.

The PAHO-WHO noted perceived disruptions in delivering of essential health services in most countries, with perceptions being of note in low-income and high-income countries. PAHO-WHO identified the primary causes of disruption were related to the deployment of healthcare workers to provide COVID support, repurposing of health facilities only to deliver COVID-19 care, fear of contagion among the general population, reduced access to medical services due to lockdowns and government-mandated orders for social distancing¹⁸⁵, and limited access to finance costs associated with care due to decreased employment and income, Busso et al. (2020).

The information for the baseline scenario is about the usual hospitals' admissions and primary care services before the pandemic started. Hospital services comprise ambulatory consultations, diagnostic tests,

The term syndemic refers to two or more epidemics interacting synergistically and contributing, because of its interaction, to the clustering of the excess burden of disease in a location or population, more than just the sum of both.

The National Task Force for Gender-Based Violence. Strategic Plan to Address Gender Based Violence. August 2015. https://www.bahamas.gov.bs/wps/wcm/connect/3be7c3ad-862c-4cof-ac44-a2833552eoob/GBV+REPORT.Final.+August2015.

pdf?MOD=AJPERES

184 See Doubova SV, Robledo-Aburto ZA, Duque-Molina C, et al. (2022) and Arsenault C, Gage A, Kyung M. et al. (2022)

185 PAHO-WHO (2020)..

admissions, deliveries, and surgeries. The public health sector in The Bahamas offers an array of hospital services through its hospitals' network. Hospital utilization data for the pre-COVID period (2015 and 2019) reveals nominal declining trends for all service types except for emergency room visits and pediatric admissions (Table II-1). Though overall admissions were falling, the magnitude of the year-over-year decline, in no instance was more significant than 0.04%.

Table II 1: SERVICES: NUMBER OF ATTENTIONS

Services	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	Avg 2015-19	FY 2019/20	%Change
Critical care	812	798	689	675	744	544	-26.8%
Psychiatry	1,436	1,520	1,438	1,303	1,424	1,107	-22.3%
Medicine	4,224	3,923	3,896	3,599	3,911	3,057	-21.8%
Emergency room	1,061	1,178	993	1,152	1,096	892	-18.6%
Surgery	4,821	5,147	5,296	4,957	5,055	4,211	-16.7%
Pediatrics	1,924	1,832	1,828	1,918	1,876	1,629	-13.1%
OB/GYN	5,886	5,617	5,389	5,339	5,558	4,931	-11.3%
Nursery	4,106	3,863	4,393	3,789	4,038	3,740	-7.4%
Geriatrics	38	47	30	35	38	39	4.0%
Total	24,308	23,925	23,952	22,767		20,150	

Source: Ministry of Health of Wellness

Disruptions to hospital admissions and access to community and outpatient services during COVID-19 are tangible. Significant disruptions to hospital utilization yielded negative magnitudes of change that far exceed the pre-COVID-19 findings. Specifically, in FY2019/2020, when compared to the prior 5-year pre-COVID-19 average, disruption in access to services resulted in an almost homogeneous decline in utilization data ranging from 27% to 7%. Service types experiencing the most significant disruptions were critical care, psychiatry, and internal medicine services, with 29%, 22% and 22% declines, respectively (Table II-1). By contrast, geriatric admissions saw a 4% increase when COVID-19 data is compared to the pre-COVID average.

For added context, eight (8) months into FY2019/2020, The Bahamas recorded its first case; policy decisions resulted in lengthy periods of curfews and lockdowns, limiting health facility visits to emergencies. The nonward services offered through the public hospitals were halted during the 1st wave of the pandemic in The Bahamas. Most routine healthcare appointments were canceled or postponed. It is noted that telehealth modalities did support mental health strategies and initiatives, even while the Community Counselling and Assessment Centre (CCAC) was closed (Table II-2). These observed interruptions to health services have had implications for the level of control of chronic diseases, delayed demand for essential health screening (for breast cancer, cervical cancer, diabetes, and hypertension – among others) and ultimately, excess morbidity and mortality from non-COVID conditions and complications.

The monetary cost of the services that were not provided could not be estimated because the assessment team did not receive information about the cost of these services.

Table II 2: OUTPATIENT SERVICES: NUMBER OF ATTENTIONS

Services	FY 2015/16 F	Y 2016/17	FY 2017/18	FY 2018/19	Avg 2014-19	FY 2019/20
Specialty Clinics	86,181	82,383	82,454	82,561	82,964	-
Accident & Emergency	65,890	64,313	64992	65,144	64,974	51,369
Other Clinic Services	44,861	51,873	51,936	51,950	47,977	-
General Practice Clinic	25,699	25,678	25,689	25,776	26,293	-
General Primary Care Clinics	15,267	14,315	14,422	14,539	14,643	-
Child Health Service	11,130	10,947	11,027	11,407	11,145	-
Other Domiciliary Services	9,490	8,358	8,548	8,235	9,270	-
School Health Service	9,181	9,251	9,325	9,351	9,214	-
Ante-natal Service	4,819	5,078	5,082	5,090	4,694	-
Post-natal Service	4,071	4,118	4,123	4,130	4,198	-
Psychiatric Clinic	2,584	2,526	2,541	2,562	2,490	-
Ann's Town Geriatric Clinic	1,027	1,136	1,141	1,155	1,081	-
Total	280,200	279,976	281,280	281,900		51,369

Note: (-) represents zero values. Source: Ministry of Health of Wellness.

C. Additional Costs

Additional costs of the health sector related to COVID-19 were approximately BSD 50 million at 2021 prices¹⁸⁶ (Table II-3). Those costs are classified as follow: a) prevention; b) treatment; c) other; d) infrastructure upgrade; e) cross-cutting; f) death management; g) general supplies. The sum of the expenses to respond to the COVID-19 pandemic on the health sector represented in 2021 approximately 14% of the total budget of the MoHW. The economic impact of the pandemic on the MoHW expenditures is critical. The total amount of expenses to care for the pandemic represents 109% of the approved estimates for the DPH for FY 2020/2021¹⁸⁷.

Table II 3: ADDITIONAL COSTS BY CATEGORY (2021 BSD)

Category	BSD
Prevention	18,370,446
Treatment	16,041,369
Other	7,118,848
Infrastructure upgrade	5,724,229
Cross-cutting	2,087,110
Death Management	243,230
General Supplies	111,981
Total	49,697,213

Source: Ministry of Health of Wellness.

Staff compensation was BSD 74 million at 2021 prices. However, that remuneration is not an additional cost. It is the regular compensation.

¹⁸⁷ Ministry of Finance (2022)

The costs associated with infection prevention and control and protection of the health workforce accounted for BSD 18.4 million of total COVID-19 costs (Table II-4). It included: a) the provision of PPEs to front-line workers for \$11.7 million (or 64% of the total prevention spend). b) timely testing of symptomatic individuals in earlier waves via RTPCR testing, which was offered free of charge at all government care sites in New Providence and Grand Bahama and community clinics on the Family Islands. In the 4th wave, the MOHW expanded testing to include screening of asymptomatic individuals via the pilot rapid antigen testing initiative. c) the scaling of contact tracing to ensure positive cases and their contacts were removed/ separated from the general population for a period of isolation and quarantine, respectively. These efforts resulted in over 32,000 RTPCR cases being advised to isolate; d) traced over 50,000 contacts; investigated close to 2,000 clusters; and flagged high-risk activities; and e) accessibility to quality and safe vaccines to offer protection against severe disease and death.

Table II 4: COVID-19 PREVENTION RELATED COSTS (2021 BSD)

Category	BSD
PPEs & distribution cost	11,699,614
Vaccines	2,047,274
Quarantine facilities	1,654,324
Medical & surgical supplies	1,299,851
Hotel accommodations	777,177
Test kits	515,826
Equipment, transport & installation costs	374,535
Specimen transport	1,846
Total	18,370,446

Source: Ministry of Health of Wellness.

Costs related to treating COVID-19 patients with severe complications requiring hospitalization and respiratory support and pharmaceutical interventions amounted to BSD 16 million (Table II-5). These costs included \$7.8 million to finance a public-private partnership between the MoHW and Doctor's Hospital to strengthen the public health infrastructure and represented 48% of the total expense for COVID-19 treatment costs. This arrangement allowed for additional bed capacity for treating cases with severe COVID disease and dialysis for services for positive patients. Pharmaceutical offerings in the public health sector included Remdesivir and monoclonal antibodies.

Table II 5: COVID-19 TREATMENT RELATED COSTS (2021 BSD)

Category	BSD		
DHHS	7,766,898		
Pharmaceuticals	4,380,630		
Emergency Flights & Isolation Pods	3,673,271		
Medical Treatments	220,570		
Total	16,041,369		

Source: Ministry of Health of Wellness.

Other costs were estimated at BSD 7.1 million. They are related to the supportive functions undergirding preparedness and response planning. Food services accounted for 63% of other costs (Table II-6) required at COVID-19 care centers (PMH, Rand, SBHC and Cancer Association Building) and the quarantine locations servicing healthcare workers and other essential workers. Twenty-six percent (25.57%) of the funds dispensed on this kind of cost supported regular cleaning of facilities care as well as contracted arrangements for deep-cleaning services. Other supportive elements represented less than 12% of the remaining total: security, waste management, transportation, and shipping.

Table II 6: COVID-19 OTHER COSTS (2021 BSD)

Category	BSD
Food services	4,454,995
Housekeeping, cleaning cost & laundry	1,820,568
Security	635,733
Waste management	168,319
Back-up transport services	24,725
Shipping cost	14,508
Total	7,118,849

Source: Ministry of Health of Wellness.

The health infrastructure from both physical and technology perspectives was upgraded/expanded to support the nation's ability to respond and mitigate all waves of the pandemic at the cost of BSD 5.7 million (Table II-7).

Table II 7: INFRASTRUCTURAL UPGRADES (2021 BSD)

Category	BSD
Infrastructure expansion	4,701,227
Temporary tents, telehealth & mobile units	1,023,002
Total	5,724,229

Source: Ministry of Health of Wellness.

Table II 8: COVID-19 CROSS-CUTTING COSTS (2021 BSD)

Category	BSD
Vaccine Roll-out (Cmte)	2,060,400
Surveillance IT and Other ICT Systems	15,172
Advertising	11,538
Total	2,087,110

Source: Ministry of Health of Wellness

There were costs associated with cross cutting measures. A few national response pillars had multiple touchpoints, cross cutting many of the other pillars. These cross-cutting elements cost approximately BSD 2.1 million (Table II-8), the majority (99%) of which the Vaccine Consultative Committee managed. The Committee had responsibility for the logistics and operationalizing of all vaccination centers, the implementation of the vaccine portal, and social mobilization initiatives as well as overtime pay for Events Supposedly Attributable to Vaccination or Immunization (ESAVI) call center agents and staff at the vaccination centers – among other responsibilities.

Education

The losses in the education sector registered a total of 48.2 million BSD, 51% of which is due to the reduction in days of classes and 49% because of lost tuition fees in the private sector. Losses related to the reduced class days add up from the school closures that began at the end of the 2019-2020 academic year and extended through the 2020-2021 and 2021-2022 periods. It is estimated that at least 102 days of classes were lost during that span due to the COVID-19 pandemic in The Bahamas since remote instruction was the only modality at a national level.

Additionally, losses of private schools because of dropouts were estimated comparing enrollment figures of 2019-2020 and 2021-2022 academic years. Results showed an increase of at least 3,354 students in public schools, so one can assume that rise was caused by those who left private schools due to the economic shock of households. Consequently, the calculation of losses considered at least the 2020-2021 and 2021-2022 academic years (20 months of fees per student). Worth noting that all the estimations use salaries and tuition fees from 2021.

Additional costs have been estimated at about BSD 2.4 million. These costs consider the expenses that educational institutions and the Ministry of Education (MoE) of the Bahamas had to incur to restore the service, first offering virtual modality, then hybrid and ultimately face to face, as it happened since the 2019-2020 academic year until the 2021-2022 period. These costs include equipping public schools to offer remote classes, cleaning and disinfection supplies, deep cleaning services, and setting up classrooms, staff rooms, and campus movement to reopen public schools.

Calculation of losses and additional costs of the education sector was made with data from press releases, public documents from the web page of the MoE, and the baseline structured on December 2021 by the Inter-American Development Bank for the consultancy "Generation of the national exposure model as Baseline Information for Critical Sectors in The Bahamas – BH-T1078 – Capacity Strengthening for More Resilient Bahamas – Education Sector".

A. Background

The MoE of The Bahamas provides resources and services for all the maintained schools (MoE, 2019). The management of pre-primary, primary, and secondary schools, including building, staffing, and the provision of tuition and other supplies, is designated by the Department of Education (DoE) through its specific divisions. According to the Education Act, access to education is free and mandatory for all residents between the ages of 5–16 years (IDB/ECLAC, 2020a). Educational institutions are categorized according to the MoE as follows:

- Public schools: Institutions operated and managed by the Department of Education and fully funded by The Bahamas government (MoE, 2019). Therefore, the MoE has responsibility for all the educational institutions in the Commonwealth of The Bahamas.
- Private schools: All privately managed and operated educational institutions, regardless of whether they receive financial support from the Government (MoE, 2019.)
- Pre-schools: A stage of education not yet mandatory for students between the ages of 3 and 4 (MoE, 2019.)
- Primary schools: From grade 1 to 6 represent the first stage of mandatory schooling. They typically accommodate students aged 5 to 10 (inclusive) (MoE, 2019.)
- Secondary schools: For children between the ages of 11 and 16 (inclusive.) Represent the amalgamation of junior high and senior high levels and the inclusive grades of 7 through 12 (MoE, 2019.)
 - Junior high schools: Accommodate students in the intermediate stage, from grade 7

through 9. Children typically aged between 11 and 13 (inclusive.)

- Senior high schools: For students in the grades of 10 through 12, the final stage of mandatory schooling. They typically accommodate students between 14 and 16 (inclusive.)
- Special schools: For children with severe disabilities. Typically, students in these schools follow an individual education plan and are grouped using the conventional grading system (MoE, 2019.)

Based on the data provided by the MoE, there are 192 education facilities in The Bahamas. Of that total, 144 are public and 48 private schools. According to the data collected, 194 schools serve 52,306 students: 40,978 from public and 11,328 from private schools. The main figures are summarized in Table III-1.

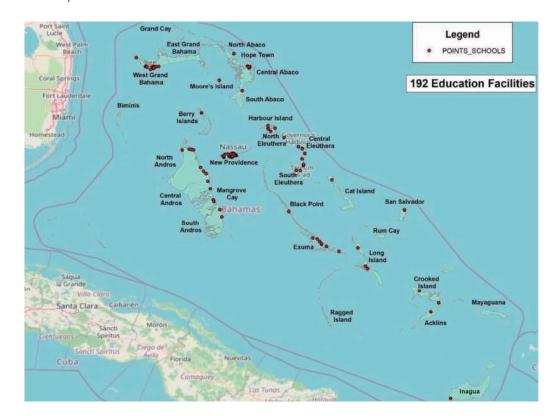
Table III 1: NUMBER OF SHOOLS AND STUDENTS PER ISLAND IN THE BAHAMAS.

Island	Private schools	Public schools	Total No. Schools	No. Students Private Sch.	No. Students Public Sch	Total No. Students
Abaco	5	13	18	750	2,148	2,898
Acklins	0	2	2	-	99	99
Andros	0	18	18	-	2,122	2,122
Berry Islands	0	1	1	-	147	147
Cat Island	0	3	3	-	293	293
Crooked Island	0	1	1	-	52	52
Eleuthera	1	16	17	125	2,278	2,403
Grand Bahama	8	13	21	1,502	4,474	5,976
Inagua	0	1	1	-	156	156
Long Island	0	4	4	-	326	326
New Providence	34	54	88	8,951	27,520	36,471
San Salvador	0	2	2	-	183	183
Exuma and Cays	0	13	13	-	967	967
Spanish Wells	0	1	1	-	164	164
Rum Cay	0	1	1	-	12	12
Mayaguana	0	1	1	-	37	37
TOTAL	48	144	192	11,328	40,978	52,306

Source: Assessment team based on data from the Ministry of Education. (2021)

Based on the latter, the spatial distribution shows that most educational institutions are in New Providence with 88 school facilities, followed by Grand Bahama with 21 schools, Andros and Abaco with 18 institutions respectively, then Eleuthera with 17 Exuma and Cays with 13 schools. The other 17 schools are in the other Family Islands (Map III-1). 2,717 teachers and 340 administrative personnel serve at different levels, particularly in public schools. As in the case of institutions, almost 76% of personnel are concentrated in New Providence and Grand Bahama, while 24% do it in the Family Islands.

The school calendar runs from August to June, and students typically attend schools five hours a day, around 180 days per academic year. Table III-2 shows the number of students per level of education.



Map III 1: SPATIAL DISTRIBUTION OF EDUCATION FACILITIES IN THE BAHAMAS

Source: Assessment team with data from the MoE (2021), geo-information downloads from OpenStreetMap portal, visual interpretation of satellite images.

Table III 2: NUMBER OF STUDENTS PER TYPE OF SCHOOL IN THE BAHAMAS

Schools type	No. of students
Pre-school	544
Pre and Primary	2,270
Primary	19,623
Secondary	20,876
All Age	8,583
Special School	410
TOTAL	52,306

Source: Assessment team based on data from the Ministry of Education.

B. Losses

Losses in the Educational Sector refer to the affected flows like reduced hours or days of classes taught and refunds to students withdrawing from paid institutions. Therefore, the affected flows include a reduced output, measured by the number of days and hours taught. The average salary for teachers and administrative personnel was the parameter applied to estimate losses. In the case of private schools, the loss of tuition fees of each level of education--dropout students due to the reduced economic capacity of parents--was also estimated. It is worth mentioning that all the calculations were done applying salaries and tuition fees from 2021.

The Government's measures to control the COVID-19 outbreak, particularly in the education sector, began during the last four months of the 2019-2020 academic year and were extended until the 2021-2022 one. Therefore, the losses were estimated considering the previous three academic years: 2019-2020, 2020-2021, and 2021-2022. Considering the advance in the vaccination plan that is imperative to come back to a complete face-to-face instruction gradually, it is assumed that in 2022-2023, the scenario would be at least as normal as before the COVID-19 pandemic.

In the case of the academic year 2019-2020, the MoE officially announced the closure of all schools and educational institutions on March 16, 2020 (MoE, 2020). Based on this decision, teachers and students were not required to report to school. However, all administrative, support staff, and security personnel were still expected to report for duty.

According to the MoE, the Virtual Learning Portal was launched with content for pre-primary to grade 12 (primary and secondary) on March 23, 2020 (MoE, 2020.) However, at that time, the platform was limited only to uploading content and guidelines as to how students should use it. It did not include videos or capabilities to give online classes. Remote live classes began for secondary students on March 30, 2020, and on May 5 for pre-primary and primary students (MoE, 2020.) Additionally, live remote instruction was from 9 a.m. to 1 p.m., just four hours of classes instead of the accustomed five hours per typical class day.

Therefore, the number of hours of education lost was estimated based on the days when it was not feasible to offer live instruction plus the reduction of hours per day compared with the standard period per day (five hours) when the online live classes began. So, in the case of secondary schools, the total lost was 22 days of classes (11 days until online live hours were available plus 11 days due to reduction of hours per day). For pre-primary and primary schools, the total number of days lost was 43 (37 days until online live classes were available plus six days due to the reduction of hours per day). Consequently, the losses incurred at the national level by all the educational institutions in The Bahamas during the academic year 2019-2020 stood approximately BSD 11.9 million. 71% of this amount corresponds to the public sector and 29% to the private (Table III-3.)

The academic year 2020-2021 began on October 5, 2020. The ministry of Education designed a plan to reopen the schools, which offered three instruction modalities (MoE, 2020):

- Face-to-face: Total enrolled students attending the school campus all day, every day.
- Hybrid learning: Part of the enrolled students attend the school campus either on shifts within a day or for a reduced number of whole days per week.
- Remote: Total enrolled students not attending the school campus. The most recommended.

The academic year 2020-2021 began on October 5, 2020. The ministry of Education designed a plan to reopen the schools, which offered three instruction modalities (MoE, 2020):

- Face-to-face: Total enrolled students attending the school campus all day, every day.
- Hybrid learning: Part of the enrolled students attend the school campus either on shifts within a
 day or for a reduced number of whole days per week.
- Remote: Total enrolled students not attending the school campus. The most recommended.

Table III 3: LOSSES BY THE REDUCTION IN DAYS OF CLASSES PER EDUCATION SECTOR ACADEMICYEAR 2019-2020 (2021 BSD)

Island	Private	Public	Total Losses
Abaco	170,298	336,282	506,580
Acklins	0	12,652	12,652
Andros	0	423,492	423,492
Berry Islands	0	53,987	53,987
Cat Island	0	85,568	85,568
Crooked Island	0	10,624	10,624
Eleuthera	0	535,039	535,039
Exuma and Cays	0	250,811	250,811
Grand Bahama	379,606	1,325,525	1,705,130
Inagua	0	70,598	70,598
Long Island	0	94,066	94,066
New Providence	2,950,434	5,019,803	7,970,236
San Salvador	0	56,691	56,691
Mayaguana	0	12,458	12,458
Rum Cay	0	4 , 153	4,153
Spanish Wells	0	87,209	87,209
TOTAL	3,500,337	8,378,957	11,879,294

Source: Assessment team based on data from the Ministry of Education (2021).

The academic year 2020-2021 began on October 5, 2020. The ministry of Education designed a plan to reopen the schools, which offered three instruction modalities (MoE, 2020):

- Face-to-face: Total enrolled students attending the school campus all day, every day.
- Hybrid learning: Part of the enrolled students attend the school campus either on shifts within a day or for a reduced number of whole days per week.
- Remote: Total enrolled students not attending the school campus. The most recommended.

Since the MoE preferred the remote modality over the others, they maintained it until the end of February 2021. From February 23 through the end of the academic year on June 25, 2021, MoE allowed face-to-face classes to resume in a hybrid modality (blend with remote classes) (UNICEF, 2021a.)

The reduction in one hour of the class day produced by the remote instruction modality generated a total loss of 18 days of classes (approximately 90 hours) during this academic year. Consequently, the losses incurred at the national level by all the educational institutions in The Bahamas during the 2020-2021 academic year stood approximately BSD 6.3 million. 76% of this amount corresponds to public institutions and 24% to private schools (Table III-4.)

The same scenario occurred at the beginning of the academic year 2021-2022, which started on August 30, 2021 (UNICEF, 2021b). Schools still offered three instruction modalities, been the face-to-face the preferred by the MoE (UNICEF, 2021b). However, due to the increase of COVID-19 cases recorded, the MoE decided that all government schools would start the courses virtually. In addition, MoE urged private schools to follow the same procedure (UNICEF, 2021b.)

Table III 4: LOSSES BY REDUCTION IN DAYS OF CLASSES EDUCATION SECTOR ACADEMIC YEAR 2020-2021 (2021 BSD)

Island	Private	Public	Total Losses
Abaco	71,288	175,578	246,865
Acklins	0	8,692	8,692
Andros	0	248,590	248,590
Berry Islands	0	22,599	22,599
Cat Island	0	43,460	43,460
Crooked Island	0	8,692	8,692
Eleuthera	0	285,096	285,096
Exuma and Cays	0	133,856	133,856
Grand Bahama	158,905	677,973	836,878
Inagua	0	29,553	29,553
Long Island	0	50,413	50,413
New Providence	1,296,234	2,960,483	4,256,717
San Salvador	0	34,768	34,768
Mayaguana	0	5,215	5,215
Rum Cay	0	1,738	1,738
Spanish Wells	0	36,506	36,506
TOTAL	1,526,426	4,723,213	6,249,639

Source: Assessment team

On November 8, the MoE informed that schools would reopen in hybrid mode in the second week of January 2022. Then they would gradually move to complete face-to-face under the reopening procedures and policies of the Ministry of Health and Welfare. In the end, the MoE, on the advice of the Ministry of Health and Welfare, announced that students across The Bahamas returned to school campuses for in-person learning commencing January 24, 2022 (MoE, 2022.)

Consequently, 20 days of classes (approximately 96 hours) were lost during the period between August 2021 to January 2022, when the remote modality was mandatory. Thus, the losses incurred at the national level by all the educational institutions in the Bahamas during the academic year 2021-2022 stood approximately BSD 6.6 million. Of this amount, 76% corresponds to public schools and 24% to private schools (Table III-5.)

During the period under analysis and with the data available, the total losses due to reduction in days of classes is BSD 24.7 million, 73% of them by the public institutions and 27% by private schools. 48% of the total losses happened during the 2019-2020 academic year when the measures to control the COVID-19 began in The Bahamas. Table III-6 shows the total losses calculated from 2019-2020 projected until the end of the 2021-2022 academic year.

Table III 5: LOSSES BY REDUCTION IN DAYS OF CLASSES EDUCATION SECTOR ACADEMIC YEAR 2021-2022 (2021 BSD)

Island	Private	Public	Total Losses
Abaco	75,248	185,332	260,580
Acklins	0	9,175	9,175
Andros	0	262,401	262,401
Berry Islands	0	23,855	23,855
Cat Island	0	45,874	45,874
Crooked Island	0	9,175	9,175
Eleuthera	0	300,935	300,935
Exuma and Cays	0	141,293	141,293
Grand Bahama	167,733	715,638	883,371
Inagua	0	31,194	31,194
Long Island	0	53,214	53,214
New Providence	1,368,247	3,124,954	4,493,201
San Salvador	0	36,699	36,699
Mayaguana	0	5,505	5,505
Rum Cay	0	1,835	1,835
Spanish Wells	0	38,534	38,534
TOTAL	1,611,228	4,985,614	6,596,842

Source: Assessment team

Table III 6: LOSSES BY REDUCTION IN DAYS OF CLASSES EDUCATION SECTOR ACADEMICYEAR 2019-2020; 2020-2021; 2021-2022 (2021 BSD)

Academic Year	Private	Public	Total Losses	%
2019-2020	3,500,337	8,378,957	11,879,294	48%
2020-2021	1,526,426	4,723,213	6,249,639	25%
2021-2022	1,611,228	4,985,614	6,596,842	27%
TOTAL	6,637,991	18,087,785	24,725,775	100%

Source: Assessment team

The losses of private schools because of dropouts were calculated from the available data related to the public school's enrolment of 2019-2020 (MoE-DoE, 2019) and 2021-2022 academic years. The comparison shows an increase of at least 3,354 students in public schools between 2019-2020 and 2021-2022 academic years: 833 students in Pre-primary, 229 in Primary, 2,254 in Secondary, and 38 in All-age schools. Presumably, the sudden increase of students in public schools is a migration of those who left private schools due to the economic shock of their households, and the estimation of losses considers 20 months of fees per student, for the academic years 2020-2021 and 2021-2022. Therefore, for both academic years, the loss in private schools is BSD 23.5 million (Table III-7.)

Table III 7: LOSSES TUITION FEES PRIVATE SCHOOLS ACADEMICYEARS 2020-2021 AND 2021-2022 IN THE BAHAMAS (2021BSD)

Island	Losses Tuition Fees - Pre-primary Private	Losses Tuition Fees - Primary Private	Losses Tuition Fees - Secondary Private	Losses Tuition Fees - All Age Private	Total Losses Tuition Fees Private Schools
Abaco	360,360	684,000	1,162,800	122,360	2,329,520
Acklins	0	0	0	0	0
Andros	0	0	0	0	0
Berry Islands	0	0	0	0	0
Cat Island	0	0	0	0	0
Crooked Island	0	0	0	0	0
Eleuthera	726,440	0	813,200	0	1,539,640
Exuma and Cays	0	0	0	0	0
Grand Bahama	760,760	0	136,800	109,480	1,007,040
Inagua	0	0	0	0	0
Long Island	0	0	0	0	0
New Providence	2,917,200	690,000	15,017,600	12,880	18,637,680
Rum Cay	0	0	0	0	0
San Salvador	0	0	0	0	0
Spanish Wells	0	0	0	0	0
TOTAL	4,764,760	1,374,000	17,130,400	244,720	23,513,880

Source: Assessment team.

To summarize, the estimated losses in The Bahamas were BSD 48.2 million, 63% corresponds to the private sector and 37% to the public sector. Table III-8 presents the results.

Table III 8: LOSSES BY EDUCATION SECTOR IN THE BAHAMAS (2021 BSD)

Description	Private	Public	Total
Losses reduction in days of classes academic years 2019-2020; 2020-2021; 2021-2022	6,637,991	18,087,785	24,725,775
Losses tuition fees private schools	23,513,880		23,513,880
Total	30,151,871	18,087,785	48,239,655

Source: Assessment team.

Based on the scenario described in this section, it is estimated that each student in the Bahamas has lost an average of 358 hours of classes since the school closures, including the 2019-2020, 2020-2021 and 2021-2022 academic years. Therefore, at least 18.7 million hours of class were lost considering the total number of students registered as baseline (52,306). Consequently, this situation not only alters the service delivered during the period under analysis, but it will bring consequences in the future of this generation of students if no action is taken to improve the level and quality of education.

It is worth mentioning that according to Azevedo et al. (2021), students could face a loss of 0.6 years of

schooling adjusted to quality if schools are closed for five months. That reduction would bring the effective years of education that children achieve during their schooling life from 7.9 years to 7.3 years. From early work on the Human Capital Index, children worldwide receive an average of 11.3 years of schooling through their lifetimes. When it is adjusted for the quality of learning they experience during this time, it decreases to 7.9 years of education (Azevedo et al. 2021). Moreover, they will face a reduction of an average of 5% in expected earnings every year. In the case of The Bahamas, schools were closed for at least 102 days (at least five months), and only 12,885 attended school online in the first week and 11,671 in the second week, from the 26,000 registered students. Bahamian students have therefore suffered from a reduction in the quality of learning. The results, expressed in terms of lost earnings, are equivalent to an individual losing out on approximately USD 16,000 over his lifetime, representing around USD 837 million for The Bahamas, considering the number of students impacted COVID-19 during this period.

C. Additional Costs

The total estimate for additional costs was BSD 2.4 million (Table III-9). These costs consider the expenses the Ministry of Education of The Bahamas and the different educational institutions had to incur to restore the service to offer virtual modality first, then hybrid and ultimately face-to-face, as it has been from 2019-2020 to the 2021-2022 academic year. These expenses include:

- Set Virtual Learning Platform to establish online instruction.
- Training and support to administrators, teachers, parents, and students. Production of learning materials for students without access to devices and internet connection.
- Classes through TV or cable channels.
- Transportation and logistics to distribute lunch vouchers.
- Infrastructure changes to install fiber and WiFi in public schools to offer remote classes.
- Set up classrooms, staff rooms, and campus movement to reopen schools.
- Cleaning and disinfection supplies, deep cleaning services: BSD 76,476 per academic year to al schools, headquarters, and satellite offices.
- Devices for students to log on to remote classes.
- Online application for parents who wish to home school their children.
- Four-week face-to-face program for students from pre-school to grade 11 called
- "Extended Learning
- Academies" to help students improve their academic level.

However, it was impossible to collect primary information from the Ministry of Education related to the additional costs. Therefore, it had to be extracted from press releases, public documents available on the web page of the MoE, and the available baseline for the Education Sector collected in November 2021. This information was crucial to estimate the different expenses listed in Table III-9.

Estimating additional costs to equip public schools to offer remote classes could be done through data collected as the baseline in November 2021, related to the total cost of electronic equipment in classrooms (BSD 6.9 million at the national level.) Considering that those numbers were obtained in November 2021, at least one and a half years after the beginning of the school closures, it is assumed that a significant percentage of this amount was used to restore the education service through the remote modality. Therefore, in the case of New Providence and Grand Bahama, where schools were assumed to be better equipped before the pandemic, 20% of the total funds (BSD 1,204,808) were spent because of the pandemic emergency. In comparison, in the Family Islands, at least 50% of the total cost of the equipment in classrooms (BSD 474,635) was spent to offer remote instruction.

The Minister of Education informed the House of Assembly in March 2021 that during the academic year 2020-2021, it had spent BSD 76,476 for cleaning service for all schools, headquarters, and satellite offices. This study assumes that the MoE expended the same amount for each academic year (2019-2020, 2020-2021, and 2021-2012), resulting in a total of BSD 229,428.

At least BSD 505,760 was spent to set up classrooms, staff rooms and move campuses to reopen public schools. It was assumed that at least \$200 was used in each classroom in public schools (2,529 classrooms reported on November 2021.)

Table III 9: EDUCATION SECTOR ADDITIONAL COSTS IN THE BAHAMAS (2021 BSD)

Concept	Additional costs
Equipping public schools to offer remote classes	1,679,443
Cleaning and disinfection supplies, deep cleaning services	229,428
Set up classrooms, staff rooms and moving of campuses to reopen public schools	505,760
TOTAL	2,414,631

Source: Assessment team

Housing

A. Background

This section used the information from the baseline of the housing sector prepared by the Inter-American Development Bank (Bahamas) in 2021, assembled using satellite images to update housing and using the structure of national population censuses and housing for the years 2000 and 2010. 2021 housing sector baseline has detailed information for each island in the country, with characteristics of the censuses and percentage of rental housing.

As shown in the following table, zone 1 has the highest percentage of rental housing (37.7%), reflecting the concentration of economic activity in that area. In contrast, zone 3 has the lowest portion of rental housing (19.3%.) When entering the analysis by island, New Providence emerges with the highest percentage of rental housing (39.1%,) followed by Grand Bahama (31.1%) and Abaco (25.9%.) The islands with the lowest portion of this housing are Mayaguana (7.5%) and Ragged Island (3.8%.)

Table IV 1: NUMBER OF DWELLINGS AND RENTAL PER ISLAND

Zone	Island	Total Dwellings	%	Rental Dwellings	%
ZONE 1	Grand Bahama	15,978	14.6%	4,701	31.1%
	New Providence	70,863	64.6%	27,417	39.1%
	Zone 1	86,841	79.1%	32,118	37.7%
ZONE 2	Abaco	6,649	6.1%	1,346	25.9%
	Andros	2,725	2.5%	329	13.9%
	Eleuthera	5,512	5.0%	602	22.2%
	Zone 2	14,886	13.6%	2,277	22.1%
ZONE 3	Exuma and Cays	1,571	1.4%	464	22.9%
	Long Island	1,613	1.5%	143	12.8%
	Zone 3	3,184	2.9%	607	19.3%
ZONE 4	Acklins	474	0.4%	27	12.9%
	Berry Islands	331	0.3%	88	25.7%
	Biminis	637	0.6%	188	25.2%
	Cat Island	704	0.6%	68	11.2%
	Crooked Island	262	0.2%	15	12.1%
	Harbour Island	731	0.7%	220	37.0%
	Inagua	342	0.3%	70	22.3%
	Mayaguana	188	0.2%	8	7.5%
	Ragged Island	26	0.0%	1	3.8%
	San Salvador	446	0.4%	83	21.7%
	Spanish Wells	674	0.6%	72	12.0%
	Zone 4	4,815	4.4%	840	20.7%
	Total	109,726	100.0%	35,842	100.0%

Source: IDB (2021).

As part of the context, it is essential to note that the 2021 baseline of the housing sector provides detailed information on the predominant construction materials on each island, according to the exterior walls, and thus provides a replacement value for the home.

Zone 1, which encompasses Grand Bahama and New Providence, concentrates most of the population, while zone 2 ranks second in total population (Table IV-2.) Similarly, the value of housing assets is higher in New Providence with a total of BSD14.14 billion, Grand Bahama with BSD2.84 billion, Abaco with 1.25, and Eleuthera with BSD1.04 billion.

When analyzing the construction typology by exterior walls of the houses, concrete block and slab walls predominate with 70.8%, followed by Wood/stucco walls with 21.4%. The lowest percentage corresponds to stucco walls with 0.3%, as shown in the following table.

Table IV 2: CONSTRUCTION TYPOLOGY AND HOUSING REPLACEMENT VALUE PER ISLAND PANEL A: CONSTRUCTION TYPOLOGY

	Quantity	CONSTR	RUCTION MATE	ERIALS OF OU	TER WALLS	
Zone	Dwellings	wood / stucco	concrete blocks / slabs	wood and concrete	stone / brick	stucco
Zone 1	86,841	16,500	63,915	1,389	4,863	87
Grand Bahama	15,978	3,036	11,760	256	895	16
New Providence	70,863	13,464	52,155	1,134	3,968	71
Zone 2	14,886	4,942	8,917	595	313	136
Abaco	6,649	2,207	3,983	266	140	60
Andros	2,725	905	1,632	109	57	25
Eleuthera	5,512	1,830	3,302	220	116	51
Zone 3	3,184	844	1,850	223	271	-
Exuma and Cays	1,571	416	913	110	134	-
Long Island	1,613	427	937	113	137	-
Zone 4	4,815	1,233	2,966	226	337	53
Acklins	474	121	292	22	33	5
Berry Islands	331	85	204	16	23	4
Biminis	637	163	392	30	45	7
Cat Island	704	180	434	33	49	8
Crooked Island	262	67	161	12	18	3
Harbour Island	731	187	450	34	51	8
Inagua	342	88	211	16	24	4
Mayaguana	188	48	116	9	13	2
Ragged Island	26	7	16	1	2	0
San Salvador	446	114	275	21	31	5
Spanish Wells	674	173	415	32	47	7
%		21.4%	70.8%	2.2%	5.3%	0.3%
Totals	109,726	23,518	77,648	2,434	5,783	276

Source: IDB (2021).

PANEL B: HOUSING REPLACEMENT VALUE PER ISLAND

	Quantity	Total assets (BSD)
Zone 1	86,841	16,994,723,975
Grand Bahama	15,978	2,849,087,194
New Providence	70,863	14,145,636,781
Zone 2	14,886	2,812,596,810
Abaco	6,649	1,256,153,769
Andros	2,725	514,817,119
Eleuthera	5,512	1,041,625,922
Zone 3	3,184	636,191,205
Exuma and Cays	1,571	313,899,618
Long Island	1,613	322,291,587
Zone 4	4,815	952,481,306
Acklins	474	93,764,515
Berry Islands	331	65,476,908
Biminis	637	126,008,430
Cat Island	704	139,262,064
Crooked Island	262	51,827,643
Harbour Island	731	144,603,081
Inagua	342	67,652,878
Mayaguana	188	37,189,301
Ragged Island	26	5,143,201
San Salvador	446	88,225,683
Spanish Wells	674	133,327,601
Totals	109,726	21,395,993,296

Source: IDB (2021).

The analysis of COVID 19's impact on the housing sector included thorough information on foreign citizens residing in the Bahamas, according to data from the 2000 and 2010 population and housing censuses. Foreign citizens are potentially the most likely to return to their countries of origin in pandemic conditions and, therefore, would stop renting the occupied home.

Part of that population resides in the Bahamas for commercial ties or international relations, while others come to get jobs not available in their country. The assumption is that persons of the Caribbean mainly integrate the second group, a population with permanent jobs in the country, which would remain to rent. Therefore, the residents that could stop renting a home when returning to their country would be the citizens of the United States, Canada, Great Britain, and other nationalities not detailed in the censuses.

The foreign population attracted to the country by its appeal as a retirement place was also part of the analysis. Population and housing census of 2000 shows that 16.6% of them are 50 years old or older and likely to stay, even in the pandemic.

By 2021 there were about 3,486 homes rented by foreigners. As demonstrated in the following table, excluding the retirees' rentals, 3,104 homes would potentially remain unrented during the last 20 months before December 2021.

The nationalities representing the highest percentage of foreigners are the Americans with 44%, the British with 11 17%, and Canadians with 14%.

Based on this information, losses from rental housing can be estimated. It is the most significant impact of COVID 19 on the housing sector.

Table IV 3: FOREIGN-BORN PERSONS IN THE COUNTRY AND UNRENTED HOUSES PER ISLAND

Country	Total population 1990	%	Total population 2000	%	Dwellings 2000	Potential int'l tenants for rental housing 2010	%	Potential unrented housing 2020-2021
Americans	2,814	9.2	4,467	1.5	1,536	1,536	44	1,367
Canadians	779	2.5	1,404	0.5	483	483	14	430
Great Britain	2,457	8.0	1,771	0.6	609	609	17	542
Haitians	17,895	58.5	21,426	7.1	7,370			
Jamaicans	2,531	8.3	3,919	1.3	1,348			
Trinidadians	194	0.6	333	0.1	114			
Turks and Caicos	925	3.0	507	0.2	174			
Other Caribbean Islands	351	1.1	1,247	0.4	428			
Other Nationals	1,867	6.1	2,496	0.8	858	858	25	764
Not Stated	756	2.5	884	0.3	304			
	30,569	100.0	38,454	13	13,224	3,486	100	3,104
% of international re	ntal dwellings				3.4%		2.8%	

Source: Assessment team based on National Census 2000 and 2010.

B. Losses

We used different sources to estimate the losses based on the measures implemented by the government as of March 2020 that directly affected the housing sector.

On April 27th, 2020, The Most Hon. Dr. Hubert Minnis in House of Assembly Communication stated that The House approved a resolution extending the emergency powers in The Bahamas (up to May 30th, 2020.) Moreover, the Prime Minister gave an update about the government response to the pandemic, highlighting the following actions related to the rental houses:

Announced the details of the Rental Assistant Program to assist individuals who have rental obligations. The program was limited to residential rentals for those whose employment or income was impacted by the pandemic. Those who qualify¹⁸⁸ could postpone a portion¹⁸⁹ (40%) of their rent payment for the next three months, beginning in April 2020, and they would have 12 months to pay back the deferred amount.

¹⁸⁸ The rental property must be inside The Bahamas; the rent must be \$2,000 per month or less; the tenant must be a Bahamian citizen or legal resident and demonstrate that their income or employment was affected by the COVID-19 pandemic.

189 Qualifying renters and landlords can agree on the amount to defer.

In addition, landlords could not evict tenants or disconnect essential services between April and June if the tenants were in good standing before April. Furthermore, the Prime Minister stated that commercial banks were "open to deferring the mortgage payments on rental properties" that participated in the program.

This measure affected the economic flows of rental housing owners, but it was only a deferred payment that is not considered a loss for the housing sector and was intended to support the local population affected by the pandemic. In addition to the economic flow from rent, there was an impact on deferred payments for essential services such as electricity and water, as well as the maintenance of condominium homes. These changes in the flows are not reflected in this chapter, since there is no precise information on the matter.

However, the most significant backlash was the departure of foreigners that returned to their countries due to the pandemic. This group stopped renting housing for a period estimated at 20 months (April 2020 to December 2021), being the threshold of analysis of this chapter.

According to the baseline analysis, 3,096 homes were rented by foreigners who left the country. Using the 2021 baseline home value as a base plus the land value, the loss of those rentals can be estimated in the amount of BSD 118,325 million in those 20 months, representing 0.94% of GDP in 2021.

The most significant impact on the reduction of income from rental housing is noticeable in New Providence for a total of BSD82.4 million, Grand Bahama with BSD 16.6 million, Abaco with BSD 5.2 million, and Eleuthera with BSD5.0 million. Regarding zones 3 and 4, the reduction in income is meager (2.9% and 4.4%, respectively) compared to zones 1 and 2.

The estimates are based on an annual income of a property of 6% (housing plus land), making the monthly equivalence. For the property's value, the starting point is the average value of the house in each of the islands plus the value of the land according to market values.

Zone	Island	Total Dwellings	%	Potential Unrented Dwelling 2020- 2021	Losses Bsd (20 Months)
ZONE 1	Grand Bahama	15,978	14.6%	452	16,605,093
	New	70,863	64.6%	2004	82,415,670
	Providence				
	Zone 1	86,841	79.1%	2456	99,020,764
ZONE 2	Abaco	6,649	6.1%	188	5,225,422
	Andros	2,725	2.5%	77	2,305,196
	Eleuthera	5,512	5.0%	155	5,026,758
	Zone 2	14,886	13.6%	420	12,557,376
ZONE 3	Exuma and	1,571	1.4%	44	1,392,501
	Cays				
	Long Island	1,613	1.5%	45	1,543,755
	Zone 3	3,184	2.9%	89	2,936,255

Table IV 4: LOSSES IN THE HOUSING SECTOR

ZONE 4	Acklins	474	0.4%	13	378,207
	Berry Islands	331	0.3%	9	261,836
	Biminis	637	0.6%	18	523,671
	Cat Island	704	0.6%	19	552,764
	Crooked Island	262	0.2%	7	203,650
	Harbour Island	731	0.7%	20	581,857
	Inagua	342	0.3%	9	261,836
	Mayaguana	188	0.2%	5	145,464
	Ragged Island	26	0.0%	0	-
	San Salvador	446	0.4%	12	349,114
	Spanish Wells	674	0.6%	19	552,764
	Zone 4	4,815	4.4%	131	3,811,163
	Total	109,726	100.0%	3,096	118,325,558

Source: Assessment team.

Productive Sectors



Tourism

The tourism activity suffered a severe impact worldwide because of the COVID-19 pandemic. The reductions in mobility and the fear of traveling had a profound effect, particularly in destinations that required air or sea travel. The Bahamas' main activity is tourism and got severely impacted due to the pandemic.

The total losses in tourism, between 2020 and 2023, are estimated at almost BSD 7.9 billion. Most of them consequence from the fall in stopover visitors, about BSD 6.4 billion. Also, The Bahamas got a severe blow from the temporary cessation of operations of the cruise lines, which produced over BSD 1 billion in losses. The rest of the lost income corresponds to boat stopover and excursionist, totaling BSD 373 million. The additional costs total BSD 87 million.

Table V 1: SUMMARY (Million 2021 BSD)

	2020	2021	2022	2023	Total
Losses	3,637	2,910	1,242	89	7,878
Additional costs	3	21	36	26	87

Source: Assessment team, based on data from the MTIA, interaction with officials, and third-party publications.

A. Background

Tourism is the main economic activity of The Bahamas. According to a MTIA report, tourism represents 38.2% of The Bahamas GDP and 51.5% of total employment. The contribution to GDP is somehow inferior to the 48.3% of total contribution reported for 2018 by the United Nations World Tourism Organization (UNWTO).

However, the tourism sector's performance is crucial for the country; it determines to a large extent the level of total economic activity. Tourism is also a key source of foreign currency. According to the UNWTO, over 80% of all export revenue comes from tourism.

During 2016 and 2017, The Bahamas endured two hurricanes. In 2016 Hurricane Matthew caused significant damages in Grand Bahama and the northern part of Andros. The total estimated damages were BSD 129.3 million, the losses were BSD 88.3 million, and the additional costs were BSD 1.5 million. In 2017, Hurricane Irma hit the country's southern islands, totaling BSD 600 thousand in damages, BSD 68 million, and additional costs for BSD 137 thousand. After a tranquil 2018, Hurricane Dorian had a devastating impact on Abaco and Grand Bahamas in 2019. Damages totaled BSD 530 million, most of them concentrated in Abaco. The losses were BSD 325 million and BSD 15 million in additional cost.

Even with Hurricane Dorian, 2019 was a record year for tourism. The Bahamas received almost 7.3 million visitors, an increase of more than 700,000 visitors compared to the previous year. The increase occurred in virtually all types of tourists, being excursionists the only group that experienced a minor decrease. Cruise travelers totaled over 5.4 million, measured at the first entry point. The number of cruise visitors increased 11.4% compared to 2018. Stopover visitors surpassed 1.7 million, reaching a historical maximum, an increase of 10.8% versus the previous year. The number of private boat visitors also increased during 2019 to more than 77,000.

Table V-2 shows the number of visitors per island group. In this case, the figure for cruise visitors is up to the third entry point since some cruises visit more than one island during their trips. New Providence received the most tourists with over 5.2 million, more than half of total visits, while The Out Islands received 3.9 million, cruise passengers more than 90% of them. Both destinations received a record number of visitors

8.000.000 7,000,000 6.000.000 5.000.000 4.000.000 3.000.000 2.000.000 1.000.000 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Figure V 1: THE BAHAMAS: TOTAL VISITORS

Source: Ministry of Tourism, Investments and Aviation.

during 2019. On its side, Grand Bahama received more than 815,000 visitors, somehow 10% less than the number of travelers welcomed during 2018. Though Hurricane Dorian could be responsible for a fraction of this decline, it reflects a longer trend.

Stopover Cruiser * Total **New Providence** 1,350,893 24,108 3,856,613 34,121 5,265,735 Grand Bahama 15,637 815,389 715,453 79,327 4,972 Out Islands 6,626 301,482 37,736 3,578,077 3,923,921 Total 77,481 8,150,143 10,005,045 1,731,702 45,719

Table V 2: NUMBER OF VISITORS 2019

Source: Assessment team, based on data from Ministry of Tourism, Investment and Aviation.

* Third entry point.

The great majority of the visitors that spend at least one night on the Bahamas come from the United States (US). During 2019, 82% of the total stopover visitors came from this country. There is a high concentration even within the US: most came from Florida, New York, and Texas. About 7% of the tourists come from Canada and 6% from Europe. While other countries of the region receive a good percentage of the travelers from the Caribbean, The Bahamas just got 1% of visitors from those countries during 2019. The rest of the visitors come from Latin America (2%), and other parts of the world (1%.) These patterns were remarkably

stable the years before the pandemic. Even during 2020 the origin of the visitors remained steady though, if anything, the percentage of European visitors decreased. However, during 2021 the percentage of visitors from the US rose significantly to 94%, while there was an important reduction in the percentage of visitors from Canada and Europe.

The tourism revenue also reached a historical maximum during 2019, over BSD 4.3 billion in current prices. A larger percentage of these revenues were from stopover visitors. In total those that spend one or more nights ashore spent almost BSD 3.6 billion; this represented 82% of total revenue. Cruisers spent over BSD 500 million and other day visitors almost BSD 3 million. Private boat tourists' generated income is around BSD 257 million. The bulk of it is produced in New Providence, which concentrates most of the room capacity and is usually one of the preferred destinations for cruises. Private boaters are an important source of earnings for the Out Islands, second only to stopover visitors. Grand Bahama received BSD 213 million in tourism revenue, down from previous years. While also affected significantly by Hurricane Dorian, by 2019, this island was still struggling to recover from the impact of Hurricane Matthew.

Table V 3: TOURISM REVENUE 2019 (BSD Million)

	Stopover	Boat Stopover	Cruiser	Excursionist	Total
New Providence	2,771	80	357	2	3,210
Grand Bahama	107	52	54	0	213
Out Islands	706	125	99	0	931
Total	3,584	257	510	3	4,354

Source: Assessment team based on data of Ministry of Tourism, Investments and Aviation.

The baseline for tourism revenue uses monthly visitors' data from January 2005 to February 2020. A baseline for the number of visitors is constructed using an ARIMA model for each type of visitor and island. A different model is fitted for each series to accommodate different trends—80 models are used. Negative forecasted values were substituted by zero, which occurred in a few series where zero visitors are the norm, with a few monthly visitors as the exception. The flow of tourism visitors is highly seasonal. The use of monthly data and ARIMA models allows the forecast to include significant trends and seasonal factors.

To estimate tourism revenue, we multiply each average expenditure by the type of visitor per island. The baseline for revenue is based on 2021 prices, and an average spending per visitor is needed to construct it. Data publicly available about tourism revenue for the first quarter of 2021 shows a significant increase in stopover spending per visitor. In some cases, like Grand Bahama, the growth is over 30% compared to the first quarter of 2019. The pandemic likely impacted the number of visitors, the amounts they spent, and the patterns of consumption. Among the possible changes are longer stays. To establish a correct baseline, the expenditure per visitor should not include any effect from COVID-19. So, to calculate the average spending per visitor for the baseline, the reported values of 2019 are adjusted using The Bahamas inflation.

Table V-3 presents the yearly tourism revenue for 2019 and the baseline for the next four years at 2021 prices. In all years, earnings were likely to rise for all island groups, except for the Hurricane Dorian-impacted Grand Bahama and Abaco in 2020. Estimation of the baseline for the impact of COVID-19 includes the effects of Hurricane Dorian that occurred just a few months before the onset of the COVID-19 pandemic.

For 2020, the tourism revenue was expected to grow 4.5% and reach over BSD 4.7 billion. New Providence estimated an increase of 5.8% and the Out Islands a 2%, while the incomes for Grand Bahama were

calculated to fall 4.9%. For 2021, the baseline estimated growth of 6.4% and total revenue of over BSD 5 billion. However, for the next two years, the growth rates were anticipated to decline to 5.8% and 5.4% and reach BSD 5.4 billion in 2022 and BSD 5.7 billion in 2023.

Table V 4: TOURISM BASELINE PER ISLAND GROUP (BSD Million)

	2019	2020	2021	2022	2023
New Providence	3,358	3,552	3,797	4,046	4,295
Grand Bahama	223	212	219	225	227
Out Islands	974	996	1,050	1,091	1,128
Total	4,555	4,760	5,067	5,362	5,650

Source: Assessment team.

B. Losses

During the pandemic, there was a significant reduction in mobility worldwide. The causes were diverse, ranging from fear and changes in behavior to direct travel bans and lockdowns. The restrictions in mobility greatly impacted tourism during 2020, and once they were eased, people were less likely to travel. Tourists also changed travel patterns favoring closer destinations and less air and sea travel. The pandemic also extended over 2021, and some of the restrictions and fears came back from new variants. The normalization of travel will likely take a couple more years, and the effects of the pandemic will persist until 2023.

Considering that a substantial part of the impacts of the pandemic has occurred and that there are still some to come, the estimation of losses needs to use effective and forecasted tourism revenue. The losses from 2020 and 2021 were estimated using the effective number of visitors and the adjusted spending per visitor described in the previous section. For the estimated losses of 2022 and 2023, a recovery of tourism visitors was modeled using a Gompertz function. The spending figures per visitor of 2021 are adjusted using the forecasted inflation for the corresponding years.

Panel A of Figure V-2 displays the monthly baseline. For the baseline, the monthly average tourism revenue is BSD 437 million. There are strong seasonal patterns, reflecting a high season that usually starts around US Thanksgiving and extends through March. After a relative decline in April and May, another peak happens around July. The lowest months are September and October. The baseline reflects these seasonal patterns: from the revenue perspective for The Bahamas, it is not the same to lose the entire month of September as to lose March.

Panel A also displays the estimated revenue. In 2020, during the travel bans, tourism revenue ceased almost entirely for April and May. After that, there was a prolonged recovery, driven mainly by private boating and stopovers; besides July, there were no recorded cruise visitors during 2020. Visits started to rebound towards the end of the year, but the second pandemic wave weakened the recovery. The average monthly estimated revenue for March to December 2020 was BSD 37 million. As the second wave in the US and Canada started to recede, the recovery gained momentum. By July 2021, the estimated effective revenue was 68% of the baseline. But again, the third wave and the rise of cases in the US during the summer affected the recovery. After a brief peak in October and November, the omicron variant impacted negatively, and the number of visitors in December was just 42% of the baseline. The monthly average revenue for 2021 was about BSD 64 million.

For the year 2022, the recovery is anticipated to continue. The average monthly revenue will likely reach BSD 343 million at 2021 prices. By the end of the year, visitors will rise to around 95% of the baseline. By 2023, the calculated monthly revenue is BSD 463 million, and a full recovery is expected by the end of that year.

Panel B of Figure V-2 displays the losses, calculated as the difference from the baseline and estimated and forecasted revenue. The losses depend on both seasonality and the degree to which the flows of visitors are disrupted. The higher the disruption and the baseline, the higher the losses for any month. The monthly estimated average loss for 2020 is BSD 364 million, while for 2021 is BSD 243 million. The monthly average forecasted losses for 2022 are BSD 103 million. The losses taper off during 2023 and are estimated on average to be BSD 7 million.

Table V-4 presents the estimated losses per year and island group. The total losses in the tourism sector due to the COVID-19 pandemic are BSD 7,9 billion evaluated at prices of 2021. Of those losses, 46.2% occurred during 2020, even though the losses occurred over a period of only ten months. The losses of 2021 were 37% of the total, while those forecasted for 2022 are 15.7%. The forecasted losses for 2023 are estimated at just 1.1% of the total. Per island group, New Providence's losses are estimated to be 77.5% of the total; the Out Islands are expected to account for 18.1% 4.4%, while the Grand Bahama is estimated to suffer the remaining 4.4%. The losses reflect the high concentration of touristic activity in New Providence.

Flows (BSD) 400 300 200 Baseline mar-20 jun-20 sept-20 dic-20 mar-21 jun-21 sept-21 dic-21 mar-22 jun-22 sept-22 dic-22 mar-23 jun-23 sept-23 dic-23 Losses (BSD) 450 300 250 200 150 100 jun-22 sept-22 dic-22 mar-23 jun-23 sept-23 dic-23

Figure V-2: THE BAHAMAS: FORECASTED INCOME AND LOSSES (Million 2021 BSD)

Source: Assessment team.

Table V 5: LOSSES PER ISLAND GROUP AND YEAR (2021 BSD Million)

	2019	2020	2021	2022	2023
New Providence	0	2,745	2,333	956	69
Grand Bahama	0	163	132	49	3
Out Islands	0	729	446	236	17
Total	0	3,637	2,910	1,242	89

Source: Assessment team.

Table V-5 presents a more detailed picture of the losses; it disaggregates them per island and type of visitor. Most of the loss of BSD 6.4 billion (81.6%) occurred from stopover visitors. Their length of stay and relatively high expenditures explain the large portion of the losses. Most of those losses occurred in New Providence, which holds all the island groups' most significant room capacity. The loss in boat stopover visitors is estimated at BSD 369 million, representing under 5% of total losses but falling heavily in the Out Islands, particularly Bimini. Boat stopover means 13.5% of the total losses in the Out Islands. The cruise visits were the most impacted during 2020 and 2021.

Table V 6: TOTAL LOSSES BY TYPE OF VISITOR (2021 BSD Million)

	Land Stopover	Boat Stopover	Cruiser	Excursionist	Total
New Providence	5,279.1	92.5	729.0	3.2	6,104
Grand Bahama	147.2	83.7	114.6	0.9	346
Out Islands	998.2	192.5	236.4	0.6	1,428
Abaco	296.4	39.1	25.3	0.1	361
Andros	19.3	0.1	0.0	0.0	19
Berry Islands	-7.2	-2.7	141.7	0.0	132
Bimini	-18.3	140.4	0.1	0.1	122
Cat Cay	0.9	-0.1	0.0	0.0	1
Cat Island	10.2	0.3	0.0	0.0	10
Eleuthera	176.5	3.6	26.1	0.1	206
Exuma	342.9	7.5	0.0	0.1	350
Half Moon Cay	0.0	0.0	43.4	0.0	43
Inagua	0.0	0.0	0.0	0.0	0
Long Island	15.2	0.4	0.0	0.0	16
San Salvador/Rum Cay	90.9	0.5	-0.3	0.1	91
Acklins/Crooked Island	15.6	0.0	0.0	0.0	16
Harbour Island	57.4	2.1	0.0	0.0	60
Other Island	0.1	-0.1	0.0	0.0	0
Unknown	-1.6	1.4	0.0	0.0	0
Total	6,425	369	1,080	5	7,878

Source: Assessment team.

The CDC established a no sail order for cruises in March 2020 and then a conditional sailing order in October of the same year. Leaving aside the testimonial visitors of July 2020, there was no cruise activity during that year since the onset of the pandemic. Cruise visitors started a prolonged recovery in February 2021 that only got significant momentum after July of that year. Home porting played a vital role in the recovery of the cruise sector and favored the stayover visits, particularly in New Providence. Cruise represents 14% of the total losses, estimated over BSD 1 billion. The losses for excursionists were BSD 5 million, less than 0,1% of the total.

Besides the importance of presenting the losses as disaggregated as possible and gaining a better understanding of the impact of the disaster, Table 5 shows some interesting results. The pandemic did not generate losses to all sectors and islands, as is observed in some of the losses. There are two clear cases:

Berry Islands for both stopover visitors and Bimini for land stopovers. These destinations benefited from certain conditions, proximity to the US among them. The number of travelers that visited these destinations, particularly after the spring of 2021, was significantly higher than the baseline in recent years, as shown in Figure 3. Some of these visitors may have changed destinations within The Bahamas, so there is no net gain. However, it is also possible that some of these visitors were attracted by some features offered by these destinations. It would be interesting to evaluate the profile of these visitors and the reasons why they chose to travel to these destinations.

Table V-6 presents the disaggregation of the losses per type of visitor and expenditure. The losses in accommodation are over 45% of the total, with about BSD 3.5 billion. With BSD 1.2 billion, the estimated losses in meals and drinks are almost 16% of the total. In activities, the estimated losses are BSD 984 million, a significant portion of which result from the fall in cruise visitors. A similar situation occurred with the losses in the retail sector, an estimated BSD 1,3 billion that represented over 16% of total losses. The rest include transportation (5.5%), casinos (0.1%), and other (4.4%.)

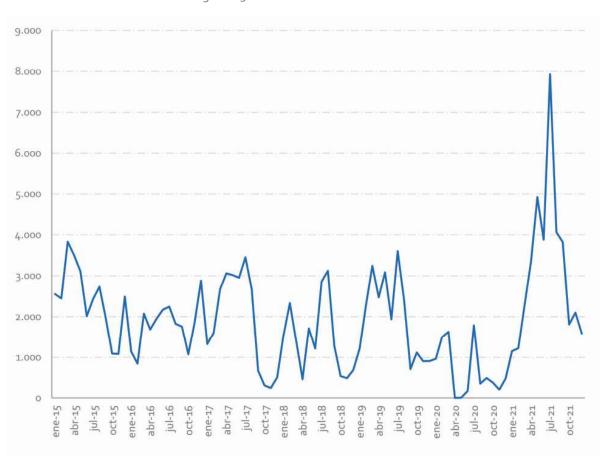


Figure V 3: BIMINI STOPOVER VISITORS

Source: Ministry of Tourism, Investments & Aviation.

Table V 7: LOSSES BY TYPE OF VISITOR AND EXPENDITURE (Million 2021 BSD)

	Land Stopover	Boat Stopover	Cruise	Excursionist	Total
Accommodation	3,380	216	0	0	3,596
Meals and Drinks	1,065	51	128	1	1,245
Activities	558	28	396	2	984
Shopping	744	32	487	2	1,265
Transportation	359	22	53	0	434
Casino	0	9	0	0	9
Other	320	10	15	0	345
Total	6,425	369	1,080	5	7,878

Source: Assessment team.

C. Additional Costs

The additional costs for the tourism sector include all those extra expenses to operate under the pandemic. Even before the tourists started to come back, businesses were required to adjust to working during the pandemic. Among the adjustments were the provisioning of screens, masks, sanitation of spaces, and increased laundry and cleaning for the accommodation facilities. There was no information provided for these costs, and in general, there is little to no data available. For the estimation, we assume that the cost per visitor land stopover visitors during 2020 and 2021 is BSD 10 and for the other visitors is BSD 5. These costs taper off in the years 2022 and 2023. The total additional cost in the tourism sector is estimated at BSD 87 million.

Table V 8: ADDITIONAL COSTS (2021 BSD)

	2020	2021	2022	2023	Total
Land Stopover	1,334,940	8,707,400	7,907,795	5,3 ⁸ 7,953	23,338,088
Boat Stopover	75,770	4,230,015	212,615	153,978	4,672,378
Cruiser	1,717,640	8,398,720	27,946,023	20,331,742	58,394,125
Excursionist	28,215	80,230	111,689	88,612	308,746
Total	3,156,565	21,416,365	36,178,121	25,962,285	86,713,336

Source: Assessment team.

D. Annex

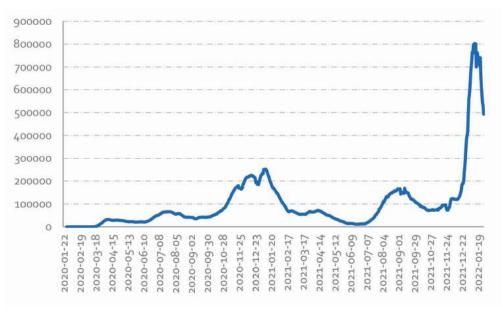
1. Description of the pandemic in the United States

In the United States of America, there have been 74,333,001 confirmed cases of COVID-19, which represents 223,279 total cases per million population, and 884,260 deaths from January 22, 2020, to January 31, 2022¹⁹⁰. By January 29, the United States had administered 538,829,920 vaccine doses, with 210,925,413 people fully vaccinated, representing around 63% of the population.

¹⁹⁰ Source: Our World in Data.

The evolution and the consequences of the pandemic in the USA vary at the state level. For example, by the first half of February 2022, California has the highest number of cases (with over 8 million patients, around 20% of its population,) followed by Texas (over 6 million, about 15%,) Florida (over 5 million, approximately 23%,) and New York (over 4 million, roughly 20%¹⁹¹.) By contrast, states like Vermont, Delaware, and Rhode Island present 100 and 350 thousand cases¹⁹². The COVID-19 pandemic in the United States hit harder the states that historically have represented the residency of the highest number of visitor nights in the Bahamas: Florida, New York, Texas, and California. For instance, in 2019, the Bahamas received 1,907,928 visitors from Florida; during 2020, those visitors decreased to 638,713. New York, as well Texas and California, exhibited

Figure V-4: NEW CASES (7 DAYS SMOOTHED) OF COVID-19 (MARCH 2020 – JANUARY 2022) IN THE UNITED STATES



Source: OurWorld in Data.

the same pattern. New York declined from 851,605 in 2019 to 229,731 in 2020. Nevertheless, all those states showed signs of recovery in 2021: Florida and New York doubled those numbers, reaching 1,333,833 and 451,776 visitor nights in the Bahamas¹⁹³.

Regarding the consequences of the COVID-19 pandemic in the USA, in April 2020, the states of New York and New Jersey experienced "more than ten excess deaths per 10,000 individuals, compared to the median excess all-cause mortality across states of 0.64 excess deaths per 10,000. [Consequently, both states] accounted for 49% of the national change in all-cause mortality [in April 2020¹⁹⁴.]".

Several factors influenced and shaped the disparate evolution of the pandemic in the USA, including states regulations, exposure to international travelers, population density, and political preferences. Furthermore, other factors like socioeconomic characteristics, race, and age also have defined the disparate consequences

¹⁹⁰ Source: Our World in Data.

The estimated population in 2021 in California was 39,237,836; Texas 29,527,941; Florida 21,781,128; New York 19,835,913; Vermont 645,570; Delaware 1,003,384 and, Rhode Island 1,095,610. Source: United States Census Bureau – Quick Facts.

¹⁹² See https://www.bloomberg.com/graphics/2020-united-states-coronavirus-outbreak/

¹⁹³ Source: Immigration Card and Research & Statistics Dept. Bahamas Ministry of Tourism Investments and Aviation.

Initial economic damage from the COVID-19 pandemic in the United States is more widespread across ages and geographies than initial mortality impacts. Maria Polyakova, Geoffrey Kocks, Victoria Udalova, Amy Finkelstein Proceedings of the National Academy of Sciences Nov 2020, 117 (45) 27934-27939; DOI: 10.1073/pnas.2014279117

on the different groups of the American population. For instance, considering sex and geographic differences, "white, non-Hispanic individuals had the lowest excess mortality of 1.5 deaths per 10,000. Black, non-Hispanic individuals had the highest excess mortality of 6.8 deaths per 10,000 in April 2020 195."

Early days of the pandemic

The Centers for Disease Control and Prevention (CDC) began screening symptoms associated with COVID-19 (cough, difficult breathing, and temperature) on January 20, 2020, at three international airports (JFK, San Francisco, and Los Angeles) that bring most passengers from Wuhan, China, to the United States. On January 21, the CDC confirmed the first case: a Washington state resident who returned from Wuhan on January 15, and on March 13, 2020, President Trump declared COVID-19 a National Emergency 196.

New York City (NYC) was the epicenter of the COVID-19 outbreak in the United States during the first months of the pandemic. To illustrate, between February 29th and June 1st, 2020, NYC registered 203,792 cases of COVID-19, 54,211 (26.6%) persons hospitalized and 18,679 (9.2%) deaths. The peak week was March 29, with a weekly mean of 5,132 cases per day and 1,566 hospital admissions by day. The death peak was reached during the week of April 5, with a weekly mean of 566 deaths per day¹⁹⁷. Indeed, during April 2020, the national mortality in the EEUU increased 33%, experiencing an additional 2.4 deaths per 10,000 individuals (that could be caused directly or indirectly by COVID-19.)

Emergency costs

The U.S. Congress approved the Coronavirus Aid, Relief, and Economic Survey (CARES) Act in early 2020 and in March 2021, approved additional funds for the American Rescue Plan Act. Up to December 31, 2021, the U.S. government has spent in response to COVID-19 USD 3.6 trillion which represents almost 79% of total budgetary resources for 44 agencies¹⁹⁸.

Run by the Treasury Department, the American Rescue Plan has a cost of over \$1 trillion and provides COVID-19 Economic Relief to assist: (i) American families and workers (economic impact payments, unemployment compensation, child tax credit, and emergency rental assistance); (ii) Small Business (tax credit programs, emergency capital investment program, paycheck protection program); (iii) States and local fiscal recovery funds (capital project fund, homeowner assistance fund, emergency rental assistance program, state small business credit initiative, and coronavirus relief fund); (iv) American Industry (airline and national security relief programs, coronavirus economic relief for transportation services programs, payroll relief program¹⁹⁹.)

Main discriminatory bans on entry to the United States

The U.S. government denied the entry into the U.S. of any foreign national (except an immediate family of U.S. citizens and permanent residents) who have traveled within the last 14 days²⁰⁰ to the following destinations:

¹⁹⁵ See Racial Inequality in Pandemic Mortality Widens When Age, indirect impact taken into account.

 $[\]frac{https://www.census.gov/library/stories/2021/02/indirect-impact-of-covid-19-results-in-higher-pandemic-death-toll.h}{\text{A timeline of COVID-19 Developments in 2020}}.$

See https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020

¹⁹⁷ Morbidity and Mortality Weekly Report – Covid-19 Outbreak – New York City, February 29-June 1, 2020.

See https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6946a2-H.pdf
See https://www.usaspending.gov/disaster/covid-19?publicLaw=all

See https://home.treasury.gov/system/files/136/American-Rescue-Plan-Six-Month-Report.pdf

Proclamation Date	Effective	Travel suspension
January 31, 2020	February 2 at 5 pm ETS	China (excluding the Special Administrative Regions of Hong Kong and Macau).
March 2,2020	March 2 at 5 pm ETS	Islamic Republic of Iran
March 12, 2020	March 13 at 11:59 pm ETS	Schengen Area comprises 26 European states: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland.
March 14, 2020	March 16 at 11:59 pm ETS	United Kingdom (excluding overseas territories outside of Europe) and Ireland.
May 24, 2020	May 26 at 11:59 pm ETS	Brazil
June 22, 2020	June 24 at 12:01 am	Suspension of Entry Aliens Who Present a Risk to the United States Labor Market Following the Coronavirus Outbreak ²⁰¹ .
January 25, 2021	January 26 at 12:01 am ETS	COVID Travel Ban Updates for South Africa, UK, Ireland, Brazil, Schengen Area
January 26, 2021		CDC Order Requiring all Passengers on U.SBound Flights to Have COVID-19 Viral Test (pre-departure)
April 30, 2021	May 4 at 12:01 am EDT	Suspension of travel from India
October 25, 2021	November 8	Proclamation - Advancing Safe Resumption of Global Travel. Non-immigrant air travelers to the United States will be required to be fully vaccinated and to provide proof of vaccination status prior to boarding an airplane to fly to the U.S. Revoke the suspension of entry into the United States of persons physically present in Brazil, China, India, Iran, Ireland, the Schengen Area, South Africa, and the United Kingdom.
December 2, 2021	December 6	All air passengers, regardless of vaccination status, must show a negative COVID-19 test taken no more than one day before traveling to the United States.

Currently, a non-US citizen non-US-immigrant traveling to the United States from a foreign country by air must be fully vaccinated with an accepted COVID-19 vaccine, a negative viral test taken no more than one day before boarding a flight to the U.S. A non-vaccinated would need to meet the criteria for an exception; otherwise, they cannot board the flight. U.S. citizens U.S. national and lawful permanent residents do not require vaccination proof 202.

Cruise Orders from the US Centers for Disease Control and Prevention (CDC)²⁰³

See https://internationaloffice.berkeley.edu/immigration/EO
It was extended on December 31, 2020 up to March 31, 2021. The order was revoked on February 24th, 2021.

See https://www.cdc.gov/coronavirus/2019-ncov/travelers/pdf/requirements-travel-to-us-by-air-quick-reference-p.pdf

The CDC also emitted a no-sail order to help contain the virus's spread during the early days of the pandemic due to the outbreak of COVID-19 cases in other cruises²⁰⁴. "Between January and April of 2020, there were 54 ships in different parts of the world that were infected with COVID-19, which represents one-fifth of the global ocean cruise fleet (Harrold, 2020). According to Harrold, there were at least 2592 infected people and 65 deaths on these ships²⁰⁵." The order prevented the disembarking of passengers without authorization from the US Coast Guard and suffered different modifications over time. Then, the CDC implemented a set of guidelines for a phased resumption of cruise ship passenger operations through the Framework for Conditional Sailing Order²⁰⁶. On February 9th, 2022, the CDC announced a new voluntary COVID-19 program that replaced the Conditional Sailing Order. The program gives a color status for each ship that participates in the program so travelers can make informed decisions before travel.

Proclamation Date	Travel suspension
March 14, 2020	No-sail order to help contain the spread of the virus ²⁰⁷ .
April 9, 2020	Renewed the No Sail Order and Other Measures Related to Operations Order. This order was modified on July 16 and September 20.
May 1, 2020	The US House Committee on Transportation and Infrastructure launched an investigation into Carnival Corporation's coronavirus response and management on its ships.
October 25, 2021	Framework for Conditional Sailing Order
February 9, 2022	CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters ²⁰⁸ .

Flying preferences

In August 2020, Gallup reported that "about half of American adults who flew at least once a year before the pandemic (52%) currently say they would not be comfortable flying." However, the figure varied by age and political affiliation. For example, air travelers aged 55 and older said they would not be comfortable flying. By contrast, "many air travelers who feel comfortable with flying are more hesitant about longer flights." 47% said that they feel comfortable taking a flight with a duration of two or three hours, but only 21% regards the same if the flight takes more than six hours²⁰⁹.

In January 2022, Gallup reported that U.S. Air Travel remains down. In fact, "fewer Americans traveled by air in 2021 than in any year in Gallup records between 2003 and 2015." For instance, when people were asked (survey Dec. 1-16, 2021) about the number of trips (did not ask the trip reason) taken on a commercial airliner in the past 12 months, 62% answered no trips, and 23% reported between 1 and 2 trips²¹⁰.

²⁰³ See https://www.cdc.gov/quarantine/cruise/covid19-cruiseships.html

²⁰⁴ For example, the Diamond Princess (Japan) Princess Cruises' Ruby Princess (Sidney).

²⁰⁵ Ana Lucia Rodrigues da Silva, An overview of the impact of COVID-19 on the cruise industry with considerations for Florida, Transportation Research Interdisciplinary Perspectives, Volume 10, 2021, 100391, ISSN 2590-1982,

https://doi.org/10.1016/j.trip.2021.100391. (https://www.sciencedirect.com/science/article/pii/S2590198221000981)

See https://www.cdc.gov/quarantine/pdf/CDC-Conditional-Sail-Order_10_30_2020-p.pdf

See https://www.ship-technology.com/news/us-cdc-no-sail-order-cruise-ships/

See https://www.cdc.gov/quarantine/cruise/management/technical-instructions-for-cruise-ships.html

See https://news.gallup.com/poll/316742/air-travelers-uncomfortable-flying.aspx
See https://news.gallup.com/poll/388484/air-travel-remains-down-employed-adults-fly-less.aspx

2. Description of the pandemic in Canada

In Canada, there have been 3,033,824 confirmed cases of COVID-19, which represents 79,695 total cases per million population, and 33,722 deaths between January 26, 2020, and January 30, 2022. By January 30, Canada had administered 77,679,365 vaccine doses, with 30,098,902 people fully vaccinated, representing around 79% of the population. Ontario accounts for roughly a third of the total cases in the country, followed by Quebec²¹¹.

The first case was detected on January 25, 2020, in Toronto. It was a man who traveled from Wuhan, China. Since then, the Government of Ontario declared a provincial state of emergency and started a lockdown in March requiring the closure of non-essential businesses. By contrast, Canada did not invoke extraordinary powers to address the COVID-19 pandemic. Instead, Canada imposed emergency measures under different federal legislation, such as the Quarantine Act and the Aeronautics Act.

Travel restrictions

Canada implemented the following travel restrictions²¹² to foreign nationals:

Date	Measure
March 14, 2020	Advised to avoid all non-essential travel abroad and all travel by cruise ship
March 16, 2020	Banned the entry of all non-Canadian or non-permanent residents into Canada.
March 18, 2020	in conjunction with the United States, closed the Canadian-US border to all non-essential travel.
March 25 2020	Immediate 14-day quarantine for all Canadians returning to Canada as of 11:59 pm on March 25, 2020.
March 28 2020	All air operators must conduct a health check of travelers before they board a flight within Canada or departing from Canada. Passengers that present COVID-19 symptoms must be refused by air operators.
April 13, 2020	Granted an exemption for temporary foreign workers from the travel restrictions to Canada, along with other foreigners with student and work visas, provided they adhere to a strict 14-day isolation protocol upon arrival.
May 12, 2020	The Canada Border Services Agency announced the temporary suspension of service at certain small sites.
May 28, 2020	Cruise ships with the capability of providing overnight accommodations to 100 or more people are prohibited from operating in Canadian waters.
November 2, 2020	New mandatory requirements for travelers to Canada: submit information through ArriveCan.
November 30, 2020	Mandatory Isolation Order and temporary travel restrictions for all travelers (except from the US) will be extended until January 21, 2021.
December 20, 2020	Suspended entry into Canada of all commercial and private passenger flights from the United Kingdom for 72 hours
December 31, 2020	Since January 7, 2021, at 12:01am EST, air passengers five years of age or older will be required to test negative for COVID-19 taken within 72 hours prior to the traveler's scheduled departure to Canada.

²¹¹ See https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html
212 See https://www.mccarthy.ca/en/insights/articles/covid-19-emergency-measures-tracker

January 29, 2021	Expanded restrictions for international flights to include commercial passenger flights from the United States, Mexico, Central America, the Caribbean, and South America; international business/private and charter flights from all countries. Announced the suspension of all flights to and from Mexico and Caribbean countries effective January 31, 2021, until April 30, 2021.
February 4, 2021	Prohibit pleasure crafts in Canadian Arctic waters and cruise vessels in all Canadian waters until February 28, 2022.
February 12, 2021	Announced further testing and quarantine requirements for international travelers arriving to Canada's air and land ports of entry.
April 23, 2021	Suspended flights from India and Pakistan for 30 days.
August 28, 2021	Restricted direct commercial and private passenger flights to Canada from Morocco.
September 3, 2021	Since September 7, Canada allowed fully vaccinated foreign nations meeting conditions to enter for discretionary purpose.
November 19, 2021	Announced adjustments to Canada's border measures: expand the list of COVID-19 vaccines that travelers can receive to be considered fully vaccinated, unvaccinated or partially vaccinated foreign nationals will only be allowed to enter if they meet the criteria for limited exceptions.
November 30, 2021	foreign nationals who have been in any of these countries within the previous 14 days will not be permitted entry into Canada: Botswana, Egypt; Eswatini; Lesotho; Malawi; Mozambique; Namibia; Nigeria; South Africa; and Zimbabwe.
December 17, 2021	Lifted entry prohibitions from Nov. 30, requirement for a pre-arrival negative PCR test result for all travelers leaving the country for less than 72 hours

Government response

At the federal level, the government of Canada introduced domestic transportations measures; invested USD 3 million through the Digital Citizen Contribution Program to support critical thinking about online health information²¹³; established the COVID-19 Disability Advisory Group, comprised of experts in disability inclusion²¹⁴; launched the Wellness Together Canada portal focused on mental health support during the pandemic²¹⁵; and made temporary changes to the Employment Insurance Emergency Response Benefits²¹⁶, among other measures that offered financial support to people and families, businesses, selfemployed workers, vulnerable economic sectors (e.g., tourism, agriculture, culture and heritage, etc.) and communities. The Economic and Fiscal Update 2021 reported that nevertheless, "the pandemic cost 3 million Canadians jobs and the GDP shrank by 17%". Regardless, by the end of 2021, Canada "has recovered 106% of the job losses at the peak of the pandemic." Similarly, the "GDP grew 5.4% in the third quarter."

Each local government developed its response to the COVID-19 pandemic framed into the federal guidelines and their health care needs during the different waves of the pandemic. However, they received strong financial support from the federal government: "\$8 out of every \$10 provided to fight COVID-19 and support Canadians through the pandemic came from the federal government²¹⁷."

²¹³ See https://www.canada.ca/en/canadian-heritage/news/2020/04/supporting-canadians-to-think-critically-about-online-health- information.html

[&]quot;With particular focus will be equality of access to health care and supports; access to information and communications; mental health and social isolation; and employment and income supports." See https://www.canada.ca/en/employment-socialdevelopment/news/2020/04/statement-by-minister-qualtrough-on-canadas-disability-inclusive-approach-to-its-covid-19-

pandemic-response.html
215 See https://www.canada.ca/en/health-canada/news/2020/04/government-of-canada-connects-canadians-with-mental-wellnesssupports-during-covid-190.html
216 See https://gazette.gc.ca/rp-pr/p2/2020/2020-04-29/html/sor-dors89-eng.html

²¹⁷ See https://budget.gc.ca/efu-meb/2021/report-rapport/EFU-MEB-2021-EN.pdf

Travel on Cruise

During the early days of the pandemic, Canada advised avoiding all non-essential travel abroad and all travel by cruise ship and on May 28, 2020, prohibited the operation in Canadian waters of cruise ships with the capability of providing overnight accommodations to 100 or more people. Cruise ship resumed operations on November 1, 2021, to be ready for the season 2022. The cruise ship industry is an important part of Canada's domestic tourism sector because it "represents more than \$4 billion annual input into the Canadian economy and generates approximately 30,000 jobs²¹⁸." However, Canada kept its advice to avoid all cruise ship travel outside the country.

See https://www.canada.ca/en/transport-canada/news/2021/07/government-of-canada-aims-to-restart-cruise-ship-season-in-canada.html



Commerce

The commerce sector got severely impacted due to the COVID-19 pandemic. A portion of this commerce is directly related to tourism, that experienced a great decline during the first year of the pandemic. Also, residents spending got impacted first due to the curfews and lockdowns, and then due to a decline in household income. The total losses in the commercial sales to residents due to the COVID-19 pandemic are BSD 823 million.

A. Background

To the best of our knowledge, there is no publicly available information about the commerce sales in The Bahamas. There is also no information about the retail sales that go to residents, however, there are good estimates about the amount tourist spend in commerce during their visits. The direct losses in this sector due to the fall in tourism, are already accounted in the tourism chapter.

The first challenge to establish a baseline is to construct a series of expenditures of residents in commerce establishments. To do it, the first step is to estimate a series of the sales using the Value Added Tax (VAT) and the tax rate. There was no VAT tax data provided, the estimated od the OCDE were used to generate a quarterly series of VAT tax base. Only a series for the period of 2016 to the second quarter of 2018 was generated. This series was used to construct a ratio to the nominal household consumption presented in the National Accounts Report 2020 from the Department of Statistics. Then the average quarterly ratio was used to generate VAT sales base from 2015 to 2020.

The VAT sales base includes sales to non-residents. As mentioned before, the potential losses due to non-residents spending are already included in tourism. Therefore, the quarterly estimated spending done by non-residents is subtracted to the generated VAT sales base. This new series includes all expenditures done by the residents that generate a VAT, but not all this spending is done in commerce establishments. The ideal case would have been to access the sector data for the collected VAT, but in the absence of this, the Consumer Price Index (CPI) weights were used to map this adjusted series of VAT base to an estimated commerce spending done by residents.

Table VI 1: Baseline for commerce sales to residents (current million BSD)

	Estimated commerce sales to residents	Variation	Household consumption	Variation
2015	3,585		7,208	
2016	3,805	6.1%	7,374	2.3%
2017	3,854	1.3%	7,962	8.0%
2018	4,032	4.6%	8,113	1.9%
2019	3,810	-5.5%	7,715	-4.9%
2020	3,236	-15.1%	6,191	-19.8%

Source: Department of Statistics and assessment team.

For 2019 the estimated commercial sales to residents were BSD 3,810 million. This represented a decrease of 5.5% with respect to the previous year. In Table VI-1 the data for household consumption is also presented. Even though 2019 was a record year for tourism and the economy, nominal household consumption fell. For

2020, the estimated commerce to residents fell 15.1% to BSD 3,236 million. For the same year household consumption fell almost 20%, to BSD 6,191 million.

In order to construct the baseline, the quarterly generated series of commerce sales to residents from 2015 to 2019, is used to fit an ARIMA model create a forecast for the years 2020 to 2023. Then this series is adjusted with CPI to present the series in 2021 prices.

B. Losses

The losses in the commercial sector due to the COVID-19 pandemic have different causes. Among the causes, particularly at the beginning of the pandemic, is the restriction in mobility and social distancing. Restricting commercial activity only to necessities, limited the commercial spending for the residents. Another factor adding to this, was the fear of being infected. This reduced the willingness of Bahamians to go out and spend. The third factor, and probably the longest to last is the affectation in economic activity with negative consequences on employment and income. The insecurities due to the drastic fall in economic activity, were likely to limit spending and change the patterns of consumption, at least temporarily.

Calculating the losses involves two processes, the first is to estimate de losses using data that is available and compare it to the baseline, this can only be done for 2020, since no quarterly estimates for household consumption are available for 2021. In order to estimate the effective commerce spending for 2021 to 2023, a Gompertz function was used.

Section A of Figure VI-1 presents the quarterly baseline for the commercial sales and the estimated one. On average the quarterly commercial sales to residents are BSD 983 million. Section B of Figure VI-1 presents the losses, this are defined as the difference between the baseline and the estimated commercial sales. The majority of the losses occurred during the first three guarters of 2020.

During the first quarter, the losses were BSD 134 million, all just in the month of march. As a fraction of the baseline the losses were 13.7%. The largest loss occurred in the second quarter, both in absolute values and relative to the baseline. During that quarter, the sector lost BSD 240 million and 25.2% of the baseline sales. The losses started to decline in the third quarter, totaling BSD 154 million and 16% of the baseline. About 64% of the total losses occurred in these three quarters. Losses starter to taper off at the end of 2020 and are estimated to taper off through 2023.

Table VI-2 presents the yearly baseline for the commercial sales the estimated sales at 2021 prices. The losses for 2020 are estimated in BSD 579 million, more than 70% of the total losses. For 2021 the losses are estimated in BSD 158 million. Losses decline to BSD 62 million in 2022 and to BSD 24 million. Full recovery is estimated to occur at the end of 2023, when the tourism sector fully recovers. Total losses are estimated at BSD 823 million.

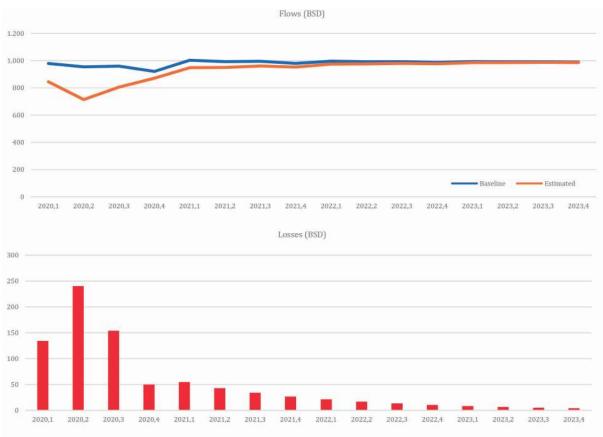
Table VI 2: Commercial losses

(million 2021 BSD)

	Baseline	Estimated	Losses	
2020	3,815	3,236	579	
2021	3,971	3,812	158	
2022	3,969	3,907	62	
2023	3,969	3,944	24	
Total	15,723	14,900	823	

Source: Assessment team.

Figure VI 1: Commercial sales to residents and losses (million 2021 BSD)



Source: Assessment team.



Fishery

Fishery is an important activity for the Bahamas, both economically and culturally. The impact of the COVID-19 pandemic in the sector was reduced and circumscribed to some staples. The main fishery staple (spiny lobster) was unaffected. The estimated losses are BSD 1.86 million, mostly in snapper and groupers.

This section uses information from the MAMR, meetings with its officials, and third-party sources like news and academic papers.

A. Background

The vast marine resources of The Bahamas allow for meaningful fishery activity and an employment source for many Bahamians. The country is also a significant exporter, mainly of spiny lobster. Fishery is a fundamental source of food for the local population and visitors.

During 2019 the total landing was over 18.4 million pounds. Most of the catch is crawfish (spiny lobster). In that year, 88% of the total catch in pounds was spiny lobster, about 16.6 million pounds. The following catch is conch, with about 900,000 pounds in 2019, a decline of 23.8% from the previous year. Snappers and groupers totaled almost 850,000 pounds, sponge 105,000 pounds, and stone crab over 90,000 pounds. Total landings have been declining since 2017. In 2019 the decline was 1.9% versus the year before.

Table VII 1: TOTAL LANDINGS (pounds)

	2014	2015	2016	2017	2018	2019	2020
Crawfish Tails	4,804,483	4,761,885	6,185,745	5,651,667	4,272,708	4,145,381	4,381,268
Crawfish Whole	64,073	97 , 5 ⁸ 7	135,839	34,604	18,356	15,518	4,958
Crawfish (wet weight)	14,477,522	14,383,242	18,693,074	16,989,605	12,836,480	12,451,661	13,148,762
Conch	1,227,679	1,191,847	792,220	966,524	1,183,527	901,757	349,026
Conch shell	267,799	257,526	180,960	84,849	137,835	315,227	98,555
Stone Crab	161,603	119,398	35,75 ¹	62,119	83,910	90,359	67,168
Snappers	1,223,280	787,280	483,364	312,363	389,106	582,903	90,188
Nassau Grouper	280,737	117,645	69,327	112,630	177,655	206,521	132,118
Other Grouper	296,128	151,815	79,558	97,220	82,968	59,752	30,882
Sponge	52,184	100,343	60,152	51,654	47,762	105,027	101,192

Source: MAMR.

Table VII-2 displays the price per pound for the different staples. In 2019 the highest price per pound was stone crab, followed by the lobster tail and then by sponge. The item with the lowest price per pound is conch shells, a subproduct of the production of conch meat. On average, the prices in 2019 were 13.2% higher than the previous year. Except for snapper and other groupers, all the prices rose during 2020.

Table VII 2: PRICES (current BSD per pound)

	2014	2015	2016	2017	2018	2019	2020
Crawfish Tails	11.3	11.5	11.0	10.5	11.0	12.7	13.2
Crawfish Whole	5.2	5.5	6.1	6.7	5.7	6.9	7.0
Crawfish (wet weight)	5.2	5.5	7.1	6.7	5.7	6.9	7.0
Conch	3.1	3.7	3.9	4.3	4.4	4.3	4.8
Conch shell	0.3	0.2	0.3	0.3	0.2	0.2	0.4
Stone Crab	12.6	13.6	12.2	13.5	13.5	14.8	16.3
Snappers	2.7	2.9	2.9	3.1	3.4	3.6	3.5
Nassau Grouper	3.9	4.5	5.0	5.2	4.8	5.0	5.3
Other Grouper	3.0	2.9	3.3	4.2	2.9	5.1	5.0
Sponge	8.4	6.3	11.2	10.9	11.8	12.4	15.6

Source: MAMR.

The value of the total landings depends on the amount of the catch and the average price per pound. Table VII-3 presents this information. The total value of the catch during 2019 was BSD 148 million, an increment of 14.4% versus 2018. A large fraction of this increase was due to a rise in the price of crawfish. For 2020 the total value of the catch was BSD 155 million, an increment also related to price changes. Crawfish makes for around 93% of the value of landings in 2019, a percentage that rose to over 96% during 2020. In terms of value, commercial fishery in The Bahamas is synonymous with spiny lobster.

Table VII 3: TOTAL LANDINGS (current BSD million)

	2014	2015	2016	2017	2018	2019	2020
Crawfish Tails	54.3	54.8	68.3	59.2	47.0	52.7	57.7
Crawfish Whole	0.3	0.5	0.8	0.2	0.1	0.1	0.0
Crawfish (wet weight)	74.6	79.7	133.5	114.5	73.2	85.5	92.0
Conch	3.8	4.4	3.1	4.2	5.2	3.8	1.7
Conch shell	0.1	0.1	0.1	0.0	0.0	0.1	0.0
Stone Crab	2.0	1.6	0.4	0.8	1.1	1.3	1.1
Snappers	3.3	2.2	1.4	1.0	1.3	2.1	0.3
Nassau Grouper	1.1	0.5	0.3	0.6	0.9	1.0	0.7
Other Grouper	0.9	0.4	0.3	0.4	0.2	0.3	0.2
Sponge	0.4	0.6	0.7	0.6	0.6	1.3	1.6
Total	141	145	209	182	130	148	155

Source: MAMR.

The value of the exports is presented in Table VII-4 for the years 2019 and 2020. In terms of value, the total exports of marine products during 2019 were BSD 68 million, primarily destined to the U.S. A large fraction of this is spiny lobster, mostly lobster tails. For 2020, the first year of the COVID-19 pandemic, the exports rose to BSD 77 million, reflecting exclusively the rise in crawfish exported and its price. The quantity for the rest of the staples declined during 2020.

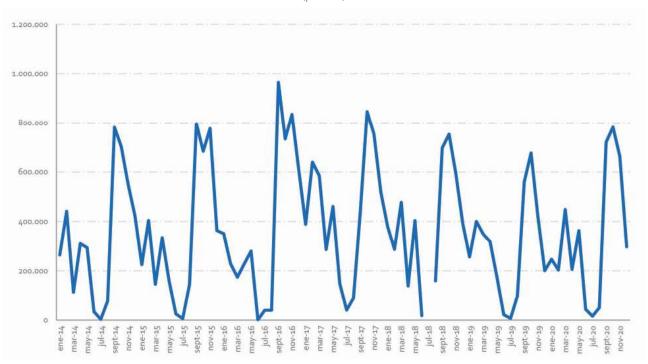
Table VII 4: EXPORTS (current BSD million)

	2019	2020		
	Weight (lb.)	Value (BSD)	Weight (lb.)	Value (BSD)
Conch	538,610	3,888,215	286,100	2,078,362
Crawfish	3,483,092	59,952,054	4,038,710	71,747,980
Live Crawfish	5,575	60,600	-	-
Scale fish	75,965	79,022	31,461	39,487
Conch shell	315,227	63,531	98,555	41,200
Sponge	105,027	1,298,369	101,192	1,581,209
Stone Crab	164,831	2,705,234	113,424	1,561,873
Total	4,688,326	68,047,025	4,669,442	77,050,111

Source: MAMR.

B. Losses

Figure VII 1: CRAWFISH EXPORTS (pounds)



Source: MAMR.

Estimating the losses for the fishery activity due to the COVID-19 pandemic faces several challenges. The first is the data. The absence of monthly production data makes it hard to establish a baseline. Yearly total landing data permits establishing a general baseline but does not permit taking into account critical seasonal factors. The second shortcoming is that the Harvest Control Rules (HCR) regulations change with time. Some of the declines we might observe are more related to their changes than to the impact of the pandemic. The fall in the conch harvest is an excellent example of this: in 2022, The Bahamas will cease the export of conch meat by regulation to preserve the resource. In third place, even though we have monthly

data about exports, this data does not necessarily reflect those months' production. We could expect that the two series will not differ much over more extended periods, like a year, but they might differ monthly. The absence of subsistence and artisanal fishery metrics is the last challenge, understandable due to the vast area and the remoteness of some of the locations.

For the estimations of the losses, let us begin evaluating the main staple: spiny lobster. Figure VII-1 presents the monthly exports of crawfish. As we saw in Table VII-1, there was no decline in the yearly catch for crawfish during 2020; actually, there was an increase in landings. The annual data is not consistent with any effect of the COVID-19 pandemic on this harvest. This conclusion seems to be validated by the exports data. There is no apparent impact from the pandemic in the exports, which includes processing the product, particularly for frozen lobster tails. In conversation with officials from the Ministry of Agriculture and Marine Resources, they assess that the COVID-19 pandemic had no impact on the main fishery activity. In general, the effect in the sector was quite reduced.

For crawfish, there are no estimated losses. There is a decline in the output produced for conch and conch products. However, yearly production has declined in recent years and with considerable variance. Besides, attributing the current fall to an impact of the pandemic could be misleading, given the changes in the HCR. Therefore, the basic assumption is that there is no impact of the COVID-19 pandemic on conch fishery. Similarly, the sponge landing experienced a modest decline, but in order of magnitude, and somehow small versus the variation of the previous year.

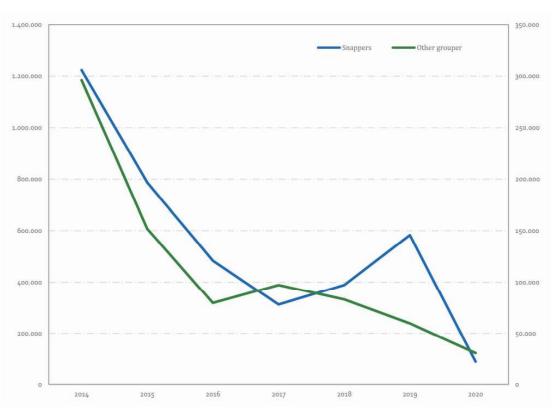


Figure VII 2: LANDINGS (pounds, other groupers right axis)

Source: MAMR.

²¹⁹ Higgs ND. 2021. Impact of the the COVID-19 pandemic on a queen conch (Aliger gigas) fishery in The Bahamas. PeerJ 9:e11924 https://doi.org/10.7717/peerj.11924

Fishery activities were always allowed during the curfews and the restrictions in mobility. However, two potential elements might have impacted certain fishery activities. Fishery was not restricted but publicly selling the catch was. Secondly, the fall in tourism caused a significant drop in demand for certain products, like snapper and groupers. Figure VII-2 displays the yearly landings for snappers and other groupers. There is a substantial fall in the first one, breaking the trend, and a lesser one in the second. That decline is consistent with the disruptions imposed by the COVID-19 pandemic.

Table VII-5 presents the estimated losses for the fishery sector. The baseline was estimated using the simple average of the past three years to calculate these losses. In total, over 400,000 pounds of marine products, especially snapper, followed by other groupers, were not produced. There was also a loss in stone crab and Nassau grouper. The total losses are estimated at BSD 1.86 million and only occur during 2020. Compared to other productive sectors, the losses in the fishery sector are pretty small.

A final reference on artisanal and subsistence fishery in the Bahamas: These activities likely increased during the pandemic. In a recent study²¹⁹, Higgs (2021) found evidence of increased conch subsistence fishery during the pandemic. The drop in tourism and other activities might have generated incentives and opportunities for Bahamians to fish. However, these increments in fishery activity are unlikely to be documented in the total landings, especially subsistence fishery. Designing a mechanism to track and monitor these activities would be interesting, especially for conservation interests.

Table VII 5: LOSSES (current 2020 BSD)

	Weight (lb.)	Value
Stone Crab	11,628	197,903
Snappers	337,936	1,222,737
Nassau Grouper	33,484	186,405
Other Grouper	49,098	253,243
Total	432,146	1,860,288



Infrastructure Sectors



Transportation

A. Background

This section presents the effect and consequences of the COVID-19 pandemic on the Transportation sector in the Bahamas. The transportation infrastructure represents an essential asset in The Bahamas' economy since it provides connectivity within the country and provides access to international commerce and tourism, one of the country's most important economic sectors. The transportation sector can be divided into three major modes: air traffic, ground traffic, and marine traffic, which are essential for the country: on the one hand, ground transportation plays a critical role in the connectivity among the islands; marine transportation integrates both tourism (pleasure vessels such as cruises) and commerce (through cargo vessels); and finally, the air traffic is a crucial connection with other countries, and between the islands of The Bahamas.

Due to the Government restrictions related to the COVID-19 pandemic, the transportation system suffered a dramatic demand decrease in 2020, especially in the airport traffic and the recreational marine flow (cruises and general pleasure vessels). Although the previous years (before 2020) showed a constant increase in demand and a consistent collected fee increment, 2020 changed the pattern of this behavior. For months, the touristic flow stopped. This situation generated a decrease in the usage of airports and navy piers according to the restrictions pushed by The Bahamas' Government.

This section analyzes the economic effects produced by the decrease in usage of transportation infrastructure during the years 2020 and 2021. Through a predictive model, it proposes the recovery according to the patterns shown in previous years. This effect is related to the decreased collected fees during the analysis period for air and marine traffic. The potential change in the use of ground transportation is not considered for this exercise. The Bahamas National Authorities have provided all the information in this document: Ministry of Tourism, Custom Service, Civil Aviation, and Port and Airport Authorities. Along with that, economic estimates have been done by the assessment team.

The estimated losses are approximately BSD 595 million for the whole country, mainly caused by the decrease in collected fees of air and marine passengers at airports and navy piers (92%). This figure is expressed in 2021 BSD. The other percentages correspond to uncollected aircraft landing fees and uncollected fees from cruises and cargo vessels that did not arrive. Table VIII-1 summarizes this sector's losses for 2020 and 2021 and the projections for 2020 and 2023 considering the forecast recovery model. According to the information provided by the authorities, there are no additional costs associated with the COVID-19 pandemic for this sector.

Table VIII 1: TRANSPORTATION SECTOR LOSSES (2021 BSD)

Description	Losses
Air passengers	273,296,482
Cruise passengers	271,721,687
Aircrafts	4,315,208
Pleasure vessels	43,475,470
Cargo vessels	1,901,626
TOTAL	594,710,473

B. Baseline

This subsection presents the transportation sector baseline: all the information about the infrastructure usage and the traffic before the start of the COVID-19 pandemic, and the projection for 2020, 2021, 2020, and 2023, should the pandemic not have affected the country. All the authorities mentioned in the previous sub-section have provided the information.

Air passenger flow

The Bahamas airport network is essential for receiving and transporting international and national passengers. Lynden Pindling International Airport is the most significant air infrastructure in the whole country. It is in western New Providence near the capital city of Nassau, and it is the primary hub for the country's leading airlines.

The air passenger flow decreased dramatically due to the Government's restrictions caused by the COVID-19 pandemic. On the rise during the previous years, the air traffic of tourists was restricted for several months in 2020, directly affecting many activities in The Bahamas. One direct implication of this decrease was the fall in the tax collection per passenger. The objective of this baseline is to project what could have been a typical year in terms of air traffic for a further contrast with the actual situation. The air traffic figures for 2020, 2021, 2022, and 2023 are based on the previous growth patterns. Figure VIII-1 shows the traffic pattern for the baseline. The pattern integrates data provided by the authorities (before 2020) and the projection after 2020 in the absence of the pandemic.

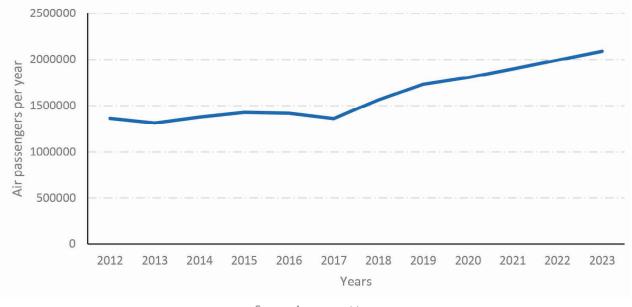


Figure VIII 1: BASELINE INFORMATION: AIR PASSENGER ARRIVALS

Source: Assessment team.

Cruise passenger flow

The Bahamas port system is essential for the tourism and commercial sectors, which are significant sources for receiving tourist and basic supplies, and crucial for the exporting business.

As expected, the restrictions due to the COVID-19 pandemic spread affected the arrival of cruise passengers after the start of March 2020. Official records show that more than 5 million passengers arrived in The Bahamas through ports in 2019, and this number had been increasing in the previous years. The projection assumes that this number would have increased in 2020 and the years after without the COVID-19 pandemic. These estimations have been carried out with a set of monthly time series with data from January 2005 to date, showing the tourism sector growth and projections. Figure VIII-2 shows the passenger flow since 2012 and the projection for 2020, 2021, 2022, and 2023 in the absence of COVID-19. The projection shows that by 2021, the annual cruise passenger arrivals would have reached more than 6 million passengers per year, with corresponding tariff payment growth.

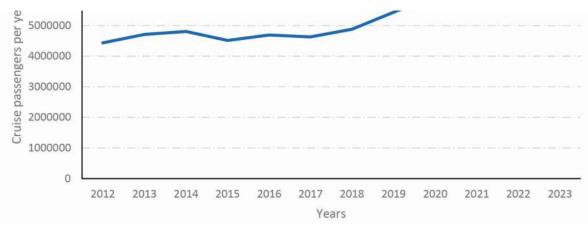


Figure VIII 2: BASELINE: CRUISE PASSENGER ARRIVALS

Source: Assessment team.

Air and marine vessels

The number of general vessels can be divided into two main categories: touristic and cargo, the former being significantly affected by the pandemic restrictions. However, cargo and supplies remained almost constant according to the available information. Table VIII-2 shows the data provided by the different authorities and the projection for the years 2020, 2021, 2022, and 2023 according to the growth rate seen from the previous years.

Description/year 2020* 2022* 2023* Aircraft 15,623 17,318 18,059 18,975 20,873 19,924 Cargo 2,025 3,418 2,804 2,898 2,710 2,991 Cruises 1,625 1,811 2,081 2,042 1,999 2,133

Table VIII 2: BASELINE: VESSEL ARRIVALS

* Projection without COVID-19 Source: Assessment team

C. Losses

Losses in this sector are defined as the decrease in collected fees as a consequence of the COVID-19 pandemic. This estimation is made based on the information provided by the authorities in charge of the different transport facilities in the country.

Three important data are crucial to estimate the losses:

- (i) the baseline with the projections shown in the previous section allows to quantify the collected fees that potentially would have been received by the country in a non-COVID-19 context.
- (ii) the records on the decrease in passenger/vessel flow to contrast the level of collected fees with the baseline.
- (iii) a projection of the recovery process to analyze how long this disaster will affect the transportation sector.

The losses per year are the difference between the collected fees of the baseline scenario and those related to the reduction in passenger/vessel flow caused by the restrictions. The recovery process is carried out using a Gompertz time series function, which estimates a 99% recovery by the end of 2023 in this sector, i.e., the projection with the COVID 19 equals the baseline projection. The estimation of the recovery process is extensively explained in the tourism sector of this document.

Air passenger flow

The collected fees from air passengers were significantly affected by restrictions due to COVID-19, as shown in Figure VIII-3. For example, in 2019, this figure was approximately BDS 164 million; this number decreased dramatically in 2020 to BSD 40 million, a reduction of more than 70% between one year and another as a direct consequence of the pandemic. Furthermore, the collected fees projection for 2020 was BDS 171 million. The estimated loss for this year rises to almost BDS 131 million dollars, which is the difference between the collected fees that year (BSD 40 million) and the projected collected fees under non-COVID-19 context (BDS 171 million.)

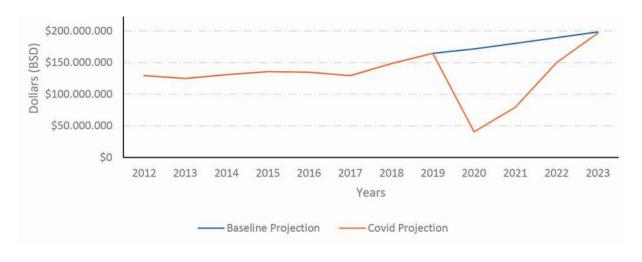


Figure VIII 3: AIR PASSENGER TRAFFIC FEES

The losses are estimated in the years that present a considerable difference from the baseline, from 2020 to 2023 (Figure VIII-3).

Table VIII 3: AIR PASSENGER LOSSES (2021 BSD)

Year	Losses
2020	130,988,150
2021	101,023,385
2022	39,462,097
2023	1,822,851
Total	273,296,482

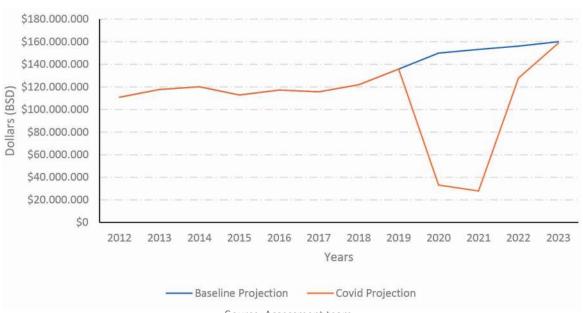
Source: Assessment team

The highest loss was in 2020, when the air traffic was suspended for several months, and the income from fee collection decreased dramatically. There was a considerable reduction in losses in 2021, and the decline continues in 2022.

Cruise passenger flow

The collected fees from cruise passengers were also significantly affected by the pandemic restrictions in 2020 and even more in 2021. For example, in 2019, the collected fees for this concept was approximately BSD 135 million, and that decreased to BSD 33 million in 2020, and BSD 27 million in 2021. In this sense, there is a slight difference with the behavior of air traffic, where the most affected year was 2020. The difference is explained by slow cruise system restoration, which started in July 2021, in contrast with the air traffic that started recovering in January 2021.

Figure VIII 4: CRUISE PASSENGER FEES



The recovery was estimated with a time series model, and it predicts the total restoration by the end of 2023. The losses produced by the reduction of fees collected from cruise passengers rose to BSD 271 million for the four years, which is around 46% of the total losses of the transportation sector. The year that produced the most significant drop was 2021, with approximately BSD 125 million in losses (Figure VIII-4).

Table VIII 4: CRUISE PASSENGER LOSSES (2021 BSD)

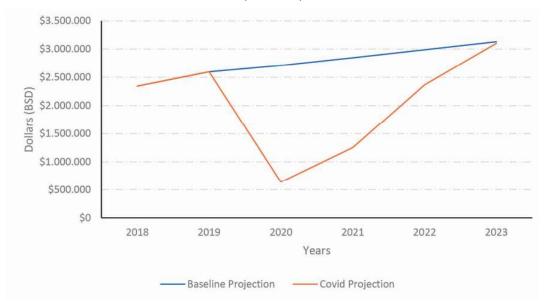
Year	Losses
2020	116,779,478
2021	125,315,790
2022	28,364,785
2023	1,261,634
Total	271,721,687

Source: Assessment team.

Air and Marine vessels

The vessel traffic was reduced due to the restrictions, and therefore there was a reduction on collected fees. Losses were produced by three types of vessels: aircraft, cargo, and cruises. In terms of collected fees, the most affected source is the cruises. The cargo vessel flow differed slightly from the projection, which can even be part of a normal annual variation. The losses presented in this sub-section correspond to the fees that the vessels should pay to the port/airport authority as part of their infrastructure use and do not include any of the passenger fees (included in the previous two sections). Figures VIII-5 and VIII-6 present losses for the aircraft and cruises, respectively.

Figure VIII 5: AIRCRAFT LOSSES (2021 BSD)



\$30.000.000 \$25.000.000 \$20.000.000 Dollars (BSD) \$15.000.000 \$10.000.000 \$5.000.000 \$0 2018 2019 2020 2022 2023 2021 Years Covid Projection - Baseline Projection Source: Assessment team.

Figure VIII 6: CRUISE LOSSES (2021 BSD)

Following the passenger behavior, the most critical year for the cruises was 2021 due to the slow recovery, and the worst year for the aircraft was 2021. The losses are calculated as the difference between the baseline and COVID-19 projections per year. According to the model, table VIII-5 presents the losses per year from 2020 to 2023, when the total recovery is projected. The drop in cargo vessels explains the difference in collected fees by port authorities only in terms of fees to ships and not the containers. Losses for the four years, are approximately BSD 49,692,303, 87% corresponds to the income lost from cruises.

Table VIII 5: AIR AND MARINE LOSSES (2021 BSD)

Year	Aircrafts	Cargo Vessels	Cruises
2020	2,068,234	503,144	18,684,716
2021	1,595,106	895,504	20,050,526
2022	623,086	392,526	4,538,366
2023	28,782	110,452	201,861
Total	4,315,208	1,901,626	43,475,470

Source: Assessment team

D. Additional costs

Additional costs correspond to any potential cost incurred by the transportation sector out of the regular spending. In the case of the pandemic, these other expenditures may be related to the hiring of new personnel to take extra shifts or because of lockdowns. However, the institutions in charge of this sector expressly mentioned no additional cost due to the COVID-19 pandemic. This situation should be related to the decreased number of tourists.



Water and Sewerage

The water and sewerage sector represents a critical service in the welfare of The Bahamas. However, at the same time, it means a huge challenge to capture and purify water, and therefore, slight changes in the demand can cause immediate problems in the water and sewerage supply chain. The Bahamas presents several challenges to supplying drinking water to its population. For example, the geographical spread, the population size, remote locations, topography, and climate conditions generate several obstacles for the management of this sector.

The restrictions pushed by the Bahamas' Government in response to the COVID-19 pandemic changed the patterns of residential and non-residential water and sewerage customers. For example, lockdowns instantaneously reduced water consumption in those companies or agencies that started home office. At the same time, residential consumption presented two different effects: an increase, given the suddenly high number of people isolated at home, but also a reduction, since the international borders were closed, and owners and renters ultimately vacated many second houses during a period of restrictions (with limited water consumption). This section of the document analyzes the effect of lockdowns and general COVID-19 restrictions in the water service demand and the consequent reduction or increment in the annual incomes for the water and sewerage companies.

The total loss for this sector rises to BSD 55.8 million, which is the combination of residential and non-residential customers. This value considers the losses of 2020 and 2021 and the projected losses for 2022 and 2023. The losses are calculated as the difference between the projected consumption in a COVID-19-free context and the projected consumption under COVID-19, considering 2020 and 2021 actual consumptions.

This assessment considers data from the Water & Sewerage Corporation (WSC), publicly available information and previous country assessments. All the meetings with the WSC were held virtually, given the sanitation context.

A. Background

The drinking water network reaches around 94% of the total population, and the WSC mainly provides it. Most of the islands, including New Providence, are covered by WSC except for Grand Bahama, served by Grand Bahama Utility Company (GBUC). This report focuses on the economic effects of the COVID-19 pandemic in the WSC, which provides water service to more than 70,000 customers around the country. Table IX-1 presents the distribution of WSC customers divided into residential and non-residential for the different islands that this company covers.

Island	Residential Customers	Non Residential Customers
Abaco	2,012	4,171
Acklins	121	30
Bimini	385	121
Central Andros	557	204
Eleuthera	4,604	1,146

Table IX 1: WATER CUSTOMER INFORMATION.

Exuma	1,509	552
Inagua	342	76
Long Island	652	300
Mayaguana	101	35
North Andros	744	306
New Providence	44,940	8,113
Ragged Island	33	16
South Andros	952	244
San Salvador	304	109
Total	57,256	15,423

Source: WSC.

The water consumption for the baseline reflects historical data for the years before 2020 and a statistical projection for 2020, 2021, 2022, and 2023. We used the data provided by WSC to estimate the tariff payments after 2020 through a statistical analysis based on the mean growth rate from past years. In the next section, this projection is compared to the actual consumption in 2020 and 2021 and the recovery performance for 2022 and 2023. Table IX-2 shows the tariff payments for the baseline.

Table IX 2: WATER CONSUMPTION PAYMENTS (2021 BSD)

Year	Residential	Non-residential
2017	26,076,354	23,916,547
2018	27,889,537	23,440,649
2019	29,367,282	28,863,154
2020*	31,642,171	30,896,408
2021*	32,476,180	32,505,852
2022*	33,242,957	33,9 ⁸ 5,552
2023*	34,213,652	35,624,788

*: Projection without COVID-19 Source: WSC.

Although the non-residential customers are only 21% of the total WSC customers, they represent more than 50% of the total consumption in terms of payments. This difference can produce considerable changes in the total consumption and, therefore, potential losses if the non-residential companies present limitations in their regular operations.

Different providers in different islands cover the sewerage network. WSC covers more than 10,000 customers in Abaco and New Providence. The latter is the primary source of customers of WSD, with more than 94% of their total customers. The sewerage payments estimations for the baseline consider historical data, the quarterly tariffs published by WSC, and a direct correlation with the water consumption pattern. Table IX-3 presents the tariff payments for the sewerage sector.

Year	Residential	Non-residential
2017	3,435,942	2,199,510
2018	3,674,856	2,155,743
2019	3,869,571	2,654,430
2020*	3,400,322	2,841,420
2021*	3,166,634	2,989,434
2022*	3,534,860	3,125,516
2023*	4,472,086	3,276,270

Table IX 3: SEWER CUSTOMER PAYMENTS (2021 BSD)

*: Projection without COVID-19 Source: WSC.

B. Losses

The estimated losses in the Water and Sewerage sector will reach approximately BSD 55.8 million and are related to a change in the consumption pattern due to COVID-19 restrictions. For example, lockdowns may produce changes in consumption of some companies forced to implement home offices and the primarily vacated second homes due to international borders policies during the first months of the pandemic.

We have defined two types of customers for this analysis: residential (principally related to housing) and non-residential (predominantly associated with commerce and other economic activities.) Both groups reduced consumption during the first years of the pandemic due to several direct and indirect effects. As mentioned previously, lockdowns implied an immediate reduction in the non-residential sector, especially of those companies that migrated from offices to workers' homes. In addition, the severe decline of tourists that usually rent homes or other residential accommodations, already analyzed in the housing chapter, explains the reduced consumption by residential customers.

The losses are the difference between the consumption estimation in the baseline, shown in the previous section, the consumption data for 2020 and 2021 obtained from the WSC, and the difference with the estimated recovery for 2022 and 2023. The estimation of the recovery process uses a Gompertz time series function. Figures IX-1 and IX-2 show the residential and non-residential sectors' water consumption, respectively, from 2017 to 2023.

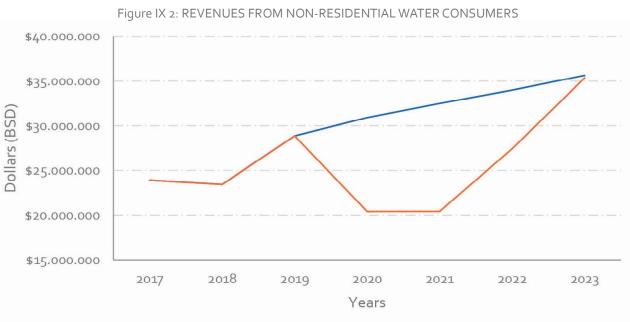
Table IX-4 summarizes the losses. The residential losses (57,256 customers) are approximately BSD 21 million, while the non-residential (15,423 customers) losses are more than BSD 29 million. In this sense, the non-residential sector, principally related to commerce, was more affected than the residential sector by the COVID-19 restrictions and policies. Complete consumption recovery is expected by the end of 2023, where the COVID-19 projection reaches the levels of consumption of the baseline.

According to the information provided by WSC and the quarter tariffs that the company charges, the sewer service consumption is estimated in correlation with the water consumption. Figures IX-3 and IX-4 present the sewer service consumption distribution from 2017 to 2023. Table IX-5 summarizes the losses, which rose to approximately BSD 5.5 million.

Table IX-4 summarizes the losses. The residential losses (57,256 customers) are approximately BSD 21 million, while the non-residential (15,423 customers) losses are more than BSD 29 million. In this sense, the non-residential sector, principally related to commerce, was more affected than the residential sector by the COVID-19 restrictions and policies. Complete consumption recovery is expected by the end of 2023, where the COVID-19 projection reaches the levels of consumption of the baseline.

\$35.000.000 Dollars (BSD) \$30.000.000 \$25.000.000 \$20.000.000 \$15.000.000 2017 2018 2019 2020 2021 2022 2023 Years · Baseline Projection Covid Projection

Figure IX 1: REVENUES FROM RESIDENTIAL WATER CONSUMERS



Source: Assessment team.

Table IX 4: WATER CONSUMPTION LOSSES (2021 BSD)

Year	Residential	Non-residential	Total
2020	5,836,152	10,495,054	16,331,207
2021	8,443,688	12,090,279	20,533,967
2022	6,415,891	6,559,212	12,975,102
2023	273,709	284,998	558,708
Total	20,969,440	29,429,543	50,398,983

\$5.000.000 \$4.500.000 \$4.000.000 Dollars (BSD) \$3.500.000 \$3.000.000 \$2.500.000 \$2.000.000 2017 2018 2019 2020 2021 2022 2023 Years Covid Projection **Baseline Projection**

Figure IX 3: REVENUES FROM SEWER RESIDENTIAL CUSTOMERS

Table IX 5: SEWER CONSUMPTION LOSSES (2021 BSD)

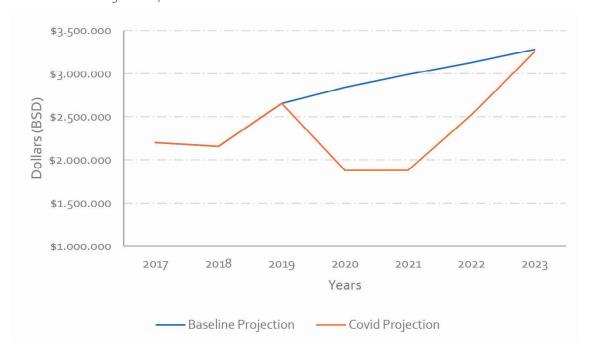
Year	Residential	Non-residential	Total
2020	768,999	965,188	1,734,187
2021	1,112,580	1,111,895	2,224,475
2022	845,388	603,225	1,448,612
2023	36,065	26,210	62,275
Total	2,763,032	2,706,518	5,469,550

Source: Assessment team.

C. Additional Costs

Additional costs correspond to any potential cost incurred by the water & sanitation companies out of the regular spending as a direct consequence of the COVID-19. In this case, additional costs may be related to hiring new personnel to cover extra shifts or because of lockdowns. However, the WSC expressly mentioned that there was no extra additional cost due to the COVID-19 pandemic.

Figure IX-4: REVENUES FROM NON-RESIDENTIAL SEWER CUSTOMERS







Power

A. Background

The power sector represents a critical service for The Bahamas. Usually, this sector is impacted by hurricanes, as it happened between 2015-2019 when two of them struck The Bahamas²²⁰. For example, Hurricane Dorian caused extensive damage to the power generation, transmission, and distribution systems on the islands of Abaco and Grand Bahama. On Abaco, there was extreme damage to the power generation plant at Marsh Harbour caused by both wind and flooding, while the transmission and distribution systems throughout the island suffered wind damage. Significant losses were expected from the level of destruction on Abaco, which has a marked reduction in the number of clients receiving service. Complete restoration of the power sector on Abaco will likely be a long-term process.

However, the mobility restrictions (quarantines, lockdowns, and border closures) in response to the COVID-19 pandemic changed the patterns of residential and non-residential electrical power consumption. For example, the worldwide closure of borders, as explained in the chapter on Tourism, caused interruptions in the flow of international travelers that this country received. This affected hotel occupancy and, therefore, non-residential electricity consumption. On the other hand, the suspension of face-to-face classes and the lockdowns of sectors considered non-essential also contributed to changing the pattern of electricity use. Losses were estimated at BSD 25 million, of which 90% occurred between 2020 and 2021.

The primary two providers of electrical power in Bahamas are Power and Light (BPL) and the Grand Bahama Power Company (GBPC²²¹.) This assessment includes information for New Providence, Abaco, Eleuthera, Exuma, and the Family Islands. It was based on the information received from BPL and publicly available information. A meeting with the BPL was held virtually, given the sanitation context.

B. Losses

Before the pandemic began, BPL had 112,308 clients, of which 73% were in New Providence. Between 2019 and 2021, BPL has seen its number of consumers drop by 1.6%. The behavior between the islands has been dissimilar. It ranges from an increase of 5.5% in Eleuthera to a drop in Abaco of 31.1% (Table X-1). The Bahamas has experienced a very compromised situation since the COVID-19 pandemic followed the strong effects and impacts caused by Hurricane Dorian. In Abaco, one of the islands most affected by that storm, the significant drop in the number of consumers can be explained by a combination of the two situations since the pandemic has slowed the pace of reconstruction post-hurricane.

BPL provided the assessment team with a quarterly series of sales value and their breakdown between fuel charges and the basic rate, the latter the measure of payments for electricity consumption. The electricity bill in The Bahamas is divided into three parts: i) Minimum charge: An amount charged regardless of electricity consumed; ii) Electricity consumed; iii) Fuel surcharge: Electricity prices in The Bahamas also include an additional varying fuel surcharge based on the cost of the fuel used in generating power during the relevant period. Since July 2020, it's been 10.5 c/kWh²²². This surcharge has been fixed until June 2022.

²²⁰ See IDB/ECLAC (2020a), IDB/ECLAC (2020b), IDB/ECLAC (2020c.)

lt is a subsidiary of Emera Limited, a utility company from Halifax Canada.

²²² BPL adopted in July 2020 the industry-standard practice of hedging. Hedging allows protecting against oil price volatility. In the past, electricity price variation was related to changes in the oil price.

For the gross income of BPL, only i) and ii) should be considered since fuel surcharge is a transfer of the cost of fuel to the consumer, in which BPL does not generate any profit. The estimates in this chapter are based on this gross income.

Table X 1: BPL COSTUMERS BY ISLAND

Year	New	Family	Abaco	Eleuthera	Exuma	Total
	Providence	Islands				
2018	80,754	10,517	9,012	6,495	4,061	110,838
2019	81,941	10,766	8,864	6,663	4,075	112,308
2020	82,220	10,720	7,063	6,806	4,126	110,934
2021	82,638	10,445	6,111	7,028	4,226	110,448

Source: Assessment team.

Table X 2: GROSS INCOME: RESIDENTIAL BASIS RATE BY ISLAND (2021 BSD)

Year	New Providence	Family Islands	Abaco	Eleuthera	Exuma	Total
2018	63,445,544	4,852,078	7,768,324	4,450,549	2,847,713	83,364,208
2019	64,776,460	4,901,362	5,665,147	4,764,639	3,073,445	83,181,052
2020	71,311,470	4,951,160	2,954,234	4,702,273	2,909,250	86,828,388
2021	69,537,360	4,646,370	4,656,718	5,271,532	3,292,622	87,404,602

Source: Assessment team.

Table X 3: GROSS INCOME: NON-RESIDENTIAL BASIS RATE BY ISLAND (2021 BSD)

Year	New Providence	Family Islands	Abaco	Eleuthera	Exuma	Total
2018	102,277,758	6,690,580	6,079,244	3,524,559	3,982,759	122,554,901
2019	98,483,263	6,453,399	4,433,958	3,510,642	4,101,706	116,982,968
2020	85,807,839	5,473,065	2,074,206	3,096,195	3,541,527	99,992,833
2021	90,115,585	4,087,733	3,193,148	3,450,346	4,117,988	104,964,801

Source: Assessment Team.

Regarding the gross income by type of client, in 2019, 58.4% of the billing was made to non-residential clients. In 2020 that figure fell to 53.5%, but in 2021 it recovered to 54.6% (Table X-2.) This jump is because the billing of residential clients increased from BSD 84 million, in 2019, to BSD 87 million, while nonresidential consumers fell BSD 12 million in that period. When the behavior by type of customer on each island is analyzed, New Providence stands out: non-residential billing represented 60.3% of the total for 2019, before the pandemic, the highest value for the groups considered . That number went up to 54.6% and 56.4% in 2020 and 2021. Between 2019 and 2021, the billing of non-residential customers fell by BSD 12 million, while that of residential customers increased by BSD 7 million Abaco, for what has already been

mentioned deserves a separate mention. Before Hurricane Dorian, that fraction of non-residential billing was 43.9% of the total, and because of the two disasters, it fell to 40.7%. The recovery of economic activity, especially tourism and mainly in New Providence, is crucial for the electricity sector to reach pre-pandemic levels.

For losses, two estimates were made:

- i) The baseline: is the counterfactual scenario of what would have happened if the pandemic had not occurred. This baseline was built for the five geographical groups with data provided by BPL. Abaco's only one handled differently because said baseline had to include the decrease in billing caused by the Hurricane Dorian disaster. Such baseline was estimated for the period 2020-23 (blue line, Graph X-1.)
- ii) Scenario with COVID-19: This reflects the effect of the pandemic on the utility's income. The information for 2020 and 2021 is contained in the series provided by BPL. For 2022 and 2023, a projection consistent with that of the tourism sector was made, using a Gompertz function (orange line, graph X-1.)

Table X 4: LOSSES (2021 BSD)

Year	Residential	Non-residential	Total
2020	-5,767,911	17,960,021	12,192,110
2021	-4,357,735	14,616,098	10,258,363
2022	-405,825	2,668,053	2,262,228
2023	-41,428	321,149	279,721

Source: Assessment Team.

Losses were estimated at BSD 25 million, of which 90% occurred between 2020 and 2021 (Table X-4.) The pandemic response measures caused people to stay in their homes longer. Their electricity consumption increased over what was expected before the pandemic, which makes the billing exceed that of the baseline. On the contrary, border closures and other mobility restriction measures reduced non-commercial turnover. Losses for this concept reached BSD 36 million but were partially offset by the increase in household consumption.

C. Additional Costs

Additional costs correspond to any potential cost incurred by BPL out of the regular spending as a direct consequence of the COVID-19. In this case, other expenditures may be related to hiring new personnel to take extra shifts or because of lockdowns. However, BPL officers expressly mentioned that there was no extra additional cost due to the COVID-19 pandemic.

²²³ The billing of non-residential customers in New Providence represents, on average, 85% of the territories with available information, and 79% of residential customers.



Source: Assessment Team.

Macroeconomic Impact



Macroeconomic Impact

A. Background

The economic activity of the Bahamas had an average growth of 1.4%, in the period 1990-2019. In the 90's it grew 2.2%, while in the oo's and 10's, it grew 1.0% and 1.1%, 224 respectively. 225. The biggest drop in that period was -4.2%, associated with the 2009 financial crisis. Likewise, in that period, the external public debt as a percentage of GDP went from 4% in 1990 to 24% in 2019. Growth of this indicator occurred from 2009, when it jumped from 4 to 8% 226. Between 2017, there was a drop of two percentage points in this ratio, associated with the government's fiscal consolidation efforts.

Since 2001, fourteen hurricanes caused disasters in Bahamas. IDB-ECLAC assessed the last four: Joaquin (2015), Matthew (2016), Irma (2017) y Dorian (2019). The most catastrophic disaster in the history of Bahamas was Hurricane Dorian. The damaging effects were estimated to last several years. The estimated overall effect was approximately BSD 3.4 billion, IDB-ECLAC (2020)²²⁷. This was also, the deadliest hurricane, 370 deaths. The storm had different impacts across the northern part of the Lucayan Archipelago, as well as across sectors. Housing suffered the most damage, while the tourism sector bore most of the losses. The effects of the disaster on the private sector were 88% of the total. Abaco suffered 87% of the losses and 76% of the damage.

The estimated impact of Hurricane Dorian is one percentage point of the GDP. This resulted in a decrease in salaries of BSD 43.3 million and capital income of BSD 61.7 million²²⁸. The situation was different when the focus is on local economic activity. In the case of Abaco, the impact was estimated at 7.1% of its GDP. Taking place on that island, 47% and 60% of the country's remuneration and capital decrease, respectively. In Grand Bahama, the impact was 1.9 of its GDP. The reconstruction efforts were estimated to last many years.

Summarizing, this was the situation of the Bahamas economy before the pandemic: a) slow growth in the last twenty years; b) growing indebtedness; and c) at the beginning of reconstruction after the greatest disaster in history caused by a hurricane.

B. Real Sector

The combined effect of the aftermath of hurricane Dorian and the pandemic-induced negative shock made the Bahamian economy in deep recession in 2020, with real GDP shrinking by 14.5%, after growing modestly by 0.8% in 2019. The halt in tourism receipts mostly explained the contraction as this sector accounts

²²⁴ In terms of GDP per capita, these growths were 0.7%, -0.8% and -0.03, respectively. For the period 1990-2019, that figure was -0.01%.

²²⁵ See https://statistics.cepal.org/portal/cepalstat/index.html . CEPALSTAT data are in dollars at 2010 prices.

²²⁶ CEPALSTAT estimates, based on national sources.

The overall effect of the disasters caused by Hurricanes Joaquin, Matthew and Irma was BSD 870 million at 2021 prices.

²²⁸ These are expressed at 2021 prices.

for roughly 50% of GDP²²⁹, making Bahama's economy particularly vulnerable to this shock. Tourismrelated sectors were severely impacted by the sanitary crisis, accommodation and food services suffered a contraction of 70% y-o-y in 2020, as well as transport and storage with a decline also of 70% y-o-y, while administrative and support services contracted by 43%.

The sudden and deep downturn in travel and tourism sectors together with curfew restrictions also took a toll on the labor market since tourism-related employment (both directly and indirectly) accounts for 70% ²³⁰ of employment. Thus, unemployment went up from 10.7% in 2019, to 25.6% in December 2020 estimated by the IMF. Figures from unemployment benefits paid to workers by the government also confirmed a significant rise in joblessness. During April and September 2020, 47,000 workers, or 20% of the workforce qualified for an unemployment benefit, from 725 in August 2019. Unemployment reached 21.5% at the end of 2020. Even though employment conditions improved gradually in 2021 -the number of workers receiving benefits declined to 17,154 in October, unemployment is expected to remain above historic average and pre-pandemic levels-231.

In broad terms, the economy is expected to return to its pre-pandemic level only by 2024, mainly because of the gradual pace of recovery in the tourism sector and the long-lasting effects of COVID-19 in this sector. After growing modestly by 2.3% in 2021, the last ECLAC forecast for The Bahamas real growth GDP is projected to be 8.5% in 2022. The IMF forecasts a lackluster growth between 2023 and 2026 of an average of 1.7% per year. Thus, the recovery is projected to be gradual, with risks towards the downside due to the country's vulnerability to natural disasters.

At the macro level, the COVID-19 pandemic event is associated with a loss of economic production that could be estimated in terms of the realized GDP trajectory. A preliminary picture of the stream of economic losses of the pandemic could be approached by comparing the projection of the trajectory of the nominal GDP in USD for the 2020-2024 period before the pandemic²³², vis-à-vis the most recent projections of nominal GDP in USD by the IMF (2021)²³³ (Figure I-1). Due to the abovementioned slow-paced recovery, the macro-level impact of the sanitary crisis in the Bahamas is projected to inflict aggregated losses of about USD 9.75 bn between 2020 and 2024. In average, the loss of nominal production is estimated to be USD 2.0 bn per year approximately, or 17.4% of the average GDP of the period.

A first approach to distributional losses caused by the pandemic is shown in Figure I-2, where estimated nominal impacts on GDP are distributed between production factors taking long-term labor and capital shares of the national income functional distribution. Given the long-term labor income share estimated for the Bahamian economy to be 39.7%, aggregated compensation income for the Bahamian workers is expected to suffer a loss of around BSD 3.87 bn for the 2020-2024 period, this is on average BSD 775 million per year (or 6.9% of average nominal GDP). In the other hand, capital income is projected to take losses amounting to USD 5.88 bn for the 2020-2024 period.

²²⁹ Ministry of Tourism, Investment and Aviation (2020). Tourism Readiness & Recovery Plan.

²³⁰ Ministry of Tourism, Investment and Aviation (2020). Ob. Cit.

²³¹ According to the 2021 Fiscal Strategy Report of the Ministry of Finance, recurrent expenditures for unemployment assistance went from 10 BSD millions in the FY2019/2020 to 164.7 BSD millions in the FY2020/2021.

²³² Nominal GDP projections from IMF (2019).

²³³ Nominal GDP projections from IMF (2021a).

USD bn Nominal GDP (WEO oct-2021) Nominal GDP (WEO oct-2019)

Figure XI 1: Nominal Output Projections (BSD bn)

Sources: IMF and own calculations.

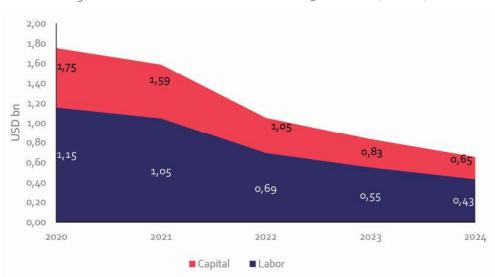


Figure XI 2: Economic Losses of the COVID-19 Pandemic (USD bn)

Sources: Own calculations based on IMF figures, ECLAC and Penn World Tables.

C. Fiscal Sector

The pandemic-induced shock hit Bahama's economy in less than 12 months after Hurricane Dorian. The country diverted resources to rebuilding and recovering, approved tax exemptions, and additional social protections expenses that amounted to 6.0% of GDP in four years²³⁴. Thus, when the pandemic came, the government faced limited fiscal space to mitigate the impact of the sanitary crisis in the economy.

The authorities implemented measures to support the unemployed, the health system, vulnerable groups,

²³⁴ IMF (2021b).

and small businesses. The COVID-19 fiscal response amounted 3.0% of GDP²³⁵ (or BSD 392.2 million) between FY2019/20²³⁶ and Q1-FY2021/22. In detail, the equivalent of 0.6% of GDP was executed in FY2019/20, 2.1% in FY2020/21 and 0.3% during Q1-FY2021/22. Among the actions taken by the government are: i) health care assistance for BSD 38.5 million; ii) BSD 51.2 million in food assistance and social support for displaced workers directly impacted by the virus; iii) BSD 204.4 million for unemployment benefits to support job loss workers and self-employed; iv) BSD 43.1 million in business loans to support SMEs; v) BSD 44.4 million in Job Retention Program.

The COVID-19 response paused fiscal consolidation progress and postponed fiscal targets. Before the pandemic, the government reduced the fiscal deficit during two consecutive fiscal years to 1.7% in FY2018/19 (from 5.2% of GDP in FY2016/17). However, the fiscal gap widened to 13.6% of GDP in FY2020/21 due to COVID spending pressures and lower revenues given the output contraction.

The combined impact of two large shocks -hurricane Dorian and the pandemic- allowed the government to activate the escape clause of the Fiscal Responsibility Act (FRA) to delay fiscal targets by four years. The government will now target a fiscal deficit of 0.5% of GDP by FY2024/25 and a central government debt to GDP ratio of 50% by FY2030/31²³⁷.

The fiscal deficit was covered by external and domestic financing. As a result, central government debt jumped by 9.8 pp to 68.6% of GDP in FY2019/20 and is expected to increase to nearly 90% in FY2020/21. In the medium-term, IMF forecasts the debt-to-GDP ratio to remain more than 22 pp above its prepandemic level.

D. Monetary Sector

The Central Bank of the Bahamas (CBOB) held the policy rate steady at 4.0% in 2020, while concentrating effects to maintain the one-to-one peg to the USD. The monetary authority strengthened the capital flow measures by suspending dividend payments of domestic and foreign financial institutions; and suspending access to foreign exchange for international capital market and real estate investments. The CBOB also asked the NBI to repatriate some of its external assets to provide enough liquidity in the FX market. Finally, CBOB asked domestic banks and credit unions to provide 3-months debt moratoria starting in March 2020 against repayments on credit facilities for businesses and households negatively affected by the pandemic.

Commercial banks' liquidity improved by 30% y-o-y during 2020, reaching BSD 1.436.3 million by the end of the year. Liquidity growth moderated sharply during the next year with a slight increase of 0.1% y-o-y in December because deposit expansion surpassed the rise in domestic credit. Nonetheless, commercial banks' credit quality indicators weakened in 2021. The average arrears rate for private credit deteriorated to 14.2% in 2021 (from 8.5% in 2020). Non-performing loans (NPLs) as a share of total loans increased to 9.6% in 2021 (from 8.5% in 2020), thanks to the growth in commercial and consumer arrears.

E. External Sector

The external position of The Bahamas was heavily impacted by the pandemic. The current account fell back to a deficit of 18.1% of GDP in 2020 (from a surplus of 3.9% of GDP) due to the collapse of tourism receipts. The trade deficit declined by 34.3% y-o-y due to the reduction of oil imports, the volume of oil imports for

 ²³⁵ Ministry of Finance (2021)
 236 Fiscal year starts on July 1 and ends on the next June 30.
 237 Common Wealth of Bahamas (2021, p.12). 2021 Fiscal Strategy Report.

local consumption declined by 21% y-o-y partially explained by the drop of tourism related oil imports and the output contraction. The deficit in services widened thanks to the tourism halt. Travel receipts decline sharply by 76.6% in 2020 compared to the year before, reaching just USD 967.4 million

In 2020, international tourist arrivals dropped sharply by 72.5% due to travel restrictions and border closures, reaching 1.8 million visitors by air and sea (from 7.2 million in 2019). International visitors started picking up in Q3-2020, but the recovery has been slow so far. By the end of 2021, the country registered 2.1 million visitors YTD, which is still down by 71% from 2019 pre-pandemic levels.

Despite the drop in tourism receipts, international reserves stood at USD 2.21 billion in December 2020 (8.6 months of the current year's imports), up by 36% from 2019, boosted by the public external borrowing and policies to limit capital outflows. The Central Bank of Bahamas suspended approval of applications to purchase foreign currency for international capital market investments through the Investment Currency Market (ICM) and the Bahamas Depositary/Depository Receipt (BDR) program. Also, the monetary authority suspended exchange control approvals of dividend payments for commercial banks.

During 2021, external reserves were at an all-time high of USD 2.75 bn in August and end the year still at a high-level USD 2.46 bn in December (10.6 months of current year's imports).

F. Macroeconomic impacts of sector losses

According to this report, the COVID-19 pandemic produced significant sector loses to the Bahamian economy. The conjunction of sanitary internal mobility restrictions and the closure of international borders significantly reduced economic activity not only in the tourism sector and connected areas, the backbone of the Bahamian economy, but also in most other sectors as well. In terms of duration of the estimated economic impacts, it is estimated that some loses string will last up to 2024 in some sectors. As seen in the following chart, estimated sector loses reached 40.1% of GDP in 2021, and decrease progressively from there until reach 0.8% of GDP in 2024 (Table XI-1).

Table XI 1: ECONOMIC LOSSES PER SECTOR (in BSD million and as % of GDP)

	2021	2022	2023	2024
Social sectors	68.9	86.8	10.8	0.0
Health	0.0	0.0	0.0	0.0
Education	18.2	19.2	10.8	0.0
Housing	50.7	67.6	0.0	0.0
Productive sectors	4,217.6	3,068.7	1,303.7	113.1
Tourism	3,637.1	2,910.3	1,241.5	88.9
Commerce	578.6	158.4	62.2	24.2
Fisheries	1.9	0.0	0.0	0.0
Infrastructure	299.3	281.9	90.1	4.3
Transportation	269.0	248.9	73.4	3.4
Water and	18.1	22.8	14.4	0.6
Sewerage				
Electricity	12.2	10.3	2.3	0.3

Total	4,585.7	3,437.6	1,404.6	117.5
Nominal GDP (IMF- WEO Oct 2021)	10,681.0	12,039.0	12,884.0	13,688.0
Loses as % of GDP	42.9%	28.6%	10.8%	0.9%

Based on the structure of the production and use and demand tables from the Bahamian national accounts, this report made a comparative static approach of the first-round effects of the COVID-19 pandemic over the sector output estimates. As expected, output loses concentrated, in order of magnitude, in the tourism, transport, commerce and construction sectors during the 2021-2022 period. Relevant output loses are also observed in in the water and electricity utilities sectors, and social sectors like education and health, (Table XI-2).

Table XI 2: ECONOMIC LOSSES PER SECTOR (AS % OF GDP)

	2021	2022	2023	2024
Fisheries	0.93%	0.00%	0.00%	0.00%
Electricity	2.14%	1.74%	0.37%	0.04%
Water and Sewerage	11.00%	13.39%	8.20%	0.34%
Construction	24.36%	23.50%	5.85%	0.27%
Commerce	37.19%	9.83%	3.73%	1.40%
Transportation	39.77%	35.53%	10.12%	0.46%
Tourism	61.22%	47.31%	19.50%	1.35%
Education	5.80%	5.90%	3.21%	0.00%
Health	0.00%	0.00%	0.00%	0.00%

Source: Assessment team

The estimated losses for the 2020-2023 are approximately BSD 9.6 billion. According to this estimate, aggregated loses in wages of employees and workers will reach BSD 2.4 billion for the indicated period, or 4.9% of GDP per year in average; loses in the operating surplus of BDS 2.0 billion, or 4.0% of GDP per year in average, and loses in mixed income of US\$ 0.1 billion, or 0.1% of GDP. The impact on employment of these loses will be around 30 thousand jobs. This is equivalent to 14.7% of the labor force of the country and is consistent with a raise the unemployment rate up to 25.6% at the initial stages of the COVID-19 pandemic.

Recommendations



Recommendations for a resilient reconstruction

A. Background

The COVID-19 pandemic hit The Bahamas as the country recovered from Hurricane Dorian, putting financial, human, and institutional resources under pressure. Even though these two events impacted all The Bahamas, islands like Abaco y Grand Bahama suffered the most. Crucial sectors of the economy, especially tourism, experienced losses and damages that will take the country years to recover from. But the recovery process also imposes excellent opportunities for the country. In outlining the way forward, stakeholders should incorporate measures that prevent affected populations and the economy from stepping and building back more resiliently and inclusively.

This chapter presents a resilient reconstruction recommendation based on the priorities of action established under the Sendai Framework for Disaster Risk Reduction 2015-2030 (Table XIV-1.) Recommendations in this chapter are based on the inputs provided by official sources. These recommendations are meant to be elements of a comprehensive framework for a resilient recovery from the COVID-19 pandemic. Such a process requires a combination of structural and non-structural measures to reduce socio-economic, environmental, institutional, and human vulnerabilities in the long term. These measures should be organically incorporated, considering the country's gaps and limitations (i.e., financial, capacity, governance,) and follow a multisectoral logic to use available resources efficiently. In a context of vulnerability to disasters and climate change, these recommendations could also enhance the country's resilience.

Table XII 1. SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015-2030

Goal	Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political, and institutional measures that prevent and reduce hazard
	exposure and vulnerability to disaster, increase preparedness for
	response and recovery, and thus strengthen resilience
Expected Outcome	The substantial reduction of disaster risk and losses in lives,
	livelihoods, and health and the economic, physical, social, cultural,
	and environmental assets of persons, businesses, communities, and
	countries.
Priorities for Action	I. Understanding disaster risk
	II.Strengthening disaster risk governance to manage disaster risk
	III. Investing in disaster risk reduction for resilience
	IV. Enhancing disaster preparedness for effective response and to
	"Build Back Better" in recovery, rehabilitation, and reconstruction

Source: United Nations Office for Disaster Risk Reduction (UNDRR, 2015), Sendai Framework for Disaster Risk Reduction 2015-2030.

The establishment of priorities, the required resources, and the intervention scheduling will depend on The Bahamas Government, based on available institutional, financial, human, and natural resources. Policy planners and stakeholders are encouraged to leverage ongoing related initiatives, including existing

frameworks such as "Our Blueprint for Change" and the IDB Group's Country Strategy (2018-2022), while considering national priorities regarding gender equality and inclusion in human rights.

The Bahamas Government is encouraged to pursue resilience with high levels of institutional involvement and participation from all sectors of society, including women, young people, and minorities. A territorial approach considering the challenges and opportunities of each island is encouraged. In addition, it also should leverage financial and technical alliances with development partners such as the IDB and ECLAC to potentiate the defined multisectoral initiatives strategically.

B. Understanding Disaster Risks

This priority action refers to the need for Disaster Risk Management (DRM) to be based on a comprehensive understanding of disaster risk in all its dimensions, including vulnerability, capacity, exposure of people and assets, hazard characteristics, and the environment. Understanding risk in the Bahamas should be addressed comprehensively based on territorial (i.e., island) and socio-economic particularities. It should also consider gender, age, and disabilities and ensure national and local authorities and socio-economic sectors are actively involved. The suggestions in this section call attention to the need for having data, information, and resources to improve DRM-related decision-making in all sectors covered by this report.

1. Incorporate Information Systems for Decision Making

The COVID-19 pandemic is a first-of-its-kind event in the data-driven world. Data allows to generate evidencebased policies, justify management measures, and cope with the complexity and uncertainty. Decisionmakers should consider strengthening information systems to enhance data quality and integration in the Bahamas as a priority and an opportunity (Box 1). Robust information or data infrastructure could allow the location and characteristics of the most vulnerable population, thereby allowing for an effective and timely response when responding to a large-scale emergency. It is suggested that the Bahamas approach this task transparent and participatory since data gathering and management could have implications for individuals' privacy rights.

One practical application of this system is aid support assignment. Throughout Latin America and the Caribbean, the local authorities experienced challenges in targeting actions to counteract the effects of the COVID-19 pandemic. It was particularly the case for the distribution of financial incentives or subsidies. High levels of informality impeded potential aid recipients from being traceable in public records, resulting in vulnerable sectors of the population not having access to available resources. Using an integrated data infrastructure could allow decision-makers in The Bahamas to allocate resources better and generate inputs for policy evaluation and improvement. For example, countries in the region have implemented a household card with socio-economic characteristics that identify whether they are subject to receiving public financial aid or if their profile fits with other available programs.

Decision-makers are encouraged to develop a multisectoral and interoperable data infrastructure. To collect, process, and analyze data in large quantities, a platform should integrate traditional statistical resources with new technologies (e.g., blockchain, machine learning.) In terms of interoperability, the data infrastructure is recommended to be connected to critical sectors such as tourism, health, education, fishing, housing, health, and commerce. It is also recommended that the system be directly linked to civil and justice services to monitor populations with higher levels of vulnerability, such as disabled people, victims of domestic abuse, and discriminated groups.

As the first step in developing data/information infrastructure, decision-makers (e.g., Bahamas National Statistical Institute -BNSI) are encouraged to update baseline or background information on household budgets, poverty, and living conditions. Having updated baseline information is critical in identifying social gaps that highlight each community's leading social and economic challenges. Greater disaggregation of data by family islands would also allow for more detailed results and possibly more precise conclusions for these territories. It would also provide more significant insights into the growth and economic contraction drivers in small island states.

Although the interoperability of public databases facilitates the understanding of risk, its practical application tends to be affected by the governance of public information systems and coordination between institutions. Therefore, it is recommended to strengthen communication mechanisms between $hierarchical institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institutional \, levels \, and \, facilitate \, local \, authorities' \, exchanges \, to \, improve \, information's \, territorial \, institution \, authorities' \, exchanges \, to \, improve \, information's \, exchanges \,$ and sectoral flow. Therefore, establishing inter-institutional agreements or high-level political leadership to safely, transparently, and promptly public data exchange is suggested. Transparency and accountability in managing data of this nature and developing a public and accessible platform that consolidates current COVID-19-related reports, are essential. Countries in the region have implemented public dashboards showing the resources available and their allocation during an emergency response. These dashboards show the extraordinary budget needed, the outlays by institutions and agencies, the donations received, and other performance indicators that track the resource allocation. The Bahamas could benefit from such best practice. Local authorities have made a substantial effort to present detailed and daily COVID-19 reports with key indicators and variables (e.g., accumulated and new cases, hospitalizations, deaths) and dimensions such as gender and islands. Hence, creating easily managed datasets can provide information about the trend of those variables and offer tools for researchers interested in analyzing the event, the response, and its effects.

One application of an interoperable data infrastructure is seen in the education sector. While estimating the impact of COVID-19 on it, gathering adequate statistics from private schools in aspects such as school dropouts was not possible. However, evidence indicated that the number of students dropping out of school increased because of the income shock (Azevedo et al., 2021). It is recommended that decision-makers design a protocol to collect data helpful in disaster scenarios. A system to keep track of students should complement this protocol. Complementary, it is recommended that the education authorities develop mechanisms for re-enrolling students out of the system, using remediation tools and flexible acceleration modalities and incentives (IDB, 2020.)

Regarding information for disaster assessment, the IDB Country Office in The Bahamas has made a significant effort with the project "Baseline Information for Critical Sectors in The Bahamas – BH-T1078 – Capacity Strengthening for More Resilient Bahamas". This project was completed for the Education, Housing, and Tourism sectors. The four ECLAC-IDB assessments of the disasters caused by hurricanes in the country between 2015 and 2019 showed that they have been among the most affected sectors. This baseline information in those sectors facilitated this assessment. The baseline of infrastructure sectors is currently a work in progress. This information was compiled for the Government. It is suggested to update it and combine it with other data sets periodically.

2. Spatial Data Infrastructure (SDI)

According to the Global Spatial Data Infrastructure, "SDI refers to the collection of technologies, policies, and institutional arrangements that facilitate the availability of and access to spatial data. The SDI provides a basis for spatial data discovery, evaluation, and application for users and providers within all

levels of government, the commercial sector, the non-profit sector, academia, and citizens in general" (FIGURE XII-1).

Key stakeholders, Core data sets that should The government structure include the basis and produce and provide geothematic layers necessary information Policies and legislation are including web access tools

Figure XII 1: ASPECTS TO CONSIDER IN DEVELOPING AN SDI

Source: Assessment team based on Horzella (2021).

The availability of geo-information, or SDI at different scales, is fundamental for planning processes, risk assessment, and overall environmental management. It is an excellent complement to data management systems in planning, monitoring, and executing effective recovery, rehabilitation, and reconstruction actions after a catastrophic event. Although some geographic databases are available in The Bahamas, they are scattered, not standardized, and unavailable for public disclosure. For example, The Bahamas National Geographic Information System Centre (BNGIS) does not have a web geo-portal to upload official geo-information. This situation hinders searching, finding, and uploading data to perform any spatial planning or risk assessment analysis.

As a subset of SDI, the deployment of Geographic Information Systems (GIS) is also suggested. From a spatial perspective, GIS tools could support the generation, analysis, and visualization of data, identifying affected populations, identifying effects and impacts, and modeling or establishing recommendations for resilient recovery.

For example, GIS and spatial information are handy as part of public health surveillance systems (VSP) in the health sector. These systems consist of the permanent observation, collection, analysis, interpretation, and dissemination of information on health events and their conditioning factors and evaluating health and social interventions. SDI and GIS are valuable tools for decision-making since they support the availability of data by facilitating activities such as:

- Location of health events in time and space.
- Mapping health resources available for patient care.
- Monitoring the behavior of a health event and its risk factors in a defined period.
- Identifying vulnerable areas and individuals.
- Map distribution of confirmed cases deceased and recovered cases.
- Evaluating health interventions after a disaster.
- Mapping the distribution of hospitals and outpatient care.
- Analyzing patterns or differences in the health situation at different levels of aggregation.

Policymakers are encouraged to establish legislation regarding geographic information management. Having clear governance frameworks can help define responsibilities and competencies for the production, management, and dissemination of geo-information at different territorial levels. Existing entities such as BNGIS can be called to structure and develop the SDI. Key personnel in government institutions (BNGIS and relevant ministries) must develop skills in generating geo-information and its application in GIS.

3. Increasing knowledge of the housing sector

The housing sector (rental) is a relevant sector of the economy in The Bahamas since it represents an income source for many individuals and families. Due to the COVID-19 pandemic, it was assumed that many landlords saw their income interrupted since foreign tenants returned to their countries of origin. The lack of information, especially within the population and housing censuses, made it impossible to determine the pandemic's impact on the sector.

Data gathering and analysis on the housing sector need to be enhanced. Decision-makers have already given important steps in this regard. The Bahamas currently counts with a baseline of the housing prepared by the IDB, which contains valuable information on the number of houses, construction typology, and estimated values. I also count with the baseline for the tourism sector, in which a portion of those houses is identified. A periodic update if the database is recommended to design housing policies related to DRM (see points 1 and 2 of this priority of action).

While assessing the impact of COVID 19 on the housing sector, we observed that some institutions, such as the Chamber of Commerce and the Real Estate Association, do not have market studies that allow monitoring of the changes in rental housing. Therefore, stakeholders are encouraged to carry out market studies that help with this purpose. Also, it is recommended to have regular information on tax revenue from rental housing, available from the Ministry of Finance database through the tax administration office.

4. Increasing knowledge of the commerce sector

For the commerce sector, the existing business directory is limited and outdated. There is a need to improve data collection, ensuring that the informal sector is appropriately surveyed. In any disaster, evaluation and assistance depend crucially on having an updated baseline for the sector. Using the data proceeding from the VAT collection could be a helpful starting point to construct an updated business registry and conduct more precise estimates.

In increasing the knowledge on the sector, the existing chambers of commerce and associations should be strengthened. It is fundamental to include the perspective of all stakeholders in the design of the policies that will have an impact on the sector.

C. Strengthening disaster risk governance to manage disaster risk

National and local governance is vital to DRM in all sectors. This priority for action ensures the coherence of national and local legal, regulatory, institutional, financial, and policy frameworks around proper DRM guidelines. These guidelines should define roles and responsibilities, define clear mandates, and guide and encourage public and private action to address and reduce disaster risk at national and local levels with high levels of inclusion and participation.

1. Multidimensional and multisectoral approach to DRM

The Bahamas was affected by two massive disasters, Hurricane Dorian and the COVID-19 pandemic. Consequently, the population affected by Dorian could experience step backs or stoppages in their recovery process.

For example, the primarily affected population by Dorian who:

- Resides in shelters and were not yet employed may need additional assistance such as unemployment benefits or require a longer time to get into the job market.
- Suffered from noncommunicable diseases could experience a worsening due to the lapse in routine health care.
- Suffered mental health concerns due to the trauma caused by Dorian could experience a worsening of their symptoms due to the stress caused by the COVID-19 pandemic and an eventual lack of access to mental health support.

As a result, it would be advisable to promote multidimensional policies to address the needs of those affected by Dorian, especially those living in shelters when the COVID-19 pandemic hit. So, they can receive integral attention to promote a resilient recovery path that helps them avoid poverty traps.

Finally, the government and humanitarian agencies should evaluate their performance and response capacity in social distance measures to design a plan that reduces the likelihood of canceling or reducing their work with vulnerable people such as those affected by Dorian—for instance, creating a program that allows selfmanagement in the shelters or prioritizing medical and mental health attention for those more vulnerable.

2. DRM mainstreaming

According to the Index of Governance and Public Policy in DRM (iGOPP), The Bahamas has a limited legal framework for comprehensive DRM. Current governance instruments only partially address all risk management processes linked to prospective, corrective, and reactive management (Lacambra et al., 2017). The Disaster Preparedness and Response Act and its principal policy tool, the Disaster Preparedness and Response Policy, define specific disaster preparedness and relief responsibilities but date to 2008. A policy framework update is required to support a more holistic approach to DRM and the gradual identification and establishment of sectorial and territorial responsibilities. Following that, the primary needs for updating DRM frameworks are provided.

- Risk identification: The DRM-related regulatory framework has to be strengthen to fully address critical conditions needed to effectively implement this component, such as identifying an institutional stakeholder responsible for providing technical guidelines for disaster risk analysis or methodologies for climate change studies at territorial and sectorial levels. Regulations governing observation and monitoring networks' ongoing construction and maintenance should be clearly defined. Similarly, the regulatory frameworks for sectors and utility businesses do not clearly define who is responsible for disaster risk analysis.
- ii. Risk reduction: The iGOPP shows that the Bahamas now only partially meets some of the normative and institutional requirements for this process, with severe gaps in sectorial, territorial, and overall policy implementation and policy assessment for risk reduction. The introduction of risk-sensitive zoning as a decisive factor in the definition of use and occupation of the land

- is one significant criterion considered in the Bahamas Planning and Subdivision Act (adopted in 2010). There is also a very relevant, but not yet authorized, housing policy about avoiding rebuilding in vulnerable places and raising the height of land for new housing developments, both of which would be beneficial.
- iii. Disaster preparedness: According to the iGOPP results, the disaster preparedness component is the most developed in The Bahamas, with critical conditions related to central policy coordination and articulation addressed in the provisions of the Disaster Preparedness and Response Act, which designates the National Emergency Management Agency (NEMA) as the governmental agency charged with the process of preparedness and response in The Bahamas. Notwithstanding, some significant gaps remain, namely the limited mandates for establishing emergency or contingency plans in various sectors or ministries, which do not identify the responsibility for disaster response activities.
- iv. Recovery Planning: The Bahamas has made some progress in normative and institutional frameworks, but much more needs to be done, which is like the outcomes of the iGOPP in the rest of the region thus far. The Disaster Preparedness Act outlines the role of NEMA's Director in coordinating and implementing the government's general strategy for post-disaster recovery, which is fundamental for this component. The National Plan & Instructions for Emergency Situations (2016-2018) include other necessary aspects and quality features for this procedure. However, as previously said, this plan still must be formally adopted.
- v. Financial Protection: The country has risk retention (Regional Fund of CDEMA) and risk transfer (i.e., insurance policies for different events through the CCRIF SPC and contingent credit lines. In the case of Hurricane Dorian, these financial instruments made it possible for the Government to have USD 112 million available for emergency response) instruments available to the country from binding agreements with regional instruments. In this context, the Bahamas may consider additional financial risk retention and transfer instruments for reducing its fiscal vulnerability to disasters, such as a local fund for supporting and financing emergency expenses in disaster situations, as well as financing or co-financing risk management activities and the establishment of mandatory critical public infrastructure insurance. It is essential to understand that while some risks are possible to pool and therefore are likely to insure, others like a pandemic are not. For these disasters, only savings in a local fund could potentially provide financial protection to such events. A local fund could also provide support and help recovery in other disasters like cyclones.

3. Enhancing gender and social capital in DRM

Inclusive approaches and equal participation of all genders and impacted groups are essential for successful DRM. Hence, including women and minorities should prioritize DRM and resilience-building governance systems. Also, incorporating information that reflects the inequality gaps by vulnerable groups in all dimensions could provide a complete picture of the city's vulnerability and, therefore, a more thorough diagnosis of its resilience.

At the territorial level, community leadership and a social capital basis serve as a roadmap for communities to establish resilience based on trust, reciprocity, and cooperation. A healthy and synergistic coexistence of governmental and societal powers in the territories is also required. Government teams should improve their ability to understand the environment to better place public policies and carry them out with empathy and respect for the other as a subject of rights. They should also increase their communication, negotiation, consensus-building, collaboration, and inclusion skills, so decision-making and policies react in substance and form to citizens' basic needs.

Achieving a cross-cutting territorial and gender-sensitive resilience approach requires the participation of all key stakeholders, providing leadership and coordination, prioritizing initiatives based on local needs and conditions, and having a long-term vision.

4. Strengthening DRM in the transportation, water, and sewerage sectors

Given the high impact of COVID-19 on the transportation system (incl. cruise ships), it is essential to strengthen health protocols to avoid the impact of future new health threats. The protocols must follow international standards suggested by the World Health Organization (WHO) and competent entities. Although this recommendation aims to mitigate future health events, it applies to any other catastrophe that could affect the country.

The high dependence of The Bahamas on tourism and its ports and airports makes it essential to coordinate with other countries that also depend on tourism. In this sense, the development of protocols of a single nation without coordination with other countries of the Caribbean that have a direct connection through the main ports and airports can be unproductive. A review of coordinated protocols is suggested to address this issue.

Creating an interoperable data registration system in coordination with all the institutions in charge of transportation facilities such as airports, ports, and roads is suggested. The system must contain information on the passenger flows, the structural state of infrastructure, and the description of the operation of each facility. This system should be open to all the institutions in charge, which should also compile and update the information (see section A.1).

In the water and sewerage sector, the dispersion or unavailability of data and information made assessing impacts challenging. The water service is mainly provided by the Water & Sewerage Corporation (WSC). However, other islands such as Grand Bahama have their catchment and distribution systems with their customers' records. In this sense, the generation of a national database of clients and water infrastructure is proposed to allow all related institutions to access and update it. This database is essential for the complete characterization of the water and sewerage system for efficient and quick future assessments. Hence, the generation of a single customer information system is recommended. This measure could allow stakeholders to better understand the sector's behavior during the different stages of DRM and improve decision-making.

D. Investing in Disaster Risk Reduction for Resilience

This priority of action relates to public and private investment in disaster risk prevention and reduction through structural and non-structural measures essential to enhance the economic, social, health, and cultural resilience of people, communities, and countries and their assets and the environment. Such actions are cost-effective and instrumental in saving lives, preventing and reducing losses, and ensuring effective recovery and rehabilitation. These investments can be drivers of innovation, growth, and job creation.

1. Adapting Education to the New Normal

As highlighted in Chapter III, the education sector suffered dramatically from the impacts of the COVID-19 pandemic. As a response, the Ministry of Education developed different initiatives and practices related

to virtual education. These measures were targeted to increase access to technology, expand connectivity, and provide psychological support for students, teachers, and parents. Additionally, risk reduction strategies for school reopening were implemented, such as class size reduction, social distancing, hygiene measures, and others.

Based on these experiences, the Ministry of Education is encouraged to plan for total recovery by consolidating the lessons learned and good practices to increase preparedness. For example, efforts directed to ensure connectivity for students have to be maintained and strengthened. This measure should be accompanied by the consolidation of a blended learning system and the development of a comprehensive education management information system and a learning management system. These measures would allow the system to be prepared for other catastrophic events.

As a precondition, the update of the 1996 Education Act is suggested. A new legal instrument would allow decision-makers to have all the provisions required to promote investments in the sector considering the new normal.

2. Building a social and inclusive Blue Economy in The Bahamas

The Bahamas has an open, service-based economy with a small number of sectors such as tourism (38.2%,) financial services (7.7%,) and real estate (13%), accounting for 60% of GDP in 2019. Over the last two decades, economic growth has been low and moderate, ranging from an average annual growth rate of 1% between 2000 and 2009 to 0.8% in 2019. Since 2000, total factor productivity (TFP) has declined (by about 30% between 2000 and 2019), putting a damper on economic growth.

The Exclusive Economic Zone of The Bahamas comprises 260,000 square miles with 5% of land and 95% of the sea, making it the country's most significant development space. Marine resources can become an essential source of economic production if properly managed and conserved, with 95% of the country's land lying in aquatic habitats and a regional average of 70% of the country's people residing on the coast.

The Blue Economy's economic contribution to The Bahamas' GDP has been estimated to be 21.5%, with indirect impacts of up to 50%, encompassing: I the harvesting of living resources (seafood and marine biotechnology;) (ii) the extraction of non-living resources (minerals, energy, and freshwater;) (iii) tourism and trade (transport, tourism, and recreation;) and (iv) the indirect contribution to economic activities and the environment (carbon sequestration, coastal and biodiversity protection, waste disposal, and ocean monitoring and surveillance.) Tourism, which includes yachting, cruising, scuba diving, and sport fishing, contributes the most to The Bahamas' economy. Tourism accounted for 38.2% of GDP before the COVID-19 crisis and 51.5% in 2019.

The Blue Economy's most significant market segment is coastal and marine tourism, strongly tied to marine ecosystems. Each year, 36,886 people are anticipated to visit the Bahamas for commercial fishing, resulting in 18,000 jobs. Visitors that come for commercial fishing use to stay longer, spend more, and help support the ship repair and maintenance business. Many international boats pass through the Bahamian maritime seas as several vital transit routes pass through and around The Bahamas archipelago. Nonetheless, a more productive and healthier ocean in The Bahamas is hampered by several structural restrictions. Its geographic features, which permit many Blue Economy activities, nevertheless result in higher business costs and increased vulnerability of coastal ecosystems. In contrast, an economic activity involving marine resources must be carefully managed to maintain its long-term viability. Other constraints include:

- The Micro, Small, and Medium Enterprises (MSMEs) business climate needs to be improved. MSMEs account for approximately 98% of all licensed businesses in The Bahamas.
- The Government, non-governmental organizations, scientists, and the private sector must work together to promote adequate policy conditions to promote the Blue Economy. The perception of high risk and the capacity to create profits for investors may limit private investment in ocean conservation initiatives in line with the Sustainable Development Goals (SDG). In contrast, economic constraints may limit public involvement.
- The COVID-19 pandemic highlighted the need for governments to implement electronic, digital, and innovative solutions as quickly as possible to ensure business continuity and government processes.
- The Blue Economy is highly vulnerable to climate change and climate hazard risk. Promoting the Blue Economy in The Bahamas must be done in the context of climate resiliency.
- The utilization of marine resources must be optimized and safeguarded. The Bahamas' deepwater offshore habitat supports a diverse range of marine species. The fishing sector provides around 1% of GDP, making it the Caribbean's second-largest exporter of fish goods.

In a context of macro-economic stress, The Bahamas should look at its ocean resources to achieve economic recovery, diversification, and resilience. The Blue Economy presents an excellent opportunity to do so since it promotes sustainable and inclusive management of ocean resources. The Blue Economy is a trigger of innovation and entrepreneurship, opening great opportunities for traditionally relegated sectors of the economy to incorporate into the new production paradigm. In this context, it is highly encouraged that The Bahamas leverages regional opportunities to foster the Blue Economy. The IDB's Policy-Based Guarantee (PBG), "Building a social and inclusive Blue Economy in the Bahamas," serves as a great example of innovative financial mechanisms that could catalyze financial flows and investments in the Blue Economy. Stakeholders should look at the oceans to promote energy and food security/sovereignty and inclusion (Box 2.) Ocean resources could help The Bahamas to unlock the benefits of its blue natural capital while contributing to climate action, DRM, and overall sustainability.

Box XII 1. BUILDING A SOCIAL AND INCLUSIVE BLUE ECONOMY IN THE BAHAMAS.

The specific objectives of the PBG are: (i) promoting Micro, Small and Medium Enterprises (MSME) business recovery in the Blue Economy and prospecting investment projects suitable for Blue Bond financing; (ii) promoting digitalization in the Blue Economy; (iii) improving the resilience of the Blue Economy through improved climate risk management in coastal and offshore areas; (iv) promoting better management (i.e., certification, traceability, and protection) of marine resources; and (v) reducing marine pollution.

Source: IDB, 2022.

3. Sustainability and economic reactivation

The Bahamas should also seize the opportunity provided by the COVID-19 pandemic to focus on regulation, taxation, public investment, public procurement, and private investments that contribute to economic reactivation. Such economic transformation could have a multiplier effect on PIB and job creation. All this aligned with climate change commitments (i.e., Nationally Determined Contributions NDC) and goals and the Sustainable Development Goals (SDG.) Countries that direct their reactivation spending to environmentally friendly sectors have announced lower spending as a percentage of their GDP (ECLAC, 2022a.)

The commercialization of

environmental services

Nonconventional
renawable energies

The improvement of
urban services such as
public transportation

Water and sanitation
services

Services

Sustainable tourism

Figure XII 2: DYNAMIZING ECONOMIC SECTORS IN THE BAHAMAS

Notes

The digital economy

Nature-Based S olutions (NBS) offer excellent opportunities to trigger economic recovery while addressing environmental and sustainability challenges. In the aftermath of the COVID-19 pandemic, the Government should redirect investments and create a package of incentives and institutional reforms that remove barriers to NBS adoption. Cultural factors influence naturalistic understanding, and the selection of "technical" or "grey" solutions should also be addressed. Therefore, it is essential to improve access to scientific evidence to overcome obstacles to broader implementation and generate appropriate market conditions (Meza and Rodríguez, 2021.)

E. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction

Experience indicates that disaster preparedness needs to be strengthened for more effective response and recovery capabilities. Disasters have also demonstrated that the recovery, rehabilitation, and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to "Build Back Better" through integrating disaster risk reduction measures. During the response and reconstruction stages, women and people with disabilities should take the lead and advocate gender-equitable and universally accessible measures.

1. Improving regional cooperation

The bioeconomy**

The COVID-19 pandemic is a global phenomenon, so there should have been a global response rather than national and uncoordinated responses like the ones that have taken place. The results are very uneven between countries. The magnitude of this phenomenon exceeded the response capacity of any country in Latin America and the Caribbean. For this reason, it is essential to develop regional proposals to deal with this ongoing pandemic and new ones that arise in the future. An initiative of this type is the ECLAC and Latin American and Caribbean States Community proposal for a health self-sufficiency plan for Latin America (ECLAC/ CELAC, 2021). This plan proposes regional initiatives with lines of action to be implemented at the regional or subregional level. Although a project of this type requires strengthening each country's capacities and recognizing the importance of national policies, its focus is not on national proposals but regional cooperation and integration. This plan is an excellent example of the direction that regional cooperation should take to deal with a phenomenon of this magnitude.

^{*}The circular economy refers to a systems solutions framework that is based on three principles, driven by design: eliminate waste and pollution, circulate products and materials (at their highest value), and regenerate nature (Ellen Macarthur Foundation, 2022).

^{**}The Bioeconomy encompasses the sustainable production of renewable resources from land, fisheries, and aquaculture environments and their conversion into food, feed, fiber bio-based products, and bio-energy as well as the related public goods (EC, 2022).

Source: ECLAC (2022a)

In a perspective of urgency in the face of the COVID-19 pandemic, the fragile situation of international access to vaccines, and the slow progress of immunization in most countries, increases the need to accelerate vaccination processes. Two specific goals must be set for that purpose: i) Improve international access to vaccines, and ii) facilitate internal inoculation processes. In this context, the following seven lines of action were defined and prioritized: i) Strengthen mechanisms for the international joint purchase of vaccines and essential medicines; ii) use mechanisms for public purchases of medicines for the development of regional markets; iii) create consortia for the development and production of vaccines; iv) implement a regional platform for clinical trials; v) take advantage of regulatory flexibilities to access intellectual property; vi) strengthen mechanisms of convergence and regulatory recognition and vii) strengthen primary health systems for universal access to vaccines and its equitable distribution.

It is suggested that the Government of The Bahamas support, promote, and join regional initiatives such as the one mentioned, which allow for a more comprehensive response for this event and the next to come. The COVID-19 pandemic put regional cooperation to the test.

2. Bridging Recovery, Rehabilitation, and Reconstruction

The emergency response tends to get mixed up with the rehabilitation process. Hence, it is critical to distinguish between efforts required to fulfill the population's fundamental and urgent requirements and those targeted at recovery with resilience and sustainability and to build bridges between the emergency and reconstruction and resilience for development. Creating an action plan that directs and organizes the recovery efforts and resources is recommended. In-depth sectoral analyses should be done to improve inclusion and countercyclical reaction capabilities. Pre-existing vulnerabilities must be avoided, and the specificities of the population, their means of production, and essential modifications must be acknowledged to prevent the emergence of new threats and, thus, further calamities.

3. Promoting Hybrid Education Modalities

Measures in the Bahamas to control the COVID-19 outbreak began in March 2020 with the closure of schools. Since then, remote or virtual instruction has been the most common modality. Therefore, several strategies have been applied in the Bahamas to expand virtual education, such as developing the Virtual Learning Platform, offering classes through TV on cable channels, or distributing digital devices. However, internet coonnectivity has hindered the capacity of students to keep the pace to remote learning. Access to the internet at home is as relevant for remote education as the provision of digital devices.

Even after the reopening of schools, remote education will continue to be necessary, particularly in countries vulnerable to extreme events such as The Bahamas. Remote education has been crucial and widely used in response to the COVID-19 emergency. However, the Ministry of Education of The Bahamas has used remote education before this contingency. Since August 2019, this modality has supported students affected by Hurricane Dorian on Abaco. It is vital to expand the remote education program, particularly to improve schooling for the marginalized population.

As it was stated in studies supported by the IDB, it is suggested that internet service providers and cellphone companies enhance connectivity and hosting access (free or subsidies) by i) promoting free use of ".edu" and ".gov" contents; ii) freeing up the use of a minimum bandwidth space for teachers; iii) enhancing connectivity opportunities for low-income areas; and iv) finding additional hosting space for all educational websites and platforms (IDB, 2020.)

To take advantage of technology and improve the quality of remote or face-to-face education, teachers must use it proficiently. Therefore, it is recommended that teachers develop skills in Information and Communications Technology (ICT) through a training program that periodically updates them with its use and application to improve education. Additionally, it is essential to support families in using technology to develop skills to help their children in e-learning and protect them from the risks of using the internet. Additionally, it could be significant that public and private school principals and teachers share lessons and digital resources through different distance learning channels to set up a national and regional strategy to improve the quality of education in a remote modality (IDB, 2020.)

Learning leveling and acceleration programs in three areas such as language, math, and science, are highly recommended (IDB,2020.) After a disaster, it has been estimated that students lose at least one hour of classes a day, which means that, on average, each student in the Bahamas has lost 359 hours of courses since the school closure. Therefore, as was concluded in many studies, this type of instruction brought challenges that impacted student learning in most Latin American countries.

4. Improving psychosocial support in the education sector

In addition to the economic pressures that the COVID-19 social distancing and stringent lockdown measure brought, there was also mental stress brought on by the sudden face-to-face closure of schools across the country. Parents and children found themselves confined to their homes to carry out their work and schooling online. These unplanned arrangements resulted in varying impact levels on mental health.

According to Dr. Tamu Davidson, Head of Chronic Diseases and Injury at Caribbean Public Health Agency, the pandemic has significantly impacted people's mental health, particularly women, children, families, healthcare providers, frontline workers, and persons in poverty. According to studies and reports from the Department of Social Services and the Crisis Centre hotlines, many women and young people have expressed anxiety, confusion, and depression. Many children have said that they find online classes harder to follow, dull, cause headaches and eye aches. Many parents, especially mothers, felt stressed about managing their work and supervising and monitoring their children's online work. Also, many children did not have access to personal computers, tablets, cellphones, and internet connection for the first few months of online classes. Many parents not only witnessed their children not following a structured academic curriculum but found that they were not constantly reacting in the most constructive ways to their children's need for structured activities and rule enforcement.

It is recommended to design psychosocial support protocols to address mental health issues. These protocols should surround school-level response when a school community member has been exposed to any condition described above. Therefore, there should be a psychosocial response and management plan to support affected officials, students, and parents in these circumstances (Parker et al., 2021.)

5. Enhancing resilience of the health care sector

The lessons learned from the pandemic underscore the importance of building up the resilience of the health system of The Bahamas to respond to public health emergencies while continuing the delivery of regular health care. From a health system perspective, resilience is the ability to prepare for, manage (absorb, adapt, and transform) and learn from health emergencies. Thus, it is essential to consider that the current capacity of the health sector should be strengthened. The domains of health systems that should be addressed include governance and financing, health workforce, public health functions, health services delivery, and community engagement.

Governance and financing are essential components of health systems. It is vital to increase health care financing. The pandemic made policymakers and the public aware of the shortages of financial resources in the health sector and the need for additional investments. Also, the government has realized the need to invest in and reinforce the health infrastructure in ambulatory settings and hospital facilities.

The Bahamas government responded to the pandemic by prioritizing care for COVID-19 and reducing access to essential health services for non-COVID-19 patients. This decision has important implications, it increased the risks for complications for patients with chronic conditions, and excess mortality. The Bahamas government realized this situation and is making substantial investments to reinforce the infrastructure, renovate the medical equipment, and modernize the health information system. Also, the MOHW should consider that the scope and functions of public health are extensive within and outside the health system. As part of such a system, public health has the formal responsibility to measure the population's health status, promote its care and attention, conduct epidemiological surveillance, prevent diseases and injuries, protect health from risks and threats, and respond to disasters. Going beyond the scope of the health system and through governance, public health must promote the design and implementation of intersectoral policies due to the importance of the social determinants of health and the influence of multiple sectors on the population's health'.

Human resources are the backbone of any healthcare system. Many countries, including the Bahamas, faced health staff shortages, and had to reallocate scarce specialized resources to care for COVID-19 severe cases. It is critical to developing a sound policy to strengthen human resources for health, including training of existing personnel in response to health emergencies. Also, it is advisable to assure equitable distribution of skilled health staff throughout the archipelago and retention strategies to reduce turnover.

These recommendations are not new, the COVID-19 pandemic challenge health systems and put into evidence the weaknesses and gaps in financing, governance, services provision, resource generation and quality of care. The government increased health expenditures and is making additional investments beyond the pandemic's response. These actions will contribute to increase the resilience of the health system to public health crises.

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