



SUSTAINABLE NASSAU

EMPOWERED
PEOPLE,
REVITALIZED
CITY

EXECUTIVE
SUMMARY





The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



NICOLA VIRGILL-ROLLE
Director

FOREWORD

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The Government of The Bahamas is pleased to partner with the Inter-American Development Bank on the Emerging and Sustainable Cities Initiative. The Bahamas is at a crucial point in its development: balancing the goals of sustainable growth, efficient use of its resources, and tackling the issues of climate change.

Over 70% of the population of The Bahamas resides on the island of New Providence. The city of Nassau, on New Providence, must therefore fully harness its potential as the driver of urban sustainability, both economically and environmentally, for meaningful growth and development in The Bahamas. Partnerships and smart collaborations that seek to balance economic prosperity and sustainable development will be central to achieving this goal.

We know that the urban footprint of cities in the Caribbean and Latin America have been growing at previously unmatched rates. While these cities are growth engines for their economies, they are also associated with the adverse consequences of uncontrolled urbanisation which can lead to the unintended consequences of higher incidence of criminal activity and poverty. Additionally, the effects of climate change present a significant risk to coastal urban economies.

Nassau, like other emerging cities, faces similar challenges: high levels of vulnerability to coastal intrusion; growing urbanisation of the city of Nassau and urban sprawl to the rest of New Providence; and elevated crime levels and poverty. Sound urban planning, social engagement, well-structured institutions and frameworks, focused environmental responses and economic initiatives will be critical to successfully reversing this trend. It is our hope that the Sustainable Nassau Action Plan will provide a roadmap for the future development of Nassau.

The focal point of this initiative is the regeneration of Nassau through citizen engagement and a focused long-term socio-economic outlook. The inclusion of smart solutions that improve solid waste management, energy efficiency, governance, disaster management, and Over-the-Hill transformation are integral to this exercise. We are confident that adaptation and transformation, with sound planning can help our people tackle the problems of everyday living.

The focal point of this initiative is the regeneration of Nassau through citizen engagement and a focused long-term socio-economic outlook.

Partnerships and smart collaborations looking at how to balance economic prosperity and sustainable development are central to achieving this goal.



The recommendations included in this Action Plan comprehensively address the identified challenges faced by Nassau – an emerging City seeking to grow in a sustainable manner. The Action Plan: offers solutions for hazard risks to Nassau from climate change events such as sea level rise; looks at how land can be more productively utilised; advocates for the introduction of green spaces to augment liveability; and proposes innovative mechanisms to move people and goods. The initiative also tackles the difficult question of energy utilisation and prioritises the need for reform in funding, the modernisation of the energy infrastructure and the introduction of alternative energy sources. Safety and crime reduction strategies focused on community engagement and the integration of technology similarly feature heavily. Moreover, a successful city requires sound governance frameworks, and the work on the municipal governance in Nassau which focuses on the devolution of government is critical to reforming the political and business landscape.

As we usher in this new era of governance that restores confidence and hope in leadership, this Action Plan, which is a vital component of the National Development Plan, serves as a roadmap to a better Bahamas for its citizenry and specifically, for the residents of the country's capital.

On behalf of the Government of the Commonwealth of The Bahamas, we would like to extend my gratitude to the Inter-American Development Bank, specifically, the Housing and Urban Development Division for the opportunity to take part in this initiative. I would also like to thank the Economic Development and Planning Unit of the Office of the Prime Minister, and the other government and nongovernment organizations, including civil society and all those who were involved in producing this work. I congratulate the team on a job well done.

Dr. Nicola Virgill-Rolle
Director, The Economic Development and Planning Unit
The Office of the Prime Minister

ACKNOWLEDGEMENTS AND CREDITS

This action plan would not have been possible without the partnerships, invaluable contributions of time, advice, opinions, and technical input from a plethora of individuals, public agencies, and community and private organizations. Of mention is the fruitful collaboration with and dedicated support from the Office of the Prime Minister and the local Country Office of the IDB in Nassau.

Economic Development & Planning Unit, The Office of the Prime Minister:

Dr. Nicola Virgill-Rolle
*Director, Economic Development
& Planning Unit*
Hellen Mukiri-Smith
Consultant
Denise Hinds-Jordan
Consultant
Karen Moss Timothy
Program Manager
Brett Lashley
Program Manager

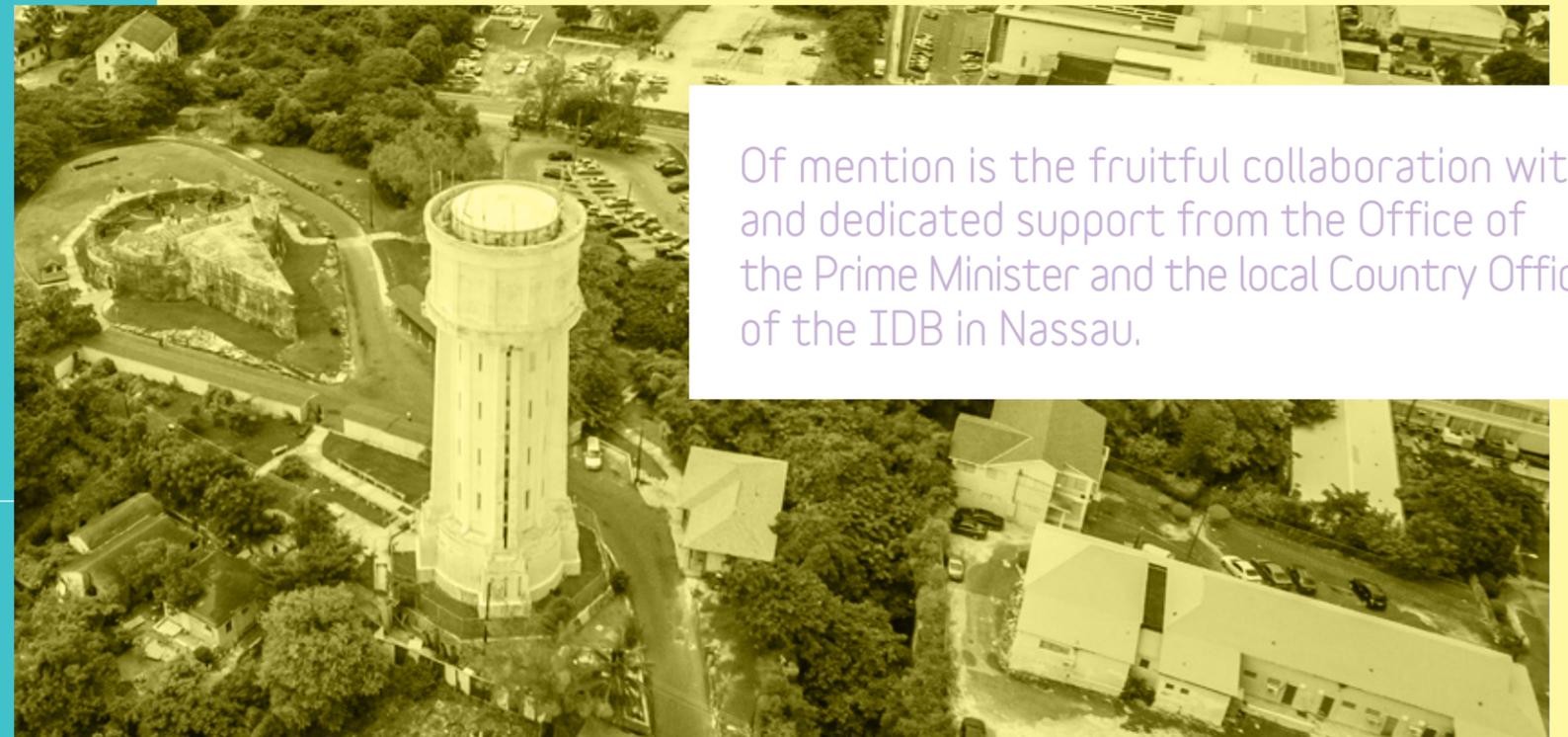
Michelle Grell-Bereaux
Communications Specialist
Khadijah Cooper
Project Coordinator
Kemi Jones
Senior Program Analyst
Daniella Pratt
Administrative Cadet
Myra Farquharson
Administrative Cadet

Organizations / Agencies in The Bahamas

360 Waste Management
Antiquities, Monuments & Museums
Corporation
Bahamas Environment Science &
Technology Commission
Bahamas National Geographic
Information Systems (BNGIS)
Bahamas Power & Light Company
Limited
Bahamas Waste Limited
Cans for Kids
Department of Environmental Health
Services
Department of Land and Surveys
Department of Physical Planning
Department of Public Health
Department of Statistics
Downtown Nassau Partnership

Educulture Bahamas
IMPAC Waste Management Services
Limited
Ministry of Education, Science and
Technology
Ministry of Environment and Housing
Ministry of Finance
Ministry of National Security (RBPF)
Ministry of Public Works - Building
Control Division
Ministry of Social Services and Urban
Development
Ministry of Tourism & Aviation
Ministry of Transport and Local
Government
National Emergency Management
Agency
Our Carmichael
Pan American Health Organization
Premier Choice Waste Management
Professional Architects Board
Public Hospitals Authority
Save the Bays
Stellar Energy Limited
The Bahamas Chamber of Commerce
and Employer's Confederation

The Bahamas Historical Society
The Bahamas National Pride
Association
The Bahamas National Trust
The Bahamas Parks and Public
Beaches Authority
The Bahamas Plastic Movement
The Bahamas Reef Environmental
Educational Foundation
The Bain & Grants Town
Advancement
The National Art Gallery
The Nature Conservancy
The University of The Bahamas
The Water & Sewerage Corporation
Tru Bahamian Food Tours
United Sanitation Service
Urban Renewal Commission
Utilities Regulation & Competition
Authority (URCA)
Violets Are Blue/ Hay Street
Movement for Change
WATERKEEPERS Bahamas
Waste Not Bahamas



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Inter-American Development Bank Team

Coordinators
Tatiana Gallego-Lizón
Florencia Attademo-Hirt
Gilberto Chona

Lead Authors
Sarah Benton
Gilberto Chona

Country Office – Nassau
Michael Nelson
Camille Davis-Thompson
Natalie Bethel

Contributors:
Roland Krebs
Gerard Alleng
Joel Hernandez-Santoyo
Christopher Persaud
Yvon Mellinger
Onyemauchekwu Osuji
Alfredo Rihm
Mauricio Bouskela
Marcelo Facchina
Emilia Aragon
Alexandre Veyrat-Pontet

Photography:

Ramón Zamora

Editorial Design:

Mirona
(www.mirona.com.co)

Designers and art direction
Camilo Villegas
Laura Alcina
Juan David Cadena

Environmental Resources Management Team

Peter Rawlings
Arturo Samper (URD Consultants)
Oliver Obregon
Sara Nawaz
Paula Alvarez
Wairimu Mwangi
Noam Raffel
Michelle Greene (Adworks Multimedia
Marketing)
Wilson Lizarazo (URD Consultants)

University of Technology Vienna (UT-Wien)

Andreas Hofer
Arthur Kannonier
Helmut Schramm
Peter Scheibstock (Maps and Graphics)



These efforts are consolidated in this Action Plan for achieving a more sustainable urban life on New Providence Island.

VISION

Sustainable Nassau is a safe, smart, responsive, and inclusive city that creates economic opportunities and improves community well-being, while empowering its residents and preserving cultural and natural resources – now and tomorrow.

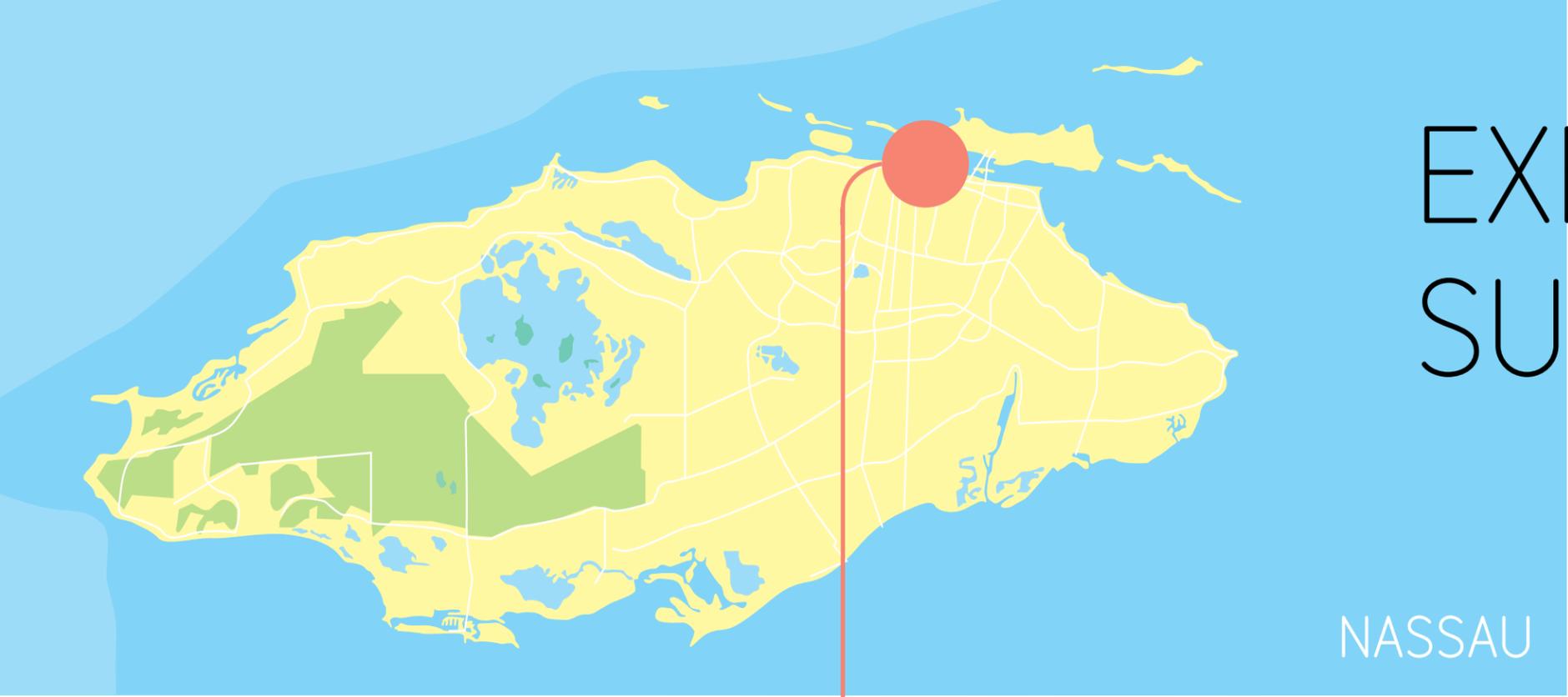
ABOUT THE PLAN

“Sustainable Nassau: Empowered People, Revitalized City” is a plan that links the past and the future for a city of many unexplored opportunities. While this Action Plan offers concrete proposals for future improvements in quality of life across social, economic, and environmental dimensions, it also considers the current and historic challenges faced by a Caribbean small island developing state in the 21st century. These challenges range from economic, cultural, and political, to more globalized problems such as natural disasters and climate change. This Action Plan represents the culmination of an intense research and assessment process carried out in collaboration between the Government of The Bahamas and the Inter-American Development Bank (IDB), and in parallel with the development of Vision 2040: National Development Plan of The Bahamas. Through the IDB’s application of the Emerging and Sustainable Cities (ESC) methodology, these efforts are consolidated in this Action Plan for achieving a more sustainable urban life in Nassau and New Providence Island.

The purpose of disseminating this Action Plan is twofold: (i) to serve as a guide and roadmap for decision-makers to take future actions for urban revitalization which will lead to a clean, green, equitable, and smart city; and (ii) to promote full transparency along the path towards improved urban sustainability and management while fostering greater public support and participation in the process. With the Action Plan made publicly available, citizens can engage in a democratic and open process in which people help guide their city on the road toward a better, safe, and prosperous future for themselves and future generations.

The way ahead is not an easy one for Nassau. The prospect for positive change is great, yet the urban sustainability challenges remain and will require commitment from the government and citizens to be surmounted. This Action Plan serves as a guide through the obstacles ahead, and shows how Nassau can grow and flourish in a more sustainable and inclusive way. The IDB is confident that with strong public and private support and collaboration, and a shared vision, Nassau and New Providence Island can be transformed and become a model for urban sustainability in the Caribbean.

EXECUTIVE SUMMARY



There are changing population needs in Nassau and a need for corrective action to remedy the negative effects of unplanned urbanization.

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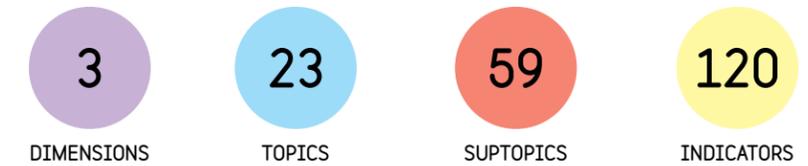
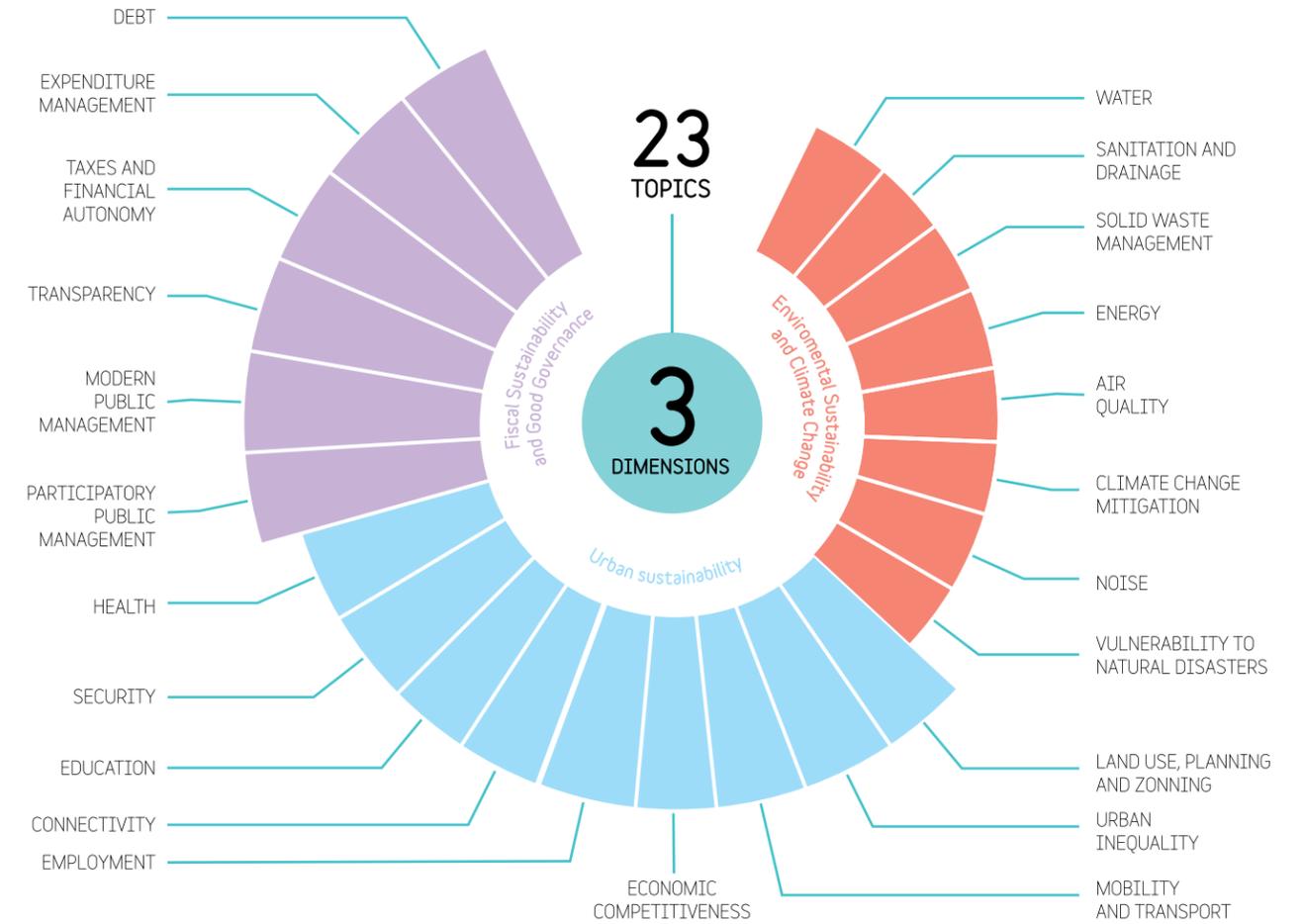
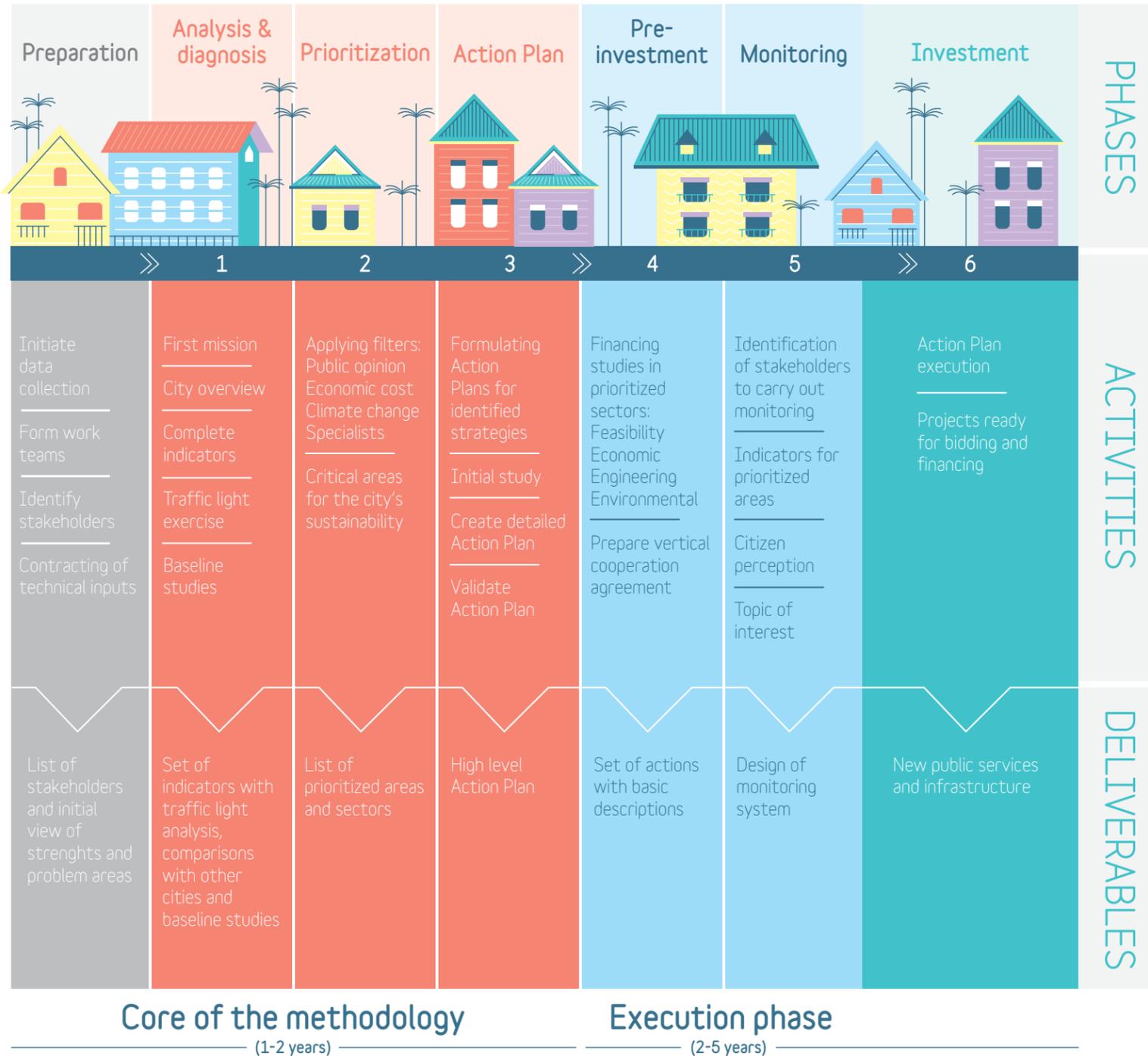
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The Sustainable Nassau Action Plan speaks to the need for sustainable urban growth in Nassau. The rate of sprawling urbanisation in emerging cities in the Caribbean has increased, and if not planned properly, can lead to uncontrolled, chaotic, and unsustainable growth patterns amid fragile coastal and marine ecosystems. There are changing population needs in Nassau and a need for corrective action to remedy the negative effects of unplanned urbanization. The Sustainable Nassau Action Plan, a result of the ESC methodology implemented in Nassau, is informed by extensive studies, research, and public consultation.

These studies and this action plan consider Nassau at two different levels: New Providence Island (NPI) as a whole given that urbanization has reached all corners of the island; and Central Nassau, an area representing the historic centre of city life and consisting of two communities – Downtown Nassau and Over-the-Hill. These communities are divided by more than the natural ridge that borders Downtown and demarcates the passage into and out of the Over-the-Hill neighbourhoods. These historic neighbourhoods, including Grants Town and Bain Town, were established as freed slave settlements and carry strong historic and cultural significance; however, many areas today remain excluded. Run-down buildings and lack of infrastructure are accompanied by a shortage of public space. Approaching Nassau from these two perspectives is important since they are part and parcel of the urban, human, and environmental dynamics of this city-island.

The ESC methodology takes an integrated approach to urban planning by assessing many topics related to a city's functioning, in three general dimensions of sustainability: environmental, urban, and fiscal/governance. ESC's methodology is organized in a two-stage, five phase process. Stage one starts with identifying Nassau's challenges by deploying a rapid assessment of 23 topics related to the three dimensions of sustainability, followed by a public opinion and perceptions survey to gain citizens' perception on the same 23 topics.

These topics are then prioritized to identify areas that are acting as bottlenecks to sustainable development. Finally, an Action Plan of prioritized interventions is formulated, containing a set of urban strategies for execution across the short-, medium-, and long-term. In stage two, the execution phase begins with the preparation of pre-investment studies for the top priority investment projects.

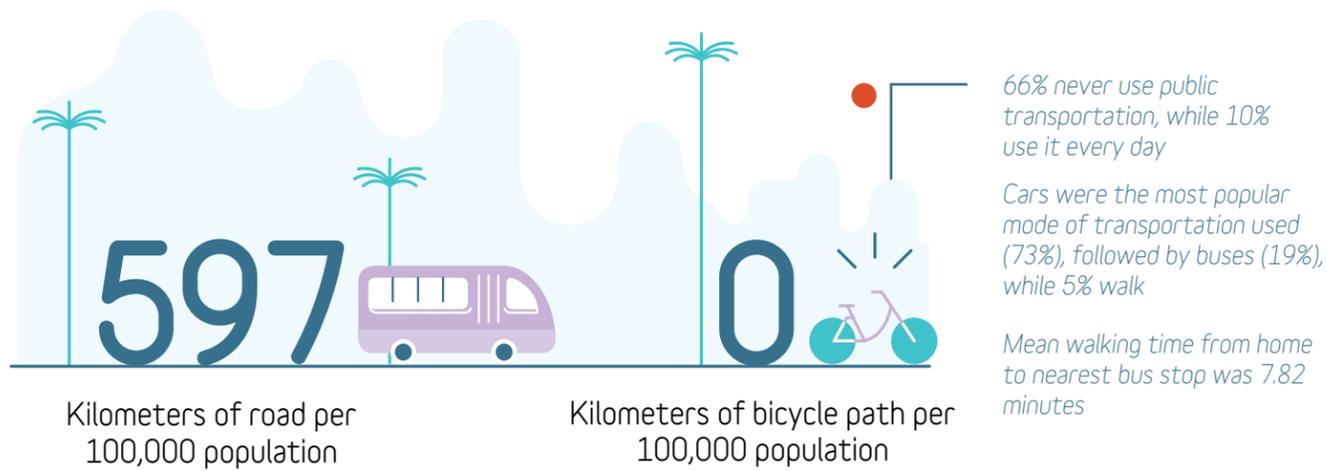


ESC's methodology is based on the premise that urban development strategies that are well-planned, integrated, and cross-sectoral, can ensure improvements in the quality of life for citizens and help materialize a more sustainable, resilient, and inclusive future for emerging cities in Latin America and the Caribbean. Good planning requires good input and evidence-based decision making. As a part of the ESC methodology, several studies were conducted to establish baseline data for Nassau across several sectors, as well as to create a basis upon which to structure this action plan. The studies and assessments that were conducted included the following: Greenhouse Gas (GHG) Inventory and Mitigation Study; Environmental Hazard and Risk Study; Urban Growth Study; Smart Cities Solutions Assessment; Energy Efficiency Study; General Assessment of Urban Mobility and Transport; Sector Characterization of Solid Waste Management; Urban Governance Options Study for NPI; an Urban Design Laboratory for Central Nassau; and a Public Opinion and Perceptions Survey for NPI.

The ESC topics (water, air quality, transparency, etc.) were prioritized through the application of multiple filters – environmental, economic, public opinion, indicator, and sector specialist expertise – to identify issues that pose the greatest challenges in Nassau's pathway towards sustainability. The top priority, or critical, areas are: mobility/transport; energy; vulnerability to natural disasters; security; solid waste management; and sanitation and drainage.

Good planning requires good input and evidence-based decision making.

MOBILITY AND TRANSPORT



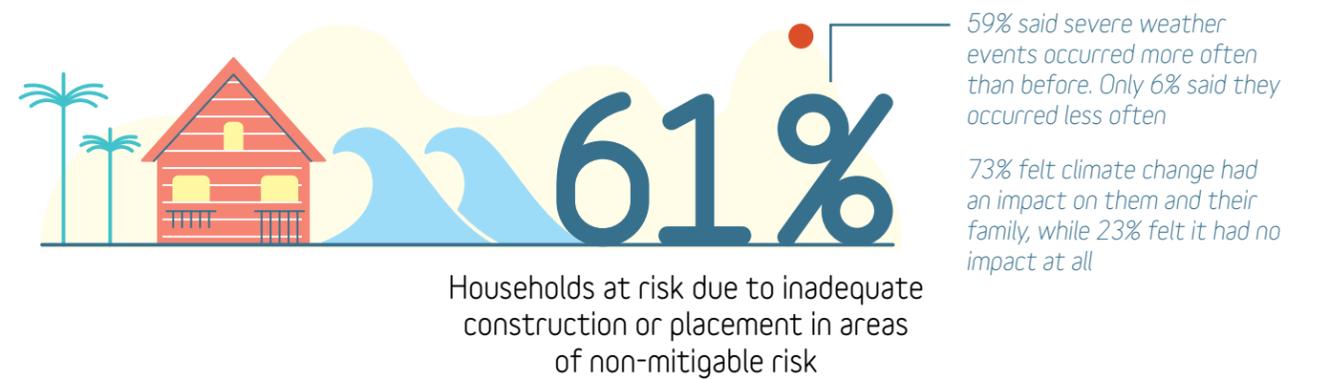
PUBLIC OPINIONS AND DATA INDICATORS

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CITIZEN SECURITY / PUBLIC SAFETY

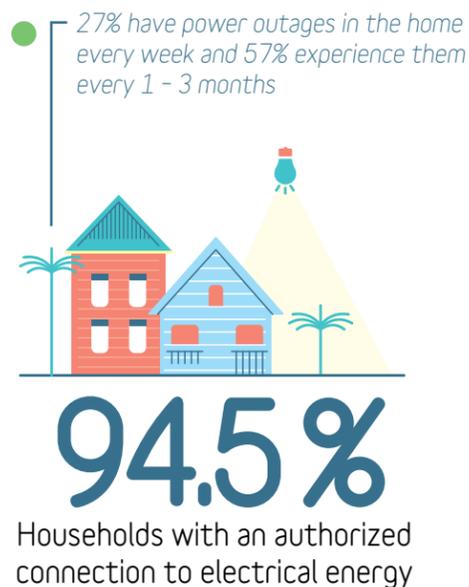


NATURAL DISASTERS AND CLIMATE CHANGE

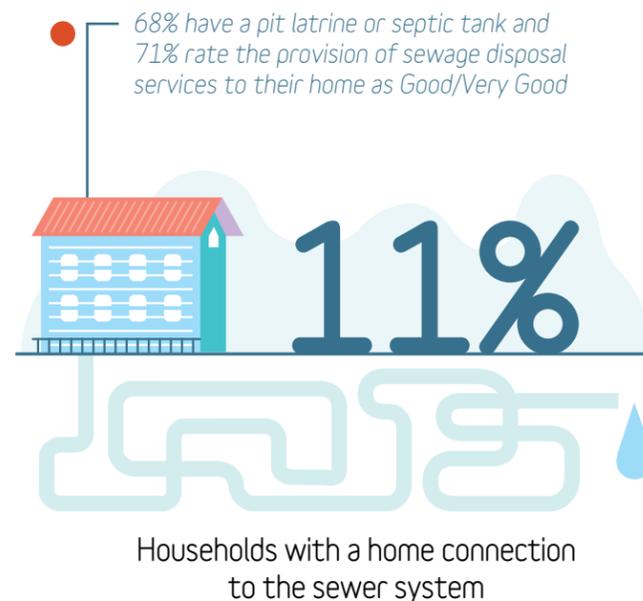


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ENERGY



SANITATION AND DRAINAGE



SOLID WASTE MANAGEMENT





This action plan also focuses on citizen and community engagement, bringing decision-making about quality of life in Nassau closer to the people.

RESILIENT, SUSTAINABLE NASSAU

REVITALIZED, INCLUSIVE, AND COMPETITIVE NASSAU

SMART AND TRANSPARENT URBAN GOVERNANCE

PEOPLE AT THE CENTER

These six priority areas allude to some of the key challenges facing Nassauvians today: traffic congestion and GHG emissions from high car ownership and inadequate public transit; lack of renewable energy solutions; health and economic impacts from natural disasters and extreme weather events (exacerbated by climate change); crime and perceptions of safety impacting quality of life; solid waste management that is incomplete and unreliable; and poor drainage as exacerbated by unchecked development. Notwithstanding, there are indications that health, digital connectivity, competitiveness of the economy, noise pollution and climate change mitigation are currently performing better than other sectors and are manageable for their contribution to future sustainable development of the island.

The next pages outline the ten proposed projects for the urban sustainability of Nassau. Each project relates to one or more of the priority topics mentioned previously, as well as the UN Sustainable Development Goals. These projects fall into four strategic action areas that underline the main themes of this action plan: Resilient, Sustainable Nassau; Revitalized, Inclusive, and Competitive Nassau; Smart and Transparent Urban Governance; and People at the Center.

These recommendations include climate change safeguards for sea level rise and coastal zone intrusions; productive land utilisation for more green spaces; frameworks that improve the logistics of transporting goods and people; modernisation of energy consumption; urban revitalization for improving quality of life; promotion of resilient infrastructure; a technical strategy to improve safety and reduce crime; among others. This action plan also focuses on citizen and community engagement, bringing decision-making about quality of life in Nassau closer to the people.

The design, implementation, and management of these projects relies on the will of the people to keep their politicians and decisionmakers accountable. The underlying theme to this package of projects is the need for better and transparent governance, which rests on a strong foundation of a knowledgeable, aware, and engaged citizenry – in short, putting people at the center.

GREENING NEW PROVIDENCE (RESILIENCY TO CLIMATE CHANGE AND NATURAL DISASTERS)

ACTIONS



- Mangrove replanting
- Beach and coral reef restoration, protection and nourishment
- Replanting of native plants/ecosystems
- Removal of invasive species
- Encouragement of low impact development techniques (roof gardens, porous pavement, etc.)



- Improve flood protections for existing properties
- Restrict coastal development
- Restore buffer zones along waters



- Design and implement a coastal management plan
- Identify natural barriers to protect infrastructure from storm surges
- Regulations against development in low-lying and floodable areas



- Protection of water resources
- Perform hydro-census of all wells and septic systems
- Grey water reuse
- Home rainwater harvesting
- Drip irrigation
- Reduced runoff and water contamination
- Control mining of rock and sand and excavation of canals/waterways below water table



RESILIENT, SUSTAINABLE NASSAU

RENEW, CONSERVE YOUR ENERGY NASSAU

ACTIONS



- Energy Efficiency Pilot Project: Retrofitting public buildings and LED street lamps (Smart Palms)



- Government incentives for energy efficiency renovations and use of energy-saving appliances



- Improve data collection and perform an inventory update on GHG for New Providence Island

GREEN, ZERO WASTE NASSAU

ACTIONS



- Residential Recycling:
 - Reuse and reduce
 - Sorting of waste
 - Composting



- Engage private sector for recycling opportunities
- Review environmental levies for private businesses
- Raise waste reduction requirements/standards for businesses and hotels



- Improve island-wide waste collection system
- Improve landfill management



RESILIENT, SUSTAINABLE NASSAU

HEALTHY CITY NASSAU

ACTIONS

- Protection and conservation of green spaces and natural rain water drainage areas



- Improve sewage system and enforce regulations against illegal dumping
- Sewage disposal regulation and enforcement
- Maintenance and cleaning of drainage systems
- Create community-based drainage plans



- Maintenance and management of current sewage infrastructure



MOBILE AND CONNECTED NASSAU

URBAN STRATEGY AND PROJECT AREAS

ACTIONS

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- Revision of New Providence transportation policies and bylaws and natural rain water drainage areas



- Improvement of urban street furniture
- CCTV and free WiFi in public spaces (including bus stops)
- Improve pedestrian infrastructure and connectivity for pedestrians and cyclists



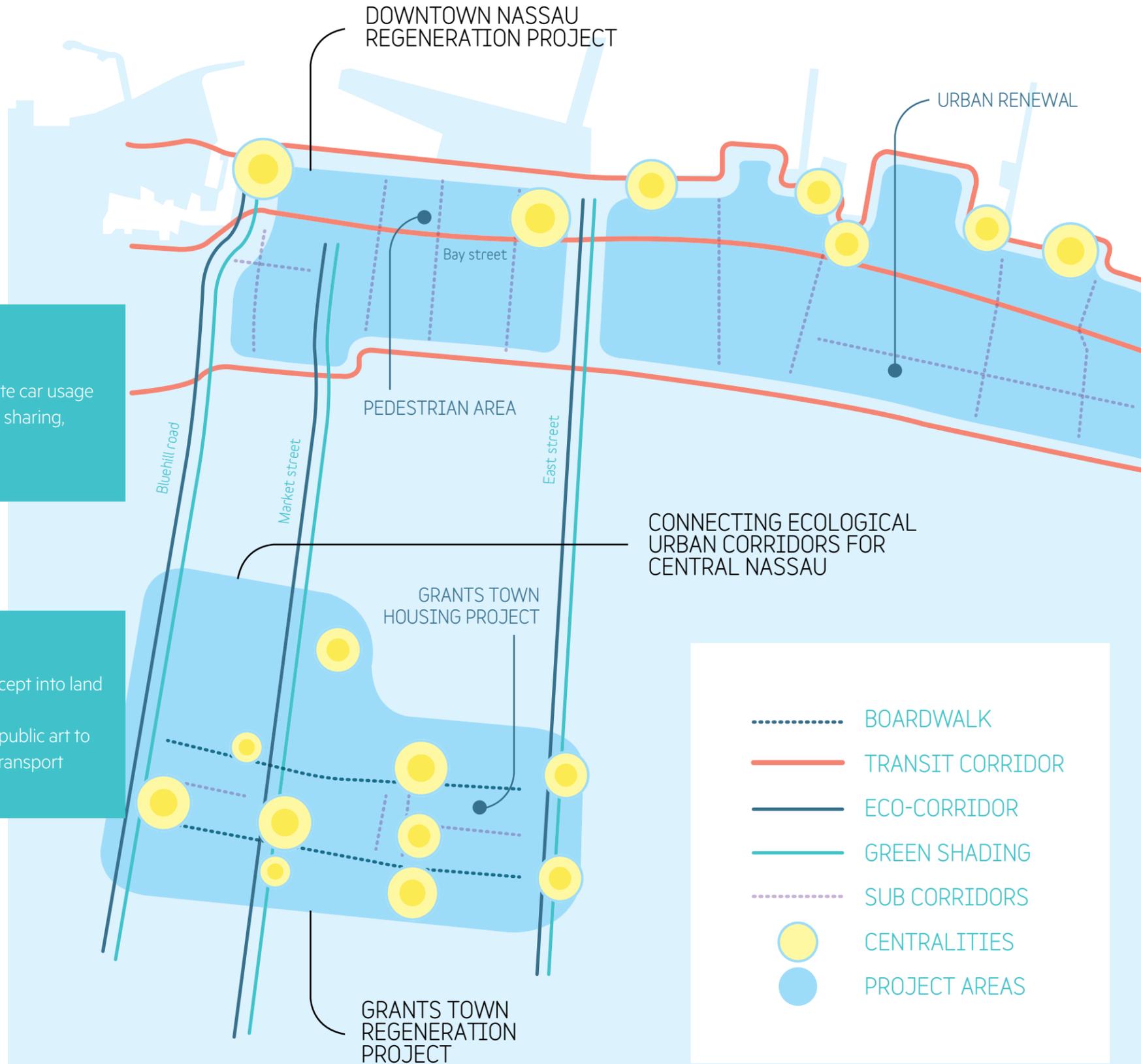
- Unification of the bus system
- Bus service and reliability improvements
- Free WiFi on buses and GPS tracking of buses
- Creation of designated bus stops and safe waiting areas
- Branding and marketing of new bus system to increase ridership



- Introduce disincentives for private car usage
- Encourage micro-transport, ride sharing, carpooling, and ride sourcing



- Introduce Complete Streets concept into land and transport planning
- Introduce small and large-scale public art to create positive image of public transport



NASSAU URBAN REGENERATION PROJECT

ACTIONS



- Downtown Regeneration Project:
 - Waterfront and Boardwalk Development Project
 - Revitalization and densification of the urban fabric
 - Walkable downtown and human scale mobility
 - Creative Nassau Co-Working space
 - Downtown Nassau Zoning and Form-Based Plan

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- Grants Town Regeneration Project:
 - Grants Town housing upgrading project
 - Toolbox for green public space development
 - Community empowerment and local economic development
 - Grants Town community education and innovation initiative



- Connecting ecological urban corridors for Central Nassau:
 - Densification of corridors using urban norms/standards
 - Creation of urban ecosystem and connecting open spaces with walkable/bikeable corridors



REVITALIZED, INCLUSIVE, AND COMPETITIVE NASSAU SMART CITY MONITORING

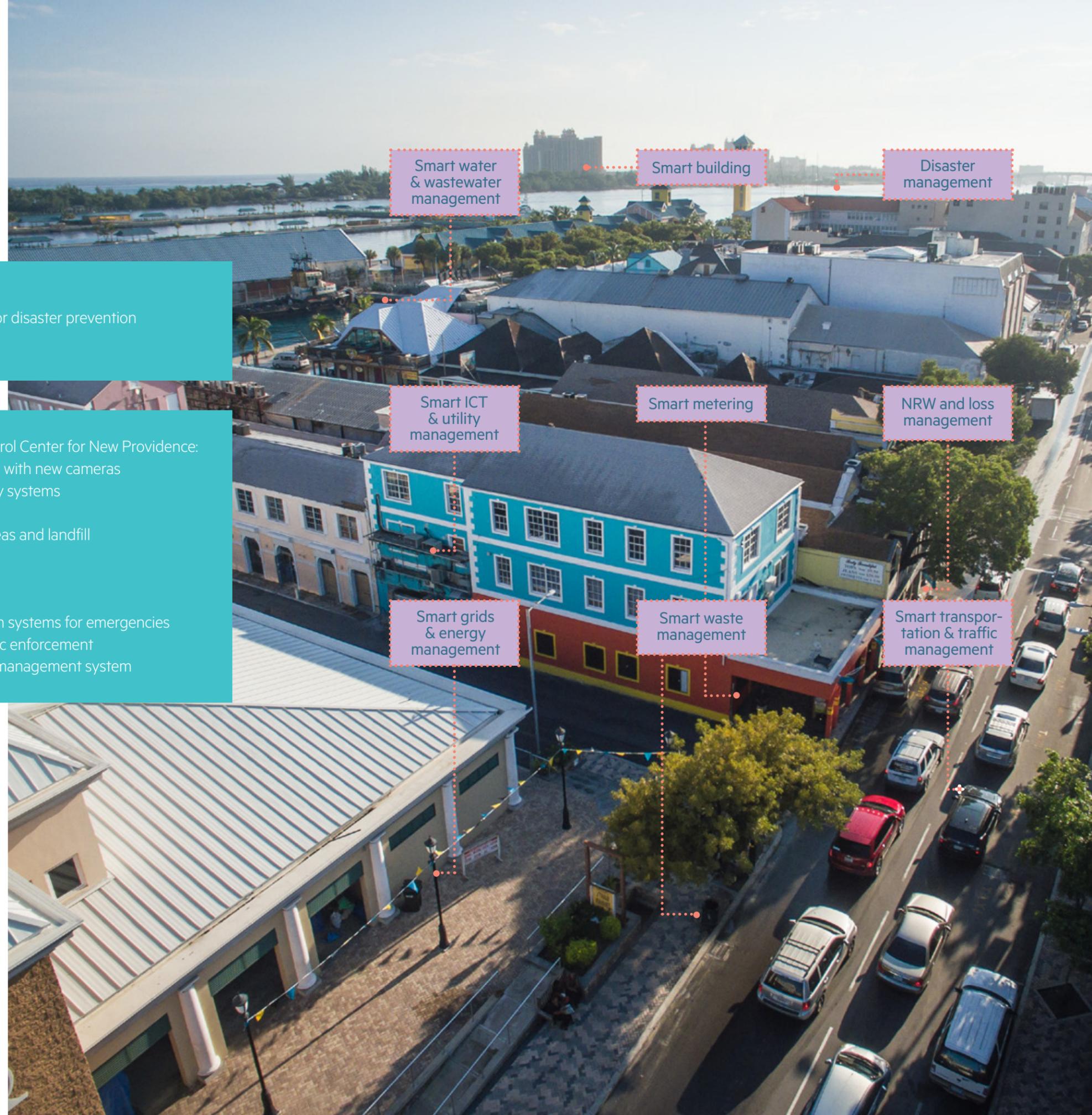
ACTIONS



- Implement an early warning system for disaster prevention



- Create an Integrated Operations Control Center for New Providence:
 - Enhanced crime prevention system with new cameras
 - Remote control of lights and energy systems
 - Traffic signal control system
 - Video surveillance of vulnerable areas and landfill
 - Monitoring of WiFi hotspots
 - Complete GIS database
 - Energy management systems
 - Enhanced computer-aided dispatch systems for emergencies
 - Smart parking and automated traffic enforcement
 - Electricity outage and distribution management system



URBAN PLANNING FOR SUSTAINABILITY



ACTIONS

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- Development of a New Providence Land Use and Land Development Master Plan
- Create a new land administration system
- Establish land and property regulations and local tax incentives for better city land development



- Establish a sector-area or small-area urban planning framework
- Develop land use plan and zoning
- Implement smart growth policies
- Address building and construction design standards/regulations
- Revise building codes



- Integrated Land Use Planning with Transportation Planning at island level



- Strengthen Government's role in housing sector regulation

RESPONSIVE, TRANSPARENT, AND EFFICIENT LOCAL GOVERNMENT

ACTIONS



- New Providence Local Government Framework
- Institute local governance on New Providence Island
- Develop local level government and a body to provide checks and balances on national government actions



- Enforcement of fiscal policies
- Improvement of reporting system of government spending to ensure proper checks and balances



- Executive Coordination Office for New Providence
- Upgrade government ministries to be more efficient and effective



- Establish an island-wide urban planning and development administration office
- Develop and single window approach to citizen engagement with local government



- Freedom of Information Act revised, implemented, enforced
- Develop or improve government websites, applications for smart phones



PEOPLE AT THE CENTER

EMPOWERED PEOPLE, EMPOWERED CITY



- Skills for the jobs of today and tomorrow resulting from emerging technologies and developing economic sectors



- Public awareness campaigns for disaster preparedness: tree trimming, evacuation routes, etc.
- Develop a tropical storm/hurricane preparedness and evacuation plan



- Public awareness and education on transportation alternatives in New Providence



- Water and environmental conservation education
- Energy efficiency education campaign
- Public campaign for recycling and energy efficiency
- Environmental educational programs for all ages in schools and communities
- School curriculum revision for civics government functions



- Public awareness programs using social media
- Schools used for lifelong learning - education programs
- Expansion of Youth in Parliament program
- Develop a Nassau Citizens Board

ACTION PLAN SUMMARY TABLE

		PRE-INVESTMENT	INVESTMENT
RESILIENT, SUSTAINABLE NASSAU	1. Greening New Providence	\$850,000	\$105,000,000
	2. Renew, Conserve Your Energy Nassau	\$530,000	\$40,000,000
	3. Green, Zero Waste Nassau	\$430,000	\$34,000,000
	4. Healthy City Nassau	\$1,000,000	\$85,000,000
REVITALIZED, INCLUSIVE, AND COMPETITIVE NASSAU	5. Mobile and Connected Nassau	\$790,000	\$52,000,000
	6. Nassau Urban Regeneration Project	\$650,000	\$57,000,000
	7. Smart City Monitoring	\$550,000	\$10,000,000
SMART AND TRANSPARENT URBAN GOVERNANCE	8. Urban Planning for Sustainability	\$800,000	\$5,500,000
	9. Responsive, Transparent, and Efficient Local Government	\$650,000	\$9,000,000
PEOPLE AT THE CENTER	10. Empowered People, Empowered City	\$750,000	\$52,500,000
TOTAL		\$7,000,000	\$450,000,000



NEXT STEPS

The intention of this action plan and the public engagement process that was used to develop it, is that its realization will be monitored by an independent, non-governmental system of citizen follow-up. Tracking the implementation of the Action Plan and the sector indicators over time becomes a good tool to promote accountability and increases transparency and efficiency in public administration. This is an important way to empower citizens, by providing them useful information about the progress achieved by their elected officials, about whether actions are being implemented on schedule, and whether they are having the desired impact.

The monitoring system should track results and impacts, and in order to do so, it must receive periodic inputs from various government agencies and departments along with public opinion data. Data should be made publicly available online where citizens can view and track the Action Plan's progress, as well as offer feedback about the types of information they would like to see. When citizens take a more proactive and participatory role in government, they contribute to any positive change and development they see.

Beyond this action plan, the IDB plans to assist Nassau to design two or three top priority interventions through pre-investment assistance; as well as support to identify external funds to accompany the key interventions recommended in this action plan. However, implementation of the Action Plan will require an inter-sectoral approach to project preparation, delivery, and supervision that includes representatives of all relevant public sector agencies and private and public stakeholders. Multi-sector collaboration and coordination, and especially public participation, are the keys to success of the Action Plan and for the proposed projects to make the expected impact and change necessary to become a revitalized, sustainable, and empowered Nassau.

When citizens take a more proactive and participatory role in government, they contribute to any positive change and development they see.

