Barbados Physical Development Plan Amendment
Towards a Green, Prosperous and Resilient Nation

Launch of the Stakeholder Consultation
February 2017
Overview

1. The Process
   Who has been involved and what is the process?

2. The Opportunity
   How can the PDP Amendment support a green, prosperous and resilient nation?

3. The Imperative
   What have we discovered through our due diligence process?

4. Draft PDP Amendment: Key Directions
   What are the Key Directions in the Plan?

5. SEA Process
   What were the outcomes of the Strategic Environmental Assessment Process

6. The Draft Review Process
   How will the community be engaged in the process?
Team

Subject matter experts:

Environment
Climate Change
Coastal Management
Natural Resources
Agriculture

Green Economy
Tourism
Built Heritage
Archaeology
Infrastructure
Transportation
The Process

CONSULTING TEAM

PHASE 1
Inception
Meeting & Initial Work Plan

PHASE 2
Analysis & Assessment

PHASE 3
Testing Policy Areas for Amendment

PHASE 4
Draft Plan Preparation
Launch and Stakeholder Consultation

PHASE 5
Finalising the Plan Amendment

GOVERNMENT OF BARBADOS

Minister accepts Draft Plan
Formal Commenting Process
Plan Approval

CONSULTING TEAM

The Process
THE OPPORTUNITY
The Opportunity

An island of tremendous core assets and increasing levels of vulnerability

New key initiatives and international commitments

Significant changes to the pattern, density and nature of development

Recognizing this is an island of scarcity: food, water and land

An opportunity to set in place transformational and foundational change

Towards a Green, Prosperous and Resilient Nation
Amending the PDP (2003)

Physical Development Plan

Growth Management and Agricultural Preservation
Housing
Heritage
Environment
Infrastructure
Land Use
Parks and Open Space
Community Plans
National Park Plan
What has changed since 2003?

- **UNESCO World Heritage** Designation: Historic Bridgetown and its Garrison
- Government commitment to sustainability – Habitat III and the Emerging Sustainable Cities Initiative
- Focus on climate change and resiliency with new international commitments – COP 21 Paris Agreement; Habitat III
- Prioritisation of the green economy – Green Economy Scoping Study

- Ongoing and successful implementation of the National Park Plan
- Commitment to renewable energy initiatives: 30% renewable energy by 2029
- Rising concern about chronic non-communicable diseases
- Steady state growth with an aging population
Plan Imperative | An emphasis on outward and lower density growth

Steady state population growth; 2% over the next 10 years

Residential density in the urban corridor declined from 23 people per hectare (pph) to 18 pph between (1983 – 2011)

65+ age segment will increase from 11% today, to 25% by 2050

Number of overall housing units grew by 15% while unoccupied units grew by 118% (1990 – 2010)

Estimated 20,400 vacant residential lots and 16% vacancy rate in existing buildings

High levels of vacancy in industrial areas

64% increase in urban footprint to accommodate 6% population growth from 1991-2013

No new land needed to accommodate growth in people and jobs

Promoting Sustainable Development
Plan Imperative | Food Scarcity and Health |

- $600 million BBD in food imports each year (2014); 50% of food imports are vegetables, fruits, fish or meat that could be grown locally.
- Between 1991 and 2013, the amount of agricultural land was reduced by 53%.
- 30,000 acres required for agriculture but only 28,000 acres available.
- Limited days of on-island food supply.
- Critical need to increase access to local and healthy food and promote a viable agriculture sector.

Non-communicable diseases estimated to account for over 80% of deaths in Barbados.

High rates of diabetes (17%), overweight (37%) and obesity (29%).

Promoting Food Security
Degradation of the coral reef cover, estimated at less than 10% of historic levels. Approximately 25% of the population and majority of critical infrastructure lie within 2 km of the coast. Increased severe weather events and associated flooding. Decrease in average annual rainfall. Estimated 0.5 metre sea rise over 50 years.

Need for Resiliency and climate change adaptation to be a critical and cross-sectoral lens.

Protecting Natural Heritage Systems and Introducing Disaster Risk Reduction.
Plan Imperative | Auto-dominance |

Doubling of car ownership since mid-1990s with limited change to road network

Peak hour gridlock and increasing congestion throughout the island

33% of GHGs from automobiles

Backlog in road repair and maintenance

Public transport system seen as unreliable and inefficient.

Auto-dependence related to rise in non-communicable diseases

Limited infrastructure for safe, active transportation

Stressed transportation network

Advancing Mobility and Accessibility
In 1983, 386 heritage buildings were gazetted. Only 5-6 buildings have been added since.

The fine of $500 for demolition of heritage properties is considered grossly inadequate.

Demolition and retrofit of heritage assets

Limited sand and mine resources remaining

Extensive waste and litter dumping

Bridgetown and historic centres in decline as retail, government offices and other businesses move to the fringes

Rise of nature-based, experiential tourism

Need to protect and leverage Core Assets

Greening the Economy
Plan Imperative | Infrastructure Challenges

- Barbados utilizing 98% of all available renewable freshwater sources on the island
- 62% of the water pumped into the distribution system is not accounted for: non-revenue water.
- Increase reliance on desalination; 2 new plants proposed
- Single air strip identified as a risk
- Capital works and road maintenance over the last three years estimated at approximately USD $99,000,000; not nearly enough.
- 90% of Barbados’ energy is imported and 97% of it is derived from fossil fuel sources at an annual import bill of $950 million BBD.
- Increased development interest in renewable energy matched by GOB target of 30% by 2029

Increased Sustainability of National Infrastructure
KEY DIRECTIONS
The Physical Development Plan seeks to achieve a vision for Barbados over the next 10 years as:

- A nation of healthy, safe, distinct and age- and gender-responsive communities sharing a common economic base and community aspiration.

- A nation in which sustainable economic and physical growth are balanced with conservation and restoration of irreplaceable resources, rural working landscapes, cultural heritage and natural heritage.

- A nation which fosters a green economy focused on strategies to enhance resource efficiency and economic growth, in particular in the sectors of agriculture, fisheries, housing, transportation, renewable energy and tourism.

- A nation characterized by increasing social equity enabling meaningful participation in social and economic activities for all.

- A nation which is resilient and prepared for the impacts of climate change.
The following principles underlie the policies of this Plan:

- The efficient use of land, resources and finances of the nation.
- The adoption of adaptive planning approaches in all aspects of national and sectoral planning for the consideration of climate variability and climate change impacts.
- The promotion of social equity, health and safety for all residents.
- The conservation, protection and restoration of irreplaceable core assets and man-made resources.
- The development of safe, vibrant places for people to live, work and play.
- The management of growth so that it occurs in a safe, logical and orderly fashion ensuring protection of core assets, reduction of environmental risks and ecological scarcities, promotion of sustainable development and efficiency in delivery of infrastructure.
Vision, Principles, Key Directions

2.1 Promoting Sustainable Development
2.2 Protecting Core Assets
2.3 Greening the Economy
2.4 Advancing Mobility and Accessibility
2.5 Planning for National Infrastructure

Towards a Green, Prosperous and Resilient Nation
Planning for Sustainable Development

The Growth Management Framework

• A focus on sustainable and resilient growth
• Managing Steady State Growth
• Urban Corridor to a Settlement Transect
• Promoting safe, inclusive communities that offer housing choice to meet the future demographic
• Defines 3 structural components to manage growth and direct investment at appropriate scales:
  o Centres
  o Nodes
  o Corridors
• Encourages the integration of land use and mobility
• Promotes appropriate levels of service and efficiency of infrastructure to support complete communities
• Builds on and updates the existing PDP land use designations
• Provides design strategies, in particular for residential and mixed use areas
• Reinforces the strategic policies (food and agriculture, mixed use centres and corridors) and Community Plans
• Emphasis on Food and Agriculture toward a healthy, resilient, and food sovereign nation
• Promotes viability of the sector
• Defines 4 policy layers:
  o Food and Agriculture Land Use Designation
  o Soil Protection Overlay
  o Integrated Rural Development Area
  o Food Production Zones
• Recommends an Agricultural Census be undertaken
• Introduces Agricultural Impact Assessment tool
Conserving the Natural Heritage System

- A focus on Protection and Restoration of the Natural Heritage System and adopts a ‘Ridge to Reef’ approach
- Recognizing the role of the NHS in addressing climate change and disaster risk reduction
- Identified Key Components and Supporting Components as well as:
  - Areas of Management and Conservation
  - Coastal Management Areas
  - Natural Heritage Conservation Areas
  - Harrisons Cave Special Environmental Control
Acknowledges water scarcity and integrates new Water Protection Zones

Adopts an Integrated Watershed Management Approach

Allows for integration of ongoing CZMU and Drainage Unit initiatives

Conserving Water Resources
• Updated to reflect and support the UNESCO World Heritage Site and Management Plan for Historic Bridgetown and its Garrison

• Enhances policies to protect and support cultural heritage assets across the island

• Introduces the Barbados Registry of Historic Assets and Heritage Impact Assessments
Introduces “mobility” and “accessibility” as a key concepts

Promotes integration of land use and transportation decisions and investment

 Defines a multi-modal network:
  - Mobility Nodes
  - Multi-use Corridors
  - Urban Connectors
  - National Scenic Parkway
  - Water Transport
  - International Gateways
Conserve and enhance the system: 7 open space categories:

OS1 Anchored by the National Park
OS2 Natural Heritage Conservation Areas
OS3 Coastal Landscape Protection Zones
OS4 Public Parks and Open Spaces
OS5 National Attractions – adding Walkers Reserve
OS6 Barbados National Forest Candidate Sites
OS7 Shore Access Points - NEW
Renewable Energy and Energy Conservation
Airport and Bridgetown Port
Solid Waster Management
Road Network
Active Transportation
STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)
Strategic Environmental Assessment (SEA)

What is SEA?

An analytical tool used to integrate environmental considerations into policies, plans and programmes.

The Approach:

Integrated Sustainability Appraisal (ISA)

• promotes sustainable development by extending the assessment from environmental to include the social and economic aspects of development.
# National Sustainability Objectives

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<tr>
<th>Economic</th>
<th>Social</th>
<th>Environmental</th>
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<tbody>
<tr>
<td>Economic growth</td>
<td>Universal education</td>
<td>Sustainable energy</td>
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<td>Agriculture and food security</td>
<td>Health care</td>
<td>Natural heritage</td>
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<td>Tourism competitiveness</td>
<td>Housing</td>
<td>Green economy</td>
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<td></td>
<td>Social equity</td>
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<td>Efficient transportation</td>
<td>Climate resilience</td>
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<td>Land resources</td>
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<td>Marine environment</td>
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The Spatial Development Options

The Status Quo

Protecting Core Assets

Compact and Complete Communities
### Outcomes of the Assessment

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<thead>
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<th>The Status Quo</th>
<th>Protecting Core Assets</th>
<th>Compact &amp; Complete Communities</th>
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<tr>
<td>Continued land use tensions</td>
<td>Strategies address scarcity issues</td>
<td>Integrated development</td>
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<tr>
<td>Stress on provision of services</td>
<td>Efficiency gains from concentration/ cores</td>
<td>Preserves agricultural land</td>
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<td>Traffic congestion</td>
<td>Some gains may be neutralised by limited strategies</td>
<td>Promotes food production</td>
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<td>Concentrated investment areas</td>
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<td>Local service centres</td>
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<td>Protection of natural and cultural heritage</td>
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<td>Protection against natural hazards and climate change</td>
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Recommended Option Based the Assessment...

Option III – Compact and complete communities

- Addresses issues of scarcity by more efficient use of available land space,
- Increases protection of natural assets - the basis of economic development and competitiveness
- Integrates measures to build resilience to threats of natural hazards => sustained development
Engaging the Community

1. SATURDAY, FEBRUARY 25, 2017 | 3:00PM
   Princess Margaret Secondary School,
   Six Roads, St. Philip

2. MONDAY, FEBRUARY 27, 2017 | 6:00PM
   Alexandra School,
   Speightstown, St. Peter

3. TUESDAY, FEBRUARY 28, 2017 | 6:00PM
   Queen’s College, Husbands, St. James

4. FRIDAY, MARCH 03, 2017 | 6:00PM
   Queen’s Park Steel Shed,
   Bridgetown

5. MONDAY, MARCH 06, 2017 | 6:00PM
   The Alleyne School, Belleplaine,
   St. Andrew

6. SATURDAY MARCH 11, 2017 | 3:00PM
   Oistins Bay Gardens, Christ Church

FREE health checks will be available

Draft PDP amendment available at: townplanning.gov.bb/pdp