blic Disclosure Authorize

Lagos Diagnostic Study and Pathway for Transformation

A Rapid Multi-Sector Analytical Review of the Mega-City

June 2023



surge Sustainable Urban and Regional Development Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederazion svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Economic Affairs SECO





Table of Contents

- 1. Executive Summary
- 2. Introduction
- 3. Development Trends and Challenges
- 4. Constraints and Drivers of Change
- 5. Recommendations
- 6. Annexes

1. Executive Summary



Lagos Multi-Sectoral Diagnostic Review

EXECUTIVE SUMMARY Objectives and Government Priorities

A multi-sector team conducted a systematic analytical review on the current development status of Lagos, with the objective of identifying challenges and opportunities that would promote integrated, resilient and inclusive growth of the mega-city to realize Lagos' development potential and its role in leading economic growth and poverty reduction for the region and the country.

- The Lagos State Development Plan (LSDP) 2012-2025 and the recently launched LSDP 2022-2052 put forward the vision and mission of the mega-city. The LSDP builds on the State's previous THEMES agenda (Traffic Management and Transport, Health and Environment, Education and Technology, Making Lagos a 21st-century economy, Entertainment and Tourism, and Security and Governance).
- The Lagos Resilience Strategy (2020) articulates an integrated approach to addressing the shocks and stresses the city experiences or might experience.
- The **Climate Action Plan** was also developed as a commitment to the C40 Cities Climate Leadership Group's Deadline 2020.
- These policies are more visionary and strategic while other state policies are sector-specific [e.g., Integrated Resource Plan (electricity policy), Strategic Transportation Master Plan].
- There is an urgent need of committing to development that spatially integrates and coordinates investment actions.





LSDP MISSION

Eradicate poverty and promote economic growth through infrastructural renewal and development



Africa's Model Megacity and Global, Economic and Financial Hub that is Safe, Secure, Functional and Productive

RESILIENCE STRATEGY VISION

An innovative, inclusive, and prosperous city that leverages the appropriate governance and infrastructure mechanisms to empower its people to thrive, adapt, and grow sustainably.

EXECUTIVE SUMMARY Key Development Trends and Challenges in Lagos (1/2)

	• While Lagos constitutes only 8% of Nigeria's population, the state generates 15-30% of Nigeria's GDP.							
Central to Nigeria's	• GDP growth greater than that of the country's growth (5.8% vs. 5.2% between 2003-2019).							
economy, but economic	GDP per capita has declined since 2015 to pre-2010 level.							
growth is stagnating while	• Informal sector plays a major role contributing about one third to the economy, but also contributes to low productivity.							
poverty remains high	45% informal employment, almost 42% of working age population is under- or unemployed.							
	• Lagos is the state with the lowest poverty rate (4.5%), but almost 80% of households are classified as poor according to LASG.							

 Rapid population growth and uncontrolled spatial expansion Built-up area average annual growth rate of 2.6%. Projected to become the world's most populous city by 2100, with 88.3 million. Built-up area average annual growth rate of 2.6% since 2000. Urban expansion taking place beyond the metropolitan area, along peripheral areas as well as reclamation of water bodies along Epe, Badagry, and Ibeju-Lekki LGAs. Sprawling growth continues beyond the state's borders to neighboring Ogun state.
--

Livahility is lagging with	 Lagos ranked as the second least livable city out of 172 global cities (EIU Global Livability Ranking 2022), according to stability, healthcare, culture and environment, education and infrastructure factors. 							
Elvability is lagging, with	A blancing definit of 2.2 million units with 97% of the need for law induction low income households							
huge housing deficit,	 Housing deficit of ~3.5 million units, with 87% of the need for low and very low-income households 							
prevalence of slums and	50-75% of the population live in informal housing; over 140 slums identified							
prevalence of sidilis and	 Only 14% of households receive steady, reliable supply of electricity (>8 hours per day). 							
inadequate provision of	• Waste collection rate is 20-30%; only 13% of recyclable waste is recycled.							
basic infrastructure and	• Only 35% of the population has access to the public water supply; only 5% is connected to the public sewerage system.							
services	• Poor mobility due to heavy reliance on road transport (98%) and insufficient transport infrastructure: commuters spend an average							
	of 4 hours daily in traffic.							

EXECUTIVE SUMMARY Key Development Trends and Challenges in Lagos (2/2)

Development taking place	• Uncontrolled urban expansion has increased the population's exposure to natural disasters and will worsen with climate change.
in a context of increasing	Flood damages estimated to cost almost \$4 billion each year.
natural disasters and	• 86% of the state's coastline is subject to erosion: approx. \$1.7 billion each year in loss of assets, economic production and land.
climate change	Other prominent risks include sea level rise, extreme heat events, droughts and wildfires.

Buildings and infrastructure	• The highest share of GHG emissions is from stationary energy: residential buildings account for 21% of these						
systems, together with	emissions, manufacturing accounts for 23%, while commercial activity accounts for 11%.						
urban sprawl, are major	 The transportation sector accounts for 20% of GHG emissions in Lagos. 						
contributors to carbon	• Pollution is mainly associated with improper solid waste/plastic disposal: the waste sector contributes the largest share of						
emissions and pollution	particulate matter (PM2.5) at 32% and is the third largest source of GHG emissions in Lagos.						

Significant investment needed to close infrastructure gap and upgrade to climate-smart systems	 LASG estimates over USD 50 billion needed to address investment gap across transport, water, solid waste management and ICT. By comparison, Lagos has managed to invest less than USD 1 billion annually over the last decade.
--	---

Primary Constraints and Drivers of Change

- The following constraints are holding Lagos back from fully realizing its development potential, but could be transformed into drivers of change:
 - Weak urban governance and finance systems: Without city or municipal governments, urban public goods and services are not adequately being delivered to meet the needs of Lagos' rapidly growing population federal, state and local governments perform municipal functions, but unclear delegation of responsibilities hampers effective urban management and results in lack of accountability. The lack of an urban finance system also creates challenges for the effective delivery of urban goods and services. Low revenues, highly inflexible expenditures, increasing reliance on borrowing and budget transparency issues are major concerns.
 - **Ineffective urban planning system:** The absence of municipal and metropolitan authorities with clear responsibility for urban areas compromises the effectiveness of planning in Lagos and hampers sustainable development. Inadequate plans and a deficient regulatory system hold down sustainable growth and exacerbates informality.
 - Fragmented land administration: A bifurcated land system, costly and cumbersome land registration and regularization processes, and land speculation are amongst the challenges which stymy affordable housing development, exacerbate informality, hamper economic development and limit revenues essential for necessary capital investments.
 - A lagging business environment: Inadequate infrastructure and market connectivity, poor access to finance, high compliance costs to formalize businesses, weak competition in consumer product markets, poor human capital outcomes, and ongoing violence, insecurity and corruption reduce the incentive to formalize business activity, resulting in the high rate of informality and low productivity.

Pathway to Harness the Development Potential of Lagos

Recommendations: 4 Areas of Intervention (1/2)

Intervention Area	Recommendations
1. Strengthen urban governance, planning and finance systems	 R1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building R1.2: Support sustainable urban growth of Lagos through community-driven and climate-resilient spatial planning and development
2. Invest in climate- smart infrastructure and services	 R2.1: Improve urban mobility through development of an enhanced transportation network that is integrated, multi-modal and supports carbon emissions reduction R2.2: Develop an integrated solid waste management system - waste minimization, collection, separation and treatment - through comprehensive planning, investment and capacity building R2.3: Increase access to water supply and sanitation services and develop an integrated urban water management system that coordinates water supply, sewerage, stormwater drainage, wastewater treatment, solid waste management and land use planning R2.4: Increase access to reliable energy through implementing policy reform and supporting renewable energy sources

Pathway to Harness the Development Potential of Lagos

Recommendations: 4 Areas of Intervention (2/2)

Intervention Area	Recommendations
3. Activate land markets to grow the formal housing sector	 R3.1: Improve land administration through complete digitization of regularization process and capacity building to increase tenure security, foster better planning and urban development, enable private investment and support increased property tax revenue generation R3.2: Increase access to quality affordable housing through comprehensive planning, incentivizing private sector participation, innovative design, and boosting housing finance and slum upgrading programs
4. Foster economic development and inclusive growth	 R4.1. Prioritize infrastructure investments that create jobs and promote economic development R4.2. Enhance process of doing business
	R4.3 Support inclusive economic development

2. Introduction

Image credit to OpenUpEd under license by Creative Commons



INTRODUCTION **Overview**

- This report provides a systematic *urbanization review* to assess the current development status of Lagos.
- The aim of the review is to understand the challenges facing Lagos and to identify the constraints and opportunities that would promote integrated, resilient and inclusive growth, to support the Lagos State Government in advancing implementation of the Lagos State Development Plan and the Lagos Resilience Strategy.
- This section provides an overview of Lagos' national and global significance. The next sections then provide key development trends, challenges facing Lagos, and the systems that are constraining sustainable growth of Lagos but are also the drivers of change.
- The report culminates with a set of recommendations to support Lagos in fully realizing its development potential and its role in leading economic growth and poverty reduction for the country and region.
- The analysis and recommendations in the report are based on the sectoral analytical studies prepared by the WB team in collaboration with the LASG under the PASA LAPD (list is provided in the Annexes).

Like many African countries, Nigeria has been experiencing above global average urbanization growth over the past few decades

- Globally, the urban population grew steadily from 33.6% in 1960 to 56.6% in 2021, while that of SSA went from 14.7% to 41.8% during the same time frame.
- At the country level, Nigeria's urban population jumped from 15.4% in 1960 to 55.6% in 2022, with a rapid urbanization rate of 4% in 2022.
- Nigeria has surpassed the annual average urban population growth rate of SSA since 1982.



Urban population growth as a percentage of total population

Nigeria's urban population has multiplied by almost 14 times over the past sixty years - from less than 7 million people in 1960 to over 100 million in 2020



Urban Population (million)

Nigeria's urban population is projected to reach nearly 264 million in 2050.

Source: World Bank Group Population Database 2023

Nigeria	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
Urban population	6.9	9.8	16.0	28.2	42.8	69.9	100.8	150.5	208.0	263.9
Population, total	44.0	55.0	72.0	95.0	122.0	160.0	208.0	262.0	320.0	377.0

Nigeria's urbanization is associated with economic growth in the past decades



GDP per capita of Lagos and benchmark cities, 2000-2022

Nigeria's three largest cities - Lagos, Kano and Ibadan - have similar GDP per capita over the past two decades, with peaks in 2015

Benchmark cities include Abidjan, Addis Ababa, Dakar, Dar es Salaam, Ibadan, Kampala, Kano, Khartoum, Kinshasa, Kumasi, Luanda and Nairobi. These are the largest Sub- Saharan African cities with data available in countries not classified as High Income or Upper Middle Income.





Lagos is the primate city of Nigeria and the one of the largest and fastest growing megacities in Africa



Source: Lagos Resilience Strategy 2020

INTRODUCTION Government Priorities and Plans

Development objectives and priorities are outlined in multiple plans at the State and local levels around a vision of a *resilient, inclusive, and prosperous city*

400+ key initiatives to make Lagos Africa's model mega city, of which 72 planned for 2023.



INTRODUCTION Lagos State Development Plan

The LSDP outlines a sectoral-based vision with a focus on four areas: (1) thriving economy; (2) human-centric city; (3) modern infrastructure; and (4) effective governance



INTRODUCTION Lagos Resilience Strategy

The Lagos Resilience Strategy lists several goals under its 1st pillar "Efficient City" to improve urban resilience

These goals encompass physical infrastructure enhancements to transportation, water and sanitation, energy, and planning.



INTRODUCTION Lagos Climate Action Plan

The CAP is a 5-year plan for Lagos that aligns with the Paris Agreement and aims towards carbon neutrality by 2050

- The plan is organized around four sectors: (1) waste, (2) transportation, (3) energy, and (4) climate adaptation and resilience.
- The CAP contains not only a broad, stakeholder-led vision but also four sets of visions each organized around the sectors. Each sector contains sets of projects organized around actions and goals.



Lagos has a key opportunity to fully realize its development potential and its role in leading economic growth and poverty reduction for the country and region

- To support Lagos in advancing implementation of the LSDP, the Lagos Resilience Strategy, the Lagos Climate Action Plan and other government spatial and sectoral plans, it is first necessary to understand the development trends and challenges facing Lagos and to identify the constraints and opportunities that would promote integrated, resilient and inclusive growth.
- The next section provides high-level development trends in Lagos with respect to demographic, economic and spatial growth. This is followed by the challenges and constraints to tapping the full development potential of Lagos and a plan to address the bottlenecks, including pathways, long-term initiatives and priority actions to harness Lagos' potential.

3. Development Trends and Challenges



Image credit to OpenUpEd under license by Creative Commons

Six Key Development Trends and Challenges

Lagos faces cross-cutting challenges to tapping its full development potential. Six key challenges are discussed in this section:

- 1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high.
- 2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion.
- 3. Livability is lagging, with huge deficits in housing and basic services.
- 4. Development is taking place in a context of increasing natural disasters and climate change.
- 5. Buildings and infrastructure systems, together with urban sprawl, are major contributors to carbon emissions and pollution.
- 6. Significant investment is needed to close the infrastructure gap and upgrade to climatesmart systems.

DEVELOPMENT TRENDS AND CHALLENGES **1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high**

Lagos plays a major role in Nigeria's economy and serves as a key node for regional, national and international linkages

- Lagos generates 15%¹-30%² of Nigeria's GDP.
- GDP growth greater than that of the country's growth (5.8% vs. 5.2% between 2003-2019).³
- Lagos is Nigeria's financial hub and trade center, home to major commercial banks and the Nigerian Stock Exchange. Most large firms in the country are located in Lagos⁴ and it is where 40% of businesses in Nigeria are registered.⁵
- 75% of Nigeria's imports passing through Lagos' ports.⁶ Nigeria's two main ports at Lagos and Port Harcourt provide direct access to international trade and freight routes that connect Asia, Europe, and North America.
- 50% of cargo movements in the North and Central African subregion passes Lagos' borders.⁷
- The Lagos-Kano transport corridor, the main channel for domestic, regional and international trade in Nigeria, is also the central axis of cattle and leather trade. It spans approximately 990km and links the country's two most populous cities (Kano and Lagos), passing through Kaduna, Ilorin and Ibadan.



[1] MEPB, LBS. 2022. "Lagos State Gross Domestic Products (SGDP): 2013-2021."

[2] & [3] Lagos State Development Plan 2052.

[4] IFC. 2020. Nigeria Country Private Sector Diagnostic.

[5] World Bank. 2019. Nigeria Systematic Country Diagnostic.[6] & [7] Lagos State Development Plan 2052.

DEVELOPMENT TRENDS AND CHALLENGES

1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high

- Lagos' economy is steered by nonagriculture sectors, with dominant specialization in services (consumer, transport & ICT, financial & business) relative to benchmark cities¹
- The tech industry has become a significant competitive area for Lagos in the past decade
- Financial technology is also growing rapidly





Source: Oxford, 2022, "Competitive Cities Database".

[1] Benchmark cities include Abidjan, Addis Ababa, Dakar, Dar es Salaam, Ibadan, Kampala, Kano, Khartoum, Kinshasa, Kumasi, Luanda and Nairobi. These are the largest Sub-Saharan African cities with data available in countries not classified as High Income or Upper Middle Income. The aggregate figure for benchmark cities is the median value.

1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high

Economic activity is greatest in the center, within the metropolitan area



Average nighttime light radiance (2013–2019) Nanowatts per square centimeter per steradian $(nW \cdot cm^{-2} \cdot sr^{-1})$

-5.5

0

77

Rate of change in nighttime radiance (2013–2019) Average change in nanowatts per square centimeter per steradian per month (nW·cm⁻²·sr⁻¹·month⁻¹) 5.5

But activity is increasing in Eti Osa and other LGAs northeast of the urban core, as well as to the east in Ibeju.



DEVELOPMENT TRENDS AND CHALLENGES **1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high**

But there is still untapped potential for Lagos to fully realize its development potential

Although Lagos has an adequate ration of GDP share to population share, there remains untapped potential in socioeconomic development.



Source: Authors, using data from UN World Urbanization Prospects 2018 and Oxford Economics Competitive Cities database.

DEVELOPMENT TRENDS AND CHALLENGES

1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high

Development is occurring in a context of overall economic stagnation, with the informal sector playing a major role in the economy

- GDP per capita has declined since 2015 to pre-2010 level.
- Stagnant growth could be attributed to the large role that the informal economy plays:
 - The informal sector contributes about one-third of Lagos' economy.²
 - About 42% of all commercial activity is conducted through the informal sector.³
 - 45% of household members are employed informally ("self-employed").⁴
- Micro, Small and Medium Enterprises (MSMEs) play a major role, and are mostly in the informal sector, in activities related to trade and manufacturing: 3.2 million MSMEs employ about twothirds of the working population.¹

DEVELOPMENT TRENDS AND CHALLENGES

1. Lagos is central to Nigeria's economy, but economic growth is stagnating while poverty remains high

Poverty and unemployment remain high

- Lagos is the state with the lowest poverty rate at 4.5%¹, but according to LASG's classification, at the LGA level, at least 78% of households are classified as either "poor" or "extremely poor"².
- Higher concentration of poverty in the urban periphery to the south, east and west, but pockets of poverty exist within the urban core.
- Population growth attributed to migration is not necessarily linked to greater supply of more productive jobs:
 - Unemployment rate is high, at 24%³
 - Combined unemployment and underemployment rate is almost 42%.⁴



Source: Lagos State Government. 2020. "Table 92. Combined Measures of Poverty." Poverty Profile for Lagos State.

World Bank. 2022. Nigeria Poverty Assessment.
 Lagos Bureau of Statistics. 2020. Poverty Profile for Lagos State.

[5] Lagos State Development Plan 2052.[6] BudgIT. 2021. State of States Report.

DEVELOPMENT TRENDS AND CHALLENGES **2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion**

Lagos is experiencing rapid population growth

- The annual growth rate of Lagos is 3.2%¹ this is higher than the country's growth rate of 2.6%.²
- Population counts vary: Most recent estimate by the Nigeria National Bureau of Statistics was 12.8 million (2019);³ according to the Lagos Bureau of Statistics, the population has reached 26.4 million.⁴ A large number of people move to Lagos daily for jobs and livelihoods, and they are not reported.
- Lagos' population is projected to surpass 32 million people by 2053; by 2100, Lagos is projected to become the most populous city, with 88.3 million.⁵
- Due to natural growth and migration, Lagos' population increases daily by nearly 3,000 persons.⁶
- The total fertility rate for Lagos is 3.4 children per woman higher than the replacement fertility level of 2.1.7

^[1] UN World Urbanization Prospects 2018 Highlights.

^[2] National Population Commission. 2021. National Policy on Population for Sustainable Development. November 2021.

^[3] National Bureau of Statistics. 2020. Demographic Statistics Bulletin.

^[4] Lagos Bureau of Statistics. 2020. Abstract of Local Government Statistics.

^[5] Hoornweg, D., & Pope, K. 2016. Population predictions for the world's largest cities in the 21st century. *Environment and Urbanization*, 29(1), 195–216.

^[6] Lagos Resilience Strategy, 2020.

^[7] National Population Commission and ICF. 2019. Nigeria Demographic and Health Survey 2018.

DEVELOPMENT TRENDS AND CHALLENGES 2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion

About 90% of the population live and work in the Lagos metropolitan area,¹ consisting of 16 out of the 20 local government areas (LGAs) of the state



[1] Lagos State Government Digest of 2018

DEVELOPMENT TRENDS AND CHALLENGES **2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion**

Population is densest in the central core, with extensive peri-urban population growth over the past twenty years

- While Lagos has the smallest landmass, it is the most densely populated state, with 8,000persons/km², which is 40 times Nigeria's average of 200 persons/km².¹
- Population is densest in the central core, especially Ajeromi LGA, with extensive peri-urban growth to Ikorodu and Eti-Osa over the past twenty years.
- The greatest number of out-of-state immigrants arrive in the LGAs surrounding the core, including Apapa, Amuwo Ofodin, Alimosho, Ifako and Kosofe.²



Map data from WorldPop. Bondarenko, et al, Census/projection-disaggregated gridded population datasets, 2020.

[1] LSDP 2052.[2] Lagos State Government. 2020. Poverty Profile for Lagos State. Table 121. State of origin of household members.

DEVELOPMENT TRENDS AND CHALLENGES 2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion

Spatial growth of Lagos is characterized by rapid uncontrolled expansion, extending beyond the metropolitan area

- The built-up area of Lagos has been growing at an average annual rate of 2.6% since 2000.¹
- The high concentration of people and activities at the center of Lagos has prompted the government to seek development along the periphery and outside the designated metropolitan area.
- Spatial mapping shows recent expansion taking place in Alimosho, Ikorodu, and Eti-Osa
- Spatial development is also occuring along Lekki, Epe, and the Ibeju-Lekki axis



DEVELOPMENT TRENDS AND CHALLENGES 2. Lagos is experiencing rapid population growth and uncontrolled spatial expansion

Urban expansion of Lagos also extends beyond the state's boundary

- Sprawling growth continues outwards to neighbouring Ogun state - especially along the Sango-Ota axis and Sagamu Interchange.¹
- The 2052 LSDP has identified large parcels of un(der)utilized land in the eastern and western regions (Badagry, Ojo, Ibeju/Lekki and Epe LGAs) and is targeting these areas for new urban development of housing and economic clusters.
- Development in peri-urban areas where land is cheaper could be one of the ways to accommodate Lagos' growing population, although the government should assess whether the lower cost of land outweighs the higher costs of extending infrastructure.





Source: Google Earth

DEVELOPMENT TRENDS AND CHALLENGES **3. Livability is lagging, with huge deficits in housing and basic services**

Lagos is lagging in livability

SELECTED CITIES IN SSA	MERCER LIVABILITY RANKING (2019)				
Port Louis	83				
Durban	88				
Cape Town	95				
Johannesburg	96				
Victoria	98				
Lagos	212				
SSA Regional Average	183				

- Lagos ranked #212 out of 231 global cities and #28 among 42 cities in Sub-Saharan Africa according to the Mercer Quality of Living Ranking 2019.
- Lagos is the second least livable city out of 172 global cities according to the Economist Intelligence Unit Global Livability Index 2022.



Sources: Mercer Quality of Living Survey (2019); United Nations Statistics Division (2014)

• Rapid development of Lagos has led to multiple challenges that impact livability, with substantial deficits in housing and infrastructure as major contributing factors.

DEVELOPMENT TRENDS AND CHALLENGES 3. Livability is lagging, with huge deficits in housing and basic services

A shortage of well-located affordable housing options contributes to low livability and is a driver of informal settlements

- Housing deficit of 3-4 million units¹, with 87% of the need for low and very low-income households².
- High costs of available housing have resulted in overcrowded living conditions: 50% of residents live in households where more than 3 people sleep in a single room.³
 - Land constitutes 40-80% of the total cost of a house in an urban setting.
 - Housing costs have increased while wages have remained stagnant (or only marginally increased).
 - Prices of imported building materials have become expensive in light of devaluation of the Nigerian currency and global inflation.
 - Mortgages are too expensive and thus remain out of reach for majority of residents: A would-be homeowner is expected to provide a deposit of between 10% - 30%⁴ to access a mortgage at high interest rates (15-25%⁵).
 - Extremely high rents at ~157%⁶ more than the acceptable average of spending a third of income on housing.
- Insufficient supply of affordable housing has led to the proliferation of underserviced, vulnerable and tenure-insecure settlements: **50-75%⁷ of the population live in informal housing** and over 140 slums identified.⁸

[1] ~3 million according to Lagos Resilience Strategy, 2020. Over 4 million according to World Bank 2022 assessment using NBS data from 2020.

[2] & [4] World Bank. 2022. Housing Affordability Assessment.

[3] UN-Habitat. 2021. City Profile #4. Lagos, Nigeria

[5] World Bank. 2015. Slum upgrading, involuntary resettlement, land and housing: Lessons learned from the experience in Lagos and other mega-cities [6] LSDP 2052

[7] UN-Habitat calculated 50% in 2019. The 2052 LSDP puts the share of population living in slums at 75%.

[8] World Bank. 2022. Scoping Study on Governance, Planning and Finance in the Lagos Metropolitan Area.
Government response to address housing issues has been largely insufficient and private sector participation has been limited

- National and state housing programs exist to address supply and demand issues, but have had minimal effect
 - National and state funding programs exist, e.g., National Housing Fund, Family Homes Funds' construction finance, mortgage refinancing, Lagos Home Ownership Mortgage Scheme (HOMS) and Rent-to-Own program these programs have not yet made a major impact
 - The Lagos State Urban Renewal Agency (LASURA) is responsible for implementing urban renewal policies and programmes, including the identification and upgrading of slum communities and excised villages. Despite being in operations for over 20 years, slum communities continue to proliferate. Interventions by the agency are primarily focused on social and physical infrastructure (road construction and water provision) to low-income communities.
 - A national housing strategy has been prepared but has yet to be approved and implemented while a comprehensive housing policy at the state level is missing
- Limited private sector participation to build low-income housing, due to high transaction costs and especially due to the difficulty of accessing land land grabbing by the descendants of indigenous landowners (*Omo Oniles*) is a prominent challenge in Lagos.
- To address the housing shortage, the 2052 LSDP proposes the creation of new housing districts in the east and west regions of the state, outside the metropolitan area development in peri-urban areas where land is cheaper could be one way to accommodate future growth, although it should be assessed if the higher cost of extending trunk infrastructure outweighs the lower cost of land.
- Without affordable housing alternatives people who move to Lagos will resort to informal housing and slums will continue to grow, or residents will have to reside in peripheral areas a great distance from job centers.

Serious backlogs in basic infrastructure and services also contribute to low livability and constrain economic development

Electricity: Only 14% of households receive steady, reliable supply (>8 hours per day)³

- Most of the population of Lagos are close to the grid infrastructure, but electricity supply from the grid is insufficient to meet demand and the majority are not connected
- 96% of households are close to grid infrastructure; gaps are primarily in low-population areas of Epe and Badagry.¹
- Only 32% of households are connected to the grid.²
- Poor reliability and incessant power outages mean connection to the grid is no guarantee of supply - many homes and businesses instead must rely on a generator: ~80% of population relies on diesel generators during outages, which are polluting and pose health and environmental risks.⁴
- The majority of residents who live in informal settlements are not connected to the grid and thus use other energy sources to meet household needs
 - $\circ~$ Kerosene is largely used to meet households' energy needs, covering 83% of fuel use in Lagos.^5 ~
 - Ambient air pollution is the major cause of health damage, due to a large proportion of the urban population relying on highly polluting fuel sources.
- Accessing electricity and unreliable service pose as major constraints to doing business in Lagos.⁶

According to the 2052 LSDP, the power supply would need to be increased by 6x to close to gap between demand and supply



[1], [2] & [3] World Bank. 2021. Lagos DPV Final Report.
[4] LSDP 2052.
[5] World Bank. 2020. "The Cost of Coastal Zone Degradation in Nigeria: Cross River, Delta, and Lagos States.
[6] World Bank. 2020. Doing Business 2020: Nigeria.

The demand for water supply services are far from being met...

- Only 35% of the population of metropolitan Lagos has access to the public water supply.¹ The Lagos Water Corporation (LWC) records a deficit of ~65% of potable water network coverage in all settlements across the state.
- Aging water transmission infrastructure exacerbates inefficiencies: the majority of existing water mains are obsolete with corroded pipes that disrupt effective transmission. Public investments in infrastructure has been mostly reactive and uncoordinated, with a persistent focus on expansion of infrastructure over preventive maintenance or rehabilitation of existing assets.
- Most households use unimproved water sources, especially in the south and west, or obtain water from informal providers the cost for informal water is almost always more expensive (1.3-3.0 times greater than the tariffs charged by the state)²



*Conventional water sources include boreholes and the Lagos Water Corporation. Unconventional includes streams, rivers, truck vendors, hand dug wells, and other sources. Source: Lagos State Government. 2020. "Table 143. What is the source of water supply to dwelling of the household?" Poverty Profile for Lagos State.

[1] Lagos Resilience Strategy. 2020.

[2] World Bank. 2016. From Oil to Cities: Nigeria's Next Transformation.

... As is the demand for sanitation services

Only 5% of the population is connected to the public sewerage system¹

- Most neighborhoods are not connected to a combined sewer system rather each housing unit makes use of septic tanks or has an on-site facility in place.
- Draining systems are in dire need of repair:
 - Around 40% of the available wastewater treatment infrastructure is either non-functional or in a state of disrepair.² This leaves a large volume of wastewater released into the environment without adequate treatment, with attendant risks to the environment and the population.
 - The dumping of solid waste in the few available drains in Lagos has made the drains unfunctional to dispose of wastewater from homes and industries as well as to transport storm water during rainfall. This is compounded by the frequent and severe flooding which diverts, solid waste sewage and wastewater from drains into streets and neighborhoods.³

[2] Environmental Rights Action. 2016. Lagos Water Crisis: Alternative Roadmap for Water Sector.

[3] Atufu, C. and Holt, C. 2018. Evaluating the impacts of flooding on the residents of Lagos, Nigeria.

^[1] Lagos Resilience Strategy. 2020.

Solid waste management needs far outweigh the current capacities in Lagos

• The waste collection rate is 20-30%.¹ A major challenge for effective waste collection and disposal is traffic congestion along certain routes which sometimes discourages waste collectors. This is responsible for household waste to remain uncollected on the streets for days.

Only 13% of recyclable waste is recycled²

- The effort of the government to manage solid waste in Lagos effectively is challenged by:
 - Insufficient facilities: Dumpsites, most notably in Olusosun, are far overloaded.
 - A wide range of parties involved (state agencies, local councils, private companies and informal channels) paired with lack of coordination, which results in insufficient delivery of services
 - Insufficient human and technical capacity: inadequate number of waste collection staff, equipment, and waste collection vehicles
 - Behavior gaps:
 - General public awareness on the negative consequences of waste (49%) but lack of specific knowledge on recycling/reusing (~80% did not know paper, cardboard and glass are recyclables and 70% unaware of SWM activities)
 - Lack of sorting habits (only 18% sorted in last 7 days)
 - Habituation to litter (67% found waste littered or dumped in the streets and gutters while only 4% reported it)

Solid waste management is relatively developed in the core but lacking in the newer and less dense east, south and west areas of the state



Source: Lagos State Government. 2020. Poverty Profile for Lagos State. "Table 145. What is the most commonly used mode for disposal?"

The 2052 LSDP includes collection and recycling targets (<90% and 45%) and 17 key initiatives to develop a best-in-class waste management system, including development of a comprehensive waste management plan to guide actions and efforts.

Investments in transport have not kept up with the extension of urban areas and population growth

- Heavy reliance on road transport,¹ high frequency of usage on the roads and insufficient infrastructure contribute to grid locks and incessant traffic congestion
 - Commuters spend up to 4 hours daily in traffic.
 - Jobs located in the center (the Island) but many live in the outskirts due to lack of affordable housing in the center, leading to traffic.
- Fragmented public transport system dominated by semi-formal operators:
 - Residents relying heavily on a combination of 'danfos' (minibus taxis), 'kekes' (threewheelers) and 'okadas' (motorcycle taxis) for 45% of their journeys around the city.²
 - Multiple operators run Bus Rapid Transit lines, accounting for just 3% of trips.
- Non-motorized modes (walking, bicycling) are dangerous options for commuters due to lack of pedestrian and bicycling infrastructure.³ Encroachment onto the existing road infrastructure by motorists and minibuses (through illegal parking) and by informal markets has significantly reduced accessibility of sidewalks.



Source: Data from LAMATA (2015) via TUMI (n.d.)

Transport investments are planned and underway, but funding is an issue, and a multi-modal system is needed to improve mobility and livability

- Two phases of BRT have been successfully implemented; waterway transport, rail mass transit and bus investments are underway, but delays have occurred due to funding issues.
- But investment in developing an integrated, multi-modal urban mobility system (integrated network of waterways, train, bus, non-motorized, etc.) is needed: isolated solutions will not help to solve the problem, a multimodal approach is needed.



The state launched the first phase of its Bus Reform Initiative in 2020, planned to introduce 700 high-capacity buses along 46 routes throughout the city. The existing routes are in the city core while proposed routes extend into Ibeju and Ikorodu to the east and Badagry, Ojo, and the western region of the core.

Multiple plans and policies exist governing transportation in Lagos, but implementation has been a major challenge

- Plans and policies that govern transportation in Lagos include the LSDP, the Lagos State Strategic Transport Master Plan, the Lagos Road Traffic and Administration Law 2012, and the Lagos State Transport Sector Reform Law 2018.
- There are also two policies that are yet to be fully initiated, the Draft Non-Motorised Transport Policy (2017) and the Draft Transport Policy (2019).
- Implementation of plans and policies has been a major challenge across the board.

development trends and challenges 4. Development taking place in a context of increasing natural disasters and climate change

Lagos faces multiple hazards that lead to massive damage and reversal of developmental gains



Urban flood hazard (High)



Coastal flood hazard (Medium)



Water scarcity hazard (Medium)



Extreme heat hazard (Medium)





Source: GFDRR. ThinkHazard! Lagos. https://thinkhazard.org/en/report/2230-nigeria-lagos

- Lagos is at high risk of both river (fluvial) flooding and urban (pluvial) flooding
 - Flood damages (to assets, economic production and mortality) estimated to cost almost \$4 billion each year.
- Other prominent risks include coastal flooding and erosion, as well as extreme heat and droughts, and wildfires
 - Estimated cost of \$1.7 billion each year in loss of assets, economic production, and land as a result of coastal erosion.²
- Climate change is exacerbating risks



DEVELOPMENT TRENDS AND CHALLENGES 4. Development taking place in a context of increasing natural disasters and climate change

Uncontrolled urban expansion has increased the state's exposure to natural disasters, a trend that will worsen with climate change

18% of land is on low-lying coastal plain, prone to regular flooding:

- Oshodi-Isolo faces the most built-up area exposure to a 10-year flood while Badagri, Eti-Osa and Kosofe becoming the most exposed when considering a 100-year flood.¹
- Given rapid population growth in Lagos city, the size of the population exposed has increased steadily over the years
 - Epe, Badagry and Oshodi-Isolo face the highest population exposure to a 10-year flood, while Epe and Kosofe will experience the most population exposure (>15% of LGA population) to a 100-year flood.²



Source: WorldPop (2020), Fathom

development trends and challenges 4. Development taking place in a context of increasing natural disasters and climate change

Lagos' coast is affected by severe pressures: unplanned urbanization has increased people's exposure to floods and erosion risks

The erosion process is threatening coastal communities along the Lagos shoreline:

- 86% of the state's coastline is subject to erosion, with an 8% average annual erosion rate of 8.2 meters per year.¹
- The eastern coast is at higher risk as it is more developed with buildings and infrastructure.²



The coast of Ojo, Amuwo Odofin, Apapa and Eti Osa has eroded at a pace of 3 meters/year.



Source: Delft University of Technology. Long-term Shoreline Changes (1984-2016). Accessed 5 September 2022. https://aqua-monitor.appspot.com/?datasets=shoreline

[1] World Bank. 2020. The Cost of Coastal Zone Degradation in Nigeria: Cross River, Delta, and Lagos States.
 [2] CDR International, World Bank. October 2022. Multi-Sectoral Resilient Plan and Pre-Design Studies for Coastal Resilience in Nigeria: Intervention Site Report.

development trends and challenges 4. Development taking place in a context of increasing natural disasters and climate change

Land use changes that do not consider environmental impacts threaten the sustainability of Lagos

Urban expansion trends have included deforestation, the reclamation of water bodies (along Epe, Badagry, and Ibeju-Lekki LGAs) and the reduction of green spaces:

- Uncontrolled development ill-suited to the environment where it is built is a major driver for temperature increases and biodiversity loss in urban areas.
- Changes in land use from public to private owners and the disengagement of the private sector for environmental protection in Lagos jeopardize the potential to restore and protect biodiversity.
- Green spaces can serve to mitigate urban heat events a prominent hazard in Lagos and have the potential to decrease the ambient temperature by at least 5°C.



development trends and challenges 4. Development taking place in a context of increasing natural disasters and climate change

Recognizing the growing exposure to climate risks and non-climatic hazards, the government has developed plans and policies to tackle the challenges - these have yet to be fully implemented

- With increasing urbanization, population growth and environmental issues (accelerated by inadequate flood prevention and drainage systems), **disaster risks are expected to intensify given the expected increasing frequency of extreme climate-related events.**
- The government estimates about \$27-34bn at stake due to the impacts of sea level rise and extreme temperature by 2050.¹
- Climate and DRM plans and policies:
 - In 2018, Lagos joined the C40 Cities Climate Leadership Group and developed the Lagos State Climate Action Plan (2021-2025), which includes adaptation and resilience actions.
 - To be able to deal with major disasters, Lagos State Government has developed a disaster management structure with the establishment of the Lagos State Emergency Management Agency and the Lagos State Safety Commission, in collaboration with the police, traffic authorities, and health services.² However, disaster management is still encumbered by challenges of capacity, equipment, and integration.
 - The Lagos Resilience Strategy proposes initiatives to improve disaster risk management.

5. Buildings, infrastructure systems and urban sprawl contribute to pollution and carbon emissions, exacerbating climate risks

Buildings are a major contributor to carbon emissions and air pollution

- The highest share of greenhouse gas emissions is from stationary energy: Residential buildings account for 21% of these emissions, manufacturing accounts for 23%, while commercial activity accounts for 11%.¹
- Due to poor energy systems in buildings, about 80% of Lagos' population relies on diesel generators during power outages, which are polluting and pose health and environmental risks.²
- Reforms in the building sector are necessary so that buildings are designed and constructed or retrofitted with systems that minimize emissions, through renewable energy sources.

The transportation sector is also a major contributor, accounting for 20% of GHG emissions in Lagos.

- This could be attributed to urban sprawl and heavy traffic congestion which extends commute times and increases carbon emissions.
- Reforms are necessary to minimize emissions such as through increasing use of alternative modes to road transport, supporting mass transit and transit-oriented development, and decarbonizing the public transit fleet.

DEVELOPMENT TRENDS AND CHALLENGES

5. Buildings, infrastructure systems and urban sprawl contribute to pollution and carbon emissions, exacerbating climate risks

The waste sector is the highest source of particulate matter (PM2.5) and third largest source of GHG emissions in Lagos¹

- The waste sector contributes about 16% of Lagos' total emissions.²
- Waste-related emissions are attributed to the limited SWM system, with households generally relying on open dumpsites, open burning and biomass burning for waste disposal: Municipal solid waste (MSW) in dumpsites and its open burning together with biomass burning constitute the highest source of particulate matter concentrations (PM2.5) in Lagos, making up about 32% of the PM2.5 concentrations.³
- The main pollution in Lagos can be associated with solid waste/plastic.⁴ Plastic improperly disposed into drainage channels is clogging the drainage system and leading to floods, with plastic waste flowing into streets this poses serious environmental degradation and health risk for humans and animals through the breeding of pests and disease vectors and contamination of both surface and groundwater.

Insufficient drainage capacity contributes to urban flooding, while paved areas and buildings lacking infiltration and clogged stormwater canals exacerbate flood risks.⁵

Policy reform and investments are needed for buildings and infrastructure systems to be upgraded and/or retrofitted to be climate-smart.

[1] LSDP 2052.

[2] & [3] Akpokodje, J., Weaver, C., Fagbeja, M., Forastiere, F., Spadaro, J., Johnson, T., Ugochukwu, O., Osunderu, O., and Guttikunda, S. 2022. Air quality management planning for Lagos State. The World Bank, August 2022.

[4] and [5] CDR International, World Bank. October 2022. Multi-Sectoral Resilient Plan (MSRP) and Pre-Design Studies for Coastal Resilience in Nigeria: Intervention Site Report.

development trends and challenges 6. Significant investment needed to close infrastructure gap and upgrade to climatesmart systems

Considering the multitude of challenges Lagos faces with respect to sprawling spatial development, climate resilience and disaster risk management, and quality and availability of basic infrastructure and services to meet the needs of Lagos' rapidly growing population, significant investment is needed to close the infrastructure gap and upgrade/retrofit buildings and systems to be climate-smart:

- Lagos estimates that it needs over USD 50 billion to address an investment gap across transport, water, solid waste management, and information and communications technology.¹
- By comparison, Lagos has managed to invest less than USD 1 billion annually over the last decade.²
- At current levels of capital spending, it will take 50 years for Lagos to address the investment gaps.

Lagos is doing poorly in all indicators of livability and services, necessitating major reforms and investments



While Lagos is the largest and fastest growing state (3.2% state population AAGR compared to 2.6% national pop AAGR), it is ranked among the lowest cities for livability.



Only 14% of households receive steady, reliable supply of electricity (>8 hours per day).



Housing deficit of ~3.3 million units, with 50-75% of the population living in informal housing.



The city is at high risk of river and urban flood and highly exposed to coastal erosion, with flood damages estimated to cost almost \$4 billion each year and coastal damage estimated at approx. \$1.7 billion each year.



Heavy reliance on road transport (98%) and insufficient transport infrastructure result in commuters spending an average of 4 hours daily in traffic.



Only 35% of the population has access to the public water supply; only 5% is connected to the public sewerage system.



Waste collection rate is 20-30% and only 13% of recyclable waste is recycled. Dumpsites, most notably the Olusosun site, are far overloaded.



Buildings, transportation and the waste sector are major contributors to GHG emissions while improper solid waste/plastic disposal is the main source of air pollution, contributing 32% of particulate matter (PM2.5).

The next section presents an overview of the systems that have led to the challenges that Lagos is facing, followed by recommendations on what can be done to address the challenges and support LASG in realizing its policy goals and objectives.

4. Constraints and Drivers of Change



Image credit to Kateregga1 under license by Creative Common

Image credit to Joshua Doubek under license by Creative Commons

CONSTRAINTS AND DRIVERS OF CHANGE Overview

Four main constraints are holding Lagos back from fully realizing its development potential

Four inter-linked systems are currently holding Lagos back from fully realizing its development potential and its role in leading economic growth and poverty reduction for the country and region, BUT they can be transformed to become drivers of change:

- 1. Weak urban governance and finance systems to deliver sufficient housing and services needed to meet the demands of Lagos' growing population
- 2. Ineffective urban planning system holds down sustainable growth and exacerbates informality
- **3. Fragmented land administration** stymies affordable housing development, exacerbates informality, hampers economic development and limits revenues
- **4. A lagging business environment** inhibits private development, productivity and inclusive economic growth

These four constraints are discussed in this section.

Governance issues pose the most significant constraint to the sustainable growth and development of Lagos, affecting all other constraints

Three interrelated governance challenges hold back effective and efficient urban management and service delivery in Lagos:

- 1. There is a "missing" city level to plan effectively, coordinate land use planning with service provision, and develop and manage urban infrastructure and services systems
 - The Nigerian governance system does not include a unit of government for urban areas instead federal, state and local governments provide urban public goods and services.
 - The 1999 Constitution defines the functions of federal, state and local governments. However, in the case of Lagos, some of the functions of local governments have been taken over by the state government. This has negative impacts on the effective delivery of urban services.
 - As a state, Lagos has constitutionally defined functions and powers that go far beyond a municipal or metropolitan mandate, and thus, is less focused on purely urban priorities than municipal governments would be. But the state government plays a de facto role as city manager, with Lagos' 20 local government areas (LGAs) and 37 local council development areas (LCDAs) playing a minor role, raising concerns about local accountability and citizen engagement.
 - In practice, federal, state, and local levels often overlap in providing urban services, leading to inefficiency and little accountability. At the state level, functional responsibilities are scattered across 168 ministries, departments and agencies.

Governance issues pose the most significant constraint to the sustainable growth and development of Lagos, affecting all other constraints

- 2. Capacity challenges within each unit of governance slows service expansion and hinders quality of service provision
 - The state government is responsible for many urban services typically administered at the municipal or metropolitan level, but since the state's functions and powers go beyond a city-level mandate, institutional capacity is lacking to prioritize focus on investing and expanding urban service networks.
 - At the lowest scale, LGAs/LCDAs have responsibility for some urban functions but have low capacity for performing them and little fiscal and administrative autonomy. LGAs/LCDAs operate as deconcentrated arms of the state government – Local Council Managers are state-appointed and typically are not technically qualified to perform on their mandate.
- 3. Weak mechanisms for coordination across jurisdictions and amongst the different parties involved in delivering municipal services deter successful service planning, investment, operation, and maintenance. Blurred responsibilities across government levels and agencies makes upward and downward collaboration more challenging and thus hinders efficient and effective service delivery and operations.

Institutional changes are necessary to more effectively and efficiently bring about a greater focus on tackling urban issues and service provision.

[1] Federal government-provided services include, inter alia, electricity, federal roads, federal railways and air transport.

ROLES OF STATE AND LOCAL GOVERNMENTS IN THE PROVISION OF SERVICES ¹

State	Local	Reality
Secondary and higher education	Primary education	State handles education
Public hospitals	Rural health and primary health centres	State handles public hospitals while LGAs handles rural and primary health centres
Construction and maintenance of state roads and road lightening infrastructure (e.g., collector roads, parks)	Maintenance of feeder roads	State takes the lead role in the maintenance of feeder road
Water supply	Sanitation infrastructure and services (provision of street drains, sewage disposal, provision of public toilets)	State take the lead role in the provision of drains and sewage disposal while LGAs handle provision of public toilets
Housing	Solid waste collection and disposal	State handles housing and solid waste management
Town and City Planning	Provision of craft and small industries	State handles planning, LGAs handle craft and small industries
	Creation and regulation of markets, stalls, slaughterhouses etc.	State carry out oversight functions over the regulation of slaughterhouses
	Installation of street lighting	State handles

The lack of an urban or municipal finance system results in poor ability to deliver sufficient urban goods and services for Lagos' growing population

- The state government is expected to deliver statewide public goods and services and has constitutionally defined functions and powers (such as legislative and regulatory authority) that would generally be seen as going well beyond any municipal or metropolitan mandate.
- Local governments have constitutionally prescribed mandates and fiscal powers that are more restricted than is typically the case for municipalities in other countries. Local councils have very little autonomy and much more limited fiscal and financial management capacity than the state government. This is attributed to two main factors:¹
 - The share of federally collected revenues allocated to local governments flows through the state government, providing the state with the means to "deduct" charges from federal transfers for the functions the state has taken over from local governments **this** leaves local governments with little revenue to support delivering on their mandate.
 - The State also exercises control over local governments through expenditure authorization powers, and local government annual budgets are subject to prior approval by the state Ministry of Local Government and Community Affairs. Essentially, budgetary resources at the local level are spent in accordance with decisions made by state governments.
- As a result of this system, local governments are marginalized players in urban finance, and urban public goods and services are provided and financed in a largely ad hoc or residual way. The current system is insufficient to address the needs of Lagos' residents.

Several features of Lagos' finance system further present challenges for sustainable development (1/4)

1. Revenues are insufficient to support needed capital investments

At the state level:

- **Own source revenues dominate** (known as internally generated revenues [IGR]) ~70% of total state revenues, via state-administered taxes and fees, BUT:
 - IGR has increasingly been below targets¹
 - Tax collection has been limited compared to its potential: Property taxes have great potential but play a minor role (2% of total IGR)²
- Federal transfers are also a major source (mainly through statutory allocations and VAT), contributing ~30% of total state revenues, BUT:
 - Transfer amounts are contingent on oil and gas revenues, which are highly vulnerable to fluctuations in world energy prices, and
 - Capital transfers (such as the refund for road construction at 10% of revenues) are ad hoc.

At the local level: LGAs receive very little federal transfers and local IGRs are insignificant to support sustainable urban development³

[1] LSDP 2052[2] LSDP 2052[3] World Bank. 2016. From Oil to Cities: Nigeria's Next Transformation.

LAGOS STATE REVENUES BY SOURCE (2019)



Several features of Lagos' finance system further present challenges for sustainable development (2/4)

1. Revenues are insufficient to support needed capital investments

Existing tax base coverage and collection rates could be much improved:

- Unlike other states, Lagos derives more than half its revenues from state-administered taxes and fees.
- **Personal income tax (PAYE)** is by far the most important, accounting for over 50% of all recurrent revenues in 2019, BUT:
 - Nearly all PAYE revenues are derived through withholding by employers, leaving businesses, large and small, out of the tax net.
 - The state is now working to improve collection from large businesses, high net worth individuals (HNWI) and the informal sector: incomes from businesses and property of HNWI are under-reported while small-scale traders and other businesses do not report incomes at all.
- **Property taxes** have great potential to increase IGR, BUT tax base is limited due to incomplete land registration and rates remain low.¹ The current yield of property tax is trivial (equivalent to US\$ 0.43 per capita in 2019 compared to US\$ 160 per capita in Johannesburg). Poor enforcement is also an issue.
- The state is working on strengthening tax administration (PAYE and property taxation), aiming to update at least 50% of records of all properties in urban areas, to increase the tax base.²

Several features of Lagos' finance system further present challenges for sustainable development (3/4)

2. Spending trends are unclear

- In 2020, the state spent N 1,168 billion: ¼ on general public services (incl pensions and interest on debt), ¼ on economic affairs (mainly transport), 20% on education and health, and 3% on housing.
- Debt repayment makes a major claim at 17% of expenditures.
- Recurring expenditures are high and increased by 4% in 2020.¹ For local governments, limited revenues result in majority of expenditures going towards the costs of local official salaries.
- Levels of spending on operations and maintenance of infrastructure are difficult to determine-partly because detailed information on expenditures is not available and partly because it is unclear as to whether maintenance spending is systematically classified and recorded as recurrent or capital.²
- Late-2019, Lagos was either running a surplus (according to income statements) or just breaking even (according to cash flow statements).

LAGOS STATE EXPENDITURES BY FUNCTION



Source: World Bank, 2021.

Several features of Lagos' finance system further present challenges for sustainable development (4/4)

3. Debt levels are extremely high, raising rollover risks

- Borrowing is critical, just to pay the principal on old debt: in 2019, Lagos borrowed N 118 billion but spent N 153 billion repaying principal on old debt, forcing it to draw down N31 billion in reserves.
- With a total debt burden of N1.04tn in 2020, up by 19.73% from N871.33bn in 2019, Lagos State is the most indebted state in the country.¹ The state's debt profile is rising rapidly due to the city's ambitious plan to speed up completion of several infrastructure projects and to boost the state's technology capacity and food security.²
- To finance capital investments proposed under the LSDP, additional borrowing will be required given low revenues - efforts to increase revenues are highly necessary to finance needed capital investments.



Trends in Liabilities

Source: World Bank, 2020.

[2] Fitch Ratings. 2022. https://www.fitchratings.com/research/international-public-finance/fitch-affirms-lagos-state-at-b-outlook-stable-02-09-2022.

CONSTRAINTS AND DRIVERS OF CHANGE 2. Ineffective Urban Planning System

The absence of municipal and metropolitan authorities with specific responsibility for urban areas compromises the effectiveness of planning in Lagos and hampers sustainable development

- The Ministry of Physical Planning and Urban Development (MPPUD) has responsibility over preparation of regional and sub-regional urban master plans, and development plans. Local governments are <u>not</u> involved in planning their urban areas.
- Various plans have been developed, including the Masterplan of Metropolitan Lagos (1980 2000) and 13 model city plans: 8 have been completed, 2 are on-going and 3 are in draft and awaiting approval. Some lower order plans for small towns and urban regeneration plans for slum communities have also been commissioned. But across the board, plan implementation has been slow largely due to administrative bottlenecks and because plans do not have legal backing the state lacks a law that makes physical plans the binding framework to guide development.
- Other plan deficiencies include:
 - Land use plans are overwhelmingly aspirational. They lack infrastructure and investment density to match population density and are not linked to a financing plan.
 - Plans envisage fully serviced peri-urban developments that are remote from existing urban realities, but the lack of reliable population data impedes effective projections and planning, while feasibility studies are lacking for sound site selection for new development areas.
 - Limited citizen engagement: Citizens are not meaningfully engaged in the planning process. Though plans are public documents, they are largely inaccessible to members of the public. Citizens typically only interact with the planning agencies during enforcement and/or demolition exercises.
 - Plans are made in isolation, leading to inefficient development and increasing the costs of service provision. Development in Lagos is largely hinged on economic planning, hence the LSDP. Strategic plans, sectoral plans and urban master plans are not coordinated. Resiliency to climate and disaster risks not integrated into master plans.
 - The metropolitan plan is outdated the LSDP calls for the creation of a comprehensive strategic master plan for the state as one of its key initiatives.
- There is an urgent need to integrate existing and proposed master plans into a comprehensive metropolitan plan that strategically coordinates land development and service provision.

CONSTRAINTS AND DRIVERS OF CHANGE 2. Ineffective Urban Planning System

Inadequate plans and a deficient regulatory system hold down economic development and exacerbate informality

- In terms of effectiveness of plans, many plans are not followed as most development takes place informally and plans lack regulatory instruments to enforce compliance.
- The **complicated and cost-prohibitive planning permit and building approval process** plays a significant role, posing as a major constraint to doing business in Lagos,¹ leading residents to evade the process and resulting in the proliferation of informality and unsafe buildings.
 - The planning permit and building approval process involves numerous agencies and ministries, and limited use of e-applications means permit processing is mostly conducted manually. The period of processing planning and building permits is extended due to administrative bottlenecks such as file movement, missing files or documents, unavailability of officials, and change of officers. A procedure is in place to reduce the permit approval process from 90 to 30 days, but in reality, the process takes 42 days.²
 - There is a special fast track building plan approval application system that allows for quick processing of applications within one week of the application, but this is based on the payment of 500% of the assessment fees on the application, making this cost-prohibitive for the majority of residents development control is misinterpreted as a revenue generating activity, hence local permitting offices (which are under State supervision) are aggressive in enforcement.
 - Unsafe buildings get constructed as a result of citizens evading the permitting process and weak enforcement of building codes and construction regulation. Building collapse occurs as a result of poor workmanship and ineffective supervision, use of substandard materials, hasty construction, illegal conversion/change of use, and/or poor equipment adopted in construction.

CONSTRAINTS AND DRIVERS OF CHANGE 3. Fragmented Land Administration

Land administration remains a major bottleneck to economic and planned growth and also contributes to informality

Fragmented and bifurcated land administration impedes the efficient delivery of land for development. Three core challenges constrain the functioning of a healthy land market in Lagos:

1. Most land claims are insecure and even state-granted titles can be revoked: The 1978 Land Use Act (LUA), the legal framework for land administration in Nigeria, confers all powers of ownership of lands on the state governors and their Land Use and Allocation Committee, and effectively reduces all claims on land to leasehold status (via a Certificate of Occupancy), vesting all ownership (freehold) in the hands of the government. The LUA grants governors the authority to revoke statutory and customary rights of occupancy if the land is required for "public purpose." Thus, a C of O does not constitute title security.

2. High barriers and costs to register land mean that few property owners bother registering, exacerbating informality and vulnerability:

- Land administration is bifurcated between statutory and customary land management. Most land transactions are conducted informally, with customary land passed down over generations and not registered by the State. Acquiring formal title involves double purchase payments: to the indigenous land owner and then to the State in the form of a ground lease payment and to obtain a C of O.
- The LUA recognizes informal land transactions and expects the purchaser to perfect the title to land; however, the land registration/regularization process is costly, lengthy and cumbersome, leading many citizens to circumvent the process, driving low land registration.
- Lack of tenure leaves the majority of residents vulnerable to forced eviction in light of government-led urban development efforts. Many informal settlements around the urban core have been earmarked for either demolition or relocation through various model city plans. Usually, forced eviction comes with no compensation or alternative arrangements. When alternatives are given, the evictees are relocated to remote areas, where they are faced with more livelihood challenges.

3. State and local governments have little information about the location, ownership, or use of specific parcels:

- The Lagos State Lands Bureau (LSLB) is responsible for land administration while the Office of the State Surveyor General handles mapping, but the land registration database and the cadastral mapping database are not linked, leading to inefficiencies.
- Lack of land information constrains urban planning, limits private sector investment, and thus hinders sustainable development of the megacity. It also limits the collection of taxes and thus the ability of the governments to raise essential resources for investments.

CONSTRAINTS AND DRIVERS OF CHANGE 3. Fragmented Land Administration

The state government has carried out several reforms to improve the land administration system, with the aim of attracting investment, but challenges persist

- Other land challenges prevalent in Lagos include land speculation after legal acquisition, locking land available for needed housing development, and land grabbing.
- Land reforms include:
 - Streamlining the registration process to issue a C of O within 30 days: In reality, the process can take 105 days.¹
 - Efforts made to digitize land information, but damaged records impede the process.
 - The 2020 Lagos State Land Use Charge Law provides for taxation of vacant properties to spur development and limit speculation.² Occupancy rights can also be revoked when land allocated for a proposed development has not commenced construction within a period of 2 years. However, this is not always the case if the allottee has political influence.
 - The Land Grabbers Law of 2016 provides for 10 years imprisonment or a fine up to N5 million naira (about \$13,000) or both to punish offenders.³ The law has helped reduce the number of land grabbing cases.
- Further land reforms are necessary to provide better institutions for urban land management and improve tenure security. Once in place, they will improve land regularization and better manage growth of slums, simplify registration for firms and enable a better business environment, foster better planning and urban development, and support increased property tax revenue generation.

CONSTRAINTS AND DRIVERS OF CHANGE 4. A Lagging Business Environment

Cross-cutting constraints contribute to a high cost of doing business in Lagos, inhibiting economic development

Key constraints include:

Inadequate infrastructure is the biggest contributor to low productivity in key sectors

- Insufficient power, transport, water and sanitation, and ICT infrastructure
- Market access/connectivity within the state is constrained by the urban spatial structure jobs located in the center (the Island) but many live in the outskirts due to high cost of living/lack of affordable housing in the urban center, leading to traffic. Public transport is limited outside the urban core, while the poor intra-city road and rail systems are in poor condition.
- The private sector could play a bigger role to address the infrastructure gap, but the PPP institutional and regulatory framework needs to be strengthened.

Poor access to land due to inefficient land administration

- The private sector faces significant hurdles in identifying land for investment, with uncertainty around ownership, and conflicts ensue before investments begin.
- Without geographic systems and data, investors and the state are unable to determine the best-suited locations for investment.
- Cumbersome building permit process also hampers business development

Constraints to inclusive economic development:¹

- Poor access to finance, especially for Lagos' high share of MSMEs:
 - At the national level, a weak regulatory framework for microfinance banks
 - MSMEs lack technical capacity to make successful loan applications
- For informal sector actors, high compliance costs to formalize their businesses.
- Weak competition in consumer product markets retail prices are generally higher in Lagos than in other major cities in the rest of the world. Removing restrictions to competition could create new markets, and boost growth and welfare.

Poor human capital outcomes adversely affect labor quality, productivity, and economic growth

- Working population lacks the requisite skill sets and education.
- The government's low expenditure on health over the past two decades has limited the expansion of highly costeffective interventions, stunting health outcomes and exposing a large share of the population to catastrophic health expenditures.
- Other constraints include ongoing violence, insecurity and corruption
- Together, these constraints reduce the incentive to formalize business activity, resulting in the high rate of informality and low productivity.

- Lagos face a multitude of challenges and constraints, many of which are interlinked. Resilience and social equity are cross-cutting challenges that are impacted by multiple sectors.
- The bottlenecks hamper sustainable spatial growth, access to basic services and infrastructure, and the effective management of the mega-city.
- However, Lagos has a key opportunity to intervene to better plan and manage the development of the state and to make necessary investments to foster resilient, integrated and inclusive growth through a coordinated multi-sectoral approach.
- Though change will not happen overnight! It is critical to sequence policy reforms and prioritize interventions in order to achieve the desired outcomes.
- The next section presents a plan for Lagos to realize its development potential and to put the state and local governments on a path to support improved productivity, livability and poverty reduction.

5. Recommendations

To Harness the Development Potential of Lagos



Image credit to Staderogba under license by <u>Creative Commons</u>

RECOMMENDATIONS What needs to be done: a coordinated and integrated multi-sectoral approach to support resilient and inclusive development and prosperity

Pathway to Harness the Development Potential of Lagos

- A coordinated and integrated multi-sectoral approach is needed to unlock Lagos' full development potential and its role in leading economic growth and poverty reduction for the country and region.
- Reforms across sectors are urgently needed to address the needs of Lagos' rapidly growth population and to support sustainable development of Lagos in a business-as-usual scenario without adequate planning and coordination of investments, the economic costs and the vulnerability of Lagos' population will increase exponentially with recurring natural disasters increasingly driven by climate change.
- Through the multi-sector analytical review of Lagos, four interlinked "areas of interventions" are identified to enable LASG to realize the policy aspirations and objectives stated in the LSDP, the Lagos Resilience Strategy, the Lagos Climate Action Plan and other government spatial and sectoral plans.
- For each intervention area, a set of recommendations is proposed. In addition, short and medium- to long-term development initiatives and priority actions are identified to implement each recommendation. These are presented in this concluding section.
- Moving ahead, major challenges will include prioritizing investment needs and choosing optimal forms of service provision, including the private sector's role, and clearly defining the functions and powers of institutions.

Four Areas of Intervention:

- 1. Strengthen governance, planning and finance systems to support coordinated and sustainable growth and development a multisectoral planning and investment vehicle is highly needed;
- 2. Invest in integrated and climate-smart infrastructure and services to improve livability and resilience and foster economic growth;
- **3. Activate land and housing markets** for improved planning, livability and economic growth; and
- 4. Support inclusive economic development for increased productivity and improved livelihoods


such as solar.

Stakeholder Consultations

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (1/2)

Initiative	Timeframe	Leading Institution(s)
Support more effective and efficient delivery of services through improvements in state and local governance	M, L	LASG
Establish a metropolitan-wide development agency to support integrated planning, coordinated service provision and land development	Μ	Ministry of Physical Planning and Urban Development (MPPUD), the Office of Public-Private Partnerships (OPPP), and other state agencies
Develop a multi-sectoral governance framework for effective capital planning	S, M	MEPB in collaboration with relevant MDAs (this would be among the responsibilities of the Lagos development authority once established)
Establish protocols and procedures for inter-agency coordination	S, M	MEPB (Lagos development authority once established)
Develop a digital platform for inter-agency coordination	Μ	MEPB (Lagos development authority once established)
Strengthen technical capacity of urban service sector authorities, LGAs and LCDAs to improve delivering on mandates	M, L	LASG, in partnership with Ministry of Local Government and Community Affairs, MDAs responsible for regulating urban services (e.g., LAMATA, LAWMA, any newly established metropolitan-level regulatory body), LGAs and LCDAs

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (2/2)

Initiative	Timeframe	Leading Institution(s)
Improve performance and enhance accountability and transparency through improved data management	M, L	LASG, in partnership with Ministry of Local Government and Community Affairs, MoF, MEPB and other MDAs
Bolster state finance system to support needed investments through technical capacity building to improve OSR generation, strengthen the regulatory framework for PPPs and tools to incentivize private investment, and strengthen management of public investments and expenditure	M, L	Ministry of Finance, MEPB, Lagos Internal Revenue Service

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (1/2)

Strategy	Timeframe	Leading Institution(s)
Develop a visionary and coherent metropolitan-level spatial plan	S – M	MPPUD (Lagos development authority once established), in partnership with MEPB
Increase effectiveness of plans	S – M	LASG in partnership with MPPUD (Lagos development authority once established)
Support technical capacity building for agencies involved in planning activities to improve plan implementation, coordination, monitoring and enforcement	S – M	MPPUD (Lagos development authority once established), Physical Planning Permit Authority (LASPPPA), Building Control Agency (LASBCA), Urban Renewal Authority (LASURA), Ministry of Waterfront Infrastructure Development

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (2/2)

Initiative	Timeframe	Leading Institution(s)
Promote urban regeneration and compact mixed-use development to counter urban sprawl and reduce carbon emissions	S – M	MPPUD (Lagos development authority once established)
Where urban expansion is necessary, ensure that new development is economically, socially and environmentally sound	S – M	MPPUD (Lagos development authority once established
Develop urban landscape design guidelines for resilient public spaces	S – M	MPPUD
Develop a greening program to increase provision of green infrastructure and mitigate urban heat island effect	S - M	MPPUD (Lagos development authority once established), in partnership with Ministry of Environment and Water Resources (MEWR) and Ministry of Energy and Mineral Resources (MEMR)
Implement Environmental Management Tools	S - M	MPPUD (Lagos development authority once established), in partnership with Ministry of Environment and Water Resources (MEWR) and Ministry of Energy and Mineral Resources (MEMR)
Restore critical wetland sites to promote biodiversity	M - L	MEWR, in partnership with MPPUD, Ministry of Waterfront Infrastructure Development
Develop building material and solar guidelines for new construction	S - M	MPPPUD
Develop a pilot urban eco-district program	S - M	MPPUD in partnership with MEMR

Recommendation 2.1: Improve urban mobility through development of an enhanced transportation network that is integrated, multi-modal and supports carbon emissions reduction

Initiative	Timeframe	Leading Institution(s)
Develop a multi-modal urban mobility system	Μ	Ministry of Transportation in partnership with Ministry of Waterfront Infrastructure Development, LAMATA, Lagos State Waterways Authority and MPPUD
Continue efforts to improve mass transit solutions while investing in smaller capacity modes of urban mobility	M - L	LAMATA in partnership with MPPUD
Decarbonize public transport fleet	S - M	LAMATA in partnership with MEMR

Recommendation 2.2: Develop an integrated solid waste management system - waste minimization, collection, separation and treatment - through comprehensive planning, investment and capacity building (1/2)

Develop an integrated solid waste management plan and platform	S – M	Ministry of Environment and Water Resources; LAWMA
Develop new solid waste management infrastructure and rehabilitate infrastructure	M – L	Ministry of Environment and Water Resources; LAWMA
Improve waste collection and separation	М	LAWMA
Develop replicable pilot municipal residential and public schools recycling and composting programs	S – M	Ministry of Environment and Water Resources; LAWMA
Build capacity to improve institutional effectiveness in waste management and raise public awareness	S – M	Ministry of Environment and Water Resources; LAWMA
Establish and enforce penalties on open burning of waste and littering	S - M	Ministry of Environment and Water Resources

Recommendation 2.3: Increase access to water supply and sanitation services and develop an integrated urban water management system that coordinates water supply, sewerage, stormwater drainage, wastewater treatment, solid waste management and land use planning

Initiative	Timeframe	Leading Institution(s)
Develop a comprehensive and realizable integrated urban water management system with state-wide coverage	S - M	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
Invest in new WSS infrastructure to extend access to unserved/underserved areas and rehabilitate existing infrastructure for more efficient service delivery	M – L	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
Build financial and technical capacity for improved operations and maintenance of WSS infrastructure	Μ	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
Develop tools and assessments for improved flood risk and coastal erosion management	S - M	Ministry of the Environment and Water Resources

Recommendation 2.4: Increase access to reliable energy through implementing policy reform and supporting clean energy sources, such as solar (1/3)

Implement a comprehensive energy reform policy, in coordination with federal regulators	S – M	Ministry of Energy and Mineral Resources
Improve financing for renewal energy sources	М	Ministry of Energy and Mineral Resources
Increase commercial use of renewable energy	М	Ministry of Energy and Mineral Resources
Support the operations for renewal energy	S – M	Ministry of Energy and Mineral Resources
Create an enabling environment for renewal energy delivery	S – M	Ministry of Energy and Mineral Resources
Develop a pilot urban eco-district program	S - M	MPPUD in partnership with Ministry of Energy and Mineral Resources

Recommendation 3.1: Improve land administration through complete digitization of regularization process and capacity building to increase tenure security, foster better planning and urban development, enable private investment and support increased property tax revenue generation

Initiative	Timeframe	Leading Institution(s)
Develop a comprehensive land information system	S – M	Lands Bureau, Office of the State Surveyor General, MPPUD, government agencies that own land assets
Strengthen capacity to increase efficiency of land titling and registration processes	S – M	Lands Bureau, Office of the State Surveyor General
Enforce vacant land taxation program to prevent land banking and stimulate housing development	S – M	MPPUD and Lagos Internal Revenue Services (LIRS)
Identify mechanisms to improve property tax collection	S – M	LASG in partnership with Ministry of Finance

Recommendation 3.2: Increase access to formal, affordable and climate- and disaster-proofed housing through comprehensive planning, increased private sector participation, innovative design, housing finance and slum upgrading programs

Develop a state-level comprehensive housing policy/strategy to improve access to quality affordable housing and limit the proliferation of informal settlements	S – M	Ministry of Housing
Incentivize private sector participation for the development of affordable housing	S – M	Lands Bureau, LASPPPA, Ministry of Housing, LASURA, MPPUD
Support innovative building strategies to reduce costs of construction thereby increasing housing affordability	S – M	Ministry of Housing, MPPUD
Expand slum upgrading program to include onsite housing improvements	М	Ministry of Housing in partnership with LASURA , LASBCA and MPPUD

RECOMMENDATIONS Intervention Area 4: Foster economic development and inclusive growth

Recommendation 4.1: Prioritize infrastructure investments that create jobs and promote economic development			
Initiative	Timeframe	Leading Institution(s)	
Support infrastructure investments (power, water supply and sanitation, SWM, transport and ICT)	M - L	MEPB	
Recommendation 4.2: Enhance process of doing business			
Support further building permit process reform	S - M	Physical Planning Permit Authority (LASPPPA)	
Improve access to land through land administration reform	М	Lands Bureau, Office of the State Surveyor General	
Recommendation 4.3: Support inclusive economic development			
Prioritize human capital investments to develop job skills and improve labor quality and productivity through job skills training and education	S – M	Ministry of Wealth Creation and Employment; Ministry of Youth and Sports; Ministry of Education	
Remove restrictions to competition to provide more affordable access to goods and increase welfare	М	Ministry of Commerce, Industry & Cooperatives; MEPB	
Provide support to MSMEs to improve access to finance	Μ	Ministry of Finance; Ministry of Commerce, Industry & Cooperatives; Ministry of Wealth Creation and Employment	
Reduce compliance costs to support increased business formalization	S - M	Ministry of Commerce, Industry & Cooperatives	

In summary, to support LASG in advancing implementation of its policy strategies and plans and to fully realize the development potential of the mega-city, Lagos needs to work on:



6. Annexes

Detailed Development Initiatives and Selected Actions Studies prepared under LADP References



Detailed Development Initiatives and Selected Actions

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (1/4)

Initiative	Priority Actions	Leading Institution(s)
Support more effective and efficient delivery of services through improvements in state and local governance	 Review of MDAs and their functions to eliminate overlapping mandates. State governance could be streamlined to reduce inefficient staffing and spending. Support true decentralization of urban governance through strengthening human and technical capacities of LGAs and LCDAs to perform functions constitutionally delegated to local governments. Support financial capacity building and fiscal autonomy of LGAs and LCDAs to empower them to deliver on their mandates. This could include strengthening local governments' organizational and financial capacity 	LASG
Establish a metropolitan-wide	by addressing critical human resource gaps and improving own-source revenue generation.	Ministry of
Lestablish a metropolitan-wide development authority to support integrated planning, coordinated service provision and land development	 Consider establishing an independent development agency responsible for integrated development planning and coordinating major infrastructure investments and service provision at the metropolitan-wide level or consider upgrading an existing agency (i.e., LASURA) to resume such role. Involve the agency in streamlining PPPs by working closely with the Office of Public-Private Partnerships (OPPP) to facilitate cooperation between the private sector and MDAs. Develop a legislative framework to require cooperation between asset owners and operators for coordinated capital investments. This could be through establishing a board that includes high-level representation from each of the state-led planning and development agencies (such as physical planning, transport, water, solid waste management, etc.) as well as representatives from each local government. 	Ministry of Physical Planning and Urban Development (MPPUD), the Office of Public- Private Partnerships (OPPP), and other state agencies

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (2/4)

Initiative	Priority Actions	Leading Institution(s)
Develop a multi-sectoral governance framework for effective capital planning	 Develop a policy and procedures manual that will set out the requirements for asset owners and operators to collect data, disclose and share information on their programs and projects, including location, scope, schedule and budget, and support collaborative efforts to avoid and resolve conflicts between projects and pursue opportunities to bundle work to reduce construction cost, time and impact on the public. Produce a recommended hierarchy of committees and working groups that will facilitate joint planning and coordination. Develop an action log that will serve as an official record of mutual commitments. 	MEPB in collaboration with relevant MDAs (this would be among the responsibilities of the Lagos development authority once established)
Establish protocols and procedures for inter-agency coordination	 Develop a coordination methodology and tools to manage the flow of plans, contractual requirements, and key performance indicators for each asset owner/service provider. Establish protocols for the number of years prior to construction during which each type of capital project should be announced by its sponsor, the type of information about each capital project that is required for effective coordination, and the manner in which each type of project, based on cost and complexity, will navigate through a series of stage-gates. The coordination methodology will specify the procedures to identify and implement opportunities to bundle projects that can be delivered by a single stakeholder, and to either accelerate or delay projects to ensure that the overall sequence is the most efficient and in best interest of the public. 	MEPB (Lagos development authority once established)

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (3/4)

Initiative	Priority Actions	Leading Institution(s)
Develop a digital platform for inter- agency coordination	 Develop a database of infrastructure and utilities that are required to support urban development and management programs. This task will entail the acquisition of software, staff training across all State agencies on how to use the database and ensuring the secure management of the system. Develop a geographical information and management system to employ the database proactively for coordinated program planning, delivery and lifecycle operations and maintenance. An initial goal could be established to complete GIS mapping of 50% of urban properties. 	MEPB (Lagos development authority once established)
Strengthen technical capacity of urban service sector authorities, LGAs and LCDAs to improve delivering on mandates	 Support building technical capacity for the preparation of investment plans for each urban service sector. This includes collecting data from reliable sources and using evidence-based decision-making for proposed investments. LGAs and LCDAs should be involved in identifying the infrastructure and service gaps within their jurisdiction. Build human/technical capacity of service sector authorities for the on-going operations and maintenance (O&M) of capital investments. Require O&M costs to be a line item in agency budgets and the state's budget to ensure dedicated financial resources for O&M Support collaboration with NGOs and local universities for the development of urban management training programs for state and local government officials Strengthen capacity of ministries and/or single-purpose entities to better regulate urban services through performance monitoring and evaluation of service providers. This would entail: i) ensuring the production of reliable data at the local level; ii) establishing performance indicators; and iii) setting up reporting systems to track performance of service providers and to facilitate the identification of areas to improve performance. Continue to invest in e-governance technology to improve access to services and to facilitate efficient payment of services. 	LASG, in partnership with Ministry of Local Government and Community Affairs, MDAs responsible for regulating urban services (e.g., LAMATA, LAWMA, any newly established metropolitan-level regulatory body), LGAs and LCDAs

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.1: Strengthen urban management and service delivery through governance reform, cross-sectoral digital coordination, and technical and financial capacity building (4/4)

Establish KPIs/targets and monitoring and evaluation systems for each convice sector	
Provide technical assistance regarding data collection and reporting at the state and local levels. Increase transparency by providing access to financial and non-financial data and ensure compliance with formal open standards. Publish all available data sets according to open data standards.	LASG, in partnership with Ministry of Local Government and Community Affairs, MoF, MEPB and other MDAs
Improve own source revenue generation to support financing capital investments through strengthening tax administration capacity to: i) improve collection of personal income tax from large businesses, high net worth individuals (HNWI) and the informal sector, and ii) update property records to increase the tax base. Strengthen PPP institutional and regulatory framework and employ land-based financial and regulatory tools to stimulate private investment in urban development projects.	Ministry of Finance, MEPB, Lagos Internal Revenue Service
Strengthen management of public investments and expenditure through technical assistance and capacity support. This includes requiring transparency around expenditures in order to evaluate efficiency of service delivery and to be able to justify recommendations for the provision and/or maintenance of urban infrastructure and services. Establish performance-based financing for MDAs to improve implementation of sustainable urban	
F II C	Provide technical assistance regarding data collection and reporting at the state and local levels. Increase transparency by providing access to financial and non-financial data and ensure compliance with formal open standards. Publish all available data sets according to open data standards. Improve own source revenue generation to support financing capital investments through strengthening tax administration capacity to: i) improve collection of personal income tax from large businesses, high net worth individuals (HNWI) and the informal sector, and ii) update property records to increase the tax base. Strengthen PPP institutional and regulatory framework and employ land-based financial and regulatory tools to stimulate private investment in urban development projects. Strengthen management of public investments and expenditure through technical assistance and capacity support. This includes requiring transparency around expenditures in order to evaluate efficiency of service delivery and to be able to justify recommendations for the provision and/or maintenance of urban infrastructure and services. Establish performance-based financing for MDAs to improve implementation of sustainable urban projects with climate change considerations.

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (1/5)

Initiative	Priority Actions	Leading Institution(s)
Develop a visionary and coherent metropolitan-level spatial plan	 Develop a legislative framework for the preparation of a metropolitan plan in coordination with local master plans and urban renewal plans. This is the first step for the preparation of metropolitan spatial strategy to be adopted at the highest level in the state. Design and implement a participatory planning process. Local communities should be actively engaged throughout the planning and development process to ensure that investments address the needs of residents. 	MPPUD (Lagos development authority once established), in partnership with MEPB
Increase effectiveness of plans	 Strengthen the status of spatial plans as legally binding documents to improve coordination among key implementation agencies. Reassess the existing spatial planning hierarchy for legal and operational overlaps in terms of jurisdiction boundaries, alignment of spatial strategies, etc. (namely the regional, master, model city, action area plans and development guide plans for excised villages). Develop an improved planning and design process for Ministerial employees to follow in the preparation and review of feasibility of the different spatial planning products planned for the MTSS. Build capacity of state planners on integration of disaster risk management and climate change measures to enable resilient spatial planning process, from plan development through implementation. 	LASG in partnership with MPPUD (Lagos development authority once established)

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (2/5)

Initiative	Priority Actions	Leading Institution(s)
Support technical capacity building for agencies involved in planning activities to improve plan implementation, coordination, monitoring and enforcement	 Develop a legislative framework to require cooperation between state agencies and LGAs/LCDAs to prepare, implement and monitor progress of local master plans in coordination with the metropolitan plan and with lower order plans such as structure and neighborhood plans. Build technical capacity of MPPUD and parastatal MDAs that carry out planning-related activities to improve planning practices, including zoning, building code enforcement and reviewing construction practices to ensure that they are resistant to disaster risks. Build capacities of LGAs for the preparation of master plans and lower order plans. Build technical capacity to facilitate more efficient and expedient building permit process. This includes streamlining and fully digitizing permitting and payment processes. Identify other mechanisms to expedite the permitting process besides the expensive fast-tracking fee. Develop a monitoring and evaluation system that includes developing performance goals and indicators to track progress of permitting activities and hold accountability. 	MPPUD (Lagos development authority once established), Physical Planning Permit Authority (LASPPPA), Building Control Agency (LASBCA), Urban Renewal Authority (LASURA), Ministry of Waterfront Infrastructure Development

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (3/5)

Initiative	Priority Actions	Leading Institution(s)
Promote urban regeneration and compact mixed-use	• Develop urban master plans that prioritize urban regeneration and the development of compact and multifunctional districts and that serve to limit future urban expansion.	MPPUD (Lagos development
development to counter urban sprawl and reduce carbon emissions	• Evaluate the introduction of financial and/or development incentives/tools for developers to foster urban regeneration and compact development.	authority once established)
	• Identify mechanisms to renovate and repurpose existing buildings in the urban core (i.e., bringing existing vacant buildings into use).	
	• Use an asset management approach to identify government-owned brownfield sites and to prepare and release them for desired urban development.	
Where urban expansion is	• Conduct pre-feasibility/location studies for the proposed new urban districts under the 2052 LSDP.	MPPUD (Lagos
necessary, ensure that new development is economically, socially and environmentally	 Review the new Epe City Master Plan to ensure the cost-effective integration of resilient land use designs and densities with modern approaches to life-cycle operation and maintenance of infrastructure and utilities. 	development authority once established)
Sound	 Review the Badagry City Master Plan and lower order plans to ensure integration of climate and resilient measures with public and private development strategies and operating practices. 	
	• Strengthen the Yaba tech cluster through planning, design and construction strategies and methods that will enhance the national profile of the cluster along with increasing the availability of real estate for new and growing start-ups.	
	 For each new urban district, develop a strategy to coordinate urban planning, urban design and infrastructure/utility network expansion and extension to guide socially and environmentally prudent land use designs and land management practices, while also fostering conditions that are conducive to public and private investment in these urban areas. 	

RECOMMENDATIONS Intervention Area 1: Strengthen Urban Governance, Planning and Finance Systems

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (4/5)

Initiative	Priority Actions	Leading Institution(s)
Develop urban landscape design guidelines for resilient public spaces	Identify measures to improve resilience in the landscaping of surfaces and open areas. Such measures should include decreasing the urban heat island effect, bioremediation landscape solutions, the use of permeable materials to absorb and filtrate water runoff, shade & cooling, vegetation to cleanse polluted air, etc.	MPPUD
Develop a greening program to increase provision of green infrastructure and mitigate urban heat island effect	 Pilot the design and construction of new eco-parks that incorporate urban agriculture as a key design aspect. Identify government-owned spaces to develop gardens. Provide developer incentives to build gardens on privately-owned spaces. Develop new Standard Operating Procedures (SOPs) for the management and maintenance of open spaces, parks and gardens. Prepare a guideline document for urban planting which outlines planting schemes for open spaces, shading and cooling in parks and gardens, planting along major motorways, neighborhood streets and sidewalks, etc. Construct standardized interpretation signs at key parks outlining general usage policies for the public. 	MPPUD (Lagos development authority once established), in partnership with Ministry of Environment and Water Resources (MEWR) and Ministry of Energy and Mineral Resources (MEMR)
Implement Environmental Management Tools	 Implement tools including Environmental and Social Impact Assessment (ESIA) and Strategic Environmental and Social Assessment (SESA) among others. Identify potential environmental impacts on spatial planning including urbanization impacts on wetlands and biodiversity. 	MPPUD in partnership with Ministry of Environment and Water Resources (MEWR)

Recommendation 1.2: Support sustainable growth of Lagos through community-driven and climate and disaster-risk informed spatial planning and development (5/5)

Initiative	Priority Actions	Leading Institution(s)
Restore critical wetland sites to promote biodiversity	 Identify critical wetland sites in need of restoration and protection based on their biodiversity value, ecological potential, floodplain type, current land use, and nutrient reduction potential. Prepare engineering studies for preserving the wetland sites including baseline surveys, and detailed engineering designs for the sites. Conduct a public environmental awareness campaign to promote biodiversity conservation. Build capacity of personnel at State institutions in wetland management through an international study tour that enables the learning and exchange of expertise. 	MEWR, in partnership with MPPUD, Ministry of Waterfront Infrastructure Development
Develop building material and solar guidelines for new construction	Propose climate friendly energy generating options to reduce GHG emissions from building activity in commercial and residential areas.	MPPPUD
Develop a pilot urban eco-district program	 Select 3 eligible districts to pilot the program a conduct a mapping exercise of public buildings and monthly electric consumption rate in each district. Develop a clean energy strategy that calculates the existing district footprint and identifies measures to reduce carbon emissions through clean energy power sources, specifically in public buildings (such as schools and primary health centres). Set targets for the conversion of energy source to solar panels in public schools and primary health centres. Monitor reduction in carbon emissions and reliance on non-clean energy resources in each of the districts. 	MPPUD in partnership with MEMR

Recommendation 2.1: Improve urban mobility through development of an enhanced transportation network that is integrated, multi-modal and supports carbon emissions reduction

STRATEGY	PRIORITY ACTIONS	LEADING INSTITUTION(S)
Develop a multi-modal urban mobility system	 Based on the various existing plans for transport in Lagos, develop a comprehensive multi- modal urban mobility plan that considers the waterway, train, and road networks, public transport and non-motorized modes of transport into an integrated system Establish new multimodal transport gateway hubs through: i) conducting pre- feasibility/locational studies to select new hubs; ii) designing hubs to converge BRT lines with interstate buses, and with park-and-ride services for private passengers; and iii) developing a financial model for the construction and operation of identified new hubs through PPPs. 	Ministry of Transportation in partnership with Ministry of Waterfront Infrastructure Development, LAMAT A, Lagos State Waterways Authority and MPPUD
Continue efforts to improve mass transit solutions while investing in smaller capacity modes of urban mobility	 Continue to investment in mass transit (e.g., train, BRT) and smaller-capacity public transport systems (e.g., buses, waterways) Support non-motorized transport infrastructure investments (e.g., sidewalks, crosswalks and bike lanes), especially in high traffic areas, to promote safe pedestrian and cycling activity Adopt integrated planning for delivery of safe streets, urban spaces, and utility infrastructure lines along LAMATA's designated corridors Pursue a plan to professionalize semi-formal public transport operators. These efforts should build on the experience with Quality Bus System and BRT in Lagos. 	LAMATA in partnership with MPPUD
Decarbonize public transport fleet	Set aggressive but achievable targets for the conversion of the public bus fleet to electric vehicles.	LAMATA in partnership with MEMR

Recommendation 2.2: Develop an integrated solid waste management system - waste minimization, collection, separation and treatment - through comprehensive planning, investment and capacity building (1/2)

Initiative	Priority Actions	Leading Institution(s)
Develop an integrated solid waste management plan and platform. This shall be a state- wide 50-year plan that integrates waste minimization, collection, separation and treatment.	 Update previous projections of waste transfer and landfill operating capacity and lifecycle to account for alternative scenarios of urban development across the State and assumptions about the adoption of waste reduction, diversion and recycling efforts that may be undertaken; for example, to potentially integrate Extended Producer Responsibility schemes into waste management. Establish operational requirements of the 50-year planning horizon. Identify immediate and long-term waste management priorities. Develop a knowledge platform to provide authorities with operational information on collection routes, GPS tracking and verification of solid waste collection, calculation of collected waste volume, reporting on infrastructure issues that impact operational efficiency, etc. Develop guidelines on the disposal of special wastes (construction/ demolition, industrial, clinical, etc.) Develop initiatives for plastic waste management following the World Bank's synthesis report 	Ministry of Environment and Water Resources; LAWMA
Develop new solid waste management infrastructure and rehabilitate infrastructure	 Select sites for new landfills and conduct pre-construction studies: environmental studies (e.g., groundwater protection, infrastructure requirements, operating practices), financial studies (e.g., capital and annual operating budgets, revenue projections, outsourcing or PPP feasibility), and impact studies (e.g., construction and operating impact management and noise/odour mitigation). Prepare preliminary and detailed design, civil engineering studies, and operating manuals for a new landfill gas (LFG) recovery system which shall extract LFG and generate energy. Conduct environmental, financial and impact studies in support of the construction of transfer stations which aim at increasing the amount of solid waste transferred through stations thereby reducing curbside collection and transfer costs. 	Ministry of Environment and Water Resources; LAWMA
	• Conduct feasibility studies for the rehabilitation of existing dumpsites to improve environmental	

94

Recommendation 2.2: Develop an integrated solid waste management system - waste minimization, collection, separation and treatment - through comprehensive planning, investment and capacity building (2/2)

Initiative	Priority Actions	Leading Institution(s)
Improve waste collection and separation	• Institute source separated collection that will incentivize waste generators, waste pickers, and aggregators to separate at source, which will improve material recovery and the quality of the segregated materials.	LAWMA
Develop replicable pilot municipal residential and public schools recycling and composting programs. The objective of this component is to reduce residential solid waste heading to landfill, create employment opportunities within higher level of community engagement through residential waste recovery and reduce carbon emissions from waste.	 Select 3 communities to pilot projects for at-source (curbside) collection/sorting of recyclable waste, composting for organic waste and waste-to-energy solutions as appropriate. Provide trash sorting bins Decide on delivery method for the program (traditional public sector operations, public-private partnership or outsourcing, or community-led, including engaging 'producer companies') and duration of the pilot program Engage an independent body to monitor the program to ensure accurate measurement and comprehensive reporting. Ensure continuity and replicability of the program for step-by-step expansion of the SWM system beyond pilot areas, through reporting on lessons learned and flexible design. 	Ministry of Environment and Water Resources; LAWMA
Build capacity to improve institutional effectiveness in waste management and raise public awareness	 Strengthen technical capabilities of institutions involved in the planning, regulating and monitoring of performance of waste services. Develop public awareness campaigns to change behaviors regarding littering, waste burning, and the importance of segregating residential waste at source and partaking in recycling schemes. 	Ministry of Environment and Water Resources; LAWMA
Establish and enforce penalties on open burning of waste and littering	Enforce ban on open burning of waste and biomass.Establish penalties for littering	Ministry of Environment and Water Resources

95

Recommendation 2.3: Increase access to water supply and sanitation services and develop an integrated urban water management system that coordinates water supply, sewerage, stormwater drainage, wastewater treatment, solid waste management and land use planning (1/2)

Initiative	Priority Actions	Leading Institution(s)
Develop a comprehensive and realizable integrated urban water management system with state-wide coverage	• Upgrade the current water supply and sanitation system using an integrated urban water management approach that coordinates water supply, sewerage, stormwater drainage, wastewater treatment, solid waste management and land use planning	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
	• Produce a strategy for infrastructure network upgrades and related measures including recommending civil works for: 1) the construction of new water supply infrastructure for unserved/underserved areas; 2) rehabilitation of existing water supply infrastructure to supply water more efficiently; 3) construction of sewage treatment plants, 4) rehabilitation of existing wastewater collection and treatment facilities, and 5) rehabilitation of existing channels and construction of new wastewater channels to convey wastewater from households/residential areas (in a network) to treatment plants.	
	 Coordinate plans between water supply and sewage management bodies. Consult and decide in a transparent manner the most appropriate management model for the provision of metro-wide services (e.g., direct management, delegation of services, partnership with civil society, etc.). This could include restructuring and reorganizing the Lagos Water Corporation to achieve more coordination, accountability and self-sufficiency. Develop a public communications program that accompanies system upgrades to ensure that users are guided on the ways in which they can responsibly use and sustain the expanded and extended wastewater systems. 	

Recommendation 2.3: Increase access to water supply and sanitation services and develop an integrated urban water management system that coordinates water supply, sewerage, stormwater drainage, wastewater treatment, solid waste management and land use planning (2/2)

Initiative	Priority Actions	Leading Institution(s)
Invest in new WSS infrastructure to extend access to unserved/underserved areas and rehabilitate existing infrastructure for more efficient service delivery	 Select sites for new WSS infrastructure development and conduct pre- construction studies: environmental studies financial studies (e.g., capital and annual operating budgets, revenue projections, outsourcing or PPP feasibility), and impact studies (e.g., construction and operating impact management/mitigation measures). Prepare preliminary and detailed design and civil engineering studies. Conduct feasibility studies for the rehabilitation of existing landfills to improve environmental stewardship of the sites through expanded and integrated LFG operation. 	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
Build financial and technical capacity for improved operations and maintenance of WSS infrastructure	 Include maintenance and operations of WSS infrastructure in the state and local government budgets. Build human and technical capacity for the on-going operations and maintenance of WSS infrastructure. 	Ministry of the Environment and Water Resources and Lagos State Wastewater Management Office
Develop tools and assessments for improved flood risk and coastal erosion management	 Develop a storm water drainage master plan at the state and local levels. Develop a metro-wide flood risk map & measures for addressing coastal erosion. Develop a sea level rise vulnerability assessment. 	Ministry of the Environment and Water Resources

Recommendation 2.4: Increase access to reliable energy through implementing policy reform and supporting clean energy sources, such as solar (1/3)

Initiative	Priority Actions	Leading Institution(s)
Implement a comprehensive energy reform policy, in coordination with federal regulators	 Implement the recently launched Integrated Resource Plan (Dec 2021) with the collaboration of electric distribution companies (DisCos) or through standalone initiatives. The plan should include a strategy for prioritizing and sequencing infrastructure network upgrades and related measures including recommended civil works to increase electric grid supply and support renewal energy. Consult and decide in a transparent manner the most appropriate management model for the provision of metro-wide services (e.g., direct management, delegation of services, partnership with civil society, etc.). 	Ministry of Energy and Mineral Resources
Improve financing for renewal energy sources	 Facilitate the development of solar-focused (DPV) financing programs to increase the availability of low-cost financing for developers in the DPV market. Create a Green Fund (e.g., from levies on carbon intensive activities, direct budget allocation, etc.) to provide low-cost financing for DPV-enabling activities . Create a one stop shop to support DPV developers in navigating issues around accessing current funds and provide training to them to meet the requirements of existing programs. Create a data platform to provide information such as solar rooftop potential and demand profile of buildings. Work with existing DPV-focused financing programmes to refine funding application review and disbursement processes, thus reducing difficulty in accessing current funds. 	Ministry of Energy and Mineral Resources
	• Structure and channel donor-led naira denominated consumer debt financing through commercial banks to provide low-cost financing and improve involvement of local financial institutions.	

Recommendation 2.4: Increase access to	o reliable energy tł	nrouah implementii	ng policy reform and	supporting clean	enerav sources, such	as solar (2/3)
					energy sources, such	

Initiative	Priority Actions	Leading Institution(s)
Increase commercial use of renewable energy	 Set a target for solar DER in government buildings to help send a signal to the market Initiate deployment of solar DPV in anchor loads, introduce fiscal incentives to attract solar DPV investments. Partner with marketing companies, distribution companies, community leaders to raise consumer awareness on benefits of solar products. Create a mechanism to aggregate demand from various customer segments to create scale, hence reducing acquisition cost of solar products. 	Ministry of Energy and Mineral Resources
Support the operations for renewal energy	 Work with the federal government to support simplifying importation process for DPV developers (e.g., create a help desk to provide clarity on custom duty exemptions, fast track importation process) to reduce importation costs. Develop training curriculum & provide standardized training programs focused on key skills required across the value chain to increase availability of skilled human resources and increase participation in underdeveloped segments (i.e., manufacturing, end of life) of the DPV value chain. Create a publicly available repository of reliable market data to increase the availability of data resources in the market. Create partnerships with existing agent networks (e.g., financial services agents' network) to improve efficiency during payment collections. Create partnerships to develop payment platforms to minimize overheads for collection and increase efficiency during payment collections. 	Ministry of Energy and Mineral Resources

Recommendation 2.4: Increase access to	o reliable energy t	through implement	ing policy reform and	d supporting clean	energy sources, such	as solar $(3/3)$
	o remuble energy	anough implement	ing poincy relation and	a supporting cican	chergy sources, such	

Initiative	Priority Actions	Leading Institution(s)
Create an enabling environment for renewable energy delivery	 Enforce International Electrotechnical Commission/Lighting Global quality standards and stricter monitoring of quality of solar products & introduce e-waste regulation on solar products to reduce the presence of low-quality products in the market. Launch state-wide awareness campaigns targeted at informing customers on how to identify quality solar systems. Work with the federal government to support introducing regulations to drive DPV demand (net metering, energy efficiency, appliance labelling, open access etc.) to contribute to solar DPV policy framework. 	Ministry of Energy and Mineral Resources
Develop a pilot urban eco-district program	 Select 3 eligible districts to pilot the program a conduct a mapping exercise of public buildings and monthly electric consumption rate in each district. Develop a renewable energy strategy that calculates the existing district footprint and identifies measures to reduce carbon emissions through renewable energy power sources, specifically in public buildings (such as schools and primary health centres). Set targets for the conversion of energy source to solar panels in public schools and primary health centres. Monitor reduction in carbon emissions and reliance on non-renewable energy resources in each of the districts. 	MPPUD in partnership with Ministry of Energy and Mineral Resources

Recommendation 3.1: Improve land administration through complete digitization of regularization process and capacity building to increase tenure security, foster better planning and urban development, enable private investment and support increased property tax revenue generation

Initiative	Priority Actions	Leading Institution(s)
Develop a comprehensive land information system	 Build technical capacity to complete cadaster through surveying, GIS mapping and identification of occupants. Coordinate activities of the multiple agencies that deal with land activities. Develop a publicly accessible land information management system that integrates land records and spatial mapping of statutory and customary land plots. 	Lands Bureau, Office of the State Surveyor General, MPPUD, government agencies that own land assets
Strengthen capacity to increase efficiency of land titling and registration processes	 Build technical capacity to expedite registration and regularization processes. This includes streamlining and fully digitizing land titling and registration and payment processes. Develop new tools to expedite the process to formalize and secure land tenure such as through a government-sponsored certificate issuance program rather than waiting for residents to initiate the process. Develop a monitoring and evaluation system that includes developing performance goals and indicators to track progress of land registration activities and hold accountability. 	Lands Bureau, Office of the State Surveyor General
Enforce vacant land taxation program to prevent land banking and stimulate housing development	Build technical capacity to improve enforcement of vacant land taxation program	MPPUD and Lagos Internal Revenue Services (LIRS)
Identify mechanisms to improve property tax collection	 Identify and address administrative bottlenecks for property tax collection. Strengthen technical capacity of tax collection staff to ensure accountability. 	LASG in partnership with Ministry of Finance

Initiative	Priority Actions	Leading Institution(s)
Develop a state-level comprehensive housing policy/strategy to improve access to quality affordable housing and limit the proliferation of informal settlements	 Identify both supply-side and demand-side constraints based on sound data (quantitative and qualitative). Evaluate existing housing finance programs for their effectiveness and adjust programs if necessary to improve performance. This would require the establishment of performance indicators and dedicated staff for independent monitoring and evaluation. Identify program gaps and implementable strategies to address the gaps. Coordinate and ensure alignment with the proposed Urban Upgrading and Renewal Policy that includes 	Ministry of Housing
Incentivize private sector participation for the development of affordable housing	 guidelines for slum upgrading and resettlement. Streamline and fully automate land registration process. Streamline and fully automate approval process for building and construction permits. Explore use of land-based financing tools and developer incentives to build affordable housing (e.g., density bonuses, conveying land at no cost, payment-in-lieu-of-taxes, mixed-income development to allow for cross-subsidization). For urban renewal projects, consider cross-subsidy schemes that include the costs of land tenure regularization and guarantee issuance of Certificates of Occupancy for informal settlers. Institute affordable housing mechanisms into planning and zoning regulations (e.g., inclusionary zoning) 	Lands Bureau, LASPPPA, Ministry of Housing, LASURA, MPPU
Support innovative building strategies to reduce costs of construction thereby increasing housing affordability	 Build technical capacity of planning and housing development staff on low-cost building strategies. This could be through knowledge-exchange events and training. Develop local manufacturing capacities to provide input material for construction locally. Develop public awareness campaign to educate on low-cost homebuilding strategies. 	Ministry of Housing, MPPL

Recommendation 3.2: Increase access to formal, affordable and climate- and disaster-proofed housing through comprehensive planning, increased private sector participation, innovative design, housing finance and slum upgrading programs (2/2)

Initiative	Priority Actions	Leading Institution(s)
Expand slum upgrading program to include onsite housing improvements	• Undertake detailed assessments of housing and living conditions, legality-associated issues (e.g., land tenure, compliance with building regulations), resident socioeconomic profiles, and community needs beyond housing in target neighborhoods, ensuring genuine community participation. Affordability assessments of public services should be included.	Ministry of Housing in partnership with LASURA ,
	• Identify the upgrading program scope for each LGA. The scope may range from a minimalistic approach (that extends access to technical infrastructure only while the status of housing units remains illegal) to a comprehensive approach that includes measures to address underlying causes of illegality. Measures could include tenure provision and microloans to improve livelihood or to upgrade housing units in the program target areas.	LASBCA and MPPUD
	• Establish local stakeholder platforms to promote public dialogue and broad participation in the design and implementation of the upgrading programs. For this, it will be critical to ensure participation of residents of the community and community-serving organizations at the earliest stages of program development and throughout program implementation and the monitoring and evaluation process.	
	Update master and detailed spatial plans to include informal slum neighborhoods.	
	 Identify housing units exposed to unmitigable natural disaster risks and future eviction risks (e.g., blocking the right-of-way for a future infrastructure/service extension or consolidation, or land to be protected for biodiversity). 	
	• Design alternative solutions for those who live in at-risk units that may include, inter alia, disaster risk mitigation measures on-site or relocation support to safe and affordable housing options elsewhere.	

RECOMMENDATIONS Intervention Area 4: Foster economic development and inclusive growth

Recommendation 4.1: Prior	itize infrastructure investments that create jobs and promote economic development	
Initiative	Priority Actions	Leading Institution(s)
Support infrastructure investments (power, water supply and sanitation, SWM, transport and ICT)	Identify existing market areas, development corridors and targeted growth areas and conduct needs assessments to identify and prioritize investments needed to enhance market access and connectivity	MEPB
Recommendation 4.2: Enha	nce process of doing business	
Support further building permit process reform	Build technical capacity to facilitate more efficient and expedited building permit process. This includes streamlining and fully digitizing permitting and payment processes.	Physical Planning Permit Authority (LASPPPA)
Improve access to land through land administration reform	Strengthen institutional capacity to increase efficiency of land titling and registration processes	Lands Bureau, Office of the State Surveyor General

RECOMMENDATIONS Intervention Area 4: Support inclusive economic development

Recommendation 4.3: Support inclusive economic development				
Initiative	Priority Actions	Leading Institution(s)		
Provide support for job skills training and education	Invest more in technical and vocational learning and encourage stronger partnerships between the private sector and technical colleges to ensure the relevant skills are developed.	Ministry of Wealth Creation and Employment; Ministry of Youth and Sports; Ministry of Education		
Remove restrictions to competition	Work with federal government to strengthen market-based competition policy and anti-monopoly policy	Ministry of Commerce, Industry & Cooperatives; MEPB		
Improve access to finance	 Work with federal government to strengthen regulatory framework for microfinance banks and the development of MSME lending products Work with federal government to extend the coverage of the credit bureau to include a larger segment of the bankable population. This can be done by developing and implementing strategies to integrate nontraditional credit providers into the credit reporting system, including by leveraging financial technology to use alternative data to create credit profiles that will make many economic actors "visible" and that will facilitate access to finance and on better terms. Promote financial literacy and the digitization of records of microenterprises to increase access to finance. Digitizing the records of microenterprises and providing easy-to-understand financial management education would ensure the transparent selection of serious and disciplined entrepreneurs who could be supported with financing. This effort would promote formalization and facilitate enterprise growth. 	Ministry of Finance; Ministry of Commerce, Industry & Cooperatives; Ministry of Wealth Creation and Employment		
Provide support for business formalization	Reducing the cost and procedures for registering a business. This could incentivize firms to formalize.	Ministry of Commerce, Industry & Cooperatives		

Studies Prepared under the Lagos Development Platform ASA

No	Output title
1	Lagos State City Scan: City Resilience Project
2	Revenue Management in Lagos- A Deep Dive
3	Bankable Project – Review of Apapa Master Plan
4	Efficiency of Informal Transit Networks: Evidence from Lagos
	Lagos Bus Reform Initiative Impact Evaluation: Objective, Baseline, Findings, and Next Steps (Impact Evaluation)
5	Studying the Viability and Providing Recommendations to Support Distributed Solar PV in Urban Environments in Nigeria:
	Lagos DPV Final Report
6	Disaster Risk Management Analytics
7	Reducing Marine Plastic Pollution and Creating Plastic Recycling Markets in Lagos State
8	Housing Affordability Study in Nigeria
9	Land Administration and Management in Nigeria
10	Bankable Project – Review of Epe and Lekki Master Plans
11	Lagos Diagnostic Study and Pathways for Transformation: A Rapid Multi-Sector Analytical Review of the Megacity
12	Multi-Sector Engagement Framework
13	Lagos Multi-Sector Analytical Review and Engagement Framework

References (1/3)

Akpokodje, J., Weaver, C., Fagbeja, M., Forastiere, F., Spadaro, J., Johnson, T., Ugochukwu, O., Osunderu, O., and Guttikunda, S. 2022. Air quality management planning for Lagos State. The World Bank, August 2022.

Atufu, C. and Holt, C. 2018. Evaluating the impacts of flooding on the residents of Lagos, Nigeria.

BudgIT. 2021. State of States Report.

Caines, C.; Oyekan, T; Maher, H.; Majekodunmi, O.; and Mezzour, A. Boston Consulting Group. 2023. Safeguarding Coastal Cities from Climate Change. 15 March 2023. Available at <u>https://www.bcg.com/publications/2023/safeguarding-coastal-cities-from-impacts-of-climate-change</u>.

CDR International, World Bank. October 2022. Multi-Sectoral Resilient Plan and Pre-Design Studies for Coastal Resilience in Nigeria: Intervention Site Report. Delft University of Technology. Long-term Shoreline Changes (1984-2016). Accessed 5 September 2022. Available at <u>https://aqua-</u>

monitor.appspot.com/?datasets=shoreline.

Economist Intelligence Unit. Global Livability Index 2022.

Environmental Rights Action. 2016. Lagos Water Crisis: Alternative Roadmap for Water Sector.

Fitch Ratings. 2022. Fitch Affirms Lagos State at 'B'; Outlook Stable. 2 Sep 2022. Available at

https://www.fitchratings.com/research/international-public-finance/fitch-affirms-lagos-state-at-b-outlook-stable-02-09-2022.

German Aerospace Center (DLR). 2015. World Settlement Footprint Evolution - Landsat 5/7 - Global data.

Hoornweg, D., & Pope, K. 2016. Population predictions for the world's largest cities in the 21st century. Environment and Urbanization, 29(1), 195-216

International Finance Corporation, World Bank. 2020. Creating Markets in Nigeria: A Country Private Sector Diagnostic. October 2020.

International Finance Corporation. 2021. Concept Endorsement and Approval Note for Blended Finance Committee for the Lagos City Infrastructure project (40065). 26 May 2021.

Lagos State Resilience Office. 2020. Lagos Resilience Strategy.

Lagos Bureau of Statistics. 2020. Abstract of Local Government Statistics.

Lagos Bureau of Statistics. 2020. Poverty Profile for Lagos State

Lagos Bureau of Statistics. 2022. Lagos State Gross Domestic Products (SGDP): 2013-2021.

References (2/3)

Lagos State Government. Digest of 2018.

Lagos State Government. 2020. Poverty Profile for Lagos State.

Lincoln Institute. 2016. Atlas of Urban Expansion

Mercer. 2019. Quality of living city ranking. Available at https://mobilityexchange.mercer.com/Insights/quality-of-living-rankings.

Ministry of Economic Planning and Budget. 2022. Lagos State Development Plan 2052.

Ministry of Environment and Water Resources. 2021. Lagos Climate Action Plan, Second Five Year Plan 2020-2025.

World Bank. 2020. States Fiscal Transparency, Accountability and Sustainability PforR Program Paper (P162009)

National Oceanic and Atmospheric Administration (NOAA). VIIRS Daily Mosaic data.

National Population Commission and ICF. 2019. Nigeria Demographic and Health Survey 2018.

National Population Commission. 2021. National Policy on Population for Sustainable Development. November 2021.

Onilude, O. O., & Vaz, E. 2021. Urban sprawl and growth prediction for Lagos using GlobeLand30 data and cellular automata model. *Sci, 3*(2), 23. Available at https://doi.org/10.3390/sci3020023.

Oxford Economics. 2022. Competitive Cities Database.

Transformative Urban Mobility Initiative (TUMI). Lagos, Nigeria: Improving sidewalks to enable safe NMT in one of Africa's largest cities. Available at

https://transformative-mobility.org/multimedia/lagos-nigeria-improving-sidewalks-to-enable-safe-nmt-in-one-of-africas-largest-cities/.

United Nations. World Urbanization Prospects 2018.

UN-Habitat. 2021. City Profile #4. Lagos, Nigeria.

World Bank. 2015. Slum upgrading, involuntary resettlement, land and housing: Lessons learned from the experience in Lagos and other mega-cities World Bank. 2016. From Oil to Cities: Nigeria's Next Transformation.

World Bank. 2019. Nigeria Systematic Country Diagnostic.

World Bank. 2020. The Cost of Coastal Zone Degradation in Nigeria: Cross River, Delta, and Lagos States.

World Bank. 2020. Doing Business 2020: Nigeria.
References (3/3)

World Bank. 2020. States Fiscal Transparency, Accountability and Sustainability PforR Program Paper (P162009)

World Bank. 2021. Lagos DPV Final Report.

World Bank. 2021. Lagos finance presentation dated 17 March 2021.

World Bank. 2022. Land Administration and Management in Nigeria.

World Bank. 2022. Presentation on "Reducing Marine Plastic Pollution and Creating Plastic Recycling Market in Lagos State, Nigeria," with data from LAWMA.

World Bank. 2022. Nigeria DRM Analysis Outputs presentation.

World Bank. 2022. Nigeria Poverty Assessment.

World Bank. 2022. Scoping Study on Governance, Planning and Finance in the Lagos Metropolitan Area.

Acknowledgement and Disclaimer

Lagos Diagnostic Study and Pathway for Transformation

Photo on front page: Image credit to Reginald Bassey licensed under the <u>Creative Commons Attribution-Share Alike</u> <u>4.0 International</u> license. Image is partially cropped and <u>available here</u>.

This report was developed with financial support from <u>SURGE</u>.

Acknowledgment Statement:

This report has been prepared by the World Bank in consultation with relevant agencies of the Lagos State Government. The World Bank has been requested by the Government of Lagos for technical and analytical assistance, with a vision of transforming Lagos into a more livable and prosperous megacity. This report is part of The World Bank's financed technical assistance "Lagos Platform for Development" which focuses on analytical work in the areas of strategic urban planning to foster an economically diverse and viable metropolitan area with emphasis to improve the operations and governance of urban services. This activity was supported by SURGE, a World Bank managed Umbrella Program financed by the Swiss State Secretariat for Economic Affairs (SECO), aimed at enabling cities and regions in developing countries to function as drivers of sustainable and inclusive economic development.

Disclaimer:

The findings, analysis and conclusions expressed in this document do not necessarily reflect the views of any individual partner organization of The World Bank, its Board of Directors, or the governments they represent. Although the World Bank, SURGE, and SECO make reasonable efforts to ensure all the information presented in this document is correct, its accuracy and integrity cannot be guaranteed.

Use of any data or information from this document is at the user's own risk and under no circumstances shall the World Bank, GFDRR or any of its partners be liable for any loss, damage, liability or expense incurred or suffered which is claimed to result from reliance on the data contained in this document. The boundaries, colors, denomination, and other information shown in any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries. The report reflects information available up to June 30, 2023.