

LAGOS STATE GOVERNMENT

Transportation Deal Book



2018



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Contents	Page
1. Preface	05
2. Executive Summary	09
3. Enabling Environment	11
4. BRT Project Opportunity	19
5. Green Line Rail Project Opportunity	33
6. Purple Line Rail Project Opportunity	47
7. Investment Process	61
8. Contact Details	65

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1. Preface

Lagos state is one of the most attractive destinations for investment in Africa and the State Government is looking to partner with private sector investors to expand the delivery of services and hasten the pace of development across the state.

The State Ministry of Transport and Lagos Metropolitan Area Transport Authority aim to provide an integrated multi-modal transport system across the Lagos metropolis, with the State Government proposing to provide critical infrastructure and potential investors to contribute the rolling stocks.



Welcome to Lagos State



Governor Akinwunmi Ambode
The Governor
Lagos State
Nigeria

It is with great pleasure that I welcome you to Lagos State – the centre of excellence in Nigeria, the hub of economic activities in West Africa and one of the fastest growing markets in Africa. Lagos is regarded as an important financial nerve centre on the continent and one of the fastest growing cities globally. We are proud to host a vibrant population of over twenty million people with a GDP in excess of USD130 billion.

My administration is committed to improving the quality of life that residents experience and is working towards deepening the enabling environment for businesses to thrive. Our aim is to make Lagos the most desirable destination for businesses seeking socio-economic impact and good financial returns. To this end, we have stream-lined regulation, simplified government processes and invested in improving our people and administrative institutions.

As we continue to play our part, we invite private sector participants and investors to join us to hasten the pace of development and improve standards across Lagos State. Opportunities exist across all sectors of our economy and our aim is to showcase such opportunities and provide a guide that simplifies the process of private sector investment in projects and/or partnership with the Lagos State Government to deliver much needed growth and development.

We very much look forward to partnering with you and more importantly to fostering significant and sustainable socio-economic development in Lagos State.

Itesiwaju ipinle Eko loje wa logun!



Our Transportation Sector is Open for Business



Mr Ladi Lawanson
Honourable Commissioner
Ministry of Transport Lagos
State
Nigeria

The Lagos State Ministry of Transport aims to make public transportation, affordable, rapid, efficient, effective and accessible to all and sundry in Lagos State. This is expected to be achieved through the provision of world class, multi-modal transport systems and infrastructure. Under the administration of Governor Ambode, The Ministry introduced the Bus Reform Initiative aimed at giving Lagosians an integrated public transportation system.

The Lagos State Ministry of Transport is committed to providing a safe, dynamic, integrated, affordable, diverse and sustainable transport system which supports optimal use of resources, social infrastructure and quality of life. It is the Ministry's mission to ensure affordable and efficient movement of people and goods through a well articulated transport policy, world class rail, air, sea and road transport infrastructure, efficient traffic management, enforcement of traffic regulations, provision of an integrated multi-modal transport system and adherence to global pollution accepted levels/standards and quality of life.

It is therefore with high expectation that we open up the transportation sector in Lagos State to potential investors to partner with us to achieve our goals.



Engr. Abiodun Dabiri
Managing Director Lagos
Metropolitan Area
Transport Authority
(LAMATA)
Lagos State

The Lagos Metropolitan Area Transport Authority has been charged with developing an intermodal integrated transport system for Lagos, which is to be executed through the Strategic Transport Master Plan that details the requirements of transport infrastructure in Lagos State up to the year 2032.

Our current focus is on delivering world-class solutions to the problems of commuting, congestion and pollution that have been synonymous with transportation in Lagos. To this end, we seek partnership arrangements with the private sector where the Lagos State Government will provide critical rail infrastructure and the investor or operator will provide the rolling stock.

As such, we have developed this investment brochure for your information and further analysis. It features prospective projects within the transportation sector and presents a description of the project opportunities, an independent assessment of their viability, risk assessment, potential partnership structures and guidelines for investing.

We trust that you will find this brochure insightful and contact us for further details.



LIST OF ABBREVIATIONS

AfDB	African Development Bank	LASU	Lagos State University
BOO	Build Own Operate	LFTZ	Lekki Free Trade Zone
BOT	Build Operate Transfer	LRMT	Lagos Rail Mass Transit
BRI	Bus Reform Initiative	LURN	Lagos Urban Rail Network
BRT	Bus Rapid Transit Central	MSMEs	Micro, Small and Medium Enterprises
CBN	Bank of Nigeria Design	NGN	Nigerian Naira
DB	Build	NSIA	Nigeria Sovereign Investment Authority
DBB	Design-Bid-Build	PPP	Public Private Partnership
DBFO	Design Build Finance Operate	TSA	Treasury Single Account
EMU	Electric Multiple Units	VAT	Value Added Tax
ERGP	Economic Recovery Growth Plan		
FAAN	Federal Airports Authority of Nigeria		
FCT	Federal Capital Territory		
FDI	Foreign Direct Investment		
GDP	Gross Domestic Product		
LAMATA	Lagos Metropolitan Area Transport Authority		

2. Executive Summary

The Lagos State Ministry of Transport and the Lagos Metropolitan Area Transport Authority have identified three potential investment areas where they seek partnership and investment to develop further. These are:

- *Bus Rapid Transit (BRT) Project proposed between Apapa – Oworonshoki.*
- *Green line rail project.*
- *Purple line rail project.*

The State Government is creating the enabling environment for these investments to bud and has identified incentives which interested investors can benefit from.



Executive Summary

→	Enabling Environment	<ul style="list-style-type: none"> Investing in transportation infrastructure in Africa will boost intra-African trade and transform the continent's economy. The over-reliance on road transportation and under-utilization of rail transportation in Nigeria present opportunities for reform and growth. Introduction of initiatives such as the payment vision 2020, which embeds electronic payments across the transport sector and the Bus Reform Initiative which improves the access of hundreds of thousands of people to public transportation and promote socio-economic development. Access to Credit for the sector has also been prioritized by both the Federal and Lagos State Governments via the CBN and NSIA.
→	BRT Project Opportunity	<ul style="list-style-type: none"> The BRT Project opportunity is a 27km corridor between Apapa and Oworonshoki championed by LAMATA with operations set to commence in 2022. The Apapa-Owosoronshoki BRT project; offers high passenger demand guaranteed by the State Government, competitive fares and the added advantage of faster travel times facilitated by dedicated BRT lanes. The proposed management structure for this project is the Build Operate Transfer (BOT) and it is to be executed in two phases.
→	Green Line Rail Project Opportunity	<ul style="list-style-type: none"> The Green Line Rail Project is an 68km rail-based commuter service between Lekki Free Trade Zone and Marina which is set to commence in 2022. The proposed project is to be developed on the basis of a Build-Operate Transfer (BOT) Public Private Partnership under favourable business conditions. The Green Line Project has an estimated daily passenger volume of 815,000 and an investment requirement of NGN 462 billion.
→	Purple Line rail Project Opportunity	<ul style="list-style-type: none"> The Purple Rail line project is a 85.79 km rail route set to be opened for use in 2032. The proposed project is to be developed on the basis of Build-Operate-Transfer (BOT) and provides investment guarantees to potential investors of the project. The Purple Line Project has an estimated daily passenger volume of 720,000 and an investment requirement of NGN 633 billion.
→	Investment Process	<ul style="list-style-type: none"> The Investment Process for any of the Lagos State transportation projects will involve five stages <ul style="list-style-type: none"> Expression of Interest. Response from Lagos State. Due Diligence. Submission. Internal Review.

3. Enabling Environment

Federal and State laws have been strengthened to create an enabling business environment for private sector-led growth, increase the attractiveness and viability of different infrastructure projects, as well as to ensure more efficient regulation in the transportation sector.

Investing in transportation rolling stock is accompanied by tax incentives and the Federal government has offered concessions of road projects to the private sector in exchange for tax holidays. Credit enhancement facilities at both the federal and state government levels are available to investors in the transportation sector.



Enabling Environment

The global transportation industry has recorded diverse trends over the years

Trends in the Global Transportation Industry

Climate Change



- Transportation accounts for about 64% of global oil consumption, 27% of all energy use and 23% of the world's energy-related CO₂ emissions.
- CO₂ emissions from transport could increase by 60% by 2050.
- The environmental impact of transportation sector has proliferated due to rising motorization rates.

Rapid Urbanisation and Motorisation



- Cities will be home to 5.4 billion residents by 2050.
- Motorised mobility in cities is set to reach 2 billion by 2050.
- Urban rail transport has registered a constant positive development with a growth rate of 5.4% from 2005 to 2015.

Accessibility and Affordability



- Air passengers continue to grow as cities around the world become more accessible by air and as air travel time shorten.
- An estimated one billion people in low-income countries lack access to all-weather road.
- High mobility costs cut the disposable income of the poor who often lack reliable and affordable.

Increasing Movement of People



- The robust average annual growth rate of the global transport industry relies on the high demand for business travel and tourism.
- Transport companies are taking advantage of the high movement of people and the low oil price and as such, net profits have doubled between 2014 and 2016.

Transportation is a critical driver of social and economic development and facilitates economies competitiveness as the infrastructure expedites the global supply of goods and services

Source: World Bank (2017); Euler Hermes (2017); AGP Research



Enabling Environment

Investing in transportation infrastructure in Africa will boost intra-African trade and transform the continent's economy



Transportation in Africa

- There is a deficit in the transportation infrastructure in Africa as an estimated 33% of Africans living in rural areas have access to all season roads.
- Transportation infrastructure investment in sub-Saharan Africa (SSA) has the fastest average annual growth rate at 11% and the majority of the growth is expected in roads and ports.
- Developing countries face the challenge of inadequate supply of transportation infrastructure, limiting accessibility to consumers and inhibiting intra-regional trade.
- The continent comprises 55 countries with varying transportation infrastructure maturity and weak transportation links which has resulted in low intra-African trade and as of 2011, the total intra-African trade accounted for only 11% of global African trade.
- The majority of the rail lines in many African countries are left over from the colonial periods and are in need for rehabilitation.
- Some countries have made investments to improve rail transport – South Africa invested more than USD 5 billion in railways and Mozambique has major plans to improve its rail network.
- There are a number of trans-African highways, and several like the Lagos-Abidjan highway through West Africa which already is under consideration for expansion plans.
- Transportation investment in Africa has the potential to transform the continent's economic development, as transportation and logistics has a direct impact on a country's import and export volumes, distribution routes and other related services.

Source: UNCTAD (2013); New Partnership for Africa's Development (2016)



Enabling Environment

Nigeria has relatively advanced infrastructure networks that cover extensive areas of the nation's territory



Transportation in Nigeria

- Transport accounts for 3% of the Gross Domestic Product distribution and the statistics are categorized by modes of transportation: rail, road, water and air.
- Nigeria has a well-developed aviation sector which has experienced substantial growth over the decade due to a rapid expansion of domestic services.
- The Nigerian aviation market consists twenty-two airports spread across the six geo-political zones and twenty-three active domestic carriers.
- Nigerian road transport accounts for 95% of all modes of transport and has a total road network of 193,200km of which only 15% is paved.
- Recent road projects are executed through public private partnerships such as the Lekki Toll Road Infrastructure Project which began when Lekki Concession Company was incorporated specially to design, finance, rehabilitate, upgrade, operate and maintain the Lekki Toll Road, under a 30-year Concession mandate from the Lagos State.
- The Nigerian railway network is largely underutilized with less than 30% of the 280 railway stations in the country functional and as such, the Federal Government allocated NGN10.7 billion in 2013 for the rehabilitation of key rail tracks and procurement of coaches, wagons and locomotives.
- General Electric in partnership with Transnet of South Africa, Dutch-based APM terminals and Chinese Sinohydro have been awarded a contract to rehabilitate approximately 3,500 km of existing narrow gauge lines from Lagos to Kano and Port Harcourt to Maiduguri.
- Nigeria also plans to participate in the AfricRail project to rehabilitate and construct 2,000km of new railway linking Benin, Burkina Faso, Cote d'Ivoire, Niger and Nigeria.
- Nigeria has over 10,000 km of navigable inland waterways and 3,800 kilometers that are navigable seasonally – Rivers Niger and Benue constitute the major channels for inland navigation.

Source: AGP Research; Nigerian Railway Corporation (2016); Nigerian Port Authority (2017); National Inland Waterways Authority (2017); Federal Ministry of Works (2013); Nigerian Bureau of Statistics (2013); Nigeria Civil Aviation Authority (2017)



Enabling Environment

The Lagos State Government has executed various projects to improve transportation of people and goods within the state



Overview of transportation in Lagos

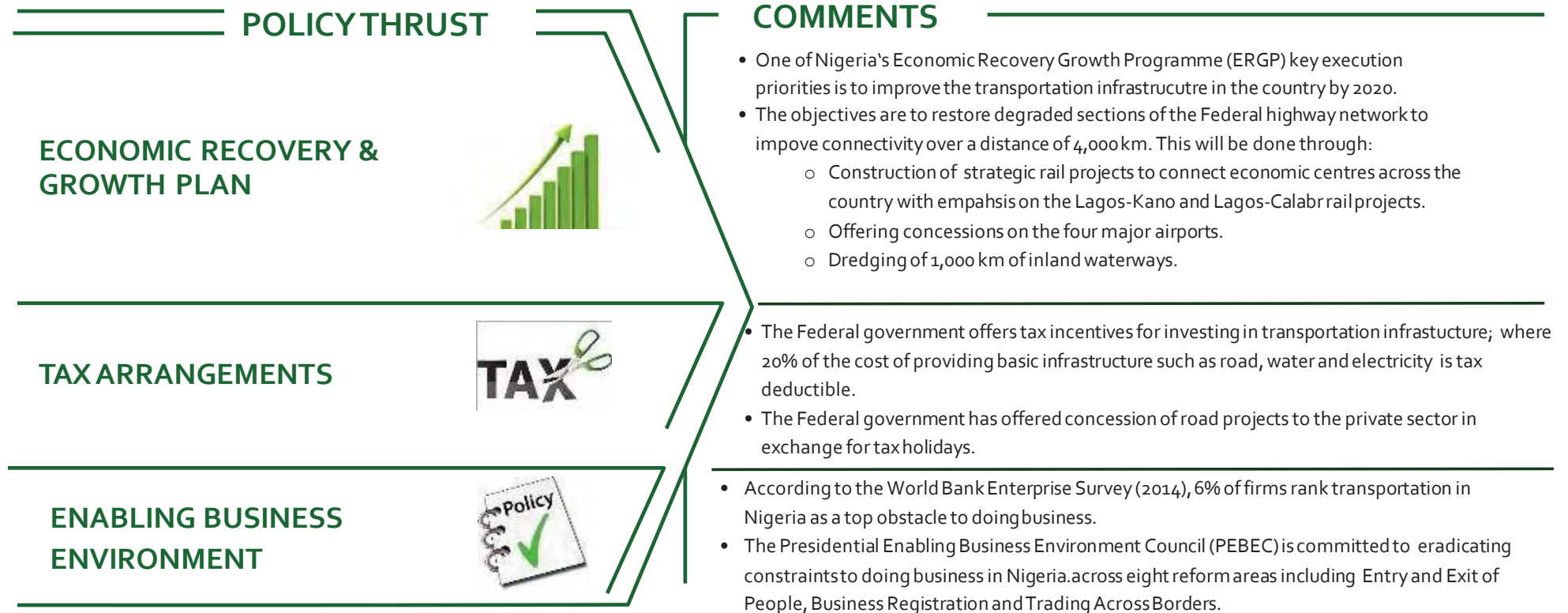
- Lagos State is the capital of economic and commercial activities in Nigeria as is reflected by the state's Internally Generated Revenue (IGR) figure of N150.59 billion in the second half of 2016.
- It is considered as one of the most congested cities in Africa and one of the largest cities in the world, processing 212 motor vehicles per square kilometer traffic into the State.
- Current trends show a proliferation of low capacity vehicles (minibuses and *danfo*) and the fleets comprise of 35,000 – 75,000 units of second hand vehicles which provide poor quality service.
- The majority of buses are entirely owned and operated by the private sector; although there are no major fleet owners and corporate organizations present.
- The demand for trips in Lagos Metropolitan Area by all transportation modes is approx. 24 million per day and demand is likely to grow to over 40 million trips by 2032.
- Although minibuses (Danfo) convey about 72% of passengers in the Lagos Metropolis, cars account for 65% of the road usage while minibuses account for only 28% of road usage.
- With a population of over 20 million people and the high volume of road, air and port traffic, the Lagos State government has been collaborating with the private sector on various projects over the years to meet the state's infrastructural requirements.
- Bus Rapid Transit (BRT) the first of its kind in sub-Saharan Africa, is a transport system which moves about 200,000 commuters daily and has reduced travel time by 30%.
- Lagos Urban Rail Network (LURN) consists of seven railway lines strategically situated along priority and high commuter demand corridors within the Lagos metropolis and beyond and is estimated to cost \$2.4 billion.
- The state government also commenced the first phase of the LURN project; a 27 kilometer light rail transit system with thirteen stations from Okokomaiko to Marina – Blue Line which is to be operated and maintained by a concessionaire – China Civil Engineering Construction Company (CCECC).
- Besides rail, the infrastructure design for Blue Line includes provision for BRT and multimode integration with non-motorized transport (NMT).

Source: International Monetary Fund(2013), LAMATA Strategic Transport Master Plan, AGP Research



Enabling Environment

The Federal and State governments have put in place, policy reforms to improve the transportation infrastructure



Source: Economic Recovery Growth Programme (2017); Nigeria Investment Promotion Commission (2017); AGP Research



Enabling Environment

Relevant agencies have introduced several reforms that will promote growth in the sector



Central Bank of Nigeria

- The Central Bank of Nigeria has instituted the Payment Vision 2020 to embed electronic payment at all stages of the transportation value chain
- This initiative is to demonstrate the benefits of e-payments to the transport business which is to be publicized upon the implementation of a pilot phase.
- A Pilot phase is to be conducted with BRT, 'Danfo' operators and Taxi (yellow cab, red cab) operators.



Lagos State Government

The Lagos State Government aims to introduce a legal framework that will support the integration of the entire transportation system in the state – rail, road and water by 2025.



Lagos Metropolitan Area Transport Authority (LAMATA)

- LAMATA aims to harness the potentials intrinsic to waterways in the state to improve the less than two percent contribution of water transportation to public transport mode in the State – as such, the State government has ordered six world class ferries for this purpose.
- Bus Reform Initiative (BRI) is a programme that has the mandate of introducing 5,000 medium and high capacity buses over a three-year period – with 72% being high capacity buses.
- The BRI, aimed at re-fleeting yellow buses with buses that are able to convey larger numbers of people at a time, is to be executed through a bus franchise system involving stakeholder groups operating multiples of 50 buses.

Source: Economic Recovery Growth Programme (2017); Nigeria Investment Promotion Commission (2017); AGP Research



Enabling Environment

The Federal and State Governments have made efforts to enhance access to credit for transport-related projects

Central Bank of Nigeria

The CBN introduced **The N300 billion Power and Aviation Intervention Fund (PAIF)** to address the challenge of inadequate funds for infrastructural development.

The Bank provided N300 billion facility for investment in debentures to be issued by the Bank of Industry (BOI) for investment in power and aviation projects. The funds are to be channeled through the BOI for on-lending to the Deposit Money Banks at a maximum interest rate of 1.0 per cent for disbursement at concessionary interest rate of not more than 7% and a tenor of 10-15 years



Nigeria Sovereign Investment Authority

The Nigeria Sovereign Investment Authority (NSIA) and GuarantCo, a development finance fund, have established an infrastructure credit enhancement facility, InfraCredit.

InfraCredit is a USD 200 million credit enhancement facility, based in Lagos State, that will enhance the credit quality of local currency debt instruments, mainly in the form of corporate and infrastructure bonds issued by eligible entities to finance creditworthy infrastructure projects in Nigeria.



Lagos Metropolitan Area Transport Authority

Lagos Metropolitan Transport Authority (LAMATA) is a semi-autonomous agency responsible for planning, implementing, regulating and franchising public transport infrastructure and operations in Lagos State

LAMATA was established with the World Bank's collaboration in the form of direct financial assistance of USD 100 million credit and mandatory Lagos State counterparts' contribution of USD 35 million.



Source: Nigeria Sovereign Investment Authority (2017); LAMATA (2017); CBN (2013); AGP Research

4. BRT Project Opportunity

A Bus Rapid Transit Project is proposed between Apapa – Oworonshoki in order to meet the urgent needs of the commuting population on that corridor. This 27 km-BRT service will ultimately contribute to Lagos State's public transportation options.

Lagos Metropolitan Area Transport Authority (LAMATA) is the primary project sponsor and is committed to providing the infrastructure and an enabling framework to facilitate the delivery of the project slated for 2022. The project is suggested to be executed under a Build Operate and Transfer (BOT) Public Private Partnership (PPP) between the investor and LAMATA.



BRT Project Opportunity

The success of the BRT-lite project has led to the expansion of the BRT Project which is championed by LAMATA



Overview of the BRT Project

- The Bus Rapid Transit (BRT) is an operational system which was introduced in March 2008 to improve the transportation system in the Lagos Metropolis.
- The success of the pilot, BRT-Lite and the huge demand from the public, has led to the expansion of the BRT services to a 27km- long corridor between the Apapa and Oworoshoki Express way stretch, while recognising the challenges of the pilot and devising improvements to the scheme in order to meet the needs of commuters on that corridor.
- BRT-lite is indicative of the potential viability of the BRT expansion project as it serves a large number of people who can attest to its benefits based on the safety, cost effectiveness and efficiency it provides while travelling between busy destinations.
- The Apapa-Oworoshoki Expressway stretch, which is the focal point of this BRT project, is a major expressway in Lagos State, which is characterized by a four-lane expressway and service roads parallel to it.

About the Project Sponsor



Source: LAMATA (2017); AGP Research

- Lagos Metropolitan Transport Authority (LAMATA) is the agency responsible for planning, implementing, regulating and franchising public transport infrastructure and operations in Lagos State.
- LAMATA has been charged with developing an intermodal integrated transport system for Lagos, which is to be executed through the Strategic Transport Master Plan that details the requirements of transport infrastructure up to the year 2032.
- LAMATA is the champion of the BRT expansion project and also provides the enabling framework and infrastructure for the establishment of the Bus Rapid Transit.
- The BRT-lite project was implemented by a public private partnership (PPP) where LAMATA provided infrastructure and a private sector operator took regulatory enforcement responsibility, operations and maintenance while a commercial bank provided financing.
- A private sector operator will be consigned to operate the BRT services and enforce stipulated regulation, commit to bus procurement, operations and maintenance.



BRT Project Opportunity

The project will be carried out in two phases based on the availability of BRT infrastructure along the slated corridor

Project Action Plan

PHASE 1
Apapa-Oworonshoki

PHASE 2
Extension onto Lagos Island
(Obalende-Oshodi)



- Phase 1 of the BRT project along Apapa-Oworonshoki Expressway, turning at Apapa North beyond Mile 2 junction, will operate within the interim period pending the establishment of the BRT infrastructure associated with the Lagos-Badagry Toll Road.
- Upon the completion of the toll road infrastructure, the BRT services will operate as planned to Obalende.
- Although Aswani and Festac are existing stops on the Phase 1 trunk, they are not included as BRT stops by the Lagos Transport Model.

Key Success Factors

- Excellent BRT design with strategically located stops and the capacity to transport all intending passengers.
- Timely infrastructural development – the toll road construction can have an impact on the delivery of the phase 1 service so this must be planned carefully.
- Effective marketing and publicity to ensure uptake of the BRT services.
- Safety at all points of the system including waiting areas to encourage usage.

Socio-economic Impact

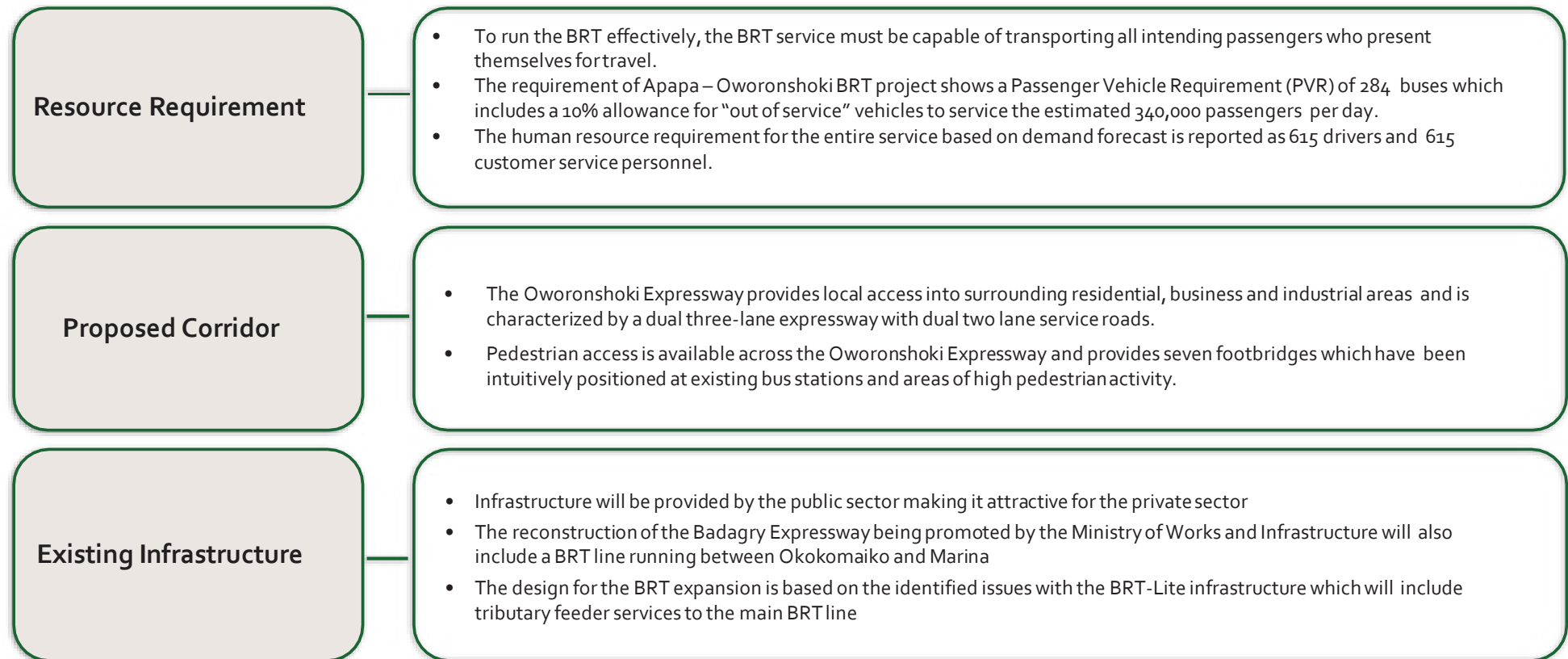
- BRT benefits users as it proposes lower fares currently at NGN50 from Mile 12 to Oshodi compared to the existing travel option of NGN100 charged by Lagbus on the same route.
- Reduced travel times achieved by priority service planning conveying more passengers than current smaller buses.
- Better road conditions and traffic management as space is taken away for BRT lanes and BRT buses will replace public transport vehicles that account for a third of the congestion i.e. reducing the number of vehicles on the rest of the roads.

Source: LAMATA (2017); AGP Research



BRT Project Opportunity

The success of the proposed project is dependent on the availability of necessary resources and infrastructure



Source: LAMATA (2017); AGP Research



BRT Project Opportunity

The BRT proposes lower fares and shorter travel times compared to existing transportation options

Resource Assessment

- 1 Vehicles selected for the BRT operations must be durable and easy to maintain as well as possess efficient fuel technology. Two types of vehicles are currently used on the BRT-lite line: Ashok Lane high floor bus type 'Falcon' and 12meter Marco Polo bodied Mercedes 'Torino' buses. However, investors are at liberty to select the type of vehicles based on requirements for size, durability, easy maintenance and efficient fuel technology.

Demand Assessment

- 2 The high volume of people currently using Lagos public transport in its poor conditions makes BRT in Lagos very attractive. Additionally, Lagosians have been sensitised with BRT not just as a concept, but as a successfully functional system. Based on demand forecasts, the main trip generators along the BRT corridor are at Oshodi, Mile 2 and Lagos Island during peak periods.

Strategic Pricing

- 3 A feasibility study on the BRT demonstrates a potential viability of the system using a zonal fare structure of NGN20 per 5km of travel and this has proven to be highly competitive when compared with the lowest existing fares on small commercial buses with an added advantage of faster traveltime.

Competitor Analysis

- 4 Focus Group Discussions (FGDs) revealed that passengers feel safer travelling by BRT as it provides comparable speed and reliability facilitated by the dedicated bus lanes as opposed to the *Danfo* and *Molue* buses. BRTs also present superior quality and comfortable vehicles compared to the poorly maintained commercial public transport options.

Travel time

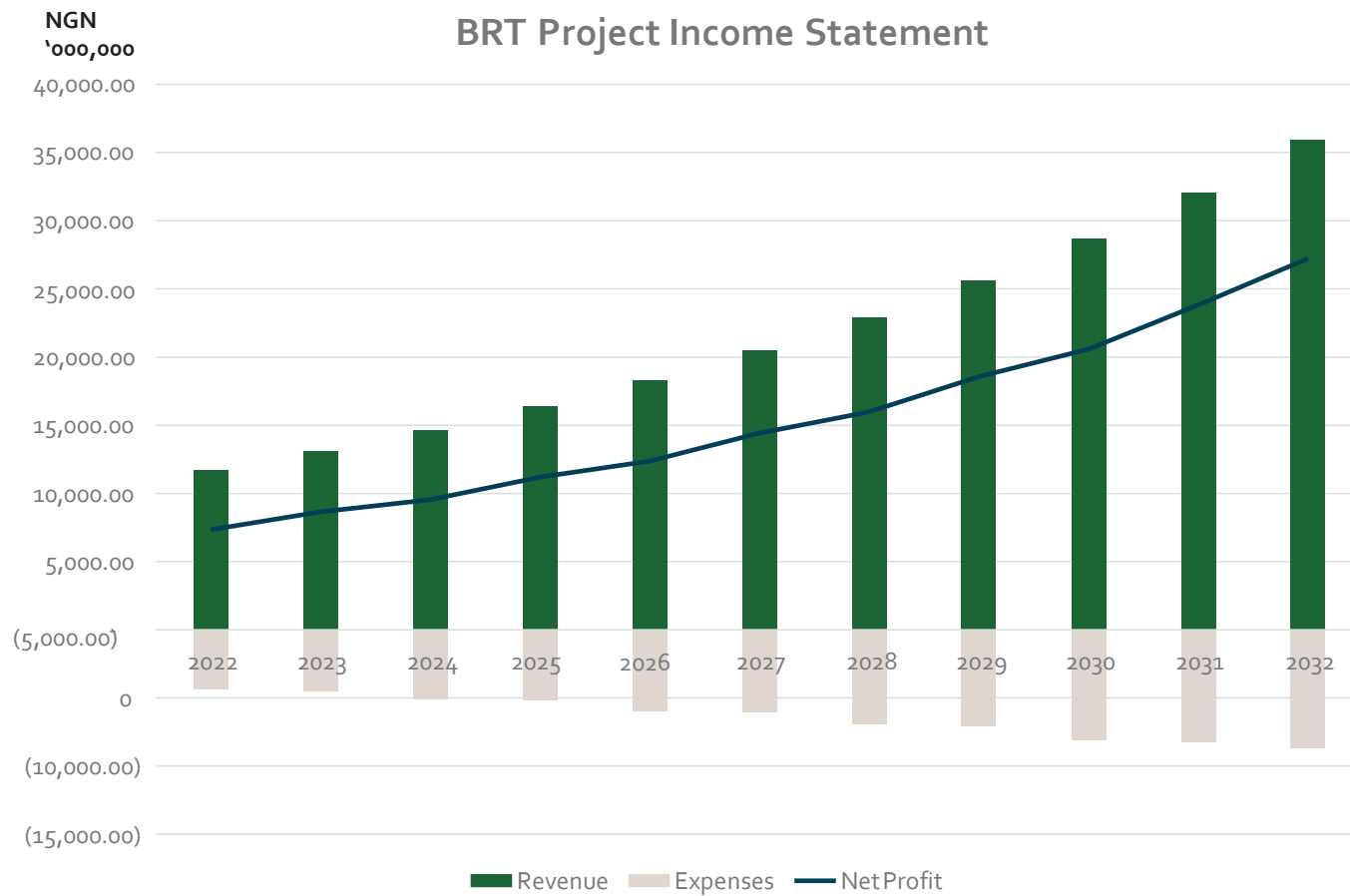
- 5 The dedicated BRT lanes will facilitate quicker travel around Lagos.

Source: LAMATA (2017); AGP Research



BRT Project Opportunity

The financial assessment depicts positive and attractive terms



Comments

- The financial assessment depicts a constant increase in income over the ten years of projection.
- The EBITDA margin is healthy enough to ensure a good return on investment.
- Revenue can be boosted further through increased passenger volume, advertising and branding.



BRT Project Opportunity

Economic Feasibility

Indicators	NGN	USD
Equity Investment (50%)	41,009,349,620	134,456,884
Debt Financing (50%)	41,009,349,620	134,456,884
Return on Investment	9%	
Net Present Value (NPV)	20,364,735,715	66,769,625
Internal Rate of Return	16.8 %	
Net Profit Margin Range	0 % to 37.4%	
Cost to Income Ratio (CIR)	37 %	
<div><div><div>Key Assumptions<ul style="list-style-type: none">• 300 working days a year.• Demand growth is 8% per annum.• The fare will increase at 20% every 5 years.• Passenger demand is 104,000,000 rides a year.• Fare is based on current BRT rates of N100 per trip.• The main revenue drivers are passenger’s patronage and branding/advertising.• Expenses increase bi-annually by 15%.• Franchise fee is paid at 5% of the annual revenue for 10 years.</div><div>Socio-Economic Benefits of the Project<ul style="list-style-type: none">• Employment generation.• Journey time savings for both private car passengers and public transport riders.• Changes in vehicle operating costs (private vehicles and public transit).• Reduction of exposure to local air pollutants.• Road safety benefits (fatalities, injuries, property damage).</div></div></div>		



BRT Project Opportunity

The proposed project indicates minimal environmental impacts along the proposed route of operation

The Federal Ministry of Environment and Lagos State Environmental Protection Agency (LASEPA) have laws and guidelines that stipulate that all transportation projects are environmentally-friendly

Elements	Environmental Effects	Impact
Air Quality	Air quality could be affected due to increase in traffic flows and exhaust fumes from the vehicles, however, ideal BRT service will offset reduced air quality through the reduction in the use of private vehicles.	Medium
Aesthetics	Generation of liquid and solid wastes at depot, workshops and bus stations could change the views currently experienced by residents and other users of the area.	Medium
Noise and Vibration	Noise and vibrations generated by machinery during construction could inconvenience residents within close proximity to the busstations.	High
Water Quality	Contamination of surface waters and water drainage systems caused by fuel spillage entering drainage system and nearby rivers.	Low



BRT Project Opportunity

The BRT Project indicates positive and minor negative social effects on the city locations along the corridor

Elements	Social Effects	Benefit/Mitigation
Servicing and Deliveries	Temporary street closure and location of construction site for bus stations and stops collectively restrict and hinder service delivery resulting in increased time, vehicle related costs and potential loss of revenue for businesses.	Location-specific proactive solutions need to be devised to minimise the effect on commercial activity during construction.
Rents	Locations with close proximity to the route corridor will experience increased competition for space and thus, an increase in rent due to improved accessibility.	Increase the economical value of real estate along the corridor which could potentially displace existing residents.
Loss of Power and Utilities	Accidental or planned shutdowns of electricity or other utilities to enable construction works could negatively impact business activities along the corridor.	All endeavours should be taken to avoid and minimise the impact on businesses and homes with proximity to the corridor.
Accelerated Development	The BRT Project will stimulate city development by increasing the attractiveness of the city areas with proximity to the rail line.	Enhance the viability of construction and development-related businesses along the corridor.

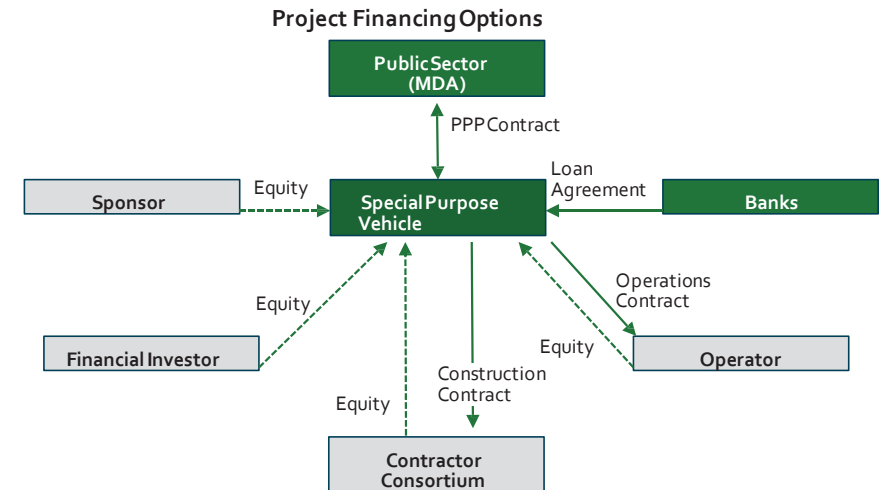


BRT Project Opportunity

The preferred public-private option for the BRT project is BOT; however, potential investors can opt for another acceptable option

PPP Options	Characteristics			
	Asset Ownership	Operations & Management	Capital Investment	Commercial Risk
Service 1 – 3 years	Public	Both	Public	Public
Management 3 – 8 years	Public	Private	Public	Public
Lease 5 – 10 years	Public	Private	Public	Private
Concession 10 – 30 years	Both	Private	Private	Private

Concession options	Characteristics				Financial Responsibility
	Asset Ownership	Design	Build	Operations and Management	
Design-Bid-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Design-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Build-Operate-Transfer	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public
Design-Build-Finance-Operate	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public, Public/Private or Private
Build-Own-Operate	Private	Private by contract	Private by contract	Private by contract	Private by Contract



- A common approach to financing PPP projects is to structure them as a **Special Purpose Vehicle**. This way projects are safeguarded against complex and ever-changing risks.
- SPVs receive **seed money financed with debt and/or equity**, which can be recovered as development costs from the first drawdown of the loan.
- The PPP company can then approach the market for additional financing. Investors are asked to only consider the bankability for which the PPP company was created.
- Term of investment is limited as PPP company may be dissolved once the project is completed and the concession reaches maturity.
- In the case of the BRT-lite project, Eco Bank provided funding of NGN 1 billion to procure 1000 buses and invested NGN 4.5 billion to the BRT-lite infrastructure.



BRT Project Opportunity

The Lagos State Government provides investors with favourable conditions to support private sector participation

Guarantee Options

- The Lagos State Government is willing to guarantee the passenger demand for the Apapa-Oworonshoki BRT corridor.
- This implies that where the actual utilization for the BRT service is unable to secure comparable demand to the forecast, the State Government will pay the private sector service provider the outstanding difference.
- This cushions the risk of low revenue due to low uptake of the BRT service.

Legal Framework

- Private sector participation in public sector procurement is governed by:
 - ✓ The Lagos State PPP Law 2011..
 - ✓ The Lagos State Public Procurement Act 2011; and
 - ✓ Regulations issued by the State Executive Council (Exco) governing the PPP process.
- These laws and regulations assure investors that all contracts will be completed in compliance with the PPP contract terms.
- There are several dispute resolution mechanisms for PPP projects and the contract management team will provide guidance on whether an issue can be escalated to arbitration or courts.



BRT Project Opportunity

Infrastructure has the largest impact on the BRT project of which can be mitigated by a competent planning team

	Areas	Key Risk	Impact	Likelihood	Mitigation
1	Government Policy	Change in government regulation or policy that impacts on the investment by private sector.	Financial	Medium	Agreements should be executed that protect investors rights and offers compensation where change of policy is unavoidable.
2	Competition	Difficulty competing with small minibus drivers (danfo).	Financial	Medium	Enforce exclusion zone and ensure that old minibuses are being used in feeder services to the BRT routes.
3	Fares	Low uptake of the BRT service due to its unaffordability by the majority of the Lagos populace.	Financial	Low	Extensive market research has been conducted on the purchasing power of residents to ensure competitive pricing of the BRT service and also make provision for variable ticket pricing.
4	Corridor selection	A low demand corridor in a peripheral location which does not provide connections to higher demand areas.	Financial	Medium	Excellent design and planning team with successful experience in BRT implementation in other cities.
5	Infrastructure	Poor BRT infrastructure pose the most serious risk as fixing the problem would entail partially or fully demolishing the BRT system.	Financial Reputational	Low	Allow time for refinement of the BRT design to revise all aspects of the project as needed.
5	Currency	Fluctuations on the value of the Naira over the duration of the project.	Financial	Medium	The investor may protect foreign capital by hedging or benchmarking the exchange rate of the Central Bank of Nigeria; which is more dependable than the commercial bank rates.



BRT Project Opportunity

In conclusion,

Investment Requirement	<ul style="list-style-type: none">▪ The project will require 282 buses to satisfy the demand of 340,000 passengers aday▪ The human resource requirement for this project has been estimated at 615 drivers and 615 customer service personnel to handle ticketing and customer interface▪ The requirement for the investment is NGN 99 billion which covers the start up costs and the operating expenses for the first operating year
Investment Purpose	<ul style="list-style-type: none">▪ The purpose of the investment is to improve the efficiency of transportation in the Lagos Metropolis▪ The Apapa- Oworonshoki BRT service is part of the intermodal Lagos State Strategic Transportation Master Plan that is aimed at transforming the Lagos transport sector beyond its current challenges▪ The Investment will facilitate the delivery of the BRT service to serve commuters on the Apapa – Oworonshoki corridor and improve the quality of transport service in Lagos
Opportunity Assessment	<ul style="list-style-type: none">▪ A review of the high-level technical, commercial and financial feasibility assessments of the project depict the attractiveness of the investment▪ The case for investment demonstrates the potential for private operators to run BRT service and the financial viability of the net profits to cover the operating costs and management costs▪ The project also presents societal benefits of the project such as journey time reduction, cost savings and the introduction of a more efficient public transport operation
Management Structure	<ul style="list-style-type: none">▪ The private-public partnership preference is a Build-Operate-Transfer (BOT) concession where the public sector maintains ownership of the assets and the private sector handles the operations and maintenance of the BRT based on a fee contract▪ The private sector will manage, operate and maintain infrastructure to standards and outputs specified by the Lagos State Government and LAMATA▪ The projected will be financed by fees which will be charged to the consumers



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5. Green Line Rail Project Opportunity

The 68 km Green Line Project is to build and operate a modern, fast and reliable rail-based commuter service between Lekki Free Trade Zone and Marina, with 10 stations, as well as a direct link and station at the proposed Airport at Lekki.

The principal merit of this project is that it will reduce the severe traffic congestion in the Marina – Lekki Corridor by encouraging the use of public transport. Investors are invited to provide rolling stocks to support the delivery of the project. The public-private partnership model for this project will be decided following negotiations and agreements with LAMATA.



Green Line Rail Project Opportunity

The Green Line Project is a 68 km rail system that will begin at Marina and terminate at the Lekki free Trade Zone

Overview of the Green Line Project



- The Lagos State Government intends to create an urban rail transit system in order to reduce traffic congestion and travel times as well as improve the transportation system in the Lagos Metropolis.
- The 68km Green line rail network route is to be built and operated as a modern, fast and reliable rail-based commuter service between Lekki Free Trade Zone and Marina.
- The Green line is a direct link to the proposed Lekki International Airport and comprises 10 stations between Lekki Free trade Zone and Marina.
- This rail network will stimulate economic growth through business tourism through using the link between the Airport and the Free Trade Zone in Lekki.
- The Green Line project is part of the Lagos State Strategic Transport Master Plan and as such, will stimulate accelerated economic growth and increased infrastructure investment.

Project Sponsor



Lagos State Government

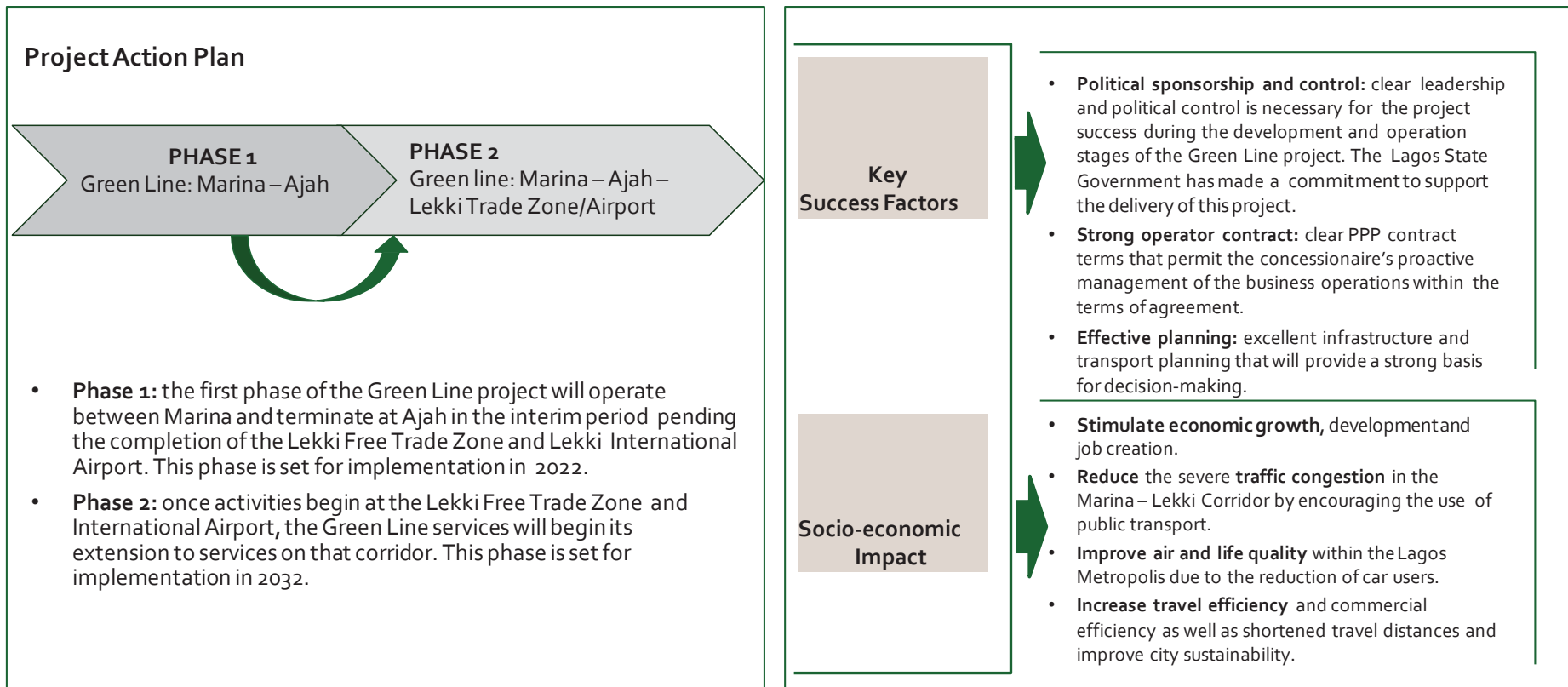
- The Lagos State Government is championing the Green Line Rail Project and is committed to the development of the infrastructure required for this project.
- The project will be executed through a concessionaire and a Memorandum of Understanding (MOU) between the State Government and the Concessionaire will provide the terms and conditions governing the project.
- The Lagos State Government will indicate her commitment by:
 - securing the Right of Way for the project route.
 - providing statutory permits and police security during construction and operations.
 - approving deployment to site and operations of the system.
 - providing tax and duty incentives to investors.
 - enacting legislations for the operations and usage of the system.

Source: LAMATA (2017); AGP Research



Green Line Rail Project Opportunity

The Green Line project will be executed in two phases: Marina – Aja and Marina – Aja – Lekki Free Trade Zone



Source: LAMATA (2017); AGP Research



Green Line Rail Project Opportunity

The success of the proposed project depends on the availability of requisite resources and infrastructure

Resource Requirement

- The Green Line Rail effectively, the service must be capable of transporting all customers who present themselves for travel.
- The estimated daily passenger volume of 815,000.

Proposed Corridor

- The 68 km corridor running between Marina and LFTZ provides local access to surrounding residential, business and commercial areas.
- The Green Line will also be integrated with the bus, ferry and feeder services within the areas in which it will operate.

Existing Infrastructure

- There is no existing infrastructure for the Green Line project.



Green Line Rail Project Opportunity

The Green Line Rail project proposes lower travel times compared to existing transport options

Resource Assessment

- 1 The trains selected for the Green Line operations must be efficient, easy to maintain and energy efficient. The type of train proposed for this project are the Electric Multiple Units (EMU).
-

Demand Assessment

- 2 The large and growing population within Lagos State and the high volume of people currently using Lagos public transport in its poor conditions makes the proposed Green Line very attractive.
-

Strategic Pricing

- 3 The proposed fare for the Green Line service is currently set at NGN 460 (USD1.25). Although the fares of existing public sector options are far below the suggested fares of the Green Line service, the Green Line provides an added advantage of faster travel times by eliminating the possibility of experiencing motor traffic congestion and therefore can command higher pricing than other forms of transportation.
-

Competitor Analysis

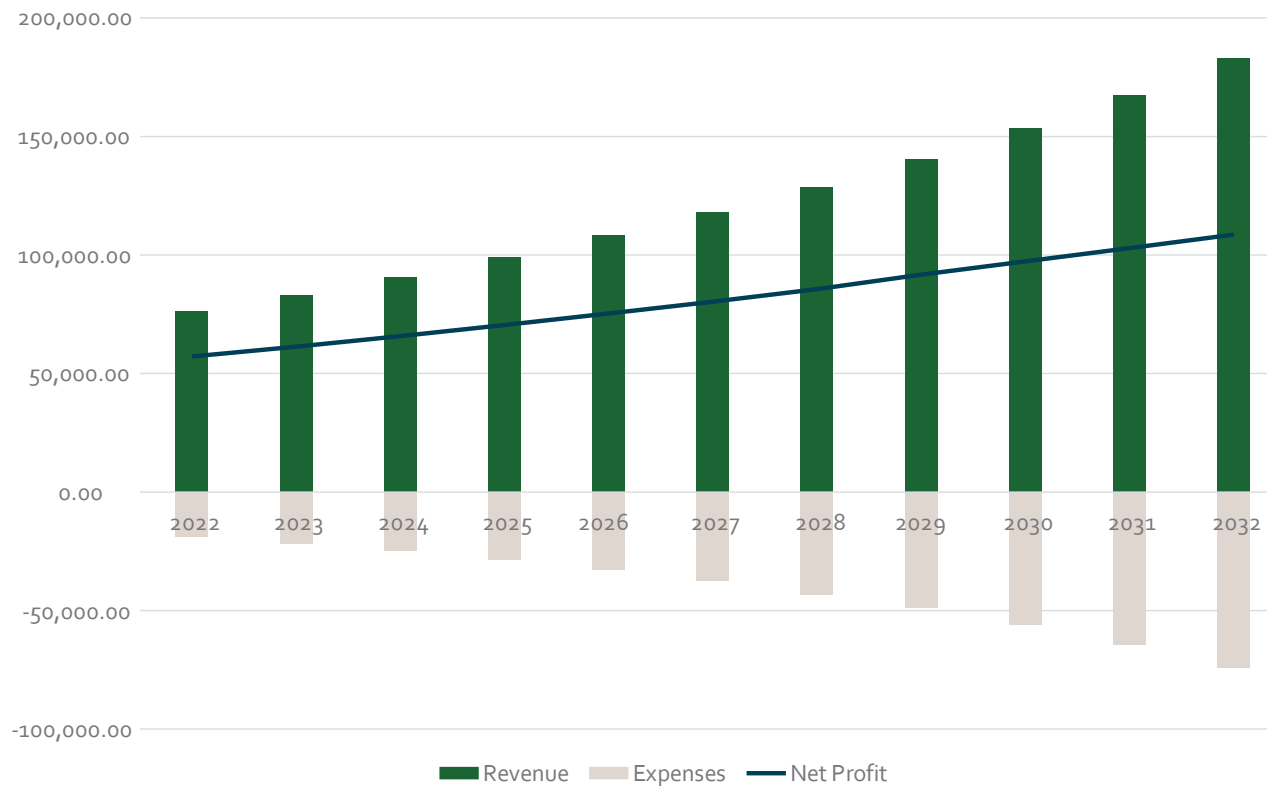
- 4 The existing public transportation options as well as the BRT services offer competing services at lower rates to consumers. However, the Green Line provides incomparable speed and reliability facilitated by congestion-free rail travel.



Green Line Rail Project Opportunity

The financial assessment depicts positive and attractive terms

Green Line Rail Income Statement



Comments

- The Green Line Project will experience a 7% growth rate annually which is favourable to investors as it depicts healthy business growth.
- The EBITDA margin is healthy enough to ensure a return on investment.
- Revenue can be boosted further through increased passenger volume, advertising and branding.



Green Line Rail Project Opportunity

Economic Feasibility

Indicators		NGN	USD
Equity Investment (50%)		231,144,250,000	757,850,000
Debt Financing (50%)		231,144,250,000	757,850,000
Return on Investment		13 %	
Net Present Value (NPV)		68,559,582,349	224,785,515
Internal Rate of Return		17 %	
Net Profit Margin Range		36 % to 39%	
Cost to Income Ratio (CIR)		25 %	
<div>Key Assumptions<ul style="list-style-type: none">300 working days a year and 288 operated cycles per day.Rolling stock - Electric Motor Unit (EMU) and will be purchased out rightly.Estimated passenger volume is 815,000 per day.Main revenue drivers include ticket fares and advertisement.Revenues will increase at a growth rate of 7% annually.Fare rates will increase by 20% every 5 years.Expenses increase by an inflation rate of 15% biannually.Franchise fee is 5% of the annual revenue.</div>		<div>Socio-Economic Benefits of the Project<ul style="list-style-type: none">Increased transit ridership and reduced automobile ridership.Increase in the use of public transportation.Economic efficiency.Employment generation.Stimulate the revival of communities in proximity to the rail.</div>	



Green Line Rail Project Opportunity

The proposed project indicates minimal environmental impacts along the proposed route of operation due to the use of EMUs

The Federal Ministry of Environment and Lagos State Environmental Protection Agency (LASEPA) have laws and guidelines that stipulate that all transportation projects are environmentally-friendly

Elements	Environmental Effects	Mitigation
Air Quality	Air quality could be affected by the rate and location of pollutant emissions that influence movement.	The use of electric energy will ensure low-emissions generators.
Aesthetics	Physical changes between Marina and LFTZ would cause changes to views currently experienced by residents and other users of the area.	Incorporated measures to minimise the visual impact into the project design where practical should be pursued.
Noise	Train noise and stationary noise resulting from operations could inconvenience residents within close proximity to the railways and station.	Ensure the use of electric multiple units to eliminate the effect of noise during operations.
Water Quality	Contamination of surface waters and water drainage systems while filling fuel tanks and leakages from locomotive fuel tanks.	Employ EMUs to eliminate the occurrence of water contamination from locomotive fuels.
Vibration	Vibrations generated during train operations could contribute to human annoyance and building damage.	Utilise EMUs which will reduce but not eliminate train noise vibrations when compared to other rolling stocks.



Green Line Rail Project Opportunity

The Green Line Rail Project indicates positive and minimal negative social effects on the city locations along the corridor

Elements	Social Effects	Benefit/Mitigation
Servicing and Deliveries	Temporary street closure and location of construction sites collectively restrict and hinder service delivery resulting in increased time, vehicle related costs and potential loss of revenue for businesses.	Location-specific proactive solutions need to be devised to minimise the effect on commercial activity during construction.
Rents	Locations with close proximity to the route corridor will become prime with increased competition for the space and thus experience an increase in rent.	Increase the economical value of real estate along the corridor which could potentially displace the current residents.
Loss of Power and Utilities	Accidental or planned shutdowns of electricity or other utilities to enable construction works could negatively impact business activities along the corridor.	All endeavours would be taken to avoid and minimise the impact on businesses and homes with proximity to the corridor.
Accelerated Development	The Green Line Rail Project will stimulate city development by increasing the attractiveness of the city areas with proximity to the rail line.	Enhance the viability of construction and development-related businesses along the corridor.

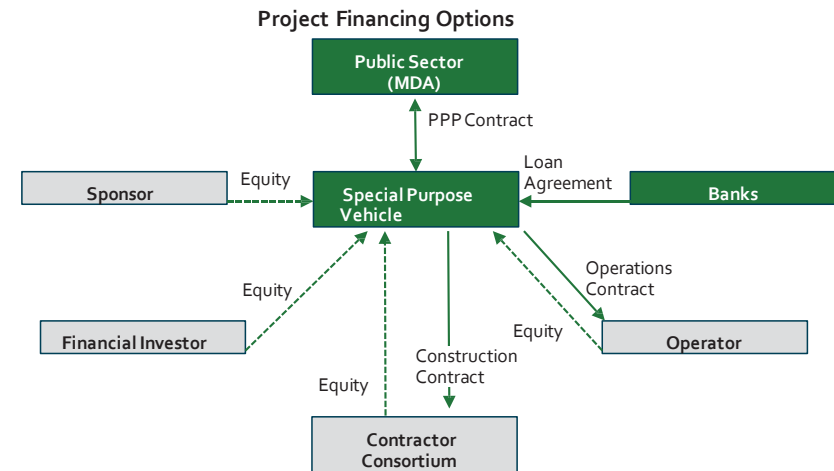


Green Line Rail Project Opportunity

The preferred public-private option for the BRT project is BOT; however, potential investors can opt for another accepted option

PPP Options	Characteristics			
	Asset Ownership	Operations & Management	Capital Investment	Commercial Risk
Service 1 – 3 years	Public	Both	Public	Public
Management 3 – 8 years	Public	Private	Public	Public
Lease 5 – 10 years	Public	Private	Public	Private
Concession 10 – 30 years	Both	Private	Private	Private

Concession options	Characteristics				Financial Responsibility
	Asset Ownership	Design	Build	Operations and Management	
Design-Bid-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Design-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Build-Operate-Transfer	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public
Design-Build-Finance-Operate	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public, Public/Private or Private
Build-Own-Operate	Private	Private by contract	Private by contract	Private by contract	Private by Contract



- A common approach to financing PPP projects is to structure them as a **Special Purpose Vehicle**. This way projects are safeguarded against complex and ever-changing risks.
- SPVs receive **seed money financed with debt and/or equity**, which can be recovered as development costs from the first drawdown of the loan.
- The PPP company can then approach the market for additional financing. Investors are asked to only consider the bankability for which the PPP company was created.
- Term of investment is limited as PPP company may be dissolved once the project is completed and the concession reaches maturity.



Green Line Rail Project Opportunity

The Lagos State Government provides investors with favourable conditions to support private sector participation

Guarantee Options

- Lagos State Government is offering a guarantee on passenger numbers to cover any shortfall that may arise from a shortage in uptake.
- The State Government has put in place various policies and initiatives that will ensure an enabling environment to do business.

Legal Framework

- Private sector participation in public sector procurement is governed by:
 - ✓ The Lagos State PPP Law 2011.
 - ✓ The Lagos State Public Procurement Act 2011; and
 - ✓ Regulations issued by the State Executive Council (Excom) governing the PPP process.
- These laws and regulations assures investors that all contracts will be completed in compliance with the PPP contract terms.
- There are several dispute resolution mechanisms for PPP projects and the contract management team will provide guidance on whether an issue can be escalated to arbitration and the judicial courts.



Green Line Rail Project Opportunity

The risk assessment of the project shows that the Green Line Rail project poses medium risks

	Areas	Key Risk	Impact	Likelihood	Mitigation
1	Government Policy	Change in government regulation or policy that impacts on the investment by private sector in public projects.	Financial	Medium	Agreements should be executed that protect investors rights and offer compensation where change in policy is unavoidable.
2	Fares	Demand and tariff levels may not be sufficient to cover the costs of operations.	Financial	Low	Perform due diligence to obtain sound traffic studies and use this as the basis for forecasting. The State Government is also offering a guarantee on passenger numbers such that it covers the short-fall in the event of low demand.
3	Corridor selection	A low demand corridor in a peripheral location which does not provide connections to higher demand areas.	Financial	Medium	Utilise an excellent design and planning team with successful experience in rail or similar implementation in other cities.
4	Infrastructure	Poor rail infrastructure pose the most serious risk as fixing the problem would entail partially or fully demolishing or shutting down the rail system.	Financial & Reputational	Low	Allow time to refine the rail design to revise all aspects of the project as needed to ensure excellent infrastructure planning design.
5	Currency	Fluctuations in the value of the Naira over the duration of the project could make project costs increase beyond original estimates.	Financial	Medium	The investor may protect foreign capital by hedging or benchmarking the exchange rate to convert foreign exchange to Nigeria.



Green Line Rail Project Opportunity In Conclusion...

Investment Requirement	<ul style="list-style-type: none">▪ The requirement for the investment is NGN 462 billion which covers the start up costs and the operating expenses for the first operating year.▪ The operating expenses include the costs of operations, maintenance costs, advertising, marketing and labour costs.
Investment Purpose	<ul style="list-style-type: none">▪ The purpose of the investment is to improve the efficiency of transportation in the Lagos Metropolis.▪ The Green Line Urban Rail is part of the intermodal Lagos State Strategic Transportation Master Plan that is aimed at transforming the Lagos transport sector beyond its current challenges.▪ The Investment will facilitate the delivery of the Green Line Urban Rail to serve the commuters between Marina and Lekki Free Trade Zone and will improve the quality of transport service in Lagos.
Opportunity Assessment	<ul style="list-style-type: none">▪ The high-level technical, commercial and financial feasibility assessments of the project depict the attractiveness of the investment.▪ The case for investment demonstrates the potential for private operators to run the Green Line service and the financial viability of the net profits to cover the operating costs and management costs.▪ The project also presents societal benefits of the project such as journey time reduction, cost savings, the introduction of a more efficient public transport operation and urban regeneration.
Management Structure	<ul style="list-style-type: none">▪ The Lagos State Government is open to discuss management structures and partnerships under the Lagos State PPP Laws.



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5. Purple Line Rail Project Opportunity

This 85.79 km Purple Line Rail will be built and operated as a modern, fast and reliable rail-based commuter service with 16 stations.

The Purple Line Rail Project proposes reduced traffic congestion by providing a non-motorised transportation option to commuters. Investors are invited to provide rolling stocks to support the delivery of the project. The public-private-partnership model for this project will be decided upon following negotiations and agreements with LAMATA.



Purple Line Rail Project Opportunity

The Purple Line Project is an 85.79 km rail system.



Overview of the Purple Line Project

- The Lagos State Government intends on creating an urban rail transit system in order to reduce traffic congestion and travel times and improve the transportation system in the Lagos Metropolis.
- The 85.79km -Purple line rail network route is to be built and operated as a modern, fast and reliable rail-based commuter service and comprises of 16 stations.
- The Purple Line project is part of the Lagos State Strategic Transport Master Plan and as such, will stimulate accelerated economic growth and increased infrastructure investment.
- The Purple Line will also be integrated with the bus, ferry and feeder services within the areas in which it will operate.

Project Sponsor



Lagos State Government

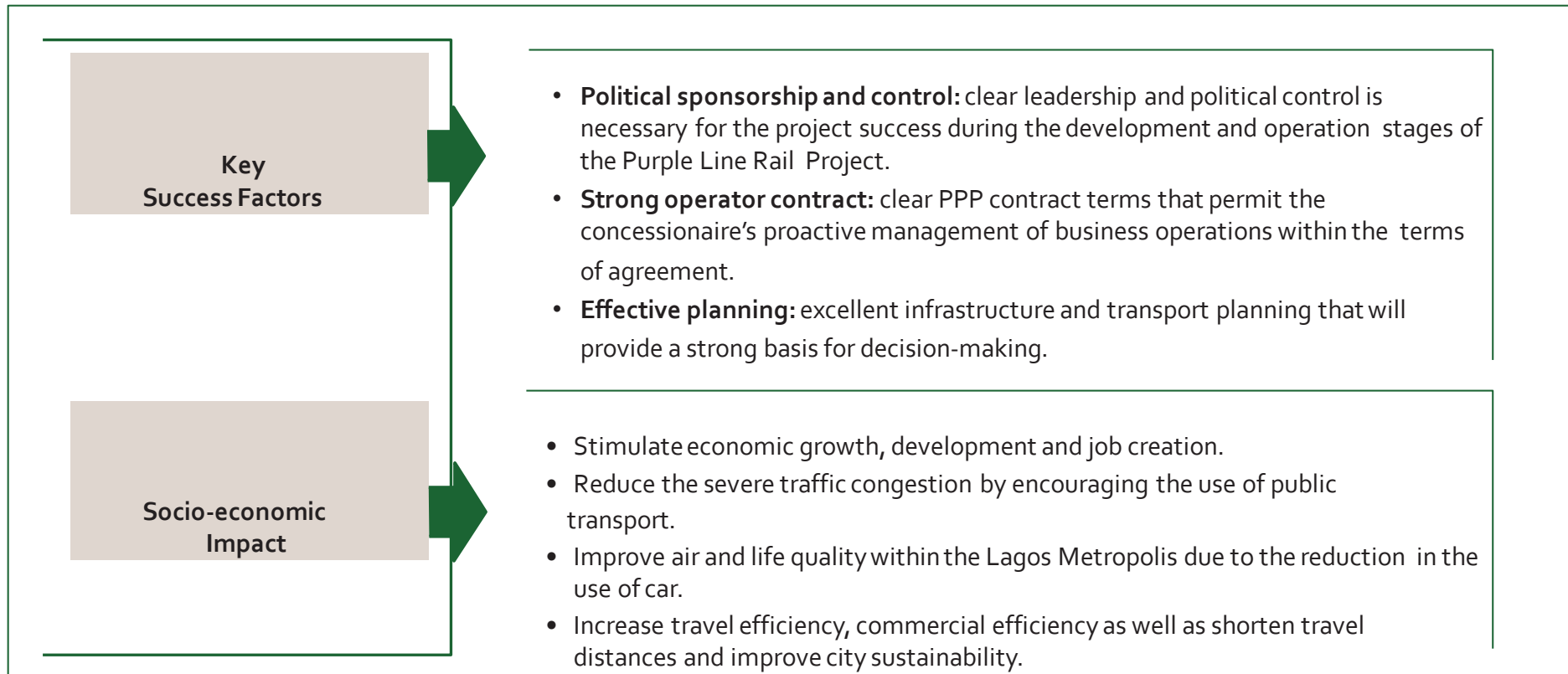
- The Lagos State Government is the champion on the Purple Line Rail Project and is committed to the construction of the infrastructure and operations.
- The project will be executed through a concessionaire and a Memorandum of Understanding (MOU) between the State Government and the selected Concessionaire will provide the terms and conditions governing the project.
- The State Government will indicate her commitment by:
 - securing the Right of Way for the project route.
 - providing statutory permits and police security during construction and operations.
 - approving deployment to site and operations of the system.
 - providing tax and duty incentives to investors.
 - enacting legislations for the operations and usage of the system.

Source: LAMATA (2017); AGP Research



Purple Line Rail Project Opportunity

The long-term nature of the Purple Line project will create and provide longstanding benefits to potential investors

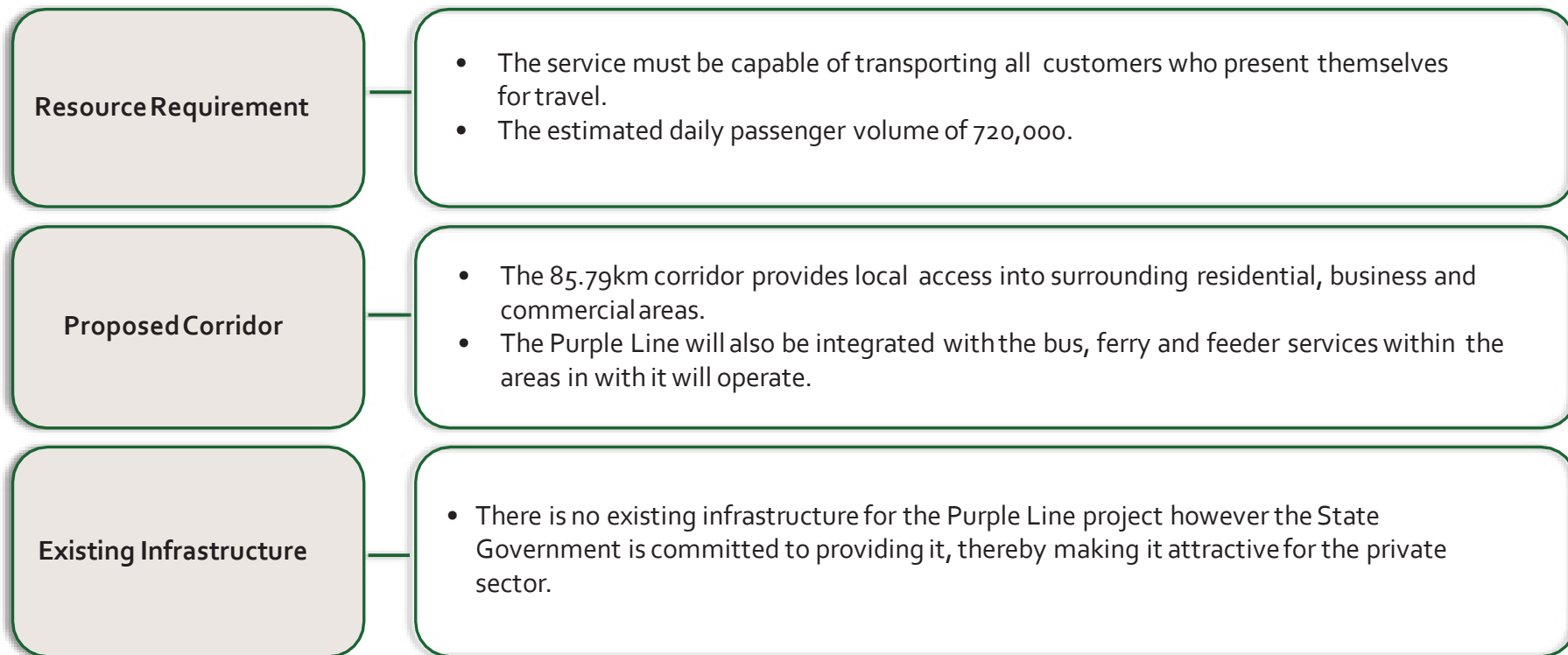


Source: LAMATA (2017); AGP Research



Purple Line Rail Project Opportunity

The success of the proposed project is dependent on the availability of necessary resources and infrastructure





Purple Line Rail Project Opportunity

The Purple Line Rail project proposes lower travel times compared to existing transport options

Resource Assessment

1

The trains selected for the Purple Line operations must be easy to maintain and energy efficient. The type of train proposed for this project are the Electric Multiple Units (EMU).

Demand Assessment

2

The high volume of people currently using Lagos public transport in its poor conditions makes the Purple Line in Lagos very attractive.

Strategic Pricing

3

The proposed fare for the Purple Line service is suggested at NGN 555 (USD1.55). Although the fares of existing public sector options are far below the suggested fares of the Purple Line service, it provides an added advantage of faster travel times by eliminating the possibility of experiencing motor traffic congestion.

Competitor Analysis

4

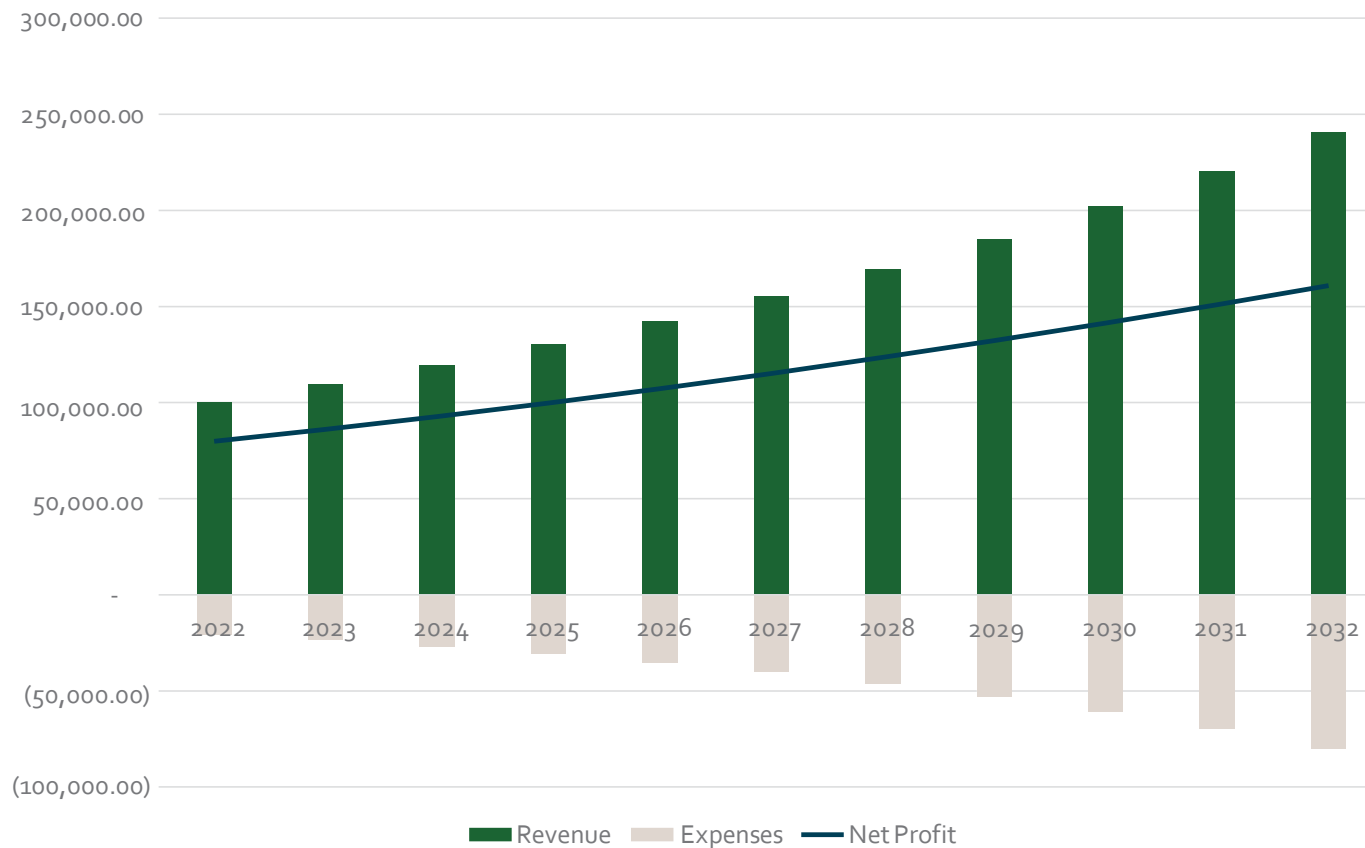
The existing public transportation options as well as the BRT services offer competing services at lower rates to consumers. However, the Purple Line provides incomparable speed and reliability facilitated by congestion-free rail travel.



Purple Line Rail Project Opportunity

The financial assessment depicts positive and attractive terms

Purple Line Rail Income Statement



Comments

- The Purple Line Project will experience a 5% growth rate annually which is favourable to investors as it depicts healthy business growth.
- The EBITDA margin is healthy enough to ensure a return on investment.
- Revenue can be boosted further through increased passenger volume, advertising and branding.



Purple Line Rail Project Opportunity

Economic Feasibility

Indicators	NGN	USD
Equity Investment (x%)	316,574,750,000	1,037,950,000
Debt Financing (x%)	316,574,750,000	1,037,950,000
Return on Investment	13 %	
Net Present Value (NPV)	115,054,593,390	377,228,175
Internal Rate of Return	17.6 %	
Net Profit Margin Range	41 % to 43 %	
Cost to Income Ratio (CIR)	20%	
<div><div><div>Key Assumptions</div><div><ul style="list-style-type: none">300 working days a year and 288 operates cycles per day.Rolling stock - Electric Motor Unit (EMU) and will be purchased out rightly.Estimated daily passenger volume 720,000 per day.Main revenue drivers include ticket fares and advertisement.Revenues will increase at a growth rate of 7% annually.Fare rates will increase by 20% every 5 years.Expenses increase by an inflation rate of 15% biannually.Franchise fee is 5% of the annual revenue.</div></div><div><div>Socio-Economic Benefits of the Project</div><div><ul style="list-style-type: none">Increased transit ridership and reduced automobile ridership.Increase in the use of public transportation.Economic efficiency.Employment generation.Stimulate the revival of communities in proximity to the rail.</div></div></div>		

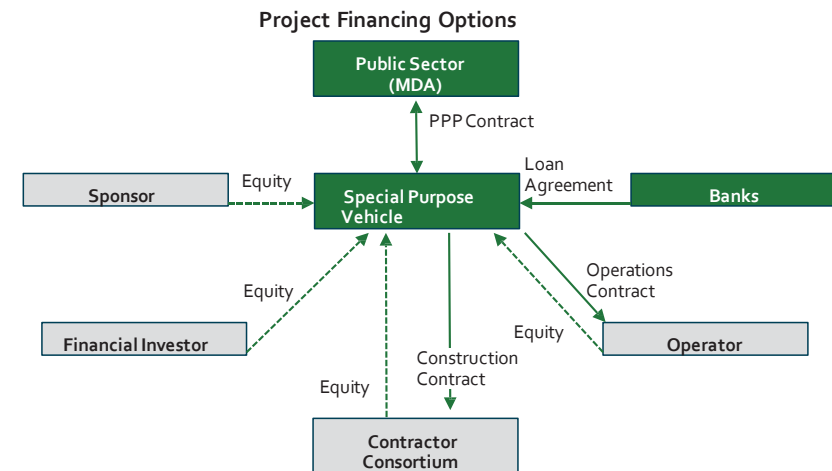


Purple Line Rail Project Opportunity

The preferred public-private option for the BRT project is BOT; however, potential investors can opt for another accepted option

PPP Options	Characteristics			
	Asset Ownership	Operations & Management	Capital Investment	Commercial Risk
Service 1 – 3 years	Public	Both	Public	Public
Management 3 – 8 years	Public	Private	Public	Public
Lease 5 – 10 years	Public	Private	Public	Private
Concession 10 – 30 years	Both	Private	Private	Private

Concession options	Characteristics				Financial Responsibility
	Asset Ownership	Design	Build	Operations and Management	
Design-Bid-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Design-Build	Public	Private by fee contract	Private by fee contract	Public	Public
Build-Operate-Transfer	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public
Design-Build-Finance-Operate	Public	Private by fee contract	Private by fee contract	Private by fee contract	Public, Public/Private or Private
Build-Own-Operate	Private	Private by contract	Private by contract	Private by contract	Private by Contract



- A common approach to financing PPP projects is to structure them as a **Special Purpose Vehicle**. This way projects are safeguarded against complex and ever-changing risks.
- SPVs receive **seed money financed with debt and/or equity**, which can be recovered as development costs from the first drawdown of the loan.
- The PPP company can then approach the market for additional financing. Investors are asked to only consider the bankability for which the PPP company was created.
- Term of investment is limited as PPP company may be dissolved once the project is completed and the concession reaches maturity.



Purple Line Rail Project Opportunity

The proposed project indicates minimal environmental impacts along the operating route

The Federal Ministry of Environment and Lagos State Environmental Protection Agency (LASEPA) have laws and guidelines that stipulate that all transportation projects are environmentally-friendly

Elements	Environmental Effects	Mitigation
Air Quality	Air quality could be affected by the rate and location of pollutant emissions that influence movement.	The use of electric energy will ensure low-emissions generators.
Aesthetics	Physical changes between Redemption Camp and LASU would cause changes to views currently experienced by commuters and residents in the area.	Incorporated measures to minimise the visual impact into the project design where practical should be pursued.
Noise	Train noise and stationary noise resulting from operations could inconvenience residents within close proximity to the railways and station.	Ensure the use of electric multiple units to eliminate the effect of noise during operations.
Water Quality	Contamination of surface waters and water drainage systems while filling fuel tanks and leakages from locomotive fuel tanks.	Employ EMUs to eliminate the occurrence of water contamination from locomotive fuels.
Vibration	Vibrations generated during train operations could contribute to human annoyance and building damage.	Utilise EMUs which will reduce but not eliminate train noise vibrations when compared to other rolling stocks.



Purple Line Rail Project Opportunity

The Purple Line Rail Project indicates positive and minimal negative social effects on the city locations along the corridor

Elements	Social Effects	Benefit/Mitigation
Serciving and Deliveries	Temporary street closure and location of construction sites collectively restrict and hinder service delivery resulting in increased time and vehicle related costs and potential loss of revenue for businesses.	Location-specific proactive solutions need to be devised to minimise the effect on commercial activity during construction.
Rents	Locations with close proximity to the route corridor will become prime with increased competition for the space and thus experience an increase in rent.	Increase the economical value of real estate along the corridor which could potentially displace current residents.
Loss of Power and Utilities	Accidental or planned shutdowns of electricity or other utilities to enable construction works could negatively impact business activities along the corridor.	All endeavours would be taken to avoid and minimise the impact on businesses and homes with proximity to the corridor.
Accelerated Development	The Purple Line Rail Project will stimulate city development by increasing the attractiveness of the city areas with proximity to the rail line.	Enhance the viability of construction and development-related businesses along the corridor.



Purple Line Rail Project Opportunity

The Lagos State Government provides investors with favourable conditions to support private sector participation

Guarantee Options

- Lagos State Government is offering compensation in demand levels fall beyond the expected demand.
- The State Government has put in place various policies and initiatives that will ensure an enabling environment to do business.

Legal Framework

- Private sector participation in public sector procurement is governed by:
 - ✓ The Lagos State PPP Law 2011.
 - ✓ The Lagos State Public Procurement Act 2011; and
 - ✓ Regulations issued by the State Executive Council (EXCO) governing the PPP process.
- These laws and regulations assures investors that all contracts will be completed in compliance with the PPP contract terms.
- There are several dispute resolution mechanisms for PPP projects and the contract management team will provide guidance on whether and issue will can be escalated to arbitration and the courts.



Purple Line Rail Project Opportunity

The risk assessment of the project shows that the Purple Line Rail project poses medium risks

	Areas	Key Risk	Impact	Likelihood	Mitigation
1	Government Policy	Change in government regulation or policy that impacts on the investment by private sector in public projects.	Financial	Medium	Agreements should be executed that protect investors rights and offer compensation where change in policy is unavoidable.
2	Fares	Demand and tariff levels may not be sufficient to cover the costs of operations.	Financial	Low	Perform due diligence to obtain sound traffic studies and use this as the basis for forecasting. The State Government is also offering a guarantee on passenger numbers such that it covers the short-fall in the event of low demand.
3	Corridor selection	A low demand corridor in a peripheral location which does not provide connections to higher demand areas.	Financial	Medium	Utilise an excellent design and planning team with successful experience in rail or similar implementation in other cities.
4	Infrastructure	Poor rail infrastructure pose the most serious risk as fixing the problem would entail partially or fully demolishing or shutting down the rail system.	Financial & Reputational	Low	Allow time to refine the rail design to revise all aspects of the project as needed to ensure excellent infrastructure planning design.
5	Currency	Fluctuations in the value of the Naira over the duration of the project could make project costs increase beyond original estimates.	Financial	Medium	The investor may protect foreign capital by hedging or benchmarking the exchange rate to convert foreign exchange to Nigeria.



Purple Line Rail Project Opportunity In Conclusion...

Investment Requirement	<ul style="list-style-type: none">▪ The requirement for the investment is NGN 633 billion which covers the start up costs and the operating expenses for the first operating year.▪ The operating expenses include the costs of operations, maintenance costs, advertising and marketing and labour costs.
Investment Purpose	<ul style="list-style-type: none">▪ The purpose of the investment is to improve the efficiency of transportation in the Lagos Metropolis.▪ The Purple Line Urban Rail is part of the intermodal Lagos State Strategic Transportation Master Plan that is aimed at transforming the Lagos transport sector beyond its current challenges.▪ The Investment will facilitate the delivery of the Purple Line Urban Rail to serve the commuters in order to improve the quality of transport service in Lagos.
Opportunity Assessment	<ul style="list-style-type: none">▪ A review of the high-level technical, commercial and financial feasibility assessments of the project depict the attractiveness of the investment.▪ The case for investment demonstrates the potential for private operators to run the Purple Line service and the financial viability of the net profits to cover the operating costs and management costs.▪ The project also presents societal benefits of the project such as journey time reduction, cost savings, the introduction of a more efficient public transport operation and urban regeneration.
Management Structure	<ul style="list-style-type: none">▪ Lagos State Government and LAMATA are open to discuss management structures and partnerships acceptable under the Lagos State PPP Laws.



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6. Investment Process

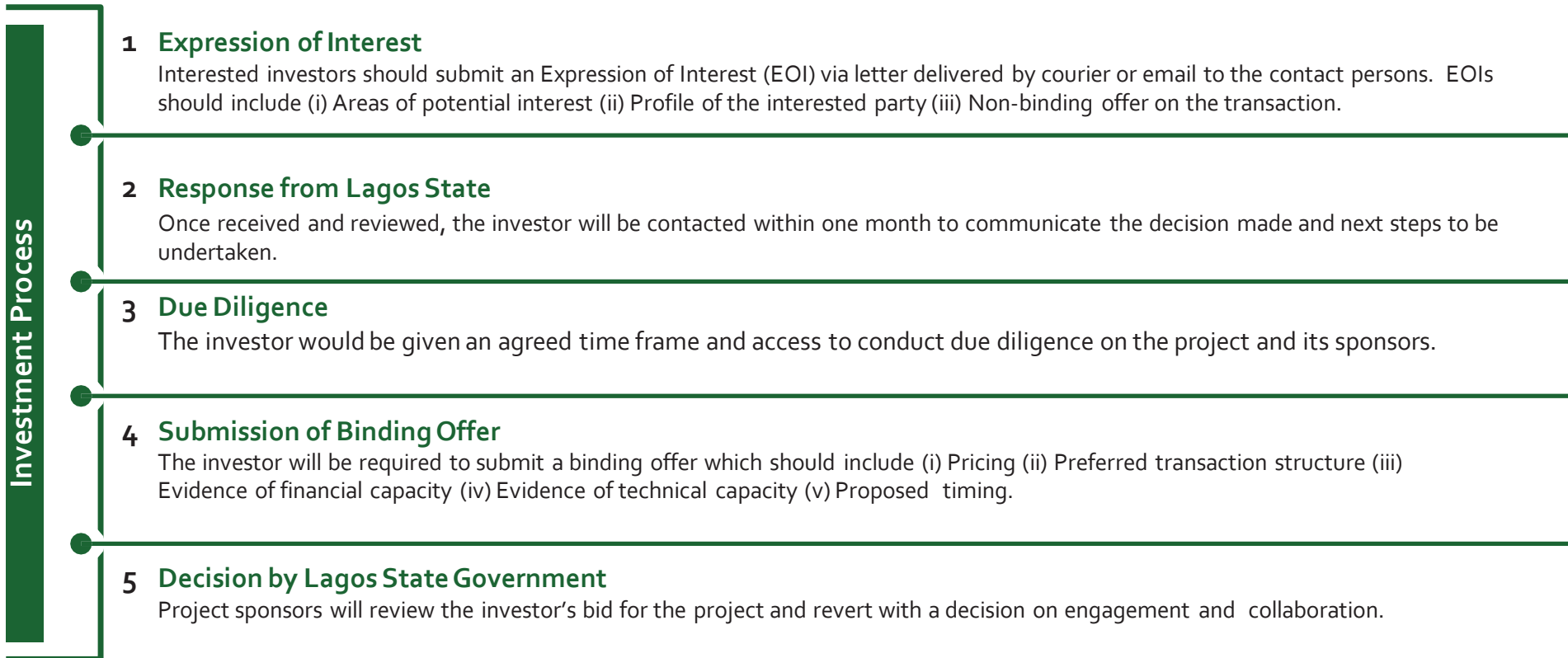
The Investment Process for any of the Lagos State transportation projects will involve five phases:

1. *Expression of Interest*
2. *Response from Lagos*
3. *State Due Diligence*
4. *Submission*
5. *Internal Review*



Investment Process

Investing in any of the three transportation projects will involve a simple process with five stages





Investment Process

Disclaimer

The bidder expressly acknowledges and agrees that the information in this investment brochure has been provided by the promoter to allow the bidder to conduct its own enquiries in order to independently assess a potential investment in Lagos State and does not constitute a warranty in relation to any binding transaction document or contract.

Cited performance may not be indicative of future results. Therefore an investor should not assume that the actual performance of any specific investment will be equal to corresponding cited performance. Each investment decision should be made with respect to specific information obtained for such investment and independently analysed by the potential investor.



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7. Contact Details

We very much look forward to hearing from you.

For further information or to express interest, kindly contact the:

- *Office of Overseas Affairs & Investment (Lagos Global) or*
- *Lagos Metropolitan Area Transport Authority (LAMATA)*



Contact Details



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LAGOS STATE GOVERNMENT
Transportation Sector Deal Book, 2018