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PROJECT PERFORMANCE ASSESSMENT REPORT

NIGERIA

Lagos Urban Transport Project

Report No. 103068
JUNE 30, 2016

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PROJECT PERFORMANCE ASSESSMENT REPORT

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LAGOS URBAN TRANSPORT PROJECT

(IDA 37200 AND IDA 37201)

June 30, 2016

IEG Financial, Private Sector, and Sustainable Development
Independent Evaluation Group

Currency Equivalents (annual averages)

Currency Unit = Nigerian naira (₦)

2002	US$1.00	₦119.41
2005	US$1.00	₦133.30
2010	US$1.00	₦151.05
2013	US$1.00	₦161.70
2015	US$1.00	₦198.90

Abbreviations and Acronyms

BRT	bus rapid transit
BRT-Lite	low-cost BRT
CO2	carbon dioxide
CPS	country partnership strategy
DCA	development credit agreement
ERR	economic rate of return
GDP	gross domestic product
GEF	Global Environment Facility
ICR	implementation completion and results report
IEG	Independent Evaluation Group
IMT	intermediate means of transport
LAMATA	Lagos Metropolitan Area Transport Authority
LASTMA	Lagos State Traffic Management Authority
LASWA	Lagos State Water Authority
LFSC	Lagos State Ferry Services Company
LMOT	Lagos Ministry of Transport
LSMWI	Lagos Ministry of Works and Infrastructure
LUTP	Lagos Urban Transport Project 1
LUTP2	Lagos Urban Transport Project 2
MVA	Motor Vehicle Administration
NPV	net present value
NURTW	National Union of Road Transport Workers
PAD	project appraisal document
PDO	project development objective
PPAR	Project Performance Assessment Report
RAP	resettlement action plan

Fiscal Year

Government of Nigeria: January 1 – December 31

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Peter Freeman (consultant) and Fang Xu prepared this report. The project was assessed in the field in November 2015. This report was peer reviewed by Jean-Charles Crochet and panel reviewed by George T. Pitman. Richard Kraus provided administrative support.

Principal Ratings

Nigeria: Lagos Urban Transport Project (IDA – 37200 and 37201)

	ICR*	ICR Review*	PPAR
Outcome	Highly Satisfactory	Moderately Satisfactory	Moderately Satisfactory
Risk to Development Outcome	Negligible to Low	Moderate	Moderate
Bank Performance	Highly Satisfactory	Satisfactory	Moderately Satisfactory
Borrower Performance	Highly Satisfactory	Satisfactory	Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible World Bank department. The ICR Review is an intermediate Independent Evaluation Group product that seeks to independently verify the findings of the ICR.

Key Staff Responsible

Project	Task Manager/Leader	Division Chief/ Sector Director	Country Director
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Independent Evaluation Group Mission: Improving World Bank Group development results through excellence in evaluation.

About this Report

The Independent Evaluation Group (IEG) assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the World Bank's self-evaluation process and to verify that the World Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEG annually assesses 20-25 percent of the World Bank's lending operations through field work. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons.

To prepare a Project Performance Assessment Report (PPAR), IEG staff examine project files and other documents, visit the borrowing country to discuss the operation with the government, and other in-country stakeholders, and interview Bank staff and other donor agency staff both at headquarters and in local offices as appropriate.

Each PPAR is subject to internal IEG peer review, Panel review, and management approval. Once cleared internally, the PPAR is commented on by the responsible Bank department. The PPAR is also sent to the borrower for review. IEG incorporates both Bank and borrower comments as appropriate, and the borrowers' comments are attached to the document that is sent to the World Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the IEG Rating System for Public Sector Evaluations

IEG's use of multiple evaluation methods offers both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEG evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (additional information is available on the IEG website: http://ieg.worldbankgroup.org).

Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance, efficacy, and efficiency. *Relevance* includes relevance of objectives and relevance of design. Relevance of objectives is the extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Relevance of design is the extent to which the project's design is consistent with the stated objectives. *Efficacy* is the extent to which the project's objectives were achieved, or are expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings for Outcome:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings for Risk to Development Outcome:* High, Significant, Moderate, Negligible to Low, Not Evaluable.

Bank Performance: The extent to which services provided by the World Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings for Bank Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower (including the government and implementing agency or agencies) ensured quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development outcomes. The rating has two dimensions: government performance and implementing agency(ies) performance. *Possible ratings for Borrower Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Preface

This Project Performance Assessment Report (PPAR), prepared by the Independent Evaluation Group (IEG), evaluates the Lagos Urban Transport Project in Nigeria. The International Development Association (IDA) approved a credit of US$100 million for the project on November 21, 2002 (Cr. 37200) and additional financing of a further US$ 50 million in April 2007 (Cr. 37201). Credit 37200 was fully disbursed, but US$0.4 million was cancelled from Credit 37201. The project closed on December 31, 2010, two and a half years later than originally planned.

At appraisal, the total project cost was estimated at US$ 135 million, but the final cost of the expanded project was US$ 265.8 million. The borrower contributed an amount of US$ 100.4 million, nearly three times larger than originally envisaged.

The project was selected for evaluation by the Independent Evaluation Group (IEG) as an input to the on-going major evaluation scheduled for FY2017 on the effectiveness of the World Bank Group's support to urban transport development. This was because the project included not only the improvement of transportation in the Lagos Metropolitan Area, but also the preparation of the first bus rapid transit project (BRT) in Africa. The project encompassed multimodal transport investment including ferry services, traffic management, and a new coordinating transport authority. Another reason was to re-visit the disconnect between the self-rating in the implementation completion and results report (ICR) and that given by IEG in its review of that ICR posted on June 26, 2013.

IEG prepared the PPAR on the basis of the project appraisal documents (PADs), ICRs, development credit agreements (DCAs), and project papers, related reports, memoranda, and working papers. Meetings were held with World Bank staff in Washington, DC, and at the resident mission in Abuja. An IEG field mission visited Nigeria in November 2015 to review achievements and assess the sustainability of the project in light of subsequent developments, including the active follow-on project. Discussions were held with the Lagos Metropolitan Transport Authority, the Lagos State Waterways Authority, the Lagos State Traffic Management Authority, and the bus operator–Primero Transport Services Ltd—among others.

The team expresses its appreciation for the generous time and attention given by the borrower and all concerned parties. A list of persons met by the team during the mission is given in Appendix C.

Following IEG practice, copies of the draft report were sent to the appropriate government officials and implementing agencies, and no comments were received.

Summary

This is a Project Performance Assessment Report (PPAR) of the World Bank-supported Lagos Urban Transport Project in Nigeria. The International Development Association (IDA) approved a credit of US$100 million for the project on November 21, 2002, and additional financing of a further US$ 50 million in April 2007. The project closed on December 31, 2010.

Lagos is the largest city in Sub-Saharan Africa. It is the commercial hub and main port of Nigeria, with a metropolitan area population estimated to be around 17 million (2015). For many years, public transportation in Lagos has been fragmented and unreliable, with multiple private operators, small poor quality vehicles, and an unregulated environment. Chronic traffic congestion is a major problem. These challenging circumstances presented the World Bank and the borrower with a huge task.

The state government program that this project intended to support had the development objective of supporting the improvement of transport services in the Lagos Metropolitan Area in particular for public transport users, especially the poor. This was to be achieved through five sub-objectives: improvements to the management of the Lagos metropolitan transport sector; enhancement of the road network; more efficient public transport services; the promotion of water transport, and the preparation for future phases of the urban transport program. A key factor in the project was support for the newly established Lagos Metropolitan Transport Authority (LAMATA), which was empowered to plan an integrated transport system for the Lagos State Government with a specific focus on implementing and regulating mass transit systems. A transport fund was to be established, which would eventually be able to cover the costs of maintenance of transport infrastructure in the metropolitan area. The project scope was expanded after four years of implementation through the provision of additional financing from the World Bank and a substantial further contribution from the borrower.

The credit financed road rehabilitation and maintenance to restore the main routes over which the public transport operated. The transport fund was indeed set up and by 2009 LAMATA was able to meet 60 percent of its operational funding requirements. This is being further pursued in the follow-on project, Lagos Urban Transport 2, which, among other things, aims to ensure that more income flows into the fund.

A quality pilot bus franchise scheme, owned by former operators of small, poorly maintained buses, was implemented on specific corridors and the project financed consultancy support for developing a conceptual framework for this. It subsequently proved possible to attract commercial funds for the purchase and operation of 100 high capacity buses and to lease a further 120 new buses. There was no government subsidy for operating the scheme and it has been financially successful. Members of the National Union of Road Transport Workers operated the buses supported by LAMATA and succeeded in paying back the loan in only two years. Selected stakeholders, including union representatives, were taken on a study tour to see successful bus and mass transit

operations in Brazil and Colombia and this was a crucial step in their acceptance of the concept.

Later, this concept was expanded in a pilot bus rapid transit line (known as BRT-Lite), which was also established along a 22 km. route–the first in Africa. BRT is a bus-based mass transit system with dedicated lanes to deliver fast, comfortable, and cost-effective service. Though the infrastructure was funded by the State of Lagos, the World Bank, drawing on its experience in Latin America, helped adapt the concept to African conditions and financed the design of the BRT line at a cost that was much cheaper than similar schemes elsewhere because it had boarding points rather than full stations and did not separate the track from the roadway exclusively for the entire length. Public support for the project is evident and ridership has far exceeded expectations.

Overall, the project was pro-poor oriented. Time spent by poor households on bus travel was reduced, as was travel time and waiting time per trip along project corridors. Passengers also experienced fewer transfers in their journeys, while the amount spent by poor households on bus travel along the corridors fell from 20 to 12 percent of income.

Relevance of the objectives is rated substantial, as is relevance of design, although it was hampered by the failure to implement a results framework in the first few years of the project. The quality of monitoring and evaluation was modest. The objective to improve the transport services in the Lagos Metropolitan Area in particular for public transport users and for the poor was substantially achieved, despite some shortcomings with respect to the ferry services regarding safety and the lack of progress in attracting private sector investment to the Lagos Ferry Services Company. Efficiency is assessed as substantial given the high economic rate of return. The project outcome is assessed as **moderately satisfactory.**

Risk to development outcome is considered **moderate.** The setting up of the transport fund has been an important step in the right direction. Although the inflow to the fund covers only 60 percent of recurrent and periodic maintenance needs in the road sector, adequate provision for maintenance of the BRT service has been provided. At the outset, it was indicated that it was a longer-term goal to achieve 100 percent cost recovery and further steps in the follow-on project are expected to close this gap. In comparison, the water transport services are cash-starved and insufficiently attractive to the private sector. In general, there is still a degree of dependency on World Bank funds in the follow-on project to maintain a stable situation. The current economic situation in Nigeria, which is deteriorating with the lower international oil prices, is a cause for concern given that 70 percent of government revenue comes from that source.

Regarding World Bank performance, the project was subject to a review by the World Bank's Quality Assurance Group in June 2003, which was concerned about the difficult country context and complex design. Concern was expressed that the implementation of the physical components might sidetrack the Lagos authorities and the World Bank from the objective of promoting the institutional and cost recovery improvements that were the project's top priority. The complexity did contribute to the limited progress in the initial years of project implementation. However, despite the over-stretched design and jurisdiction difficulties, the borrower, with the World Bank's help, managed to improve

the public transport service to the satisfaction of the users, while institutional capacity was strengthened and a cost recovery mechanism established. Nevertheless, a proper monitoring and evaluation system was not in place until the approval of additional finance. At this time, the number of traffic management units to be set up was reduced; and over time, the closing date was progressively extended by two and a half years.

The World Bank during supervision sought ways to resolve various issues in a collaborative manner. Technical assistance, though there were perhaps too many separate studies, was commensurate with the needs of the project. The World Bank's procurement and financial management procedures set the project on a sound footing and gave credibility to LAMATA as a transparent organization. Windfall savings were used opportunistically to finance the design costs of the BRT. Overall the rating for World Bank performance is considered **moderately satisfactory.**

In respect to borrower performance, the state government ensured approval of the LAMATA legislation; provided support to empower, resource, and establish it; and streamlined responsibilities within the government to better define the role and mandate of LAMATA as a planning and regulatory body. Although the state government was partly responsible for insufficient counterpart funding early in implementation, it subsequently offered timely solutions, and was willing to restructure the project, such that by closure, the state government had financed over US$100 million from the state budget and transport fund towards project activities, including the capital costs of the pilot BRT line. The state government's final contribution was considerably greater than the initial US$ 35 million specified at appraisal. LAMATA made steady progress despite the challenging circumstances and demonstrated competence in complying with World Bank procurement and safeguard requirements. Borrower performance is rated **satisfactory.**

Lessons

Setting up a strong institutional basis for coordinated planning and regulation is critical to the success of urban transport projects. However, such changes take time and need to be supported by strong commitment from top officials and politicians to ensure the integrity of governance changes as in the case of the establishment of LAMATA. Supporting legislation is essential and the roles and responsibilities of all transport entities affected need to be worked through. The recruitment of experienced international staff enabled the creation of a strong authority and the ability to move beyond the project and begin to implement an ambitious reform agenda.

The challenges facing cities with respect to urban transport and its governance are of long duration and not quickly fixed. The Bank had its first intervention in the city with the Lagos Urban Transport Project, followed by the second Lagos Urban Transport Project, this continuous engagement by the Bank is a compelling requirement to sustain progress in urban transport sector. It should also be noted that urban transport projects require longer periods for implementation—seven years or longer when many authorities are involved.

Critical to the success of the project was steady progress with the institutional reforms and the establishment of a transport fund, which contributed to the positive outcome by improving financial sustainability. The team targeted the right priorities in a comprehensive capacity building program and ensured that the necessary preparations and commitments were made to establish a sustainable transport fund. However, while financial self-sufficiency for institutions is an important longterm goal, it may take longer to achieve than has been previously recognized.

World Bank supervision teams need flexibility and the ability to adjust the project to take advantage of opportunities that may arise. In this case, the enthusiasm of the politicians in the State of Lagos to pursue the BRT project presented such an opportunity, and the team was able to use windfall funding to help the pilot BRT project to become a reality by financing the design and related costs and in providing technical advice from the World Bank's global experience. The concept of BRT was adapted to the African context so that it was more affordable to the poor in Lagos.

Observing the experience of other countries or cities where new public transport concepts have worked successfully can convince local stakeholders to adopt a new approach. In this case it convinced key stakeholders, including the trade unions, to agree to adopt the franchising and BRT concepts locally. That said, the integration of existing operators into new bus franchise services without fundamental transformation of business models underlying those services is at best a transitional strategy and not sustainable in the long run.

Marvin Taylor-Dormond
Director
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1. Background and Context

Economic Background

1.1 Nigeria, the largest country in West Africa, exceeds the area of France and Germany combined. It has a federal government system with 36 states and one federal territory (Abuja). In 2014 the country's gross domestic product (GDP) overtook that of South Africa to become the continent's largest economy.

1.2 According to the World Bank, Nigeria officially has a population exceeding 177 million (2014) with 47 percent urbanized, but many sources suggest that the figure, although based on census data, may be inflated, with the population in the north being broadly overstated and that in the south understated.[1] Some estimates put the true population closer to 160 million. The Economist Special Report on Nigeria, (June 20, 2015), for example, points out that because allocations of revenue and resources from central government depend on population estimates, every region has had an incentive to inflate its figures. Since eight cities have a population of over a million this issue is significant for effective planning. There are two mega cities, Lagos and Kano, with populations exceeding ten million, while five other cities have a population between five and ten million.

1.3 During the past decade the country, despite a history of weak governance, experienced strong economic growth averaging 6.5 percent a year, strengthened by prudent fiscal policy management and a decline in the rate of inflation. The successful outcome of the recent Presidential and Governorship elections also enhanced stability and the country's macroeconomic prospects. Poverty has declined over the last five years by about 2.3 percent, despite continued high population growth. Nevertheless, a major challenge is to handle the steep fall in oil prices. Nigeria is a major oil exporting country and has large reserves of natural gas. Although oil contributes only about a tenth of Nigeria's GDP, it accounts for 70 percent of government revenue. The sharp decline in oil prices since the third quarter of 2014 has posed major challenges to the country's public finances; it has constrained the ability of the new federal government to undertake some ambitious programs. Strong non-oil growth is needed and hurdles include the need to strengthen the investment climate and improve governance (particularly at state level). Fiscal decentralization gives the state governments considerable policy autonomy, but capacity is weak in many states meaning that improved governance will likely be a long-term process.[2]

Lagos Urban Transport Context

1.4 Lagos is the largest city in sub-Saharan Africa. It is the commercial hub of Nigeria, with a metropolitan area population estimated to be around 17 million in 2015,

[1] The Economist Special Report on Nigeria, *Nigeria's Opportunity* (June 20, 2015)
[2] www.worldbank.org/en/country/nigeria/overview

growing at four percent per year.[3] Estimates suggest it is the sixth largest city in the world. The metropolitan area stretches well beyond the physical boundaries of the State of Lagos. Its seaport and the international airport handle over 70 percent of the nation's cargo. It is also the largest manufacturing center in Nigeria, employing over 45 percent of the skilled manpower in the country. Although Lagos has been replaced by Abuja as the country's capital city, its role as the principal financial and commercial center and gateway to the country is unquestioned.[4]

1.5 The absence of effective policies on land use and economic development has led to urban sprawl; the long travel distances have also pushed up the price for public transport affecting the poor disproportionately. Before the project, Lagos lacked any mechanism to coordinate the plans and actions of the various agencies at the federal, state, and local government levels for managing, maintaining, and developing the transport network in an integrated manner. Moreover, most of these agencies lacked a secure financial basis for their operations; their budgets were vulnerable to fiscal pressures and higher political priorities.

1.6 Transport operations in Lagos for the public are almost entirely owned and managed by the private sector – typically individuals own one or two second-hand vehicles that they rent out to drivers on a daily basis. For many years such transportation in Lagos has been fragmented and unreliable, with multiple private operators, small poor quality vehicles, and an unregulated environment. Chronic traffic congestion is a major problem with commuters reliant on a large fleet of 75,000 minibuses (*danfo*) together with smaller numbers of midi-buses (*molue*) and shared taxis (*okada*). *Danfo* and *molue* are low quality modes of transport with variable fares. Riders of such vehicles tend to experience uncomfortable, unsafe and tedious journeys. Although minibuses are widely used they are not much liked. Most minibus owners have only a few vehicles and compete aggressively for passengers. Transport prices associated with these modes historically accounted for over 20 percent of a typical passenger's disposable income. The *danfo* and *molue* are affiliated with one or more associations, the largest being the National Union of Road Transport Workers (NURTW).

1.7 There are far more registered private vehicles than one would expect in a country at this stage of development. This is a legacy of subsidized petroleum prices over many years and unrestricted imports of cheap second-hand vehicles. Commuters from the north and west of Lagos trying to reach the central business district on Lagos Island typically have a one-way journey of more than two hours.[5] The linear nature of the commute concentrates the congestion in a north-south pattern since possible alternative routes are constrained by the coastal geography. Buses account for 82 percent of the share of motorized person trips, while taxis and cars account for 13 percent and the remaining five percent are motorcycles, despite the fact that two-wheeled traffic is officially banned in the city center. Non-motorized transport users (principally pedestrians), as observed by

[3] Lagos Central Bureau of Statistics; - the 2006 national census put the population of Lagos at nine million, but the Lagos authorities vehemently dispute this figure; according to the Lagos State Bureau of Statistics the population was closer to 17 million (2015).
[4] World Bank, 2010 *Lagos Urban Transport Project 2*, PAD, Report 49974-NG
[5] Mobereola D, 2009, *Lagos Bus Rapid Transit*, SSATP Discussion Paper No 9.

the IEG mission (November 2015), have very limited infrastructure facilities; sidewalks have largely been taken over by parked cars and there are few footbridges or pedestrian crossings.

1.8 Other modes of transport include a limited daily rail commuter service operated by the National Railway Corporation and a branch line that is scarcely used (these rail corridors represent a significantly under-used asset). In addition there are ferry services provided by both state and federal government. Such services together at the time of appraisal accounted for less than one percent of total person trips, but were considered to have good potential for expansion.

1.9 The institutional structure of Nigeria has three levels: federal, state and local. At the federal level, the Ministry of Transport is responsible for national transport policy and the Ministry of Works develops the federal road network, which connects the cities. Urban transport has been devolved to the states through the 1999 constitution and the states thus make their own laws on traffic and transport. In Lagos State the Ministry of Transport (LMOT) is the primary agency for transport policy and implementation, whilst the newly created Lagos Metropolitan Area Transport Authority (LAMATA) was to introduce an integrated transport system for the state with specific focus on implementing and regulating mass transit systems. The Lagos State Ministry of Works and Infrastructure (LSMWI) is responsible for the state road network and the Lagos State Traffic Management Authority (LASTMA) has the power for primary traffic management and enforcement; it reports to the Commissioner for Transportation.

World Bank Assistance to Urban Transport

1.10 Federal government policy is to propagate the concept of sustainable urban transport involving improvements to safety, cleanliness, and reliability for the urban transport systems in Nigeria, as well as through institutional reforms and improvements to the regulatory and enforcement environment.[6] The World Bank committed to support urban transport development in Lagos in order to improve the urban environment and transport for the poor in particular. The concept of metropolitan authorities in developing countries had already been implemented elsewhere in Africa with Bank support, notably in Dakar, Senegal.[7] Under LUTP a Bus Rapid Transit (BRT) Line was established on a pilot basis with the World Bank providing technical support and the capital funding by the Lagos State Government.[8] This BRT concept is being expanded under the follow on project Lagos Urban Transport Project 2 (LUTP2) with the financing and implementation of two additional lines. The World Bank's intention is to consolidate and build on the achievement of the first project. Ultimately it would like to support replication of the project in other cities such as Kano.

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[6] Transport Sector Policy Letter drafted in 1996 and revised in 2001.

[7] Kumar A and Agarwal O, 2013, *Institutional Labyrinth: Designing a Way Out for Improving Urban Transport Services – Lessons from Current Practice,* Working Paper 84066, World Bank

[8] BRT is a bus-based mass transit system that delivers fast, comfortable and cost effective service. The BRT-Lite system in Lagos operates along a 22 km. route of which 65 percent is physically segregated from the regular roadway and 20 percent is separated by road markings.

1.11 The World Bank is well placed to mobilize its knowledge and expertise in urban transport worldwide for the benefit of Nigeria. Best practices in similar projects such as in Bogota, Colombia and Curitiba, Brazil have been used as a basis for adapting the BRT bus-based mass transit system to the African context.

1.12 Future focus is likely to be on reviving the under-used rail corridors, expanding the BRT network, reducing traffic-related air pollution, improved traffic management, introduction of integrated land use measures and parking policies as well as upgrading the pedestrian facilities and promoting road safety. This is in line with the Transport Master Plan for Lagos and the 2009 Country Partnership Strategy.

2. Project Objectives, Design, and their Relevance

2.1 This Project Performance Assessment Report (PPAR) evaluates the Lagos Urban Transport Project in Nigeria. IDA approved a credit of US$100 million for the project on November 21, 2002 and additional financing of a further US$ 50 million in April 2007. Credit 37200 was fully disbursed, but US$0.4 million was cancelled from Credit 37201. The project closed on December 31, 2010, two and a half years later than originally planned.

Objectives

2.2 The project objectives stated in the Development Credit Agreement (DCA - conformed copy June 24, 2003) differed from the PAD. The DCA (page 2) first refers to a Lagos State program whose objectives were " to improve the transport services in the Lagos Metropolitan Area in particular for public transport users and for the poor by: (i) maximizing use of existing capacity; (ii) promoting private sector participation and competition; (iii) raising cost-recovery and ensuring sustainability; (iv) regulating quality, externalities and competition in the transport sector; (v) developing human resources; (vi) providing safety nets; and (vii) involving stakeholders in the development process and declaring Lagos State's commitment to the execution of the Program."

2.2 Subsequently, in Schedule 2 (page 19) of the DCA, the project development objective was stated as "to support the program by *(a) improving the management of the Lagos metropolitan transport sector; (b) enhancing the public transport road network in an environmentally, socially and financially sustainable manner; (c) enhancing bus services; (d) promoting water and non-motorized transport; and (e) prepare future phases of the Program.*

2.3 The PAD (page 2) on the other hand describes the project objectives as: "The capacity to manage the transport sector in the Lagos Metropolitan Area is sustainably improved and the efficiency of the public transport network enhanced, such that it contributes measurably to poverty reduction."

2.5 After reviewing the above, this assessment assesses the program objectives as the overarching objectives and the means to achieve them through the five activities listed in Schedule 2 of the DCA, but takes note that the fifth activity is mainly an input rather than an output.

Relevance of Objectives

2.6 The relevance of the project development objectives is **substantial.** However, as described above, it was difficult to distinguish some of the objectives from the components.

2.7 *The program objective is*:

- To improve the transport services in the Lagos Metropolitan Area in particular for public transport users and for the poor.

The means by which the program objectives are supported in the project are:

- Improving the management of the Lagos metropolitan transport sector, including preparation of future phases of the program;
- Enhancing the public transport road network in an environmentally, socially and financially sustainable manner;
- Enhancing bus services;
- Promoting water and non-motorized transport; and
- Preparing future phases of the program.

2.8 After 30 years of military rule, the World Bank's interim strategy for 2000-2001 discussed the need for a full Country Assistance Strategy formulated on the basis of a recently completed Poverty Reduction Strategy Paper. It stated that the major role of the World Bank would be to help the Nigerians build their capacity to manage their own resources effectively, and this theme would inform all of the World Bank's activities in Nigeria. Studies on private sector competitiveness, including a survey of international businesses, had shown that transport infrastructure was given the least satisfactory assessment in Nigeria out of twenty-four African countries.[9] The objectives were thus relevant at the time and remained relevant throughout the life of the project.

2.9 The 2009 Country Partnership Strategy (CPS) covering the period FY10-13 was jointly developed by the Federal Government of Nigeria, the World Bank Group, as well as the United Kingdom's Department for International Aid, and the United States Agency for International Development. In wishing to transform and diversify Nigeria's economy, there was a particular focus on establishing an integrated mass transit program with priority given to road, rail, and water transportation services. The September 2011 CPS Progress Report proposed Lagos State as a candidate to pioneer state level urban development operations and prompt other states to improve planning, management and coordination of urban transport functions in their metropolitan areas. The importance of diversifying away from oil dependency, the provision of key infrastructure and a major move to strengthen governance are continuing important features of the latest CPS for

[9] World Economic Forum, 2000, *The Africa Competitiveness Report 2000/2001*, Centre for International Development and World Economic Forum, New York, Oxford University Press

FY14–17, though this is more applicable to the follow on project, which mainly focuses on expanding BRT and other transport services further.

2.10 The PDOs were also consistent with the federal government's priorities as presented in the 2007 National Economic Empowerment and Development Strategy for Nigeria as well as the Lagos State Economic Empowerment and Development Strategy. Both strategies recognize the economic importance of an efficient and sustainable transport system for the Lagos Metropolitan Area, which is the main commercial center of the country. The objectives are also aligned with the long-term (2020) federal government plan to develop an efficient and affordable multi-modal transportation network for the major cities.

Components

2.11 The project comprised five components:

2.12 **Capacity building** (Estimated cost at appraisal, US$ 27.6M; actual cost at completion, US$44.2M). This component focused on capacity building through the establishment of an appropriate policy, regulatory, and institutional framework for the management and financing of the transport system of metropolitan Lagos. It included institutional strengthening to bring the Lagos Metropolitan Area Transport Authority (LAMATA) into operational effectiveness and included the establishment of units responsible for procurement, financial management, and safeguard compliance as well as the creation of a special transport fund from sector based user charges to be used by LAMATA to entirely finance its operating costs and discharge its key responsibilities. The establishment of the Fund was covenanted in the loan agreement with details of amounts to be deposited from collection of user charges each fiscal year. In addition, LAMATA was to maintain, starting in 2003, a ratio of total operating expenses to total expenditures of less than 0.06.

2.13 The component included the construction of an office building for LAMATA and strengthening the capacity of other transport sector agencies in Lagos State. These included the Lagos State Ministry of Transportation (to strengthen its policy making and performance monitoring functions), and the Lagos State Ministry of Works, (to improve its planning for road investments and explore options for toll roads). In addition, the Lagos State Ministry of Women's Affairs and Poverty Alleviation was included (to strengthen its poverty and gender impact monitoring capacity), and the Nigeria Police Traffic Unit (to enhance traffic enforcement capacity in Lagos). Provision was also made for the establishment of Traffic Management Units in key local government areas as well as the financing of the operating costs of LAMATA, including external audits and the carrying out of other activities consistent with sector policy and strategy. A cost recovery strategy was to be drawn up moving towards full cost recovery in the long term and ensuring the declared road network was fully covered by user charges by the end of the project.

2.14 **Road network efficiency improvement** (Estimated cost, U$ 98.5M; actual cost, U$ 158.8M). The component was designed to enhance the efficiency of the existing road space, to reduce vehicle-operating costs and to improve road safety, in particular

pedestrian safety. It comprised: maintenance and rehabilitation measures on a prioritized 400 km of the 632 km of main road network (including bridges) in the Lagos Metropolitan Area that serves as the backbone for the bus system; the rehabilitation and improvement of major junctions on the above network incorporating low cost traffic systems management measures; and the preparation and implementation of similar measures to improve traffic flow on Lagos Island and in Ikeja.

2.15 **Bus services enhancement** (Estimated cost, US$ 0.7M; actual cost, US$ 50.7M). This component comprised technical assistance to LAMATA for the establishment of an effective regulatory framework for bus services provision by the private sector and the adaptation of this framework to the other modes of public transport (rail mass transit and water transport). It included the preparation of a pilot demonstration project for the provision and financing by the private sector of improved bus services. (This component was later considerably expanded with funding from IDA additional financing, and from the Lagos State Government).

2.16 **Water transport promotion** (Estimated cost, US$ 2.9M; actual cost, US$ 5.3M). To contribute to the improvement of modal diversity within an integrated urban transport system by promoting the enhanced provision and use of water transport, including the development and implementation of a detailed strategic plan for improving the use of the waterways of Metropolitan Lagos for transport services, including the establishment of an appropriate regulatory framework; a study on the potential for privatization of the Lagos State Ferry Services Corporation and disposal of existing state owned ferries and the encouragement and promotion of private sector participation in the provision of water transport services. In addition there were feasibility studies for potential franchised routes and spot improvements to selected existing terminal facilities.

2.17 **Preparation for follow-on phases** (Estimated cost, US$ 5.3M; actual cost, US$ 6.8M): This component consisted of the preparation of a comprehensive Master Transport Plan for metropolitan Lagos, an institutional reform plan of the transport sector (in particular on reform of the Motor Vehicle Administration system), a strategy for the enhanced use of intermediate means of transport (IMT)[10] in metropolitan Lagos, and all the necessary studies and preparatory activities for the next phase of the implementation of the Lagos Metropolitan Area transport policy and strategy, including the preparation of resettlement plans for the implementation of rail mass transit in the Agege-Iddo corridor.

Relevance of Design

2.18 During and prior to project preparation the performance of urban mobility systems in Lagos was dismal, but the government, in creating the Lagos Metropolitan Area Transport Authority (LAMATA) in 2002, understood that there was an urgent need to establish an organizational and institutional capacity for the planning and management

[10] "Intermediate forms of transport" is a generic term that includes animal carts, bicycles, motorcycles, rickshaws, and wheelbarrows, among other things.

of the state's transport system. It also needed to raise the level of cost recovery in the transport sector and promote the use of affordable public transport services.[11]

2.19 The overall relevance of design is rated **substantial.** Despite the design complexity, there was a good causal linkage between the planned activities, the sub-objectives and the program objective. The sub-objectives commenced logically with institution building of LAMATA and the upgrading of the identified roads in the core area used by public transport, as well as improvements to traffic flow at the major intersections. Expanded and better bus and ferry services directly targeted the poorer transport users. The studies showed how all urban transport modes can be further improved and integrated in the program over time. A focus on the poorer public transport users is evident from the emphasis on reducing the cost of travel and improving the service for users from poor households.

2.20 The results framework was delayed initially, because data in Lagos are extremely difficult to collect, but when the framework was finally in place, it supported a sensible approach of measuring savings in travel time and the costs of travel for rail and road users; it provided for the establishment of a coordinating metropolitan authority to oversee implementation progress as well as considerable capacity building; it introduced a transport fund to ensure operations and maintenance could be funded going forward; and enabled comprehensive urban transport planning. However, the indicators were not supported by a full baseline survey at the outset and only, when additional financing was approved, were credible baseline figures approved.

2.21 On the other hand, the bus service component of the project was designed as a public-private partnership with the public sector financing the infrastructure and the private sector financing bus procurement and operations. While the Credit did not finance bus purchases, the success of the project nevertheless depended on the ability of the private sector to obtain financing for buses. This was the major success of the project.

2.22 Traffic congestion was to be relieved by a series of measures with implications for improving the environment, while innovative public transport interventions supported this aim through reducing emissions and encouraging commuters to switch from taxis and other vehicles to less-polluting modern buses, although there were no targets set for improving emissions levels.

3. Implementation

Implementation Experience

Loan and Credit Details

3.1 The total cost of the project increased from US$135 million at the time of appraisal to US$ 265.8 million at closing. IDA approved additional financing of US$50 million on 10 April 2007, while the borrower provided counterpart funding and contributions from a transport fund, established under the project, to the value of

[11] Letter of Sector Strategy and Policy, PAD, Appendix 11

US$100.4 million. The remaining US$15.4 million was funded out of windfall foreign exchange gains. The most significant cost increases were for the road network and the bus services components; road overlays planned for 42 km. was extended to 68 km. and length of the franchised bus network was increased from 10,000 to 15,000 km. In addition there was an increase in the cost of road works primarily due to significantly higher bitumen and other input prices, and deterioration in the condition of parts of the road network, during the two-year delay between design and construction.

Project Financing

3.2 In April 2007, US$50 million in additional IDA financing was approved to contribute towards the increased cost of road works and to scale up the bus services. The scale-up of the bus services component included bus shelters, terminals, lay-byes, and streetlights. For road network efficiency improvements, 25 additional junctions were added, three traffic management units were to be funded and traffic systems management measures introduced along the pilot bus franchise corridors to improve traffic flow. Some funds were also allocated for a strategic plan to improve use of the waterways and for the rehabilitation and upgrading of two additional jetties. The project was entirely financed by IDA and borrower contributions (including the transport fund – see Table 1).

Table 1: Lagos Urban Transport Project Financing (US$ millions)

Source of Funds	***Appraisal Estimate***	***Estimate at Additional Financing***	***Actual Financing***
Borrower (Counterpart Funds)	35.0	15.0	65.2
Borrower (Transport Fund)	-	-	35.2
Borrower Sub-Total	35.0	15.0	100.4
IDA	100.0	150.0	150.0
Foreign Exchange Gains	-	10.8	15.4
TOTAL	**135.0**	**175.8**	**265.8**

Source: LAMATA and ICR**.** See Appendix A for greater detail.

3.3 The actual IDA disbursement amount at closure was US$165.4 million including gains from a favorable dollar/naira exchange rate and US$ 0.4 million was cancelled. The borrower contribution at closure amounted to US$100.4 million. Of the final amount, US$ 65.2 million was from counterpart funds and US$ 35.2 million from the transport fund set

3.4 The transport fund received dedicated funding from the Lagos State budget, license fees, bus concessions and road user charges (tolls). The Lagos State Government contribution was primarily allocated to finance the bus service improvements component and the increase in the roads component.

Project Restructuring.

3.5 The project was restructured following approval by the World Bank's Country Director) in June and August 2005. In both cases, there were some amendments to the original components, but the project development objectives remained unchanged. The June 2005 adjustments included:

- The Federal roads that were initially earmarked for maintenance were excluded and only state and local roads remained under the project. This was because the Federal Ministry of Works agreed to carry out the maintenance of the Federal roads in the project area and therefore project funds could be reallocated to other components;
- The Lagos State Government counterpart funds contribution to the transport fund was rescheduled to start in FY2004-05;
- The road safety performance indicator on the number of pedestrian traffic accidents was dropped; the data were found to be inaccurate and were not collected.

The direct transfers to the transport fund were also to start later than planned, but were expected to reach $7.0 million by the end of the project; a further payment of US$5.0 million, however, would be paid separately for road maintenance activities. (In the event this amount was US$ 8.2 million). Provision for a building for LAMATA was dropped from the project.

3.6 The August 2005 restructuring allowed the application of 100 percent of IDA financing to all eligible expenditures, and the reduction of the Lagos State Government's annual commitment due to financial constraints. In June 2010 a further restructuring allowed remaining funds of US$13 million to be expended, among other things, on technical assistance, additional road upgrading and detailed design for the BRT. The state government provided the infrastructure for the BRT.

Dates

3.7 The project was approved on November 21, 2002, but only became effective on 30 October 2003 mainly because of differences of opinion on the LAMATA proposal between the different road and transport agencies. The project was originally scheduled to close on June 30, 2008, but the closing date was extended three times: first, by a year in the additional financing project paper from June 2008 to June 30, 2009. Then to August 31, 2010, and finally December 31, 2010 to complete the implementation of activities.

Procurement

3.8 At commencement of the project LAMATA engaged the services of an experienced consultant charged with building capacity in the procurement unit. This initiative was supplemented by the World Bank though procurement training both within and outside the country; this was also an effort to mitigate a lack of capacity, an area of risk identified in the PAD. Over time considerable expertise was built up and the IEG mission found that a key factor contributing to the good performance of the procurement function was the strong complement of competent and highly skilled staff. Some of these

officers had developed proficiency working for systems in other organizations and in the preparation of specifications; this was supplemented during the project by training in the application of Bank procurement procedures. Based on their experience elsewhere, they demonstrated considerable planning and implementation skills, made good use of contract management tools and had strong communication skills. Bank procurement specialists in Abuja supported the view that LAMATA'S procurement unit was efficient and also said that the procured contracts had unit prices that were lower on average than those of other organizations in Nigeria funded by the World Bank. The unit was prompt in paying contractors and applied transparent procurement rules. The implementation supervision reports were positive and post procurement reviews conducted by Bank staff were found to be satisfactory.

Fiduciary Management

3.9 At an early stage the financial management staffs were able to migrate from a transaction-based to a report-based disbursement procedure. LAMATA financial and accounts department also developed a robust computerized accounting system to generate timely and reliable financial statements. Processing time was reduced from 21 to 15 days. Well-respected auditing firms externally audited the project funds and IEG observes that all annual financial statements were submitted on time and with unqualified opinions. The IEG mission noted that towards the end of the project resolution of all financial management issues were found by the auditors to be in compliance with Bank procedures and the amounts provided by the borrower exceeded the original commitments. Fiduciary management was overall satisfactory.

Safeguards

3.10 The project was categorized in Environmental Assessment Category "B" under OP/BP4.01 Environmental Assessment. The World Bank's safeguard policy Involuntary Resettlement (OP 4.12) was triggered.

3.11 LAMATA was responsible for carrying out a safeguards assessment with an emphasis on pedestrian safety and the project's social and environmental impacts. For this purpose it established a safeguard unit, which developed an information, education and communication strategy. It also incorporated a grievance redress mechanism and prepared procedural manuals on environmental and social assessment. The IEG mission noted that LAMATA prepared, implemented, enforced and disclosed an Environmental Management Framework, and on the basis of this framework carried out the resettlement management plans for the activities where resettlement was required. All sub-components were screened using the World Bank's safeguard checklist and the environmental and social management plans were implemented. As part of safeguard due diligence, an environmental audit was conducted with a view to evaluating the project's safeguard performance. The environmental audit report found the project's overall safeguards compliance to be satisfactory.[12]

[12] LAMATA, 2007, Study on Environment and Social Assessment, Environmental Resources Management

3.12 The LAMATA safeguards unit undertook an Environmental Impact Assessment along five corridors and a Resettlement Action Plan (RAP) along four corridors.[13] In 2006 an RAP was implemented to minimize any adverse socio-economic impacts that might affect the Iyana-Ipaja bus franchise corridor. Following the RAP, LAMATA provided technical support for the transport union to establish a cooperative to run bus services and resolve all stakeholder concerns. A further RAP dated March 2008 in respect of junction improvements, identified that while no households needed relocation, some 435 roadside vendors were affected with various semi-permanent or temporary structures. But only four needed to be demolished, while others were to be relocated or shifted backwards. Compensation and logistical measures were addressed in consultation with community leaders. All RAPs were publicly disclosed.

3.13 A vehicular emission monitoring study was undertaken in respect of the BRT-Lite corridor. The objective of the study was to raise public awareness and promote better understanding of the characteristics of air pollution, its related health effects and its principal sources. In the longer term it was aimed at developing a consensus among stakeholders around a plan to improve air quality in Lagos. Traffic data, ambient air monitoring, and vehicle emissions measurements were carried out in the corridor including data on suspended particulate matter and exhaust emissions. Overall, safeguard compliance was satisfactory.

4. Achievement of the Objectives

4.1 This chapter is structured according to an assessment of each of the five sub-objectives and then the program objective. In the case of the second sub-objective "Enhancing the public transport road network in an environmentally, socially and financially sustainable manner" the assessment considers each of these aspects separately.

1. ***Improving the management of the Lagos Metropolitan Area transport sector***

The improvements to the management of the Lagos Metropolitan Area transport sector were **substantial.**

Outputs

4.2 LAMATA's annual operating costs have remained within the indicator target of less than six percent of overall expenditure throughout the project and this was still the case when the IEG mission visited in November 2015.

4.3 Two Traffic Management Units were set up and became operational; the original target was four, but during a re-prioritization of project resources in 2007 this was reduced to two focused on the areas where the bus franchise scheme and BRT-Lite were situated. A third Unit was established at a later stage.

[13] A decision was taken not to include the fifth corridor so an RAP was not needed.

4.4 Technical assistance to LAMATA and training for its professional staff was provided in areas such as road management, traffic management, public transport planning, financial management, procurement, environmental and social assessment, traffic law enforcement, transport economics, and general management. This included developing a road map towards full cost recovery by the transport sector in the long term as well as a transport sector policy and strategy of the Lagos State Government for the next five years. Consultancy support was provided in the drawing up an appropriate resettlement policy framework. A proposed new office building for LAMATA (US$ 1.5 million) was dropped because of difficulties in achieving planning permission at the proposed site.

4.5 A pilot bus franchise scheme was implemented and the project financed consultancy support for developing a conceptual framework for the scheme.

4.6 A detailed strategic plan was developed and implemented for improving the use of the waterways of Metropolitan Lagos for transportation purposes, including specific measures to encourage private sector participation. The Lagos Ferry Services Corporation (LFSC) was incorporated as a limited liability company in January 2008.

Outcomes

4.7 The Lagos Metropolitan Area Transport Authority (LAMATA) was established by law, but became fully functional with competent staff and all procedural manuals in place only in August 2005. The original target was 2002, later revised to June 2006 and ratified as such in the additional financing paper approved in March 2007. The delays were due to recruiting suitable professional staff, difficulties in clarifying the roles and functions of the various agencies involved in transport operations and management, and delays in finalizing the regulatory framework and setting up the transport fund.

4.8 LAMATA has strengthened its capability for the planning, management, and overall regulation of the transport sector in Lagos State. The law that established LAMATA in 2002 was strengthened in 2007 to include planning and regulatory functions across the various modes of transport (with the approval of the Governor). This made the role of LAMATA as the sector regulator unambiguous. LAMATA operates as an independent authority along the lines of a private sector organization (see Figure 1). Since its establishment, LAMATA has contributed to increased awareness for traffic management, transparency and discipline in procurement and has involved the users in the decision-making processes. Because LAMATA has flexibility in employee compensation it has been able to recruit Nigerian professional staff from international organizations such as Transport for London.

4.9 A regulatory framework for bus service provision was established which supported the implementation of a pilot bus franchising scheme. Thirteen-meter buses replaced existing minibuses that were mostly in poor condition. The new buses use street capacity more efficiently.

4.10 A transport fund was set up in 2004 with resources from the Lagos State budget as well as license fees (comprising permits, road taxes, license plate and auto

registrations), concession fees, and other road user charges, including tolls. LAMATA successfully made a case on behalf of 36 states to the Joint Tax Board at the federal government level to increase road user charges, which was shared and implemented in LAMATA's case (50 percent), State Treasury (40 percent), the Motor Vehicle Authority (five percent), and the LMOT (five percent). Similar arrangements were also applicable for other major cities in Nigeria that wished to follow suit.

4.11 LAMATA oversaw the preparation of a strategic long-term plan master plan for the transport sector in Lagos that provided an overall vision and strategic direction for transportation in the metropolitan area. It undertook the implementation of a pilot BRT system, with preparation and design funded by the World Bank and the project funded by the state government. It also managed preparatory studies for the follow on project, Lagos Urban Transport Project 2 (LUPT2). Included was a strategy for the enhanced use of intermediate means of transport such as bicycles in Metropolitan Lagos.

4.12 At first sight the amount allocated at appraisal for technical assistance may appear high, but the items included covered capacity building for a variety of stakeholders as shown in Table 2 below. In Appendix A the costs of the project, and contributions by financial source are detailed.

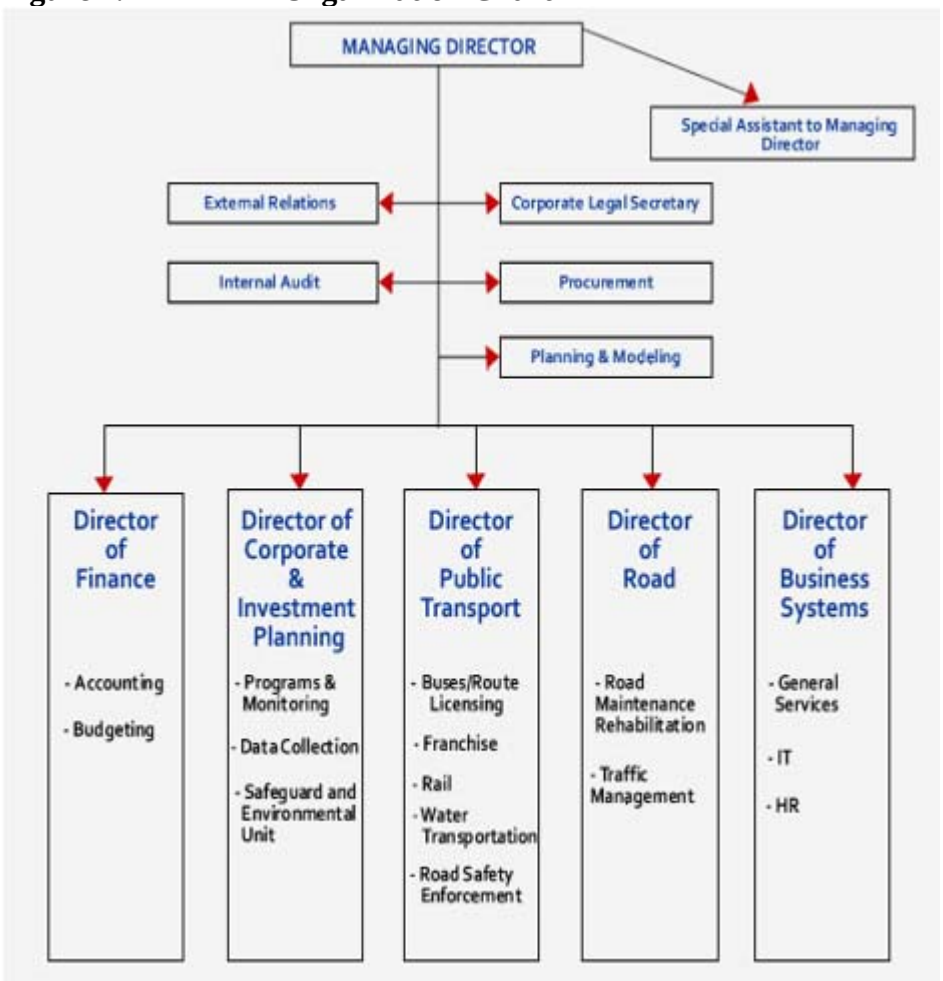
Table 2. Key Capacity Building Outputs

Sub-components	***Details***
LAMATA	Technical assistance for LAMATA to develop the capacity to effectively discharge its duties.
Technical Assistance	Provide technical assistance in areas such as road management, traffic management, public transport planning, financial management, procurement, environmental and social assessment, traffic law enforcement, transport economics, general management, etc
Training	Training of LAMATA staff
Information, Education and Communication	Provide technical assistance to LAMATA to design and implement a communication policy, strategy, and action plan to promote dialogue and consensus partnerships toward achieving its objectives
Sector environmental and social assessment	Consultancy support to prepare detailed Resettlement Policy Framework.
Elaboration of a cost recovery strategy and implementation plan.	Technical assistance to develop a road map for moving towards full cost recovery by the sector in the long term.
A traffic enforcement strategy and plan.	Technical assistance for developing the traffic enforcement framework and implement the critical elements of the plan.
LAMATA building	Preparation of building design and bidding documents.
Other activities	Technical assistance to develop transport sector policy and strategy of Lagos State Government for five years

Lagos State Ministry of Transport	Technical assistance to strengthen policy-making and sector performance monitoring and evaluation functions
Lagos State Ministry of Works	Technical assistance to improve planning for road investments
Lagos State Ministry of Women's Affairs and Poverty Alleviation	Technical assistance to strengthen poverty and gender impact monitoring capacity
Nigerian Police Traffic Unit	Technical assistance to enhance traffic enforcement capacity in Lagos.
Traffic Management Units	Technical assistance for the creation of Traffic Management Units in local government areas

Source: ICR Appendix 2

Figure 1. LAMATA Organization Chart



Source: www.lamata-ng.co

2. *Enhancing the public transport road network in an environmentally, socially and financially sustainable manner*

Enhancing the public transport road network in an environmentally, socially and financially sustainable manner was **substantial.**

Financial Sustainability

Outputs

4.13 In order to restore the road network over which public transport operated, regarded as a "quick win" because of its visibility, the Credit was originally to finance 76 km. of road overlay,[14] 567 km of routine maintenance, 50 km. of road rehabilitation, and 70 junction improvements. The declared network included in the project was 632 km. but initially the plan was to concentrate on 400 km designated as first priority roads until the transport fund became fully operational. This network included federal, state and local roads. No agreement, however, was reached with the Federal Ministry of Works in respect of LAMATA's right to maintain the federal roads and in 2004 the Federal Ministry of Works decided to carry out the work on these roads using federal budget resources. As a result the project focus was shifted to rehabilitating and maintaining state and local roads. There was no functioning M&E system in place to measure these changing targets for road improvements. By the time of the Project Paper for additional financing the bulk of these works had already been completed using the available finance, and reference was made to the completed maintenance, rehabilitation and periodic maintenance activities, but it was not possible to compare the final details of completed works with the revised upgrading targets because they were not recorded.

4.14 There were sufficient savings in the project for the World Bank to provide technical support for the establishment of a new pilot BRT line. The State of Lagos, however, provided the capital investment of US$ 36 million. Launched in March 2008, the new BRT-Lite system was a major step in providing some of Lagos' commuters with a clean, affordable and reliable means of getting around in the city. Through the provision of exclusive lanes and good customer service, BRT-Lite essentially emulated the performance and amenity characteristics of a modern rail-based transit system, but at a fraction of the cost.[15] The pilot route was 22 km. long from Mile 12 to Lagos Island. Sixty five percent of the route was physically segregated from the regular roadway and 20 percent by road markings. More expensive systems in other countries have exclusive rights-of-way for the entire route and substantial stations instead of stops. Since the BRT system was not part of the project in either the PAD or the Project Paper for additional financing it is not discussed further in the main text of this PPAR, but because of interest in the BRT concept more detail is provided in Appendix C.

4.15 A transport fund was set up with resources from the Lagos State budget as well as license fees

Outcomes

4.16 An ex-post assessment of 57 junctions found that the improvements included better physical design of roundabouts, dedicated right and left turning lanes, and other

[14] An overlay involves grinding off selected areas of old asphalt, patching potholes and then resurfacing with a new compacted hot mix asphalt pavement.
[15] World Bank, 2010, Lagos urban Transport Project 2, PAD, Report 49974

measures such as pedestrian crossings, road signs, and traffic signal repairs. The ICR[16] reported that a 2011 site inspection of 21 roads rehabilitated under the program showed that they were still structurally intact after three years. The PAD for the follow up project, LUPT 2, however, discusses the need for additional investment in the declared road network including routine maintenance of road surface and drainage for 532 km, periodic maintenance on 12 km. of strategic roads that had degraded but were structurally intact, and the rehabilitation of five km. identified as structurally damaged.

4.17 This strongly suggests that insufficient maintenance was performed in the intervening period. Apparently there was a pavement management system, but LUPT 2 provided funds for upgrading it to a road management system that could generate appropriate management reports from data collected including pavement condition. Nevertheless, any increased capacity freed up by the LUTP interventions has in the interim likely been neutralized by further traffic growth. Enforcement of traffic regulations has also reportedly deteriorated.[17]

4.18 Regarding the transport fund, the covenanted minimum amount expected as counterpart funding from the Lagos State Government was originally set at US$ 7.0 million and to be in established by 2004. However, taking account the delays in the early years of the project, the state government claimed this was unreasonable given its competing priorities for funds, and so in August 2005 the project was restructured to reflect a more realistic amount of US$ 2.0 million, provided that US$ 7.0 million was reached by the end of the project (US$ 6.78 million was attained). Since 2005, and after the Motor Vehicle Administration (MVA) increased its fees, the transport fund has brought in revenue to the value of US$ 46.2 million or an average of US$ 6.6 million each year. In 2014, the latest full year available to IEG, the revenue was US$ 8.3 million - see Table 3.

Table 3. Lagos Metropolitan Area Transport Authority: Counterpart and Transport Funds Received from Lagos State (US$ millions)

Year	***LSG Counterpart Fund Contribution***	***Transport Fund***	***Total***
2005	5.63	-	5.63
2006	4.50	-	4.50
2007	2.29	2.27	4.56
2008	6.78	5.26	12.04
2009	5.65	6.73	12.38
2010 LUTP end	6.78	5.98	12.76
2011 LUTP 2 begin	-	6.32	6.32
2012	5.90	6.17	12.07

[16] Implementation and completion results report, page 24

[17] An article in the *Economist* (November 7, 2015) claims the root of the problem lies in policy. The new dispensation following the change in government cut the powers of the traffic controllers from impounding vehicles. In retaliation officers have been refusing to enforce the rules.

2013	7.11	7.45	14.56
2014	6.39	8.29	14.68

Source: LAMATA

4.19 According to the PAD for LUTP 2, by 2009 LAMATA was able to meet 60 percent of its operational funding requirements, but the IEG mission was unable to establish the current percentage since such needs vary from year to year. It appears that the general shortage of available funds results in priority only being given to essential road repairs and high priority projects in discussion with various transport authorities, although the road management system now under implementation will at least be able to put a figure to total needs. Implementation supervision reports for LUPT 2 indicate that only about two thirds of the scheduled work is completed on time. This said, the progress in setting up the Fund and gaining commitment from the stakeholders was substantial. The follow-on project is assisting a move to full cost recovery in the short to medium term. With the recent launch of a new operating contract for the BRT extension, franchise fee recovery rates are expected to improve.

Environmental Sustainability

4.20 According to the World Bank, *Little Green Data Book*, 2015[18] 94 percent of the Nigerian population is exposed to air pollution levels exceeding World Health Organization guidelines (compared to 72 percent for sub-Saharan Africa as a whole). Over 50 percent of the transport contribution to greenhouse gas emissions in Nigeria emanate from Lagos alone.[19] It was estimated by the Global Environment Facility (GEF) that the total vehicle population in Lagos is approximately 1.2 million (representing about 55 percent of the total vehicle population in Nigeria), out of which, approximately 72,000 are public transport vehicles (mostly mini-buses). Though no systematic data exists, vehicles are estimated to contribute over 70 percent of the ambient air pollution in the city.[20]

Outputs

4.21 Clear targets were not established, but a study by LAMATA between 2003 and 2007 at eight monitoring stations on key bus routes indicated that vehicle emissions contributed approximately 43 percent of ambient air pollution on the routes measured. The results showed that vehicular emissions also accounted for almost half of the total particulate matter emission within the bus route study area. In addition traffic control officers and a control group were subjected to pulmonary tests using a standard portable spirometer. The tests showed a high prevalence of respiratory symptoms.

4.22 Under this project, older and smaller buses were replaced with 220 newer and larger ones. A further 400 more buses were purchased after project closure to meet customer demand.

[18] www.data.worldbank.org/data-books/little-data-book/little-green-data-book
[19] Komolafe, A et al, 2014 *Air Pollution and Climate Change in Lagos, Nigeria*, American Journal of Environmental Sciences 10(4): 412-423, 2014
[20] Global Environmental Facility, 2008, Input to proposal for LUPT 2.

Outcomes

4.23 As a result of replacing older and smaller buses with buses that were newer and larger,[21] better operating conditions and a small shift from private cars to buses of between five and ten percent, depending on the route, LAMATA claimed a reduction in CO2 emissions on selected routes of 13 percent per year, or about 24.7 kilotons for the period 2008-2009, as subsequently reported in the Lagos CO2 Emissions Assessment Handbook (June, 2010).[22] In the intervening period it is likely, however, that the impact of these early gains had diminished as the vehicles began to age, and overall pollution in Lagos deteriorated further. Another study was completed in 2013 to estimate a baseline for greenhouse gas emissions in the corridors for the follow-up BRT project, LUPT 2. It reveals that the average age of vehicles in Lagos is 15 years. A baseline saving of 1,100 kilotons of CO2 emissions saved was estimated, but these figures are being examined more closely under the GEF financed component of LUPT 2. Enhanced environmental sustainability has made modest progress in the right direction.

Social Sustainability

Outputs

4.24 Stakeholder involvement was principally through the Safeguards and External Relations Units of LAMATA. The latter has the mandate to follow-up on issues raised by the public, and chairs an internal user's services group, which meets regularly. IEG confirmed from perusing the minutes that such meetings took place.

Outcomes

4.25 No targets were set for the road network such as improvements in road roughness as such. The needs of the passengers were determined through rigorous quantitative and qualitative surveys that established information on travel time, gender issues, fare elasticity, and to understand reasons for the choice of transport means. Moreover, regular focus group meetings were held to explore in detail the travel-related issues faced by different demographic groups in Lagos and later to test features of the proposed BRT-Lite. Information from these meetings was used to improve the quality of the services offered.

4.26 Time spent by members of poor households on bus travel per trip along project corridor: The baseline (2005) was 30 minutes. The target set in 2007 was 24 minutes, and at completion 20 minutes was achieved. This saving in travel time excludes time saved in waiting at the bus stop resulting from higher bus frequency and better scheduling. On average the reduction in journey time was 40 percent and that of waiting time 30 percent. In the latter case waiting time on average was reduced from ten minutes to four minutes

[21] Typically new buses were Euro II compliant. European Emission Standards were introduced to define limits for the exhaust emissions of new vehicles. Euro II compliance is now below the limits currently expected in Europe, but in a developing country they can be regarded as a significant step in the right direction.

[22] Lagos State Government, *CO2 Emissions Handbook*, June 2010

because of the more frequent service. Passengers also experienced fewer transfers in their journeys.

4.27 The amount spent by poor households on bus travel along the corridors improved by the project fell from 20 percent of income to 12 percent of income during 2005-2010 (the numerical target was 15 percent). In real terms, however, the target was achieved (i.e. taking account of the 63 percent change in the Consumer Price Index during the period); the amount spent on travel in 2010 is a reduction of 45 percent since 2005.

4.28 Workdays of labor created: the baseline was 390,000 (2005), the target was 700,000 and at completion 1,660,000 workdays were claimed.[23] The IEG mission accepts that the direct employment data are likely valid, but the indirect employment estimate looks too high. Overall, substantial progress has been made in the establishment of a socially sustainable public transport system.

3. ***Enhancing bus services***

Enhancement of bus service provision was **substantial.**

Outputs

4.29 A regulatory framework for bus service provision was established which supported the implementation of a pilot bus franchising scheme. Thirteen-meter buses (costing US$ 100,000 each) replaced existing minibuses that were mostly in poor condition. The new buses used street capacity more efficiently. Operator incentives were introduced to encourage safer driving and more reliable services along coordinated routes. Both the driver's union and the owner's union accepted the franchising concept after considerable negotiation and a study tour organized by the World Bank to successful operations in Latin America (Bogota and Curitiba). A commercial bank agreed to provide finance for the buses on condition that it had an initial lien on revenue collected from the bus fares and the right to act as ticket distributor and security monitor. Participating operators, though, had to accept collective liability (route operating cooperatives) for all the obligations into which they had entered. Any individual default, whether by embezzlement of revenues or through vehicle unavailability (perhaps as a result of an accident or mechanical failure), were to be met by an additional charge on all the remaining members.

4.30 The loans were paid off in only two years, which proved the viability of the bus franchise scheme to the lenders after which other banks became interested in participating. The scheme included an operator development function in partnership with the National Union of Road Transport Workers (NURTW). However, in view of the lack of capacity and experience of NURTW in operating large-scale scheduled bus services,

[23] These estimates are based on the completion report prepared by the borrower (March 2011). Direct employment was defined as created in bus depots, terminals, additional bus fare collectors, inspectors, etc. The indirect employment was created by improved access to job opportunities along the corridors, improved maintenance requirements, additional employment in commercial banks financing bus purchases, increased business opportunities along the corridor and a multiplier impact.

support was mobilized by LAMATA in organizing, operating and scheduling the bus services. The vehicle maintenance function was outsourced to the vehicle supplier, which provided full technical support including trained personnel and spare parts. Financial management functions were provided by a commercial bank, while operations management was outsourced to a specialist business handling large vehicle fleets. These arrangements were all aimed at improving sustainability.

4.31 About 500 drivers were also trained in customer care. The original target for the pilot bus franchise (15,000 bus-km) was tripled (to 45,000 bus-km) for the two chosen corridors (Iyana-Ipaja-Ikotun and Mile 2 - Church Missionary Society). More than 100,000 passengers use the buses on these corridors daily instead of using poorly operated and maintained small buses.

4.32 During project implementation, 12 workshops were held which involved a broad section of stakeholders, divided into ten groups, The stakeholders included the state government, public transport users, private vehicle users, people living along the transport corridors, bus owners, bus operators and their associations, vendors and other commercial operators in the project area, suppliers of buses and bus-related parts and equipment, as well as pedestrians, commercial banks and NGOs. The views of the stakeholders were translated into activities to improve service quality.

4.33 The project also provided funds for the preparation (studies and design) of the BRT-Lite pilot project. The Lagos State Government at a cost of US$ 36 million provided the capital for the infrastructure.

4.34 The pilot BRT scheme was not part of the original project or part of the additional financing agreement. However, during implementation an opportunity arose for the World Bank to support the State of Lagos to implement such a scheme. The World Bank financed feasibility studies, project design, exposure to good practices through study tours, participation in international seminars and knowledge sharing, while the Lagos State Government provided the finance for the construction. The extension of the scope was approved by way of a level two restructuring. Improvements made to the corridor including the designation of dedicated lines for buses, road surface improvements on and adjacent to the exclusive lines, bus terminals, bus stops, bus shelters, lay-bys, ticketing activities and traffic system management measures. The BRT-Lite service, Mile 2 to CMS corridor, carries over 220,000 passengers per day, see also Appendix C.

Outcomes

4.35 In addition to benefiting the poor households as a result of improved bus services (para 4.23-4.24), the user surveys conducted by local firms and NGOs helped in defining the project and achieving its public acceptance. User beneficiary responses were obtained by random samples (500 households) and also analyzing results from 900 respondents that included commuters, women and disadvantaged groups, NGOs and civil society organizations as well as transport operators. Public perceptions were generally positive, as demonstrated by the surge in demand to use the better and cheaper public transport including calls for the construction of an expanded network. Commuters reported quicker journey times, lower costs of travel, greater comfort, and clean well-

maintained vehicles. They also felt more secure. Passengers learnt to form orderly queues and it was considered positive that the new buses were better equipped and designed to accommodate persons with disabilities. The main issues cited by riders concerned public safety (safety was better on the buses compared with the minibuses), comfort (degree of overcrowding was less on buses), fares (buses are cheaper) and journey times (shorter by bus).

4.36 More recent surveys of the franchised bus operation were not undertaken after the project closed, but a passenger satisfaction survey was conducted for the pilot BRT-lite line after project closure in December 2010. The top three favorable factors in service quality according to the passengers were affordability (0.783), comfort (0,775) and safety (0.695). However, in January 2016, following complaints by the public about poor service quality and extensive waiting times, the Lagos State Government terminated the BRT franchise in the Ikorodu corridor citing frequency schedules below 50 percent fleet capacity contrary to the agreement.[24] A new operator has been appointed and service monitoring improved.

4. *Promoting water and non-motorized transport.*

The promotion of water transport and non-motorized services was **modest.**

Outputs

4.37 The Lagos Ferry Services Company (LFSC) has been established. The company was granted a universal license to operate on all designated ferry routes.

4.38 The project financed repairs, additions and rehabilitation works of selected existing water transport terminal facilities, including the construction of improved parking facilities in the vicinity of some jetties. Four jetties were improved or constructed under the project and are now operational. The original target was two. To put this in perspective, these were large jetties, but there were 27 jetties in total.

4.39 A detailed strategic plan was developed and implemented for improving the usage of the waterways of Metropolitan Lagos. Its main platforms were mobilizing the private sector, identifying needed improvements, coordinating with other transport modes and improving waterway safety.

4.40 A study of intermediate means of transport was completed. This covered the existing and potential use of animal and handcarts, wagons, bicycles and wheelbarrows, among other things, in the urban context of Lagos. The study recommendations were not pursued further in this project since they were not considered by LAMATA as a priority, but more attention is now being given under the follow-on project.

Outcomes

4.41 Initially there was a dispute between the Lagos State Government and the National Inland Waterways Authority with regard to the responsibility for licensing

[24] The News, January 2, 2016, *Lagos terminates NURTW BRT franchise in Ikorudu corridor*

waterway operators in the state, but the former prevailed in 2008 and the Lagos State Waterways Authority (LASWA) came into being.[25] LASWA monitors private operators to ensure they operate within the waterways law, but has limited capacity and funds. Although progress has been made with the availability of lifejackets for passengers, there are still avoidable accidents reported. Progress with attracting private sector investment has also been much slower than anticipated and LASWA's target of 60 million passenger trips by 2021 looks over-ambitious. The IEG mission noted, however, that on certain routes there has been an attempt to improve intermodal connections between the ferries and the buses and LFSC will now try to concession the most used terminals.

4.42 The repairs, additions, and rehabilitation of existing terminal facilities as well as the jetty improvements have led to an upsurge in the numbers of passengers using the services. From 2.62 million passenger trips in 2007, patronage has increased to 22.0 million in 2014 and 26.40 million in 2015. This is still comparatively small and represents about 1.5 percent of all commuter trips by all modes compared with about 0.5 percent previously. However, each ferry passenger is one less person using the roads.

4.43 The indicator target was to privatize LFSC. Nominally, this has been done, but the sole initial investor in the concession (2016) is the state government. It operates as LAGFERRY and has purchased or refurbished the ferries now used on the primary routes. However, there has as yet been limited interest by the private sector to become franchisees despite the fact that there are over 200 ferries operated by 50 private individuals or groups. This may be because the stated mandate to deliver water transport to previously *underserved* areas is not seen as the most profitable investment in comparison to competing for the most trafficked routes. A new venture operating successfully since 2009 is Metroferry Marine Services Ltd., but many small operators have dubious safety records and old vessels providing a low quality of service.

5. ***Preparing Future Phases of the Program***

Preparation for future phases of the program was **substantial.**

4.44 The activities were mainly outputs not outcomes. They were all accomplished, however and comprised:

- A transport master plan for metropolitan Lagos;
- An institutional reform plan for the transport sector, in particular on reform of the MVA system;
- Strategy for the enhanced use of intermediate (non-motorized) means of transport in metropolitan Lagos;
- Studies for the next phase of implementation of the policy and strategy, including the resettlement plans for the implementation of rail mass transit in the Agege-Iddo corridor.

[25] National Inland Waterways Authority Act (Repeal) Law, 2008

4.43 The achievement of the overall program objective is derived from the outcomes of the five sub-objectives. In summary, based on the analysis of responses to user surveys, improvements to the transport services, especially for public transport users and the poor in the Lagos Metropolitan Area, have been **substantially achieved,** albeit with some minor shortcomings. The benefits to the poor bus users include savings in journey time, lower fare costs, fewer transfers, more comfort, and greater security. Benefits to ferry users are similar, but on a much smaller scale.

Efficiency

4.45 At project appraisal an economic analysis was undertaken for the road network efficiency improvement component comprising rehabilitation, routine maintenance, bridge repairs and traffic management, this represented 60 percent of the total project cost. The same methodology using the standard Highway Development Model was used to estimate the economic rate of return (ERR) and net present value of each of the proposed road works and for the aggregate works including the junction improvement program. The overall ex-post rate of return given in the ICR was 67 percent compared to 56 percent at appraisal.

4.46 IEG has looked at the methodology used and finds that the ex post ERR of 67 percent is overstated. Maintenance, overlays and rehabilitation account for 89.4 percent of the items included in the ICR analysis. In the case of maintenance the ERR was lower than at appraisal and for overlays and rehabilitation only two percent higher. This suggests that the ex post ERR is unlikely to be much higher than the 56 percent at appraisal.

4.47 On the other hand, the project would likely also have resulted in small short-term benefits in terms of improved traffic safety, and carbon dioxide emissions reduction, but these benefits were not included in the economic analysis because the former could not be quantified due to unreliable data, while the latter were partially measured for the bus corridors only and the environment benefits may not be sustained as a result of continuous growth of traffic in the city. Overall, even if the ERR is overstated, it is still likely to be at least 56 percent, well over the threshold level of 12 percent.

4.48 No economic analysis was undertaken for the sub-components for capacity building, water transport promotion, or for the preparation for the pilot BRT. Measuring the benefits of the critical capacity building and organizational aspects was difficult in the absence of a functioning M&E system, which was not in place until the additional financing Project Paper in 2007. The water transport aspects were not well connected to the main project and were measured mostly in terms of outputs. Indeed there is a disconnect in the sense that the efficiency aspect of the project focuses heavily on the benefits of improved road works, while much of the discussion is centered on transport services.

4.49 Regarding BRT-Lite, the project financed technical support for the pilot, which was funded by the Lagos State Government. LAMATA was unable to furnish an economic analysis for BRT-Lite, but advised that revenues collected amount annually by the operator amount to over US$ 16.5 million. LAMATA also confirmed that they budget

US$ 1.3 million a year for maintenance of the BRT infrastructure. ERR's have since been calculated at appraisal for the two corridors financed by the World Bank under LUTP 2, and are 17 and 15 percent respectively.

4.50 The project was delayed by two and half years and took eleven months to reach effectiveness. These delays were due to recruiting suitable professional staff, to clarifying the roles and functions of the various agencies involved in transport operations and management, and in setting up the regulatory framework and the transport fund. There was an under estimation by US$ 60 million in the cost of the road works, which was part of the reason for a request for additional financing approved in 2007.

4.51 While the cost of the institution-building component at completion appears large it was because the project was delayed and capacity support was needed for an additional 2.5 years. It was also expanded to cover additional scope assigned to LAMATA by the state government including BRT planning, design, and regulation, among other things.

4.52 In fairness, there are some other positive indications of efficiency. LAMATA has been able to reverse a prevailing culture whereby suppliers and consultants paid little attention to quality, and cost of services. It has addressed this through designing terms of reference and product specifications more clearly and precisely. A rigorous selection procedure is followed to ensure that the suppliers that are best able to deliver are contracted. Nevertheless, there still remains an issue with on-time completion of projects, since the implementation supervision reports indicate that only one third of contracts are completed in the time originally agreed.

4.53 LAMATA's procurement process has nevertheless resulted in the delivery of road works at a relatively low cost per km compared to similar works managed and financed by other Ministries and agencies. For example, the average cost per km. (of a 7.3m single carriageway) is US$ 1.4 million, compared with US$ 2.8 million by MOWI. In addition, the roads provided by LAMATA includes service ducts, sidewalks, streetlights road markings and traffic signs, whereas, MOWI, despite the high cost, provides only service ducts.

4.54 The overall project efficiency is **substantial**.

5. Ratings

Outcome

5.1 Relevance of the objectives and of design is substantial, despite being hampered by the failure to implement a results framework in the first few years of the project. Four of the five sub-objectives were substantially achieved: (a) improving the management of the Lagos metropolitan transport sector; (b) enhancing the public transport road network in an environmentally, socially and financially sustainable manner; (c) enhancing bus services; and (e) prepare future phases of the Program. One sub-objective was modestly achieved: (d) promoting water and non-motorized transport. Efficiency is assessed as substantial. Despite the good rate of return, there were serious shortcomings because of the significant delays that occurred. It was, moreover, recognized that preparing "future

phases of the program" was really an input rather than an output. However, cognizance was also taken of the progress of capacity building in the very difficult circumstances prevailing in the Lagos Metropolitan Area. The overall Program Objective, whereby improvements to the transport services, for public transport users and the poor has been substantially achieved is also taken into consideration in the final outcome rating. Taking into account the moderate shortcomings of achieving the project development objectives, the outcome is **moderately satisfactory.**

Risk to Development Outcome

5.2 Risk to development outcome is considered **moderate.** Ownership of the project is now evident at the highest levels in the Lagos State Government, despite initial issues concerning jurisdiction and overlapping responsibilities. Strengthened legislation with regard to the LAMATA law in 2007 helped clarify its regulatory powers across the various modes of transport. However, the federal roads in Lagos are still the responsibility of the Federal Ministry of Works, which raises a question about the sufficiency of funds to maintain them in future, despite assurances that they will meet regularly with LAMATA to discuss future needs. Institutional capacity developed by LAMATA to deal with technical and environmental issues has substantially improved the management of the urban transport sector in Lagos State and it is being further strengthened under the implementation of the follow-on project. The retention and consolidation of high-caliber professionals to lead LAMATA reduces the risk that the outcomes will be neglected. The setting up of the transport fund and the raising of fees by the MVA has been an important step in the right direction. Although the inflow to the Fund covers only 60 percent of recurrent and periodic maintenance needs in the road sector, adequate provision for maintenance of the BRT service has been provided for. In the PAD it was indicated that it was a longer-term goal to achieve 100 percent cost recovery, but further steps to reform the MVA system are expected to close this gap. In comparison, the water transport services remain cash starved and insufficiently attractive to the private sector. Overall, there is still a degree of dependency on World Bank injections of funds to maintain a stable situation in urban transport in Lagos.

5.3 The government has commenced railway construction for the implementation of rail mass transit in the Agege-Iddo rail corridor – an underused facility. There are plans to expand the BRT system to other corridors in the city as part of the recommendations of the Metropolitan Lagos Master Plan. A cable car route is also being studied, which will only be implemented if sufficient private sector investors are in support. However, political factors remain a significant threat in Lagos and the complex and fragile governance situation remains a concern.[26] This is exacerbated by the current economic situation in Nigeria, which is deteriorating with the lower oil prices, given that 70 percent of government revenue comes from that source.

5.4 The qualified success of the model to involve the transport union in the bus and BRT schemes to some extent ensured their future support and commercial banks are now willing to make available loans for the purchase of buses. However, the situation can be

[26] Gomez-Ibanez JA, 2011, *Lagos Metropolitan Area Transport Authority, a case study*, Urban Planning and Public Policy, Harvard University, USA

unstable and volatile at times. The Chairman of NURWT was assassinated in March 2015, and in January 2016 the Lagos State Government had to terminate the franchise issued to NURTW to operate a BRT service along the Ikorodu corridor.[27] This was due to non-compliance with operational requirements concerning the level of service stipulated in the franchise agreement they signed. This said the willingness of the state government to take action is commendable and a new operator is now in place while service monitoring is to be more frequent. The fact that the government was willing to take serious action and to heed complaints from users has strengthened their hand in dealing with future operators. It is clear that the integration of existing operators into new bus franchise services without fundamental transformation of the business models underlying those services is at best a transitional strategy and not sustainable in the long run.

Bank Performance

Quality at entry

5.5 For quality at entry Bank performance, is **moderately satisfactory.** Preparation began with studies leading to the promulgation of the law establishing LAMATA in 2002, which was crucial to the project. In addition, all preparatory studies, engineering designs and procurement documents for the first year activities were completed. An Environment Management Plan was also prepared and disclosed, while safeguard studies including a Resettlement Policy Framework were finalized. The project preparation team applied lessons learned from similar urban transport projects in sub-Saharan Africa and other regions such as Latin America, and adapted them to the particular circumstances in Nigeria. Among the most frequent problems found in previous transport projects in the country were insufficient focus on institutional strengthening, insufficient capacity building within the civil service structure, unreliable counterpart funding, and lack of transparency in procurement procedures. The project sensibly focused first on fast-return investments such as road maintenance, rehabilitation, and junction improvements.

5.6 The objectives in the appraisal document and the legal agreement were not consistent. A full workable results framework was not in place when the project commenced. Baseline data were unavailable to begin with and not all desired outcomes were covered by the M&E system. However, after initial delays, and by the time the results framework had been finalized implementation had begun to gather momentum.

5.7 The project was subject to a review by the World Bank's Quality Assurance Group in June 2003, which was concerned about the difficult country context and relatively complex design and gave a rating of marginally satisfactory. Concern was expressed that the implementation of the physical components might sidetrack the Lagos authorities and even the World Bank from the objective of promoting the institutional and cost recovery improvements that the PAD rightfully identified as the project's top priority. This risk, they said, is compounded by the fact that LAMATA will be a new agency and will face inevitable teething problems associated with start-up, as well as potential opposition from other agencies jealous to protect their turf. They further opined

[27] The News, January 2, 2016, *Lagos terminates NURTW BRT franchise in Ikorudu corridor*

that the project team was unduly optimistic and that a smaller project might be more appropriate.

5.8 An expert advisor to the team sent an email message to the Decision Meeting held on April 4, 2003 that expressed similar views. He endorsed the central institutional thrust in the development of a strong transport planning and management function for the city, but said there was a danger that the project pretended to address all issues, and as a consequence had a Christmas tree appearance. He did not get the impression that much was going to be achieved through the environmental provisions.

However, albeit with all the concerns over the complexity of the projects and the initial delays, the complexity did not derail the project implementation, the physical work activities were completed and the objectives were substantially achieved. The project's priorities of promoting the institutional and cost recovery improvements were fully achieved. On the other hand, at effectiveness a proper monitoring and evaluation system was not in place, while at approval of additional finance there was a reduction in the number of traffic management units to be set up, and over time the closing date was progressively extended by two and a half years.

Quality of supervision

5.9 Quality of supervision, considering the difficult circumstances in Lagos, is **satisfactory.** The supervision team was well staffed, and combined international expertise on urban transport with in depth knowledge of the country. The team was able to assist in resolving many problems such as the amount of counterpart funding that should be paid to the transport fund from the Lagos State Government in the light of the tardy progress on the project. The project was restructured twice to introduce a more flexible funds transfer requirement and clarify the issue of LAMATA's responsibility in managing the road network. LAMATA's capacity was greatly strengthened and strong management systems were put in place on the basis of the World Bank's advice including the preparation of manuals and procedures. Given the gradual improvement in disbursements the development objectives and implementation progress ratings were eventually revised to satisfactory in the implementation supervision reports.

5.10 When additional financing was made available for the project the team missed an opportunity to revise the poorly written development objectives, but this was not done, perhaps to avoid having to submit the Project Paper to the Board instead of the Country Director. Nevertheless, the supervision team deserves credit for helping the borrower to accomplish a relatively successful project in very difficult circumstances.

5.11 The World Bank listened to the borrower and sought ways to resolve issues in a collaborative manner. Technical assistance, though there were perhaps too many studies, was commensurate with the needs of the project - for instance the financing of BRT study tours were crucial in bringing the transport union on board, and helped in making the conception and implementation of the new bus systems become a reality. The World Bank's procurement and financial management procedures set the project on a sound footing and gave credibility to LAMATA as a transparent organization.

5.12 The World Bank was proactive in discharging its obligations, such that, for example, there was little or only minimal delay in providing no-objections; and the World Bank‘s relationship with LAMATA was one of mutual respect. When windfall funds became available the World Bank was able to motivate that these funds be used to support the BRT design. The collaborative approach of the World Bank staff, reported in the borrower’s ICR, played an important role in ensuring that LAMATA properly led implementation with progressively reduced Bank involvement that ultimately contributed to the project’s sustainability.

5.13 The overall Bank performance is **moderately satisfactory.**

Borrower Performance

Government

5.14 The Lagos State Government’s ownership and commitment were clearly present at the time of project identification and appraisal and sustained during implementation. Government performance was **satisfactory.** Commitment was demonstrated through two successive elected Governors’ Administrations, which fully supported institutional, legal, and regulatory reforms in the public transport sector, and supported a dedicated transport fund, partly financed through user charges, to finance public transport investments in Lagos.

5.15 The first three years, however, were difficult and characterized by a slow start due to the complexity of the multimodal operation and the time taken to recruit suitable professional staff in LAMATA. Lack of a clear mandate on the ability of LAMATA to carry out maintenance on the federal roads led to delays in project start up. Eventually in 2004 the federal government Ministry of Works decided to undertake this work itself using its own budgetary resources. There were also delays in setting up the transport fund and in making direct transfers to it. Resistance to change by multiple agencies and organizations involved in transport operations and management became a key challenge that was only finally resolved in 2007 when the LAMATA law was amended to clarify the role and functions of LAMATA as the agency responsible for bus regulations and to enter into concessional contracts with bus operators.

5.16 The state government ensured approval of the LAMATA legislation, provided support to empower, resource and establish it, and streamlined responsibilities within the government to better define the role and mandate of LAMATA as a planning and regulatory body. Although the state government was partly responsible for insufficient counterpart funding early in implementation, it subsequently offered timely solutions, and was willing to restructure the project, such that by closure, the state government had financed over US$ 100 million from the state budget and transport fund towards project activities including the capital costs of the pilot BRT line. Its final contribution was considerably greater than the initial US$ 35 million specified at appraisal.

5.17 The then Commissioner of Transport led a delegation to view BRT systems in South America and was appointed to chair the BRT steering committee. He acted as an important bridge between the technical experts and the Governor. The momentum created

by the implementation of BRT-Lite and the positive public perception ensured that commitment was maintained when a new Governor and Administration came into power.

5.18 The leadership at the state government level for the coordination required with other entities was of paramount importance in dealing with institutions representing different transport modes with vested interests and in establishing clear lines of communication between the federal government and the metropolitan area, which often had different priorities and objectives.

Implementing agency

5.19 Implementing agency performance was **satisfactory.** LAMATA achieved high standards in exercising its responsibility for the formulation, coordination, and implementation of urban transport policies and programs in the Lagos Metropolitan Area. Although it took time, many highly competent Nigerians working abroad in senior positions including organizations such as Transport for London were encouraged to return and support the agency. Leadership shown by the Managing Director was passionate and exemplary – a major success factor for LAMATA. According to the World Bank project supervision team, one of the key reasons for project success was LAMATA's performance led by this professional management team. LAMATA's management recognized the importance of hiring competent people; enforcing a culture of dedication and integrity, where teamwork was the norm, and where all staff shared a common goal. The Managing Director has since been appointed as Traffic Commissioner for Lagos, but the IEG mission was impressed by the caliber and professionalism of the entire team.

5.20 A weakness in LAMATA has been the initial failure to recognize the importance of measuring progress through a proper M&E system. The organization is adept at public relations, but economical at providing facts and figures to back up its assertions. On the other hand, the implementation of the BRT scheme (which was not even mentioned in the formative years of the project) was achieved in a record time of 15 months, as compared with four to five years for similar schemes in many other developing countries. This was largely due to the active involvement of key stakeholders including the local transport union. Selected stakeholders including union representatives were taken on a study tour to see successful BRT operations in other countries.

5.21 LAMATA demonstrated competence in complying with Bank procurement requirements, and is recognized by the World Bank as an agency that follows good practice with regard to compliance with safeguards policies. LAMATA has rapidly expanded its BRT lines since the project closed and is supported by LUPT2, the follow up project. A Transport Master Plan is now in place and LAMATA is coordinating progress in all the transport modes supported by funds from the French Development Agency the Global Environmental Facility (GEF) and the World Bank.

5.22 Overall borrower performance is rated: **satisfactory.**

MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) Design

5.23 At the time of original project design, three sets of indicators (shown in the PAD) were selected to measure the project outcomes: (i) time and money spent on personal travel activities by poor households; (ii) person-days of labor created; and (iii) number of accidents. The third indicator on road safety was eventually removed because the data available were found to be unreliable. However, establishing a baseline and a reporting system, which should have been carried out before project approval in 2002, was not done given priority and hampered progress as the project proceeded.

M&E Implementation

5.24 M&E was rated unsatisfactory in the early years of the project because the results framework was not completed until 2006. A consultant was appointed to undertake the survey and proposed a workable M&E framework. According to the Mid-term Review the baseline data and indicators were to be finalized only in November 2005. A new baseline was established in September 2006, but only when the Project Paper for additional financing was approved in 2007, was it formally adopted.

5.25 When additional financing was approved the outcome indicators were better aligned with the project objectives in that the target average waiting time on the pilot bus route was reduced, (Appendix B). However, some important aspects of the project related to poverty, for example, were poorly taken into account or not at all.

5.26 No new indicators specific to the BRT were formally introduced as the opportunity to support BRT only arose later. Nevertheless, as the project matured, the importance and relevance of the BRT sub component became evident and thus a new results framework was specifically developed for it and additional data collected (see Table 3). Extensive monitoring surveys were conducted and stakeholder workshops were held and used to strengthen BRT design. This additional information formed the basis of LUTP 2, but was still under development in LUTP.

M&E Utilization

5.27 The indicators used in the project were instrumental in providing the basis for defining and selecting key indicators for the follow-up operation (LUTP2), which in addition to improved monitoring of institutional development and capacity building, also monitors CO2 emissions and concentration of pollutants. Both the M&E tools and the framework developed are now used for Lagos State Government projects.

6. Lessons

6.1 Several lessons are drawn from this assessment, some based on the ICR and others from IEG's own analysis:

Setting up a strong institutional basis for coordinated planning and regulation is critical to the success of urban transport projects. However, such changes take time and need to be supported by strong commitment from top officials and politicians to ensure the integrity of governance changes as in the case of the establishment of

LAMATA. Supporting legislation is essential and the roles and responsibilities of all transport entities affected need to be worked through. The recruitment of experienced international staff enabled the creation of a strong authority and the ability to move beyond the project and begin to implement an ambitious reform agenda.

The challenges facing cities with respect to urban transport and its governance are of long duration and not quickly fixed. The Bank had its first intervention in the city with the Lagos Urban Transport Project, followed by the second Lagos Urban Transport Project, this continuous engagement by the Bank is a compelling requirement to sustain progress in urban transport sector. It should also be noted that urban transport projects require longer periods for implementation—seven years or longer when many authorities are involved.

Critical to the success of the project was steady progress with the institutional reforms and the establishment of a transport fund, which contributed to the positive outcome by improving financial sustainability. The team targeted the right priorities in a comprehensive capacity building program and ensured that the necessary preparations and commitments were made to establish a sustainable transport fund. However, while financial self-sufficiency for institutions is an important longterm goal, it may take longer to achieve than has been previously recognized.

World Bank supervision teams need flexibility and the ability to adjust the project to take advantage of opportunities that may arise. In this case, the enthusiasm of the politicians in the State of Lagos to pursue the BRT project presented such an opportunity, and the team was able to use windfall funding to help the pilot BRT project to become a reality by financing the design and related costs and in providing technical advice from the World Bank's global experience. The concept of BRT was adapted to the African context so that it was more affordable to the poor in Lagos.

Observing the experience of other countries or cities where new public transport concepts have worked successfully can convince local stakeholders to adopt a new approach. In this case it convinced key stakeholders, including the trade unions, to agree to adopt the franchising and BRT concepts locally. That said, the integration of existing operators into new bus franchise services without fundamental transformation of business models underlying those services is at best a transitional strategy and not sustainable in the long run.

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Appendix A. Basic Data Sheet

Nigeria: Lagos Urban Transport Project (IDA Credits 37200 and 37201)

Key Project Data (amounts in US$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project costs	135.00	265.80	196
Loan amount (IDA)	100.00	150.00	150
Exchange gains	-	15.40	-
Borrower contribution	35.00	100.40	286
Cancellation	-	0.40	-

Cumulative Estimated and Actual Disbursements

	FY03	***FY04***	***FY05***	***FY06***	***FY07***	***FY08***	***FY09***	***FY10***	***FY11***
Appraisal estimate (US$M)	8.9	26.8	51.6	72.0	89.0	100.0	100.0	100.0	100.0
Actual (US$M)	0	7.2	22.8	52.4	85.1	100.4	124.7	161.1	165.0
Actual as % of appraisal	0	26.8	44.1	72.7	95.6	100.4	124.7	161.1	165.0
Date of final disbursement: April 19, 2011									

Project Dates

	Original	Actual
Initiating memorandum	-	05/08/2002
Board approval	-	11/21/2002
Effectiveness	-	10/30/2003
Additional Financing	-	04/10/2007
Closing date	06/30/2008	12/31/2010

Staff Inputs (staff weeks)

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY02	70	447.84
FY03	17	98.58
FY04		0.00
FY05		0.00
FY06		0.00
FY07		0.00
FY08		0.00
Total:	**87**	**546.42**
Supervision/ICR		
FY02		0.00
FY03	16	86.53
FY04	34	176.48
FY05	41	228.77
FY06	59	310.38
FY07	46	186.21
FY08	36	180.66
FY09	30	0.00
Total:	**262**	**1169.03**

Task Team Members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Adenike Sherifat Oyeyiola	Sr. Financial Management Specialist	AFTFM	FMS
Akintola Fatoyinbo	Sr. Communications Specialist	-	-
Anthony Hegarty	Lead Financial Management Specialist	-	FMS
Bayo Awosemusi	Lead Procurement Specialist	AFTPC	Procurement
Benjamin Vannier	Project Assistant	AFTTR	Assistant
Clementine du Payrat	Project Assistant	-	Assistant
Dan Aronson	Lead Social Scientist	-	Safeguards
Dieter Schelling	Team Leader	-	Team Leader
Edward Olowo-Okere	Sr. Financial Management Specialist	-	FMS
George Banjo	Sr. Transport Specialist	ECSS5	Technical

APPENDIX A

Hubert Nove-Josserand	Sr. Urban Transport Specialist	SACIN	TTL
Jocelyne do Sacramento	Language Program Assistant	AFTTR	Prog. Support
Karen Hudes	Sr. Counsel	-	Legal
Kristine Drike	Economist	-	Economist
Scott Sinclair	Lead Financial Specialist	AFTEG	Disbursement
Subhash C. Seth	Consultant	AFTTR	Engineering
Mark Walker	Lead Counsel	LEGES	Legal
Melanie Jaya	Program Assistant	AFCS1	Prog. Support
Nina Chee	Environmental Specialist	MIGEP	Safeguards
Ntombie Siwale	Team Assistant	AFTTR	Prog. Support
Supervision/ICR			
Ajay Kumar	Lead Transport Economist	AFTTR	TTL
Amos Abu	Sr. Environmental Specialist	AFTEN	Safeguards
Sameer Akbar	Sr. Environmental Specialist	ENV	Environmental management
Akinrinmola Oyenuga Akinyele	Sr. Financial Management Specialist	AFTFM	FMS
Bayo Awosemusi	Lead Procurement Specialist	AFTPC	Procurement
George A. Banjo	Sr. Transport Specialist	ECSS5	Technical
Roger Gorham	Transport Economist	AFTTR	Environmental management
Aisha D.A. Kaga	Program Assistant	AFCW2	Assistant
Antoine V. Lema	Sr. Social Development Specialist	AFTCS	Safeguards
Regina Oritshetemeyin Nesiama	Program Assistant	ECSHD	Assistant
Anne Njuguna	Program Assistant	AFTTR	Assistant
Hubert Nove-Josserand	Operations Advisor	SACIN	TTL
Comfort Onyeje Olatunji	Program Assistant	SASDO	Assistant
Africa Eshogba Olojoba	Sr. Environmental Specialist	AFTEN	Safeguards
Olatunji Ahmed	Transport Specialist	AFTTR	Engineering
Adenike Sherifat Oyeyiola	Sr. Financial Management Specialist	AFTFM	FMS
Justin Runji	Sr. Transport Specialist	AFTTR	Engineering
Subhash C. Seth	Consultant	AFTTR	Engineering
Thomas Kwasi Siaw Anang	Procurement Specialist	AFTPC	Procurement
Rajiv Sondhi	Sr. Finance Officer	CTRFC	FMS
Samuel L. Zimmerman	Consultant	MNSSD	Technical

Detailed Project Cost and Financing

a) Project Cost by Component

(US$ million) Figures in parentheses show IDA financing

Component	Appraisal estimate	Estimates at restructuring	Estimates at Additional Financing	Actual/ latest estimates	Percentage of estimates at AF
Capacity building	27.6 (13.3)	20.8 (18.4)	20.8 (18.4)	44.2* (8.9)	48.4
Road network efficiency	98.5 (78.9)	94.5 (83.1)	133.3 (121.9)	158.8 (141.7)	116.2
Bus service enhancement	0.7 (0.7)	1.9 (1.7)	11.2 (11.0)	50.7** (8.6)	78.2
Water transport promotion	2.9 (2.4)	2.2 (1.9)	4.1 (3.8)	5.3 (2.4)	63.2
Preparation of follow-up phases	5.3 (4.7)	6.4 (5.7)	6.4 (5.7)	6.8 (3.8)	66.7
TOTAL	135.0 (100.0)	125.8 (110.8)	175.8 (160.8)	265.8 (165.4)	102.9

b) Financing

Source of Funds	Appraisal estimate	Estimates at restructuring	Estimates at Additional Financing	Actual/ latest estim	Percentage of estimates at AF
Borrower – Counterpart Fund	35.0	15.0	15.0	65.2#	
Transport Fund				35.2##	
Sub-total	35.0	15.0	15.0	100.4	669.3
IDA	100.0	100.0	150.0	150.0	100.0
Exchange gains		10.8	10.8	15.4	
TOTAL	135.0	125.8	175.8	265.8	151.2

* The substantial increase in financing by the Lagos State Government (LSG) for capacity building component is because: (i) the closing date was extended three times from June 30, 2008 to December 31, 2010. Therefore the cost incurred during these additional two-and-a-half years was not part of the original estimates; and (ii) over the years, LAMATA is not only responsible for LUTP implementation but a much broader scope of planning and regulation activities assigned by the LSG. These include BRT planning and regulation, design and planning of blue and red rail lines, among others. This increase in activities has resulted in an increase in operating cost and staff size.

** This amount includes US$42 million contribution from LSG for BRT construction and service lane improvements.

This includes LSG financing for: (i) US$15 million for LAMATA capacity building; (ii) US$8.2 million for routine maintenance; and (iii) US$42 million contribution for BRT construction and service lane improvements.

Includes: (i) US$24.1 million from license fees (hackney permits, road taxes, license plate and auto registrations); and (ii) US$11.1 million from other user charges, including income from bidding documents, sale of maps from the geographic information systems, income from advertisement along BRT route, franchise fee from BRT operations and lease income from bus depots.

APPENDIX A

Other Project Data

Borrower/Executing Agency:

Follow-on Operations

Operation	*Credit no.*	*Amount (US$ mil)*	*Board date*
Lagos Urban Transport Project 2	4767	190.00	06/02/2010

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Time spent by poor households on travel along project corridor per trip (minutes)			
Value quantitative or Qualitative)	30	Savings 20% (24)	Savings 20% (24)	20
Date achieved	07/20/2005	07/20/2005	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 2 :	Money spent by poor households on bus travel per trip along project corridor (share of income)			
Value quantitative or Qualitative) (percent)	N108 (20%)	N 92 (15%)	N 92 (15%)	N 96 (12%)
Date achieved	07/20/2005	07/20/2005	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%. In real terms, considering the change in CPI, the target was fully achieved.			
Indicator 3 :	Length of daily bus-km franchised (km)			
Value quantitative or Qualitative)	10,000	15,000	15,000	45,000
Date achieved	07/20/2005	07/20/2005	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 4 :	Work days of labor created			
Value quantitative or Qualitative)	390,000	700,000	700,000	1,660,000
Date achieved	07/20/2005	07/20/2005	04/15/2007	12/31/2010

Comments (incl. % achievement)	Achieved 100%.

(a) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	LAMATA is fully functional			
Value (quantitative or Qualitative)	Established by law	100%	100%	100%
Date achieved	11/22/2002	11/22/2002	08/02/2005	12/31/2010
Comments (incl. % achievement)	Achieved 100%. LAMATA fully functional in June 2006 with all internal procedural manuals established.			
Indicator 2 :	Total annual contribution from user charges into the Transport Fund at the end-of-the-project (US$ million)			
Value (quantitative or Qualitative)	0	5 (EOP)	2	6
Date achieved	11/22/2002	11/22/2002	08/02/2005	12/31/2010
Comments (incl. % achievement)	Achieved 100%. The amount includes dedicated contribution from license fees and other user charges.			
Indicator 3 :	Minimum annual amount expected as counterpart funding from LSG (US$ million)			
Value (quantitative or Qualitative)	0	7	2	8
Date achieved	11/22/2002	11/22/2002	08/02/2005	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 4 :	LAMATA's annual operating cost remains less than 6 percent of overall expenditure			
Value (quantitative or Qualitative)	0	<6%	<6%	<6%
Date achieved	11/22/2002	11/22/2002	08/02/2005	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 5 :	Traffic Management Units set up and operational			
Value (quantitative or Qualitative)	0	4	4	2
Date achieved	11/22/2002	11/22/2002	08/02/2005	12/31/2010

Comments (incl. % achievement)	Achieved 50%. During reprioritization of the available resources, the number of TMUs to be established was reduced from four to two, with a focus on those areas in which BRT and BFS were situated.			
Indicator 6 :	Total time saved in motorized travels per day on selected legs of the declared road network (in minutes)			
Value (quantitative or Qualitative)	0	10-12	10-12	7-12
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 7 :	Pilot bus route passenger satisfaction (% satisfied)			
Value (quantitative or Qualitative)	N/A	70%	70%	80%
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 8 :	Decrease in average waiting time on pilot bus route (minutes)			
Value (quantitative or Qualitative)	N/A	10	4	4
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 9 :	Lagos state ferry services corporation privatized			
Value (quantitative or Qualitative)	0	To be completed	Completed	Completed
Date achieved	11/22/2002	11/22/2002	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%. Achieved in 2004.			
Indicator 10 :	Concession of ferry service operationalized			
Value (quantitative or Qualitative)	0	To be completed	Completed	Completed
Date achieved	11/22/2002	11/22/2002	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%. Achieved in 2005.			
Indicator 11 :	Jetties passenger per day (Ijegun Egba and Agboyi Ketu)			
Value (quantitative or Qualitative)	0	6,100	7,200	7,200

Date achieved	11/22/2002	08/02/2005	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 12 :	Transport Master Plan prepared in a participatory manner and disclosed			
Value (quantitative or Qualitative)	0	To be disclosed	To be disclosed	Disclosed
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Transport Master Plan has been prepared and disclosed 2010.			
Indicator 13 :	Length of road rehabilitated (km)			
Value (quantitative or Qualitative)	0	25	25	47.8
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 14 :	Length of overlays placed (km)			
Value (quantitative or Qualitative)	0	68	68	76
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 15 :	Number of junctions improved			
Value (quantitative or Qualitative)	0	70	70	70
Date achieved	11/22/2002	04/15/2007	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%.			
Indicator 16 :	Number of jetties improved/constructed for small boats			
Value (quantitative or Qualitative)	0	20	4	4
Date achieved	11/22/2002	11/22/2002	04/15/2007	12/31/2010
Comments (incl. % achievement)	Achieved 100%. During restructuring, project components were redesigned and the number of jetties to be improved reduced from 20 to 4. The 4 jetties have been constructed and functional on the identified waterway routes.			

Appendix B. The BRT-Lite Project

Outputs

The World Bank gave expert advice and funded feasibility studies and detailed designs. It provided assistance in identifying a future mass transit network and supported PPP transaction advisory services and the structuring of operations and maintenance concessions.

Existing and prospective bus operators were closely involved in the definition of the BRT-Lite services and enhancement activities of the project.

Improvements were made to the corridor (funded by Lagos State – US$ 36 million), including the designation of dedicated lines for buses, road surface improvements on and adjacent to the exclusive lines, bus terminals, bus stops, bus shelters, lay-bys, ticketing activities and traffic system management measures.

The BRT-Lite service along Mile 2 to CMS corridor carries over 220,000 passengers per day.

Outcomes

The new BRT Vehicles carry a considerably greater number of passengers per vehicle in greater comfort, and the vehicles meet Euro 1 standards meaning lower emission levels of key pollutants. Furthermore, operating in segregated bus ways for much of the route, these vehicles can bypass traffic so less time is spent inefficiently in stationary traffic. Since inception BRT-Lite total ridership is 301 million passengers.

The operation was a cooperative partnership with the Road Transport Employers Association of Nigeria representing the owners' interests. This association represents the large bus sector, whereas NURTW represents the franchised operations and small bus operators.

A driver-training program was instituted in the use of the infrastructure and customer care.[28]

The IEG mission visited the Mile 2 interchange and inspected the facilities at Ojota depot, which were clean, functional, and effective. It was observed that passenger behavior had gradually changed through education and that orderly queues were now the norm. The mission also rode on the new buses and inspected the secure bus workshops, fuel depot, and cleaning bays. A fingerprint recognition system is used to gain access. The facility has been built in expectation of a rapid increase in the number of BRT lines.

[28] Support was also provided by a state initiative known as "Kick against Indiscipline" to help with the management of the stations and terminals. This included control of traders and hawkers on the walkways and the introduction of orderly queuing at the bus stops.

User surveys reveal an improvement in bus passenger satisfaction along the corridors from 40 percent to 80 percent over the project period.[29] The surveys indicate that not only have the project-supported improvements made bus travel more affordable, but they have also made it more accessible to women and children. The focus groups involving users highlighted several key factors to measure satisfaction and results for their preference for the BRT-Lite. These were quicker journey times (35 percent), comfort (20 percent), fare differential (18 percent), safety/security (12 percent), reliability (five percent), and other reasons (ten percent).[30]

The enhanced bus services along the rapid transit corridors have empowered local operators to provide public transport services without subsidy, and have motivated local banks, financiers and vehicle suppliers to provide funding for additional planned BRT routes. Ridership has been so high that there is no longer any question about the viability of the scheme and this enables the regulator, LAMATA, to ensure that fares are lower than before the improvements.

Public transport in Lagos is now almost entirely owned and managed by the private sector, but regulated by LAMATA. The state government requested the World Bank's support for the extension of the BRT corridors (now under implementation in the second Lagos Urban Transport Project – LUPT2). There is no need for a government subsidy for operating the BRT scheme. This is feasible because of the high revenue generated by the services.

Processes for securely printing tickets and managing their distribution have been developed with the objective of minimizing fare evasion. BRT tickets are sold to passengers prior to boarding and verified at the entry to bus station and buses.

LAMATA charges the successfully selected operators a franchise fee in order to recoup its direct costs in administering the scheme and managing the enabling framework. The vehicle maintenance function is outsourced to the vehicle supplier, who provides full technical support including trained personnel and spare parts. Maintenance and administrative costs are recovered through a lease fee. Both drivers and small-fleet operators apply to join the route association, but their acceptance is subject to peer review in the light of the individual and collective liabilities. In any case, the actual drivers concerned receive training from the vehicle supplier and must be certified. Refresher training and repeated tests are mandatory.

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[29] Surveys and focus group discussions were carried out by a number of small firms and NGOs during the course of implementation. These included the New Nigeria Foundation, the Nigerian Institute of Transport Technology, Multiple Development Services Ltd., and Geo-Trans Associates Ltd.

[30] When BRT-Lite was 100 days old a "BRT town hall" was held in order to assess and debate performance and any issues that were raised by the public. The meeting comprised of senior LAMATA officers, the lending bank, State Government representatives, as well as users' representatives (including the physically challenged and commuters). A senior academic from the University of Lagos independently moderated the meeting. It was attended by approximately 1,500 people and televised. After six months there was a full evaluation of operational performance.

APPENDIX B

Figure 2. The 22 km. BRT-Lite Route from Mile 12 to Lagos Island

Source: Sub Saharan Africa Transport Program Discussion Paper No 9

Appendix C. List of Persons Met

World Bank Washington DC

Roger Gorham	Task Team Leader LUTP2

World Bank Nigeria Country Office, Abuja

Ahmed Olatunji	Senior Transport Specialist
Akinyele Akinrinmola	Senior Financial Management Specialist
Mary Asanato-Adiwu	Senior Procurement Specialist
Ugonne Eze	Team Assistant

Lagos Metropolitan Area Transport Authority

Lyiola Adegboye	Acting MD and Director of Finance
Dairo Olugbenga	Director Public Transport
Olufunsho Elulade	Director Roads and Traffic Management
Tayo Orekoya	Director Corporate and Investment Planning
Olurinu Jose	Director Business Systems
Abiodun Dabiri	Deputy Director Procurement
Prof. Olukayode	Deputy Director Safeguards
Obafemi Shita-bey	Head Transport Research and Development
Dr. Frederic Oladehinde	Technical Adviser/Head of Transport Planning

Lagos State Waterways Authority

Abisola Kamson	Managing Director
Tayo Gbajuma	Head of Operations

Lagos State Traffic Management Authority

B.A. Braimah	General Manager
Chris Olakpe	Chief Executive Officer

Primero Transport Services Ltd.

Lekan Ladipo	Managing Director/CEO

Appendix D. Borrower Comments

No comments were received.