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IMPLEMENTATION COMPLETION AND RESULTS REPORT
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ON A

{LOAN/CREDIT}

IN THE AMOUNT OF {SDR, EURO, etc.} {0.0} MILLION
(US$ {0.0} MILLION EQUIVALENT)

TO THE

{BORROWER}

FOR A

{PROJECT NAME}

March 29, 2011

{Sector Department}
{Country Department}
{Region}

CURRENCY EQUIVALENTS

(Exchange Rate Effective 00000000)

Currency Unit =
1.00 = US$ [ ]
US$ 1.00 = [ ]

FISCAL YEAR

ABBREVIATIONS AND ACRONYMS

Vice President:	
Country Director:	
Sector Manager:	
Project Team Leader:	
ICR Team Leader:	

COUNTRY
Project Name

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I N S E R T

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1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

The Lagos urban transport project was designed in challenging circumstances. The Lagos metropolitan area had a population estimated at over 10 million in 2000, and projected (conservatively) to grow to more than 25 million by 2025. However, transport infrastructure and services were at levels that supported a population of no more than 6 million. As a result, the level of efficiency and productivity in the metropolitan area had been adversely affected by a growing weakness in the physical infrastructure required to support basic needs of the population. The density of the road network at about 0.4 km/1000 population, for example, was quite low even by African standards. The provision of bus public transport was highly fragmented with multiple private operators, operating small buses of poor quality and in absence of any management or a regulatory authority. Despite the city size, there were no organized mass transit systems. Over the years, the quality of public transport in Lagos State had degenerated, especially after the movement of the federal capital from Lagos to Abuja. Like any other state in Nigeria, Lagos State lacked institutional capacity and adequate funding for the management of transport infrastructure to meet the demand of its teaming population.

Public transport environment: Public transport operation in Lagos is almost entirely owned and managed by the private sector—principally individuals owning one or two second-hand vehicles that they rent out to drivers on a daily basis. The existing bus fleet is estimated at 75,000. Minibuses (*danfos*) make up the bulk of the fleet, and their numbers are rising as the number of midi-buses (*molues*) dwindles. Every *danfo* and *molue* is affiliated with one of several associations, the largest being the National Union of Road Transport Workers (NURTW). Buses account for almost 82 percent of the share of motorized person trips (10 percent regular size buses and 72 percent mini buses), the taxis and private cars account for about 13 percent, and the reminder five percent accounted by motor cycles, locally known as *okadas*. These vehicles are often reckless, not roadworthy, and contribute heavily to pollution. However, they are an integral part of Lagos's transport network and most Lagosians still use them in absence of alternatives, with close to 16 million trips made daily in the city. Despite poor service conditions and low availability, such public transport was unaffordable especially for people in the lowest quintile, costing over 20 percent of the household's disposable income.

Institutional and Regulatory Context: The institutional structure of Nigeria has three levels: federal, state and local. At the federal level, the Ministry of Transport (MOT) makes national transport policy and the Ministry of Works (MOW) develops the federal road network. Urban transport was devolved to the states by the 1999 Constitution, and the states make their own laws on traffic and transport. Federal agencies with divisions in the states include the Nigeria Police – Lagos State Traffic Division, which includes Traffic Wardens, and the Federal Road Safety Commission which is responsible for traffic control and enforcement, primarily on federal roads.

At the Lagos State Government (LSG), the MOT is the primary agency for transport policy formulation and implementation. The state ministry comprises five functional divisions. The Motor Vehicle Administration is the regulatory authority for public transport. There is also a Transport Operations Division. The Local Government Councils are responsible for local traffic management schemes, parking control and management of public transport terminals. In 2000, the Lagos metropolitan area consisted of 18 local government areas (LGA) out of 20 in the state, with their own elected governments. These LCDAs have a works department and a traffic management unit responsible for road maintenance and traffic management on local government roads. As a result, more than 100 agencies at local, state or federal government levels had a role in transport provision and/or services in the city. Often, most agencies develop and implement their own policies and programs in isolation, and without much regard for its effect on policies of other agencies.

Key issues in the city transport system are: (a) insufficient and poorly managed and regulated services and infrastructure; (b) lack of clear and coherent policies; and (c) weak and disorganized institutions. The central urban transport context can be described as follows: a growing urban population inadequately served by the transport system, declining standards of public transport, overlaps and conflicts among the agencies responsible for planning and implementing transport solutions, massive growth in the use of minibus services, growing dependence on private transport (cars and motorcycles), increasing congestion, inadequate and deteriorating transport infrastructure, and poor facilities for non-motorized transport (walking and bicycling).

Many of the observed shortcomings in the transportation system in Lagos stem from the sector's management weaknesses. These include (i) absence of a well articulated and adopted policy and strategic framework for the sector; (ii) fragmentation and duplication of institutional responsibilities among various agencies at the three levels of government; (iii) lack of inter-agency co-ordination among the various bodies; and (iv) absence of standard procedures for the technical and economic evaluation of programs and projects.

Recognizing a need to improve the transport sector in the Lagos state, a number of studies were conducted in the 90s to define appropriate solutions. The Lagos Mass Transit and Transport Systems Management Program study was undertaken in 1992. This work set out to identify actions necessary to address the complex transport situation in Lagos. The study had as one of its recommendations, the creation of Lagos Metropolitan Area Transport Authority (LAMATA) to coordinate transport policies, programs and actions of all agencies at different tiers of government.

1.2 Original Project Development Objectives (PDO) and Key Indicators

The project development objective of the LUTP was to: (a) improve the management of the Lagos metropolitan transport sector; (b) enhance the public transport road network in an environmentally, socially and financially sustainable manner; (c) enhance bus services; (d) promote water and non-motorized transport; and (e) prepare future phases of the program.

The key outcome/impact indicators identified in PAD were (Please see Table 1 for outcome and output indicators):

Key outcome/impact indicators

(i) Reduction of time and money (as a portion of the overall income) spent by poor households for personal travel activities;
(ii) Reduction of accidents (relative to vehicle-kilometers driven), and particularly of those involving pedestrians; and
(iii) Number of person-days of labor created (by the road rehabilitation and maintenance program).

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

The Project was restructured twice, in June 2005 and August 2005. The project also received additional financing in April 2007 for an amount of SDR 33.6 million (US$50 million equivalent).

However, the Project Development Objectives did not change as a result of restructuring and additional financing. Nevertheless, the changes resulted in reallocation of credit proceeds and modification of result indicators.

Project Restructuring

The first restructuring was undertaken in June 2005 for the following reasons:

a) One of the components to be financed in this project was maintenance of the declared road network, which includes federal, state, and local roads. During preparation, there were no clear agreements at different levels of government on the works to be carried out by the implementing agency. The federal roads were being maintained by the Federal Ministry of Works and the project focus was limited to maintaining state and local roads. As a result, the credit had to be reallocated to redirect allocation of funds from federal to state and local roads;
b) During initial years of project implementation, LSG faced challenges in co-financing equivalent of $7 million annually as agreed during project design. As a result, the requirement for the state to pay annually $7 million was reduced to $2 million; and
c) In view of the changing government policies and to maintain flexibility in implementation, the dated covenant related to the direct transfer of user charges to the Transport Fund was cancelled and it was kept as a performance indicator.

In August 2005, the project was again restructured to introduce the following changes:

a) Apply 100 percent IDA financing to all expenditures (including taxes); and
b) Reduce annual payment to the Transport Fund from $7 million to $2 million.

Additional financing

Additional financing for the project was approved on April 10, 2007 for an amount of SDR 33.6 million (US$50 million equivalent) and the related amended Agreement was signed on October 30, 2007. The justification for additional financing was:

a) Increase in the cost of road works due to an increase in the price of diesel and premium motor spirit[1], depreciation of Naira[2], and further deterioration in the condition of the road network due to delay between design and construction; and
b) Scale up the bus services enhancement component, with a focus on implementing a pilot bus franchise scheme along Iyana Ipaja-Ikotun/Igando corridor. Financing was to be provided for infrastructure such as bus shelters, terminals, lay-byes, street lights, traffic lights and other facilities necessary for bus franchise operation. As a result, the project investments were more closely aligned with the development objectives.

The credit proceeds were reallocated and result indicators modified to reflect changes in the project design. The closing date was extended by one year from June 30, 2008 to June 30, 2009.

[1] The price of diesel increased from N21/liter to N85/liter and of premium motor spirit from N22 to N65/liter over the period 2003 and 2006

[2] The value of Naira against dollar depreciated from N 117 in 2002 to N 128 in 2006

Table 1: Key Result Indicators (Original and Revised)

	Original Indicators	Revised Indicators
Key Outcome Indicators		
1.	Reduction of time and money spent by poor households for travel	- Time spent by poor households on travel along project corridors - Money spent by poor households as a share of income along project corridor
2.	Reduction of accidents	Dropped
3.	Number of person-days of labor created	Number of person-days of labor created
4.		Length of bus-km franchise per day
Intermediary Outcomes		
(i) Capacity Building		
1.	LAMATA is fully functional	LAMATA is fully functional
2.	Total financial contribution of LSG annually is at least $7 million	Total financial contribution of LSG annually is at least $2 million
3.	LAMATA's operating costs remain less than 6 percent	LAMATA's operating costs remain less than 6 percent
4.	Road user charges directly transferred to Transport Fund increase from $1 million in 2003 to $5 million in 2007	Total road user charges directly transferred to Transport Fund are $5 million by the end-of-project
5.	TMUs operational in priority LGAs	TMUs operational in 4 LGAs
(ii) Road Network Efficiency		
1.		Reduction in travel time by motorized modes on the Declared Road Network
(iii) Bus Services Enhanced		
1.	Percentage of bus operations governed by new regulatory framework	Amended as in outcome indicator 4
2.	Implementation of the bus pilot project	- Decrease in average waiting time on pilot bus route - Increase in passenger satisfaction along pilot bus route
(iv) Water Transport Promotion		
1.	Privatization of LSFSC	Privatization of LSFSC
2.	First ferry concession operational	First ferry concession operational
3.		Increase in jetties passengers per day
(v) Preparation of Future Phases		
1.	Transport sector institutional reform plan prepared	Transport sector institutional reform plan prepared
Output Indicators		
1.	Length of roads rehabilitated	Length of roads rehabilitated
2.	Length of overlays placed	Length of overlays placed
3.		Number of junctions improved
4.	Improvement/construction of jetties for small boats	Improvement/construction of jetties for small boats
5.	Transport master plan produced	Transport master plan produced

Project Schedule

The original project closing date was June 30, 2008. With the additional financing, the closing date was extended for the first time to June 30, 2009. The closing date was extended a second time to August 31, 2010 in order to complete implementation of the ongoing activities. The closing date was extended a third time to December 31, 2010 to allow full disbursement of the committed funds and complete the on-going contracts to attain project objectives.

1.4 Main Beneficiaries

The primary beneficiaries of the project are the people of Lagos State who are expected to benefit from improved road network and organized public transport system. The project investments have resulted in a decline in transport expenditure and travel time, and improvements in road safety. On average, cost to bus users along the project corridor has reduced by about 30 percent, and considerable savings in time has been realized both in terms of travel time and waiting time. Moreover, over 1.6 million jobs were created during the project. The individuals and organizations benefitting from the project are diverse as brought out in stakeholder analysis conducted as part of project impact monitoring and is presented in Table 2.

Table 2: Stakeholder Analysis

S.N	Beneficiary	Primary benefits
1.	State Government	- Reduced need for subsidy - Enhanced productivity - Increase in employment opportunities
2.	Public transport users	- Reduced travel time - Reduced travel costs - Improved quality of life - Improved transport facilities for women, physically challenged
3.	General traffic	- Reduced congestion in corridor, allowing time and cost savings - Reduced accident rate
4.	Population along corridor	- Improved quality of life - Improved public transport access opportunities - Reduced pollution, as a result of reduced congestion and lower VKT
5.	Bus transport operators/ associations	- Improved access to finance -
6.	Bus drivers/owners	- Better work environment - Better organized - Improved revenue

7.	Vendors and commerce along corridors	- Improved business opportunities - Higher land values
8.	Bus suppliers	- Opportunity for sales and service support, including supply of higher specification vehicles - Development of contract maintenance
9.	Pedestrians	- Improved quality of life - Safe walking environment - Improved access to physically challenged, old and young people
10.	Commercial banks	- Opportunities for productive investment outside the usual sectors - Development of innovative finance mechanisms for the informal sector that has wider development implications

1.5 Original Components

The project consisted of five components as follows:

Component 1: Capacity Building (Total US$27.59 million, of which US$13.32 million to be financed by IDA)

This component comprised of three sub-components: (a) institutional strengthening to bring into operational effectiveness the Lagos Metropolitan Area Transport Authority (LAMATA) including establishment of units responsible for procurement, financial management and safeguards, creation of a dedicated Transport Fund, and construction of a office building for LAMATA; (b) strengthening the capacity of existing transport sector agencies, in particular the Lagos State Ministry of Transportation (LSMT), the Lagos State Ministry of Works (LSMW), the Lagos State Ministry for Women Affairs and Poverty Alleviation, the Nigeria Traffic Police Traffic Unit, and the establishment of Traffic Management Units (TMUs) in key LGAs; and (c) the operating cost of LAMATA including external audits and carrying out of other activities consistent with the sector policy and strategy.

Component 2: Road network Efficiency Improvement (Total US$98.53 million, of which US$78.90 million to be financed by IDA)

This component comprised of three sub-components: (a) maintenance and rehabilitation measures on a priority 400 km of the 632 km of the declared road network (including bridges) in the Lagos Metropolitan Area; (b) rehabilitation and improvement of major junctions on the road network using low cost TSM measures; and (c) preparation and implementation of TSM measures to improve traffic flow in Lagos Island and Ikeja.

Component 3: Bus Service Enhancement (Total US$ 0.73 million, of which US$0.66 million to be financed by IDA)

This component comprised of two sub-components: (a) establishment of an effective regulatory framework for bus service provision by the private sector; and (b) preparation

of pilot demonstration project for the provision and financing by the private sector to improve bus services.

Component 4: Water Transport Promotion (Total US$ 2.90 million, of which $2.4 million to be financed by IDA)

This component comprised of four sub-components: (a) development and implementation of a detailed strategic plan for improving use of the waterways of Metropolitan Lagos for transport services, including establishment of an appropriate regulatory framework; (b) privatization of the Lagos State Ferry Services Corporation and disposal of existing state owned ferries; (c) encouragement of private sector participation in the provision of water transport services; and (d) rehabilitation and addition to existing terminal facilities.

Component 5: Preparation of follow-on phases (Total US$5.25 million, of which US$ 4.7 million to be financed by IDA)

This component comprised of four sub-components: (a) preparation of a Transport Master Plan for Lagos Metropolitan Area; (b) preparation of an institutional reform plan for the transport sector, in particular on reform of the Motor Vehicle Administration (MVA); (c) preparation of a strategy for the enhanced use of intermediate means of transport; and (d) necessary studies and preparatory activities for the next phase of the implementation of the policy and strategy, including preparation of resettlement plans for the implementation of rail mass transit in the Agege to Iddo corridor.

1.6 Revised Components

The components were not revised during the two restructurings. However, there was a reallocation of credit proceeds due to a reduction in the counterpart funding from $35.0 million to $15.0 million, and the corresponding reduction in project cost from $135.0 million to $115.0 million (IDA share of US$100.0 million remained the same). However, in the Restructuring Paper, IDA financing is reflected as US$110.8 million (which includes $10.8 million exchange rate gains; the SDR amount remained the same). The co-financing from LSG was reduced from $7 million annually to $2 million starting 2005[3].

The project component allocations were further revised as part of additional financing in 2007. In addition to addressing the increase in the cost of works due to an increase in input prices, the allocations were revised with a focus on scaling-up bus services component to implement a pilot bus franchise scheme along Iyana Ipaja-Ikotun/Igando corridor with investments in bus shelters, terminals, lay-byes, street lights, traffic lights

[3] As a result, total LSG contribution was to be $15 million ($7 million in 2004 and $2 million each in years 2005, 2006, 2007, and 2008).

and other facilities necessary for bus operation. The objective was two-fold: a) to realign the project focus from making investments mainly in road construction and maintenance to also finance public transport infrastructure components to improve public transport services; and b) to develop a comprehensive integrated program of complimentary improvements which combines public transport, NMT and roadway infrastructure, operations management and public transport service improvements by focusing on a specific corridor to increase over-all travel speed, reliability and safety. The changes were designed to align the investments with development objectives in an attempt to enhance public transport in an environmentally, socially, and financially sustainable manner. The changes in design were also consistent with comments received from the peer reviewers.

Table 3. Project Costs by component

(US$ million)

Component	Appraisal estimates		Estimates at Additional Financing (AF)	
	Total	IDA	Total	IDA
Capacity building	27.6	13.3	20.8	18.4
Road network efficiency improvement	98.5	78.9	133.3	121.9
Bus service enhancement	0.7	0.7	11.2	11.0
Water transport promotion	2.9	2.4	4.1	3.8
Preparation of follow-up phases	5.3	4.7	6.4	5.7
TOTAL	135.0	100.0	175.8	160.8

1.7 Other significant changes

There were no other changes in design, scope and scale, implementation arrangements and schedule, and funding allocations.

2. Key Factors Affecting Implementation and Outcomes

Federal versus state: (a) lack of a clear agreement on the ability of LAMATA to carry out maintenance on the federal roads led to delays in project start-up. The project had to be restructured to clarify the roles. (b) challenges faced by the state in initial years to raise counterpart funding led to delays and restructuring; (c) delays in setting up the Trust Fund and making direct transfers. However, while these issues led to delays in project take-off, in the long term they were addressed satisfactorily and the outcomes were fully achieved.

Institution building, regulatory framework, enforcement: (a) Delays in getting suitable professional staff in LAMATA: To meet its objectives and goals, LAMATA

needed to have in its employment qualified and experienced staff in departments, such as traffic management, transport economist etc, which are not easy to recruit. It took a few years to recruit the required professional staff in LAMATA, which initially slowed project implementation. (b) Delays in clarifying roles and functions across multiple agencies: Getting the multiple stakeholders on-board and accept the proposed reform program has taken time and led to initial delays: Resistance to change by agencies and organizations currently involved in transport operations and management has been one of the key challenges in implementation. As an example, it took some time for some state agencies and institutions to appreciate the role and functions of LAMATA as the agency responsible for bus regulations and enter into concessional contracts with bus operators. In 2007, the LAMATA law had to be amended to make it as the agency responsible for entering into regulatory contracts with the bus operators. (c) Delays in setting up the regulatory framework: The regulations governing the operation of road transport need to be in compliance with the relevant federal legislation. For example, the standards for the use and construction of motor vehicles are set out in the National Road Traffic Regulations of 1997, empowered under the Federal Road Safety Commission Act. These Regulations also established the Federal office of the State Director of Motor Vehicle Administration with powers, *inter alia*, to set the maximum and minimum fares that may be charged for stage carriage (local bus services). In addition, effective enforcement of regulations ultimately rests with the powers granted to the Nigeria Police Force, which is a federal body even though it is organized on a state basis. Whilst officers of State agencies do have a limited enforcement capability, they don't hold the power of arrest and some of their actions require accompaniment by a police officer. Getting a full understanding and agreements on the way forward in enforcement across multiple agencies resulted in initial delays. However, though there were initial delays, the outcomes were fully achieved.

Cost increase: The delay of over 15 months between appraisal and effectiveness resulted in further deterioration in the condition of the project road network. This deterioration in road condition coupled with an increase in cost of works (as discussed in para _-), led to an increase in resources required to maintain roads to the agreed standard. The project implementation on some of the roads was delayed while additional resources were being arranged.

Access to credit: The project was designed as a PPP with the public sector taking on the role as a regulator and quality control and also providing financing for the infrastructure; the private sector was to provide financing for bus purchase and operating services. The success of the project therefore depended on the ability of the private sector to obtain financing for bus purchase. However, new regular size buses were available for about $100,000. This was a large amount to be financed by private operators, who were so far used to financing second hand old small buses costing less than $10,000 and often bought from personal savings. The commercial banks were unwilling to lend on long-term (the typical lending term was 2-3 years against a bus life of over 10 years) and required some form of security of repayment. The challenge was addressed in two ways:

a) First, the scheme design gave the bank the initial lien on revenues collected from services; only the balance (after the deduction of financing costs) was

passed on to the operator. The bank also was given the right to act as ticket distributor and security monitor.

b) Second, the scheme design required the participating operators to accept collective liability for all the obligations into which they enter. Any individual default, whether by embezzlement of revenues or through vehicle unavailability (perhaps as a result of an accident or mechanical failure), would be met by an additional charge on all the remaining members.

As a result, though there were some delays, buses were procured and the outcomes were achieved.

2.1 Project Preparation, Design and Quality at Entry

Project Preparation: The project was prepared as a first phase of interventions to address the issues related to a lack of institutional capacity for sector management, low cost recovery, poor quality of public transport coupled with adverse environmental and social impacts, and inadequate involvement of stakeholders. Taking forward the concepts from earlier studies, the Lagos Urban Transport Project (LUTP) was prepared on the basis of building capacity to manage and coordinate the transport system, and identifying priority actions, investments and enabling measures for its improvement. An APL was considered a more appropriate instrument to address the long term support required to implement the transport sector policy and strategy though the project was designed as a SIL because of the unsatisfactory macro-economic performance of Nigeria. From the outset, enhanced provision of bus services was a core component of the project design and included development of busway priority – though primarily as a complementary measure to the mass-transit railway proposal. Consideration was given to providing financial support for bus renewal to demonstrate financial viability of the bus operations in Lagos. However, the introduction of regulatory reforms to reward efficient bus service coupled with improvements to the road network was expected to provide sufficient incentive to the private sector for enhanced provision of bus services.

Project Design: A multi-modal transport approach was taken, recognizing the potential for developing rail and inland waterway mass-transit integrated with the core road passenger transport network. The project focused on fast-return investments, such as road maintenance, rehabilitation, and junction improvements. It also included preparation of technical, environmental, and social measures for possible future mass transit development for possible support in a private-public financing framework.

However, while the issues and the strategies to address those issues were rightly identified during preparation, the initial design was complex and the investments were not directly focused on achieving the desired objectives. The investments in bus services enhancement component, for example, were less than one percent of the total project cost, while enhancing bus services in a socially and financially sustainable manner was one of the key original objectives of the project. Similarly, investments in road network efficiency improvements were spread throughout the city road network and as a result the impact on improving traffic flow was only marginal. To address these issues, additional financing was utilized to sharpen the focus and align more closely with the project

objectives. As part of additional financing the project design focused on: a) increasing the investments to improve public transport infrastructure (depots, terminals, stops) from less than one percent to about seven percent; and b) investing in comprehensive, integrated program of complimentary improvements along a specific route or corridor rather than spreading across the city. In addition, outcome indicators were better aligned with the project objectives and base line data collected during preparation of additional financing. Initially, outcome and output indicators were mixed-up. Improvement in bus services, for example, was intended to be measured by the "implementation of bus pilot project" as part of initial project design. During additional financing, the indicator was modified to measure benefits resulting from implementation of the pilot project—to include decrease in average waiting time, improvement in passenger satisfaction, and length of bus-km franchised. Similarly, improvements in road network efficiency were measured by reduction in travel time by motorized modes rather than length of roads rehabilitated (which is an output indicator).

Involvement of key stakeholders was critical to successful implementation: Conception to implementation of the BRT scheme was achieved in a record time of 15 months (as compared to four to five years in most other countries). A key success factor for the project was the active involvement of key stakeholders in the scheme; the local transport union was incorporated into the scheme. It successfully established a co-operative that was able to attract commercial funds for the purchase and operation of 100 high capacity buses and further lease of 120 high capacity buses. There is no government subsidy for operating the scheme; notwithstanding the scheme is financially successful. To deliver this scheme, the Governor of the state demonstrated strong political leadership in the face of fierce opposition by other interest groups. The traveling public has since greatly acclaimed the introduction of the scheme.

The project design focused on the following:

a) The project design is driven by consideration of local requirements and what is most appropriate at the local level and it combines institutional and regulatory reform together with specific investments;

b) The design represents a local response to adapt an expensive design. Drawing from good practices from Bogota (Colombia) and Curitiba (Brazil), the system was adapted to a Nigerian context, as BRT 'Lite' (i.e. a high-quality public bus service system that is affordable, reliable and safe, while retaining the most desirable BRT engineering characteristics). The services were designed to respond to the demands of various stakeholders: politicians, transport unions, public transport users and road users. it was delivered at very low cost per kilometer as compared to BRT projects in other parts of the world, making it easier to replicate along other corridors and other low-income countries in Sub-Saharan Africa;

c) It encompasses all elements of public-private partnership, with the State financing infrastructure and the private sector financing buses, depots and maintenance facilities. The union is operating the buses and will be able to pay back the credit within 2 years.

Fares are not subsidized and they are lower than those charged earlier by the mini buses; and

d) The project is being implemented in full partnership and cooperation of bus unions and other local interests.

Quality at Entry: The quality at entry is rated satisfactory due to the strategic choice made in identification of project components, championing the establishment of a strong independent transport authority as the only effective way to address the sector's institutional weaknesses, and the sequencing of long term planning efforts in the urban transport sector.

The project was subjected to a two-stage review at the Sixth Quality at Entry Assessment. At the first stage review, the quality at entry was rated as marginally satisfactory (rating 3), which was subsequently upgraded to satisfactory (rating 2) in the second stage review. Both panels were of the view that project implementation will face serious challenges, *first* because the country context is difficult (as reflected by poor record of achievements in the past and delays in effectiveness), *second*: because it has too many components which make it complex and *third*, because the likelihood of resistance to the changes sought are high. The high amount dedicated to road maintenance in project components was seen as a distraction from promoting the institutional and cost recovery improvements. A more prudent approach would have argued for a smaller project which was better focused on the provision of bus services. While the identification of specific risk factors and the proposed mitigation measures were seen to be adequate, the level of risk appeared to have been consistently under-rated.

However, it is seen as a well justified project that attempts to address serious transport problems faced by the city residents. Achievement of project objectives was expected to contribute to the resolution of city's urban transport problems.

2.2 Implementation

(including any project changes/restructuring, mid-term review, Project at Risk status, and actions taken, as applicable)

To ADD

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

The monitoring and evaluation framework was developed based on qualitative and quantitative performance indicators for each sub-component, with a specific focus on transport, social, environmental, and capacity development aspects. The transport and social impact monitoring were conducted by the M&E unit in LAMATA on an annual basis. A number of studies were conducted to monitor the impact of project investments. The specific output of studies is the identification of attributes of adequate public transport, which were utilized to develop design of the Bus Rapid Transit (BRT) and Bus Franchise Scheme (BFS) corridors. The analytical scope of attributes evolved around four main attributes as listed in Table 2.

Table 2: Monitoring and Evaluation Framework

Attributes	Dimensions
Affordability	Monthly spending on transport/users income Price or fare; Offer of benefits for public transport (e.g. bus-passes) or subsidies on fares; "Opportunistic cost of service"
Availability	Routes desired by users *vs* available services Length of wait, Traveling time, Reliability, Availability of services at night and at weekends
Accessibility	Walking distance to terminal or station Availability of information Access roads to allow vehicles in neighborhood Social environment (mugging and violence) Vehicles and bus stops adapted to vulnerable users (children, pregnant women, elderly, disable)
Acceptability	Safety inside vehicle Crew member's attitudes (drivers and aides) Conditions of bus stops and shelters Cleanliness and conservation of vehicles Comfort and capacity

Progress towards the project objectives was measured on a regular basis through the following actions:

a) Design and validation of the monitoring system in cooperation with the implementing agency and all stakeholders;
b) Implementation of an automated data processing system that generates the relevant M&E information periodically;
c) Periodic field data collection for input into the data processing system to generate the appropriate indicators;
d) Collation of monthly and quarterly reports by LAMATA; and
e) Publication and circulation of quarterly progress reports by LAMATA to all project stakeholders.

2.4 Safeguard and Fiduciary Compliance

Safeguards:

Safeguard compliance is rated **satisfactory.**

The safeguard policies triggered are the Bank's Environmental Assessment (OP/BP 4.01) and Involuntary Resettlement (OP/BP 4.12). An Environmental Management Framework (EMF) as well as Environmental Management Plan (EMP) was prepared with consultation with stakeholders. The EMF was disclosed nationwide. LAMATA has

created a safeguard unit which is responsible for the implementation of environmental and social issues arising from the implementation of the project. The unit prepared procedural manuals on environmental assessment and social assessment which were well implemented during the project. The unit collaborated with information, education, and communication (IEC) strategy to gain support of the people which foster the engagement of the Project Affected Persons (PAPs) in the project implementation. The social impact of improved bus services and roads maintenance was mitigated by the creation of thousands of jobs on construction sites and integration of displaced drivers in the new bus scheme.

In particular, all subcomponents were screened using the safeguard checklist to ensure conformity to the rules and social and environmental soundness. The environmental and social management plans was well implemented, and closely monitored to ensure compliance. As part of safeguards due diligence, an environmental audit was conducted with a view to evaluating the project's safeguard performance. The report of the environmental audit rated the project's overall safeguards compliance to be satisfactory.

Fiduciary

Fiduciary compliance is rated **highly satisfactory.**

Procurement: Prior to attainment the required capacity on procurement, LAMATA engaged the services of consultant for its procurement activities. This provided the required skill mix needed for good project preparation and implementation take-off. The design of the procurement scope, procedures, review thresholds and frequency of supervision was based on analysis of Country Procurement Assessment, Country Performance Portfolio Review, and procurement capacity assessment of the procurement unit in LAMATA. The major risks and their mitigation were clearly identified. Overall, in terms of procurement, clear issues were identified and sound steps undertaken to ensure efficiency and effectiveness of procurement towards the achievement of the project development objectives.

Procurement management was vested in the procurement unit of LAMATA. The key factor contributing to the satisfactory performance in procurement function included but not limited to availability of competent and highly skilled staff with blend of skill and experience within LAMATA organization to prepare specifications and terms of reference for procurement needs, good project planning and implementation, good tools for monitoring and evaluation of projects, good contract management tools, and good communication arrangements. The procurement unit has performed creditably well from the commencement of the project to closing of the project. It was able to adopt and follow World Bank's guidelines and procurement procedures. The unit sought and received the World Bank No Objections for all prior review contracts including procurement plans and cleared all post review contracts during the World Bank post review audits of procurement activities.

Financial Management:

Acceptable financial management arrangements were maintained during project implementation. The project commenced with transaction-based disbursement method and converted to report-based disbursement method in 2005 after the review undertaken by the Bank project team found the project eligible for report-based disbursement method. It is one of only three implementing entities in the country portfolio availed the report-based disbursement method. IFRs were rendered timely and of satisfactory quality. In May 2009 the project won a Certificate of Excellence given by the FM Unit of the Bank for achieving 100 percent compliance in IFR submission during the period January 1, 2008 - December 31, 2008. All through the period of project implementation, annual financial statements were submitted timely and had unqualified opinion. The implementing entity maintains a very robust computerized accounting system, migrated from Sunaccounts to Enterprise Resource Planning using oracle software. This has facilitated preparation of timely and reliable financial statements. Payment processing progressed to electronic processing (using Remita payment platform) from manual at inception. Consequently processing time was reduced from 21 to 15 days. An internal audit unit with two staff was set up in LAMATA in 2007.

2.5 Post-completion Operation/Next Phase

While the BRT project has been a success, it has also raised expectations among city residents to scale-up the reform and investment program and extend BRT system to other parts of Lagos metropolis. LAMATA with support from LSG has prepared a transport sector policy and a strategic plan to address mobility needs of the population in a clean, safe, and affordable manner. The objective is to create an integrated multi-modal transport system. Some of the key elements of the plan are: (a) extension of BRT to other corridors, including Oshodi-Mile 12-Ikorodu and Oshodi-Mile 2-Obalende. The rationale behind selection of these corridors is based on a comprehensive network analysis, traffic flows and ease of implementation; and (b) the construction of two commuter rail lines—Agbado to Marina (Red line on an existing railroad right-of-way) and Okokomaiko to Marina (Blue line). The LSG has requested Bank's support for extension of the BRT corridors while the commuter lines are being constructed using a Public Private Partnership model, with infrastructure being funded by the LSG under a design/build contract (at a cost of over US$1 billion) and the actual railway operations being funded and managed by the private sector under a concession agreement.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

Rating: S

The objectives and activities designed under the proposed project are consistent with the government's overall strategy for non-oil dependent growth as stipulated in the National Economic Empowerment and Development Strategy (NEEDS) and Lagos State Economic Empowerment and Development Strategy. The Federal Government of Nigeria (FGN) is keen to propagate the concept of sustainable urban transport that calls for inclusion of parameters such as safety, cleanliness, and reliability in transport systems for

Nigerian cities. The project is also successful in supporting the Nigeria Vision 2020 developmental blueprint adopted by the federal government, with a specific focus on development of an efficient and affordable multi-modal transportation network plan for major cities (p. 132).

Additionally, the World Bank and the United Kingdom's Department for International Development (DfID) have jointly developed the Country Partnership Strategy (CPS), which was approved by the Bank on July 28, 2009. The CPS is aligned with the pillars of both the NEEDS and State Economic Empowerment and Development Strategy, especially the second pillar that focuses on improved environment and services for non-oil growth. The transportation strategic priority for Lagos identified in the CPS is to, "put in place an integrated mass transit program with emphasis on road, rail, and water transportation services through LAMATA, and public-private partnership by strengthening traffic management mechanisms…" (p. 92). The project has successfully removed some of the key bottlenecks to sustainable transport by facilitating market transformation, strengthening institutional capacity and laying the basis for acceptability of the reform program.

The project activities are strategically aligned with all three pillars of the NEEDS. On **empowering people and improving social service**, the project components were identified based on broad consultation, involving users and community residents. The project would support development of an information, education, and communication strategy not only to guide the involvement of transport users and beneficiary communities in the planning and implementation of project elements, but also for use as a monitoring and evaluation tool to provide feedback on the project's impact. On **fostering economic growth**, the project has a strong focus on developing an enabling environment for increased private sector participation in the sector, and improving delivery of services. Those services – improved affordable mobility in Lagos – are themselves critical to ensuring the ongoing economic productivity of Nigeria's largest city. On **improving governance**, a key element of the project is to strengthen LAMATA, increase its budgetary accountability and improve its sector planning and programming capacity. This strengthening is likely to have ripple effects, since within Nigeria, LAMATA is already held up as a model of public sector governance.

3.2 Achievement of Project Development Objectives

Rating: **Highly Satisfactory**

Objective 1: *Improve management of the transport sector in the Lagos metropolitan area, including institutional, regulatory and policy aspects*

The objective was fully met.

(a) Strengthening capacity of LAMATA is expected to be the most enduring impact of the project[4]. The effectiveness of LAMATA was driven by its structure as an independent legal entity, separate from the line ministry with strong leadership, and competent and highly motivated staff. Some of the key factors driving the success of LAMATA include:

- Established as an independent Authority along the lines of a private sector organization;
- Operated as a business unit, observing best practices and acting as agents of change;
- Strong leadership supported by competent staff;
- Management by a Board of Directors, with a non-executive Chairman and a broad based membership drawn from amongst stakeholders, including the private sector;
- Staff remuneration based on private sector benefits;
- Corporate governance, social responsibility, corporate credibility were high on its agenda; and
- System of continuous engagement with the public and system users to allow acceptance, cooperation, and collaboration.

Since its establishment, LAMATA has succeeded in contributing to increased awareness for traffic management, transparency and discipline in procurement processes and involving the users in decision-making processes. LAMATA activities are now widely recognized by government, participating communities and development partners as an efficient and high-performing initiative that has significantly contributed to the city's poverty reduction goals notably by improving accessibility in low-income areas, involving communities in identification of priority programs and improving sector management.

The project supported strengthening the capacity of LAMATA in a number of areas, including:

a) Developing a transport sector strategy;
b) Creating organizational and institutional capacity for the planning and management of the State's transport system;
c) Supporting studies to raise the level of cost recovery in the transport sector;
d) Strengthening capacity in safeguards management, procurement and financial management; and
e) Developing a PPP framework for public sector bus operations.

[4] LAMATA has received multiple awards over the past few years for its spearheading best practices in transport management and planning, including:

- Award for Excellence, World Bank Africa Region (2010)
- Transport Planner of the Year 2009 award to MD by Transport Planning Society (UK) (2009)
- World Bank award of Certificate of Excellence for 100% compliance on IFR submissions (2008)
- Award as the Most Supportive Government Agency by Busworld, Lagos (2007)
- Award of recognition by National Association of the Blind (2010)
- Merit Award from the Department of Transport Planning and Management, Olabisi Onabanjo University, Ogun State (2007)
- Award as Best Transport Administrator to MD by Nigeria Auto Media Awards (2009)
- Corporate award by Yolas Consultants

In effect, LAMATA has become a model for other state governments in Nigeria and other countries in terms of efficiency, capability, data repository and expertise in project financing and implementation.

(b) Developing role of LAMATA as regulator: One of the key outcomes was establishment of an effective bus regulatory framework for bus services provision, which supported implementation of a pilot bus franchising scheme. The original powers granted to LAMATA in the domain of passenger transport had been limited to its planning and co-ordination and not to its actual regulation. However the revised LAMATA Law, passed by the House in late 2006, defined its function *inter alia* to 'plan, regulate and co-ordinate the supply of adequate and effective public transport in all travel modes and supporting infrastructure within metropolitan Lagos' and granted specific powers to make regulations (with the approval of the Governor) with respect to its functions. This has now made the role of LAMATA as the sector regulator unambiguous. The Law also granted powers to the Authority *inter alia* to 'prepare plans for the management and development of transportation in metropolitan Lagos' and, in conjunction with the Ministry of Works, to 'construct, re-construct, maintain and manage transport infrastructure and facilities' necessary for the discharge of its functions. This legislation thus empowered LAMATA to act as the sponsor and promoter of mass-transit schemes in Lagos, and hence to develop the BRT-Lite system.

(c) Sustainability of Funding: The project financed studies and provided technical assistance to LAMATA which led to setting up a transport fund. The transport fund was financed by dedicated funding from: (a) Lagos State budget provision; (b) license fees (hackney permit, road taxes, license plate registration, vehicle registration)[5]; (c) bus concession fees; (d) other road user charges (tolls). In discussions with the representatives of the 36 states, LAMATA has successfully made a case with the Joint Tax Board at the Federal Government level to increase road user charges, to be shared between LAMATA (50 percent), state treasury office (40 percent), Motor Vehicle Authority (five percent), and state MOT (five percent). As a result, LAMATA is able to meet 60 percent of the total funding requirements of US$42 million in 2008 (an increase from less than 20 percent in 2004) with the World Bank financing the balance 40 percent. The transport fund has shown a steady increase since its inception in 2006.

(d) The project financed creation of Traffic Management Units (TMUs) responsible for effective traffic management on local government roads and to develop the

[5] LAMATA is responsible for regulating traffic along the pilot bus franchise and BRT corridor and enforcing and monitoring franchise agreement. For providing this technical assistance, LAMATA charges an annual franchise fee which has provided an additional funding source for LAMATA activities and helps to achieve cost recovery.

capacity to be able to define functional road hierarchy and the preparation and implementation of appropriate traffic management plans for the area. During project restructuring, the number of TMUs to be created were reduced to four, Eti-Osa, Surulere, Mushin, and Ikeja. Eventually, during reprioritization of the available resources, the number of TMUs to be established was reduced to two, with a focus on Alimosho (the area in which Bus Franchise Scheme is situated) and Oshodi, the local government area at the hub of the BRT scheme where BRT scheme (Obalende to Ikorodu) is located. The TMUs are Key tasks performed are:

- Development of a Local Area Traffic Plan;
- Development of a Parking Policy and implementation Plan;
- Development of Traffic solutions to identified traffic and accident black spots;
- Action on remedial works and planned maintenance on priority local roads; and
- Provision of equipment and training.

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

The objective was fully met.

The investments in road network efficiency improvements have resulted in:

a) Reduced delays at major intersections;
b) Person days of employment created; and
c) Improved quality of road network resulting from: i) setting up a procurement management system to carry out road condition surveys; ii) setting up a GIS system; and iii) adoption of maintenance manual.

LAMATA has started, for the first time in the country, the design and execution of maintenance work with participation of the private sector through awarding contracts to local consultants and contractors. Experience has shown that the output of maintenance works through contracts is more efficient, cost effective and better in quality compared with the traditional methods of using force accounts procedures. This has contributed to enhancing efficiency of the existing road space, thereby reducing vehicle operating cost and improving road safety.

The works to improve junctions comprised better physical design of roundabouts, dedicated right and left turning lanes, introduction of other relatively simple improvements and measures like repair of existing traffic lights, introduction of traffic light regulated measures, pedestrian safety measures such as zebra crossing, road signs at junctions, road bumps and drop curbs. Ex-post assessment of the "as is" condition of the 57 junctions suggest that at least 71 percent are in efficient conditions meaning that the TSM measure is functioning to reduce traffic congestion. A site inspection of 21 roads rehabilitated under the program reveals that they are still structurally intact after over three years of usage. However, there is a need to continue the maintenance regime if the gains are to be sustained.

Environmental impact: The project has contributed to monitoring and reducing greenhouse gas (GHG) emissions from public transport. Specifically, pollution levels have fallen in Lagos as a result of replacing old and small buses with an organized public transport system. There has also been a modal shift from private cars to buses to the tune of about 5-10 percent. This has resulted in CO2 reduction of 24,677 tons in 2009. Similar reduction in particulates present in the atmosphere was recorded at about -33. The data (first in Lagos) will serve as baseline to measure project impacts. This shows that environmental and transport objectives can both be met when addressed as a problem of management and planning, not simply of hardware and technology.

Social Impact: The project contributed to poverty alleviation, improved access for women and children, reduced cost of travel, and made public transport more affordable especially for users in the lowest income quintile (for details please see Section 3.5 a, page __)

Financial Impact: The project contributed to financial sustainability by helping set up a Transport Fund with dedicated funding from user charges (for details please see __). By financing investments in public transport infrastructure and creating a conducive environment for private sector participation in bus operations, the project has successfully demonstrated viability of a PPP model.

Objective 3: *Enhance bus services***.**

The objective was fully met.

The investments in bus service enhancement resulted in:

a) Implementation of pilot bus franchise scheme along Iyana-Ipaja-Ikotun corridor (operations started in June 2009;
b) Development of bus terminals, bus stops, bus shelters, lay-byes, and traffic system management measures along the corridor and regulation of ticketing activities;
c) Implementation of BRT system along Mile 2 to CMS corridor (operations started in March 2008[6]); and
d) Successful demonstration of a PPP scheme, with the private sector providing services and public sector providing infrastructure and regulatory framework.

The Lagos BRT scheme has positively affected the metropolis in a number of key ways:

[6] The financing for construction of the BRT was provided by the LSG; Bank financed feasibility studies, exposure to good practices through study tours, participation in international seminars and knowledge sharing.

1. Patronage has exceeded expectations. Average ridership is twice the forecast, carrying about 4 million passengers monthly.
2. Passenger fees have been reduced and fares are not subsidized. Passengers now pay on average 30 percent less than previously, and enjoy fare stability, although fuel costs have risen by over 100 percent in the past few years. They also enjoy an average reduction in: journey time by 40 percent; waiting time by 35 percent, and reduced exposure to theft.
3. The scheme has attracted patronage from clients that had hitherto shied away from public transport: children, car owners, the elderly and the mobility-impaired.
4. The scheme has created direct employment for over 1,500 people, mostly graduates, and indirect employment to over 500,000 people in Lagos.
5. The scheme has empowered local operators to successfully run public transport services, and enticed local banks, financiers and vehicle suppliers for other planned BRT schemes.
6. The scheme has demonstrated and confirmed the strategic role of public transportation in Lagos to the extent that planned State investments in the sub-sector have risen 50-fold.
7. Ambient concentrations of pollutants which pose health hazards have been reduced along the BRT corridor, preliminary data suggests.

Please check out a 3-minute video on Lagos BRT on the following web link:

http://streaming3.worldbank.org/ramgen/ext/media/LagosTransportMIX.rm

Objective 4: *Promote water and non-motorized transport*

The objective was fully met.

The investments in water transport promotion resulted in:

a) Development and implementation of a detailed strategic plan for improving the use of the waterways of Metropolitan Lagos for transport services, including establishing an appropriate regulatory framework;
b) repairs of the jetties and the privatization of the Ferry services resulted in commencement of water transport, with the Ebute Ipakodo Metro Ferry Service running from Ikorodu to Lagos;
c) Encouragement of private sector participation in the provision of water transport services; and
d) Rehabilitation and addition to existing terminal facilities.

Objective 5: *Prepare future phases of the program*

The objective was fully met.

Preparation of follow-on phases which includes the participatory preparation of a Transport Master Plan for metropolitan Lagos; the preparation of an institutional reform plan for the transport sector, in particular on reform of the Motor Vehicle Administration (MVA) system; the preparation of a strategy for the enhanced use of intermediate means of transport (IMT) in metropolitan Lagos; and all the necessary studies and preparatory activities for the next phase for the implementation of the policy and strategy, including the preparation of resettlement plans for the implementation of rail mass transit in the Agege to Iddo corridor.

a) Government has commenced construction of the urban rail in Lagos, which was one of the recommendations of the Transport Master Plan; and
b) Government has begun expansion of BRT system to other corridors in the city as part of the master plan.

3.3 Efficiency

Rating: **Highly Satisfactory**

Economic rate of return: An ex-post economic analysis was carried out for routine maintenance, rehabilitation, bridge repairs, and traffic management components. The overall rate of return is 67 percent as compared to 56 percent at appraisal, suggesting that greater economic benefits were realized after improvements than expected before.

Holding suppliers, contractors, and consultants accountable: Reversing the prevailing culture whereby suppliers, contractors, and consultants paid little attention to quality, timeliness, and cost of services was a key challenge faced by LAMATA. In response, LAMATA designed terms of references and product specifications clearly and precisely, leaving little room for ambiguity. The expectations are made clear and a rigorous selection procedure is followed to ensure that suppliers that are best able to deliver are appointed. Once appointed, further discussions and monitoring are initiated to reinforce LAMATA expectations and performance guarantees exercised if necessary.

Cost Efficiency in Civil Work Rates per Kilometer: The procurement process followed by LAMATA with its competitive bidding requirements, among other factors, has ensured greater efficiency in terms of delivery of road works at relatively lower cost per km compared to output from other Ministries and agencies. Other factors resulting in this cost-effectiveness of LAMATA contracts include:

a) Regularity of payment, which reduces built-in costs of funds.
b) Professional culture within the organization.
c) Efficient monitoring and management of contracts.
d) Strict penalty for non-performance.
e) General atmosphere in the contracting industry towards improved accountability and delivery.

In response to the above, empirical data confirms that the average cost per kilometer of road contracts in Lagos and Nigeria are about two-to-three times the cost of those

executed by LAMATA. Although some caution must be exercised because of the changes in the general price level and exchange rates over the time period. In addition, there are likely to be differences in composite road designs by different agencies (e.g. a standard LAMATA road will have pedestrian walkways, TSM measures etc.). The above nevertheless provide a reasonable guide as to cost-effectiveness of LAMATA road contracts.

Technical, Financial, and Institutional Audits: Independent technical and financial audits of the road works are built into the monitoring framework. The civil works have been audited by the Authority's external auditors and an expatriate consultant. The reports of audits have been most favorable and underline the Authority's commitment to quality standards in its civil works implementation.

3.4 Justification of Overall Outcome Rating

Rating: Highly Satisfactory

After years of struggling with a lack of reliable public transport, Nigerians living in Lagos finally got to experience their first organized and efficient bus transport system. Launched in March 2008, a Bus Rapid Transit (BRT) system provides Lagos commuters, with a clean, safe, affordable and reliable means of getting around in the city. The BRT is a bus-based mass transit system that delivers fast, comfortable and cost-effective service. Through the provision of exclusive right-of-way lanes and excellence in customer service, BRT essentially emulates the performance and amenity characteristics of a modern rail-based transit system, but at a fraction of the cost and creates a demand for gas which is currently being flared-off. In a city such as Lagos with 17 million people, this is no small feat.

Employment Generation: A total of 1.7 million person days of labor was created during the project life. This represents number of labor days employed by contractors on routine maintenance. The data was collected from time/labor sheets submitted to LAMATA by the contractors. The contractors employed laborers mostly from the localities and communities in which routine maintenance was being carried out.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

The beneficiaries and stakeholders are in agreement with the substantial reduction in time and money spent by poor household in the state on transportation since the introduction of BRT system in Lagos State. Following the tremendous impact of the scheme, the public requested for more coverage of BRT scheme to other parts of the state. For instant, market women requested for some form of concession in which special BRT/BFS cargo buses are introduced into the fleet to ply the routes at some specific times so that the women could have access to cheaper fares to ease the transportation of wares from the market depot at Mile 12 along the corridors. Furthermore, many parents now use BRT buses to take their children to school because it is cheaper, efficient in time and safer than

other public transport system in the metropolis. The elderly and the physically challenged, on the other hand, requested for buses that provide for easy access to embark and disembark; and the same time reserve seats for them as well as pregnant women.

Market women also requested for some form of concession in which special BRT/BFS cargo buses are introduced into the fleet to ply the routes at some specific times so that the women could have access to cheaper fares to ease the transportation of wares from the market depot at Mile 12 along the corridor. LAMATA is considering these requests with the objective of reducing poverty among women and encouraging business growth of this category of users.

The impact of the BRT on the lives of children has been immense. Children that were interviewed during the ICR survey were full of appreciation for the service free transportation that they enjoy with the BRT buses. In the past, parents had the extra burden of first ensuring that their kids were safely transported to school every morning before going to their respective places of work. Respondents confirmed that they are relatively confident in the safety of the BRT buses that they leave their children to board and dismount the buses at the stops close to their schools. This is an unexpected positive result from the BRT which should be developed further in future phases such that a system of having some designated number of buses in the franchisee's fleet to be dedicated to school runs in the mornings and afternoon during normal school closing periods should be examined.

The BRT scheme also has been able to win over professionals with motor cars who have transferred to the BRT or those other commuters who ordinarily would not, as a result of their social standing commuted with the former public transports plying the BRT corridor (*molues* and *danfos*). A growing number of high income people are beginning to use the BRT buses.

(b) Other Unintended Outcomes and Impacts (positive or negative)

The BRT Lite scheme exceeded expectations in daily patronage with daily averages of about 180,000, at least 200 percent above expectation. The stability in fares in the BRT because of the agreement between LAMATA and the Franchisees that fares be maintained for a period of years led to a positive impact on the project. Commuters are able to budget exact amount of money required for transportation on monthly basis. The BRT scheme also has been able to win hitherto unlikely passengers such as those with motor cars who have transferred to the BRT or those other commuters who ordinarily would not, as a result of their social standing commuted with the former public transports plying the BRT corridor (*molues* and *danfos*). A growing number of such classes of people are beginning to use the BRT buses. Many more are likely to join if the future phases of planning takes care to create feeder networks from many passenger hubs around Lagos connecting to the BRT corridor and when a fully integrated inter modal transport system is in place.

BRT has prompted action and development of the overall city plan as well offer an opportunity to address issues along a specific corridor. Driven by the success of the

initial efforts, the city has prepared a Lagos Transport master Plan, which includes for more widely adopted regulation within public transport provision, an extend network of BRT and development of a complementary feeder services network, with the objective of increasing efficiency of the system.

Road safety data is not available but anecdotal evidence and consumer surveys suggest a high reduction in road accidents.

It is recognized that many informal sector workers with roadside activities will be affected by the development of the pilot bus franchise scheme, as most areas of encroachment will be taken back for public use. The early activities under the Resettlement Action Plan initiatives are very relevant to the pilot and it is important that these activities are continued and actions implemented. Any retrospective reversals or diminution of support would have adverse influences on the pilot.

General image and citizen perception: The general image and public perception of the reforms and resulting improvement in bus operations was obtained through analysis of media reports, websites, user group interviews, chat forums, focus group transcripts, and from directly observing and talking to users. Provision of organized public transport system is seen as a significant departure from previous operations and the level of service is seen as unequivocally superior. There is notable pride in the BRT which is seen as symbolic of the city's ability to deliver and compete in an international context. Improvement raises expectations which at times have led to negative comments. In Lagos there are calls to address capacity issues and expand the organized bus system to other corridors. Areas not currently served wish to be connected. The city has price sensitive population and there has been underlying fear of fare rise which have been protested against when occurring in the city. Some negative comments emanate from non users, in particular car drivers who have seen some highway capacity removed in favor of BRT lanes.

Businesses within the catchment area of BRT stated that the system has a positive influence effect upon recruitment and are proud to state their location in relation to BRT stations.

The overall positive response from users has been seen to have political influence with BRT forming part of the 2011 election manifesto in Lagos.

Development of Lagos CO_2 Emissions Assessment Handbook: This handbook provides the reader with a straightforward and comprehensive guide to calculating the impact on carbon emissions from the implementation of a new transport scheme, including the collection of the necessary data required for this task. The objective of the manual is to set out the monitoring and evaluation framework for the estimation of carbon emissions savings through the implementation of new BRT lines in Lagos.

This document gives practical instructions on the collection of the data required for the calculation of emissions estimates, including specifications for each of the different surveys required, advice on choice of survey location and a schedule for survey timings.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

The project was developed within a city with little public knowledge of good planning, what organized public transport might be like, and a history of poor delivery of transport improvements and systems that sought to ensure that profit was directed to the entrenched interests. As such, the potential for skepticism and suspicion of motives and intentions was rife. Therefore, a series of community engagement strategies were developed by LAMATA aimed at developing a similar level of ownership of the project within the citizens of Lagos that existed with the delivery orientated stakeholders.

A number of surveys were planned, designed, and implemented at various stages of pre-design, pre-delivery, construction, and operation phase to assess the impact of project interventions on multiple beneficiaries. The intended beneficiaries are local communities situated within and around project interventions, public transport users and the urban poor in general.

During project implementation, a number of workshops were held which involved a broad section of stakeholders and these helped considerably in defining the project and achieving its public acceptance. Existing and prospective bus operators have been closely involved in the definition of the bus services enhancement component of the project. During project implementation, stakeholder involvement was principally through the Safeguards and the 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 to consider matters brought before it or required to be addressed. Minutes of this group were usually forwarded to the Managing Director and the Corporate and Legal Secretary

The needs of the traveler were determined using the following methods:

a) *Ethonographic observation.* This method consisted of discreet observation of travelers' access to transport, their contacts and relationships with the various actors involved in transport, and their demeanors and actions.
b) *Quantitative/qualitative surveys.* Surveys were conducted to establish formal data such as fare elasticity and value of time, but also to gather details on the relative importance of walk, wait, and travel times, transport choice issues, and the most important obstacles to the ideal use of transport.
c) *Focus groups.* A series of focus groups were held to explore in detail the issues related to travel in Lagos by different demographic groups, as well as to test the features that may or may not be applied within a BRT system.

In order to continue to foster scheme support, take on board and improve services and further increase knowledge of BRT-Lite, the following initiatives were launched to support the operations phase:

a) BRT Parliament: When BRT-Lite was 100 days old a BRT parliament was established in order to assess and debate performance and issues. The parliament consists of senior LAMATA officers, the lending bank, State Government representatives, user representatives (including the physically challenged and commuters). It is moderated independently by a senior academic from the University of Lagos. It is attended by approximately 1500 people and televised.

b) A Customer relations management line was established whereby those with comments and/ or questions could ring or text 24 hours a day 7 days per week. The line is manned by two operators. The nature of comment is logged and summarized in a Customer Relations Managers report and complaint tracking

c) BRT Half-hour TV. From May 2008 a live TV program shown on Sunday (repeated Tuesday) was established to examine BRT issues. The program often consists of an interview with someone involved with BRT-Lite and/or someone who has an opinion on it or its operation. The program has a weekly audience of approximately 5 million.

4. Assessment of Risk to Development Outcome

Rating: Moderate

Key risks identified at appraisal were:

- Inability of LAMATA to operate independently due to political interference
- Insufficient counterpart funding
- Inability to generate user charges
- Road network efficiency gains are used up by traffic growth
- Inability to gain broad acceptance of regulatory reforms from the private sector
- Unwillingness of private bus operators to take advantage of opportunities provided by introduction of franchise services
- Water transport fails to take a significant share of the overall transport system
- Lack of interest in the private sector to invest into the railway

While there were initial challenges in project implementation, both in terms of institutional support and public acceptance, gradually the risks were mitigated through good planning, government's commitment, consensus building among diverse stakeholders, and effective monitoring and evaluation.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance
(a) Bank Performance in Ensuring Quality at Entry

Rating: satisfactory

The project issues were well identified. A number of urban transport specialists were involved in designing the project who conducted a candid assessment of financial management issues (and associated risks), prepared background work on a number of issues, including linkages between urban transport and poverty, and championed establishment of a strong independent transport authority as the only effective way to address the sector's institutional weaknesses. However as observed earlier, the project design was complex and this was a high risk project. There was no QER which may have helped address some of the initial risks including comments provided by the peer reviewers and with questions raised at Board discussions.

(b) Quality of Supervision

Rating: Highly Satisfactory

During implementation of the project, the Bank prepared 17 Implementation Status Reports (ISRs). These reports were very detailed and sufficiently informative. During the initial years, disbursements were low and there were two changes in the TTLs. In August 2005, the development outcomes and implementation progress was rated as moderately unsatisfactory. Subsequently there was change in the TTL, and the project was restructured. The ratings improved to satisfactory in February 2006 and disbursement ratio improved. From August 2005 to project closing in December 2010, the TTL and the task team remained the same and the outcome ratings were satisfactory. The additional financing in 2007 allowed the project design to be more closely aligned to project objectives.

Extensive monitoring surveys were conducted during the mission and a number of stakeholder workshops were held. Working closely with the implementing agency, the feedback from consultations was utilized to adapt the project design. In partnership with LAMATA management, a number of workshops and training sessions were organized to build the capacity of LAMATA staff and other state agencies in transport planning and management.

Some of the key contributions of the supervision missions are the following:

- The Bank acted as a stakeholder in the real sense of the word throughout the implementation process, listening to the Borrower and seeking ways to resolve all issues in a collaborative manner.
- Technical Assistance has been useful and at par with the real needs of the project components. Assistance with the planning and feasibility study on the BRT and in embarking on study tours for the BRT abroad made the conception and implementation of the BRT successful.

- Bank processes and procedures especially on Procurement and Financial Management set the project on a sound footing and gave credibility to LAMATA as a transparent organization.
- The Bank was proactive in discharging its obligations, so there was little or at worst there were only minimal delays in no objection.
- The Bank's relationship with LAMATA was one of mutual respect and LAMATA was accorded with much respect when it was obvious that operations as regards financial management and procurement were credible, the reporting system to the Bank was upgraded.

The Bank played a key role in ensuring that the necessary tools and understanding for implementation through efficient procurement management was put in place by conducting a thorough training for the procurement unit and the project management team in LAMATA. The Bank also undertook regular supervision missions culminating in extensive discussions on the way forward with the borrower.

(c) Justification of Rating for Overall Bank Performance
Rating: Highly Satisfactory

The Bank provided an environment to:

- Connect ideas and action;
- Bring international experience and an understanding of what works and what does not in different environments, ability to benchmark to international standards;
- Assist in development of a multi-sectoral and a holistic approach, with linkages to macro-economic environment, and other cross-cutting issues (social, environment, economic, climate change); and
- An honest broker and facilitator.

The bulk of the financing for implementation of the BRT system was provided by the state and the private sector (local banks, bus operator, bus supplier) but, it was all made possible by the Bank playing a critical role in bringing international knowledge and providing a platform for open and transparent discussions. A number of study tours were organized to expose key stakeholders, including the private sector to good practices in bus planning and reform and BRT designs, to countries in Latin America and Europe. The Bank's presence was seen as a risk mitigation factor by the private sector and provided them confidence in the knowledge that Bank's procurement and financial management processes were being followed by the implementing agency.

5.2 Borrower Performance
(a) Government Performance
Rating: HS

The state government's performance[7] on the LUTP stood the project in good stead and accounted for a great part of the success. Some of the more remarkable actions are as follows:

The project was initiated during Asiawaju Bola Ahmed Tinubu's time as Governor of Lagos State. His commitment to an integrated transport system with BRT as a first point of delivery gave context and support to the BRT feasibility study and was articulated by his then Commissioner of Transport. The Commissioner led the delegation to view BRT systems in South America and was appointed to chair the BRT Steering Committee providing knowledge and experience. He was able to display political commitment to the technical development team and take back knowledge to the Governor. Governor Tinubu's term as State Governor ended on May 2007 when Babatunde Raji Fashola was elected as Governor. The momentum created by the implementation of BRT-Lite at that time, and the positive public perception, together with the subscription by the new Governor to the previous Governor's commitment to the development of an integrated transport network, ensured that momentum was not lost, and continuity maintained.

Bold Project Ownership and Management: At the institutional level, the focus is on developing a single agency responsible for urban transport planning and regulation at the state and local levels, with dedicated funding arrangements. The government established, empowered and resourced a Transport Authority, Lagos Metropolitan Area Transport Authority (LAMATA) to plan and deliver the scheme. Government successfully gained the buy-in of different agencies, especially those responsible for traffic control and enforcement and environmental management. The government sought and took advantage of the technical expertise of the World Bank transport team.

Other factors:

- Coming in to provide support when there was risk to the project such as the low supply of buses to the first BRT from the bank as against the demand by the Franchisee and facilitating LAGBUS to lease 100 buses to 1st BRT Cooperative.
- Lending its weight of support to the IEC by launching the products of LAMATA such as the commissioning of the BRT and road rehabilitation projects.
- Stepping in to resolve issues of potential conflicts between MoW, MoT, LAGBUS and LAMATA whenever such issues arose.
- Lobbying the FGN to resolve the conflict on the federal roads on the DRN.

(b) Implementing Agency or Agencies Performance
Rating: HS

[7] There were considerable delays in project effectiveness and initial start-up due to a lack of common understanding between the state and federal governments. The "government" performance rated here relates to support from the state government.

Powers for the primary traffic management and enforcement in the State lies with the Lagos State Traffic Management Authority (LASTMA), a body that reports to the Commissioner of Transportation. Co-operation between LAMATA and LASTMA the two authorities has improved markedly in recent years, and LASTMA were prepared to commit significant resource to the BRT-Lite scheme needed to protect the exclusive use of its infrastructure and to manage traffic conflicts in the box junctions at the various highway merges and demerges.

The support of a State initiative 'Kick Against Indiscipline' (KAI) could be called upon to help with public management within the BRT-Lite system, particularly at the stations and terminals. This covered aspects such as trading and hawking on the walkways / sidewalks, and orderly queuing at the bus stops and vehicle parks (terminals).

The strength and professionalism and the democratic leadership style of the Managing Director contributed to the success of the project. Key contributions:

- Recognition of the importance of hiring competent people to LAMATA and giving the people an opportunity to do their work without interference.
- A democratic leadership style that listens to the views of others, brainstorms with the senior staff and allows superiority of arguments to prevail.
- Enforcing a culture of dedication, focus and integrity and exhibiting these qualities as example for others. The work environment is kept strictly official and staffs are made to reflect on daily achievements.
- Team work was a culture in LAMATA. It was the norm rather than the exception and this brought tremendous progress to the organization. To foster closer team relations, strategic retreats were held for all staff of LAMATA.
- Goal oriented and so, corporate goals are disseminated to all staff, Departmental objectives, goals and key performance indicators are set and from the department individual goals and KPIs are also set thereby achieving a job-centric organization.
- Staffs are made to be part of the achievement of LAMATA and so enjoy ownership of LAMATA and the LUTP.
- The MD of LAMATA surrounded himself with highly knowledgeable and capable hands while at the same time he was breeding leaders in all departments and units of the Authority and leading by example.

(c) Justification of Rating for Overall Borrower Performance
Rating: HS

6. Lessons Learned

Setting up a strong institutional basis for coordinated planning and regulation is critical to the success of urban transport projects. The Bank urban transport policy paper "Cities on the Move" (2002) identifies institutional weaknesses as the source of many observed failures in urban transport in developing countries. Strengthening urban transport institutions often requires legislative, institutional, and management changes at the

national, state, and municipal level to minimize jurisdictional and functional impediments to efficient and effective service delivery. Strengthening transport also requires setting up dedicated institutional bodies for urban transport planning and regulation, with commitment from the highest levels of government and a champion to further the cause of good management. The establishment of LAMATA with the overall responsibility for transport planning and coordination in the Lagos metropolitan area was central to bringing about reforms in the sector.

Interactions with the borrower and beneficiaries should take place in a context of their choosing. The impact of ongoing changes in policy, governance, and institutional frameworks in countries like Nigeria should not be underestimated. Where the requirements bring about changes in roles, responsibilities, and relationships, there is a need to understand the impact on the culture and values of the societies, sectors, and institutions for which the change is proposed. It is critical to understand the broader country-specific context. Experience shows that best results are achieved through long-term relationships where new ideas can be introduced indirectly and gradually, in pursuit of a shared vision and road map. The design of this project was driven by consideration of city requirements and what is most appropriate in the national context. Development of a communications strategy, with the participation of key stakeholders was central to involving all interest groups in the design and implementation.

Allow a measure of flexibility in the design and set reasonable targets. The growing problem of urban mobility is the result of a complex interplay of factors, cutting across multiple disciplines and involves many stakeholders. There are no easy or quick fix solutions and any design requires adaptation to local context. It is important to build flexibility in project design and be willing to make changes in design as new lessons are learnt during implementation. This project was restructured twice together with one additional financing to align more closely with objectives and improve project impact.

***Implementation of BRT is a big challenge and requires considerable up-front discussions and consensus building*.** BRT is a "system" and requires extensive up-front planning and discussions that consider all the relevant issues as a package, including the design of the bus-way; design of the stops and junctions; design of the ticketing systems, fare levels, and structures; regulation and ownership of the buses; safety; and enforcement of the regulations. A successful system requires ownership by existing operators, drivers, and users and incorporation of their specific concerns in the design. The project clearly demonstrated that investments in BRT "hardware" will come about only after an understanding and acceptance of the broader reform program and an appreciation of the complexity of issues involved.

Demonstration of good results is essential to gain support for implementing a reform program: The urban transport environment in many cities is characterized by multiple shortcomings at institutional, regulatory, management, planning and implementation, and financial levels. Lagos is no exception. Addressing these multiple dimensions requires tackling all issues simultaneously rather than in a segmented piece-meal fashion. Focusing only on road improvements or bus fleet renewal or traffic management or

institutional development by itself, FOR EXAMPLE, while desirable, may not produce measurable outcomes. What is required is a comprehensive integrated program of complimentary improvements which combines public transport, NMT and roadway infrastructure, operations management and public transport service improvements to increase over-all travel speed, reliability and safety. Such a comprehensive approach can best be implemented at a corridor level rather than across the whole city. This is exactly the approach followed in this project and with documented good results and public appreciation of the project investments it has now become much easier to scale-up the reform program more widely across the city.

Need for a strong political and technical commitment: Bringing about reforms in the urban transport sector requires a strong political champion and a dedicated and competent technical team. There are a number on entrenched interests in this sector which often control the market through self-regulation. In Lagos, union control is enforced by contracted youths (area boys) who extract payment from the operators and can resort to violence should this be withheld. These payments pass through the Union chain of command and used to "manage" the operations by seeking favors from politicians and police. To change this atomized system to an organized and disciplined operation requires political support at the highest level and a willingness to take risks. The relationship between technical development and political will is clear in Lagos with the vision and determination of political leaders supported by a dependable and committed technical team. Without this synergy and trust, it may be difficult to bring about the fundamental change as seen in Lagos.

In summary, key lessons can be identified as:

- Look for the best fit, not best practice (recognize that there is no single BRT system prescription)
- Charismatic leadership, political will, and project ownership is central to effective implementation
- Stability and continuity in the project team—both at the Bank and the implementing agency, is critical to project success.
- Do not measure success by project completion; the critical issue is how it is managed and operated in a sustained manner
- Implement a comprehensive integrated corridor based approach to get quick results
- Pay attention to project management, be flexible in approach
- Provide opportunities to learn from good examples in other parts of the world
- Conduct frequent reviews, keep people informed; communications is key
- Human resource needs of an urban transport project are very different from a traditional engineering project;
- A unique brand identity and quality image are important as passenger information and marketing devices
- Begin integration with land use planning early
- Work hard to overcome the negative image of most bus "systems"
- Ensure that decision-makers and the general public know what BRT is and what its potential benefits might be for their city

- Use transportation planning to sort out BRT and other alternatives
    - Begin with market analysis
    - Match markets with service plans, plan for running ways, vehicles, stations, etc
    - Focus on system integration
- The chances of success are greatest when development and management of urban transport reforms is led by city level of government.
- A good project monitoring system is necessary for effective management-- close monitoring combined with extensive consultations allows for timely adjustments
- Key to a successful project design is based on an approach which is:
    - **comprehensive** (covers multiple administrative boundaries, is multi-modal),
    - **continuous** (plans, planning data and tools are updated on a regular basis),
    - **cooperative** (all stakeholders participate, develop communications plan and stakeholder analysis),
    - **connected** (capital projects are consistent with adopted long range plans),
    - **championed** (support at the highest political level, ownership), and
    - **change incrementally** (scale-up interventions in an incremental fashion and allow flexibility in design).

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

The report prepared by government is included in Annex __. In this report, government has highlighted the important results achieved by the project, such as _____. The government specially found ……(LAMATA To ADD A BRIEF TEXT, ONE OR TWO PARAS)

(b) Cofinanciers

None

(c) Other partners and stakeholders
(e.g. NGOs/private sector/civil society)

Annex 1. Project Costs and Financing

(a) Project Cost by Component

(US$ million) Figures in parentheses show IDA financing

Component	Appraisal estimate	Estimates at restruc-turing	Estimates at Additional Financing (AF)	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] (8.9)	
Road network efficiency improvement	98.5 (78.9)	94.5 (83.1)	133.3 (121.9)	158.8 (141.7)	
Bus service enhancement	0.7 (0.7)	1.9 (1.7)	11.2 (11.0)	8.7 (8.6)	
Water transport promotion	2.9 (2.4)	2.2 (1.9)	4.1 (3.8)	5.3 (2.4)	
Preparation of follow-up phases	5.3 (4.7)	6.4 (5.7)	6.4 (5.7)	6.8 (3.8)	
TOTAL	135.0 (100.0)	125.8 (110.8)	175.8 (160.8)	223.8 (165.4)	

(b) Financing

Source of Funds	Appraisal estimate	Estimates at restructuring	Estimates at Additional Financing (AF)	Actual/ latest estimates	Percentage of estimates at AF
Borrower – Counterpart Fund	35.0	15.0	15.0	23.2[9]	
-Transport Fund				35.2[10]	
Sub-total	35.0	15.0	15.0	58.4	389.3
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	223.8	127.3

[8] The substantial increase in financing by the LSG for capacity building component is because: a) 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 b) over the years, LAMTA 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.

[9] Includes: (i) $15 million for LAMATA capacity building; and (ii) $8.2 million contribution from LSG for routine maintenance. This amount excludes LASG contribution for BRT construction and service lane improvement, estimated at $42 million.

[10] Includes: (i) $24.1 million from license fees (hackney permit, road taxes, license plate registration, auto registration); and (ii) $11.1 million from other user charges, including income from sale of bidding documents, sale of maps from GIS, income from advertisement along BRT route, franchise fee from BRT operations and lease income from bus depots.

Annex 2. Outputs by Component

Component 1: Capacity building (Appraisal estimate: US$__million, restructuring estimate: US$ ___ million, additional financing estimate: US$ ___ million, actual cost: US$ ___ million)

The credit financed goods and consultancy services for the following activities:

Table __:

	Subcomponents	Details
1	LAMATA	Technical assistance for LAMATA to develop the capacity to effectively discharge its duties.
1.1	Office equipment and vehicles	Purchase of 30 vehicles
1.2	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
1.3	Training	Training of LAMATA staff
1.4	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
1.5	Sectoral environmental and social assessment	Consultancy support to prepare detailed Resettlement Policy Framework
1.6	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.
1.7	A traffic enforcement strategy and plan	Technical assistance for developing the traffic enforcement framework and implement the critical elements of the plan
1.8	LAMA TA building	Preparation of building design and bidding documents
1.9	Operating Costs	operating costs of LAMATA
1.10	Other Activities	Technical assistance to develop transport sector policy and strategy of LSG for five years
1.11	Lagos State Ministry of Transport	Technical assistance to strengthen policy-making and sector performance monitoring and evaluation functions
1.12	Lagos State Ministry of Works	Technical assistance to improve planning for road investments
1.13	Lagos State Ministry of Women's Affairs and Poverty Alleviation	Technical assistance to strengthen poverty and gender impact monitoring capacity
1.14	Nigerian Police Traffic Unit	Technical assistance to enhance traffic enforcement capacity in Lagos.

1.15	Traffic Management Units	Technical assistance for the creation of Traffic Management Units in LGAs

Component 2: Road network efficiency improvement (Appraisal estimate: US$__million, restructuring estimate: US$ ___ million, additional financing estimate: US$ ___ million, actual cost: US$ ___ million)

The credit financed works, goods and consultancy services for the following activities:

- 76 kilometers of road overlay
- 50 kilometer of roads rehabilitated
- 70 junctions improved

Component 3: Bus services enhancement (Appraisal estimate: US$__million, restructuring estimate: US$ ___ million, additional financing estimate: US$ ___ million, actual cost: US$ ___ million)

The credit financed works, goods and consultancy services for the following activities:

- Implementation of a pilot bus franchise scheme on the Iyana-Ipaja corridor (___km) and the credit financed consultancy support for developing:
  - a conceptual framework for the scheme
  - Bus route and terminal survey
  - Bus franchise implementation strategy
  - Topographical surveys of bus terminals along the corridor
  - Infrastructure design to complement franchise scheme
  - Formation of associations/companies by small operators
  - Bus regulatory framework
- Works and goods to support implementation of the bus franchise scheme, including:
  - Depot, terminals, bus stops
  - Road surface overlays
- Improvements to Bus Rapid Transit corridor, including
  - Road surface improvements
  - Bus stops, terminals
  - Communications

Component 4: Water transport promotion (Appraisal estimate: US$__million, restructuring estimate: US$ ___ million, additional financing estimate: US$ ___ million, actual cost: US$ ___ million)

The credit financed works, goods and consultancy services for the following activities:

- Consultancy services to support:

    - Development of a detailed strategic plan for improving the use of waterways
    - Studies to support privatization of the Lagos State Ferry Services Corporation
    - Studies to define role of the private sector
- Works and goods to support:
    - Repair of four terminals (Agboyi Ketu, Ijegun Egba, Iya Afin, and Epeme)

Component 5: Preparation of future phases (Appraisal estimate: US$__million, restructuring estimate: US$ ___ million, additional financing estimate: US$ ___ million, actual cost: US$ ___ million)

The credit financed goods and consultancy services for the following activities:

- Report of the Lagos BRT Feasibility Studies
- Detailed designs of BRT infrastructure along Oshodi-Mile 2-Obalende and Oshodi-Mile 12-Ikorodu corridors
- 2020 Strategic Transport Master Plan
- Identification and selection of MRT network, comprising 7 LRMT corridors, 9 BRT & 10 Water commuter routes.
- Blue Line & Red Line – PPP transaction advisory services in progress
- Operations/maintenance concessions (PSP)
- Future plans to develop and implement full multimode MRT network

Annex 3. Economic and Financial Analysis

Introduction: An ex-post economic analysis was carried out for routine maintenance, rehabilitation, bridge repairs, and traffic management components.

The project integrates components that complement each other, and hence aims to deliver significant benefits to economic activities and quality of life in the State. Many of these benefits cannot be quantified, and are consequently not captured in the analysis. Nonetheless, traffic accidents are expected to reduce substantially in the project areas where traffic management and non- motorized transport (pedestrian walkways) modes are to be improved.

Although there are no specific mechanisms for estimating and quantifying the impact of road investment on socio-economic developments specifically, cost-benefit analysis was applied to evaluate the economic rate of return. The impact of road investments can be measured in terms of direct benefits, indirect benefits, and induced benefits. Direct benefits refer to those benefits that have direct positive impact on the road user and include savings in VOCs, travel time savings, reduced accident costs due to the upgrade of the roads, and possible savings in road maintenance costs. Direct benefits are usually quantifiable and can be expressed in monetary terms. It is therefore easier to establish these benefits accurately to a certain extent. Indirect benefits refer to those benefits that do not impact directly on the road user and have a wider impact, such as employment opportunities that are related to road investments. Induced benefits refer to those benefits that can be attributed to local economic development as a result of road investments. These include enhanced self-sufficiency, increased production and efficiency as a result of, among other things, improved access to markets for agriculture produce, improved access to social services such as healthcare and educational facilities, and an increase in household income and subsequently, a more equal distribution of income.

Economic and Financial Analysis: The economic analysis was completed for about 567 km of roads excluding the length of bridges that was considered separately. The total cost of US$118.87million was estimated for the implementation of road and junction improvement program over the five-year period.

The cost estimates were made for following type of works:

Routine and recurrent maintenance	$47.01 million
Overlay and rehabilitation	$59.26 million
Bridge repairs	$ 6.48 million
Traffic system management	$ 6.12 million

Demand analysis: Traffic count surveys were conducted in 2009 at 30 selected roads for three days on each of the roads and the average was calculated to obtain an average daily traffic figure. The average daily traffic volume of 30 selected roads in Lagos metropolis

was estimated at 8,981. The traffic volume by type of vehicle is presented in Table __. Average growth rates of 3 percent for cars, 4.5 percent for public transport vehicles, and 5 percent for trucks assumed in the PAD were considered to be an underestimate of the true traffic growth rate. Following previous studies, annual growth rates of 5 percent for trucks and 7 percent for other vehicles were assumed to be reasonable for road traffic and were applied in the analysis.

Table : Traffic volume and average daily traffic of some selected roads in Lagos metropolis

Vehicle type	Average daily traffic volume/road	Total %
Cars	3104	34.6
Minibus	1354	15.1
Taxi	333	3.7
Motorcycles	3533	39.3
Heavy duty vehicles	204	2.3
Keke NAPEP	453	5.0
Total	8981	100.0

User Benefits: The quantification of road user benefits was computed on the basis of savings in travel time and vehicle operating cost. The project would result in considerable benefits in terms of improved traffic safety, environmental benefits, carbon dioxide emissions reduction, air quality improvement, non-motorized transport improvement, and improved travel reliability, which were not quantified. Therefore, the economic benefits obtained in the analysis represent the low-end of total realizable benefits.

Cost: Unit costs for various items of maintenance and rehabilitation operations were obtained
from selected executed contract documents, and subjected to further verification by consulting appropriate contractors. The unit costs for individual intervention strategies were provided into the HDM to perform economic analysis for the defined road work options. The various costs and prices obtained were computed in both financial and economic terms. While financial costs were composed of current market prices, taxes and duties; economic costs represented the real cost to the economy of the resources actually used in providing the materials and services.

Economic Analysis: The Economic Analysis was carried out so as help in evaluating the feasibility on improving the roads under LUTP. The road condition data, the appropriate unit costs for rehabilitation and maintenance operations, and the appropriate costs for vehicle operation parameters were fed into the HDM program to determine the economic returns of investments on each of the roads. The analysis period was carried out using a discount rate of 12 percent.

HDM program was used to calculate Economic Rate of Return (ERR) and Net Present Value (NPV) for each of the proposed road works. NPV of road and junction improvement program was estimated to be US$170 million with aggregate ERR of 67 percent.

Table :

	Economic Cost ($ Million)		**Benefits ($ Million)**		**ERR (%)**	
	At appraisal	**Ex-post**	**At appraisal**	**Ex-post**	**At appraisal**	**Ex-post**
Routine & recurrent maintenance	45.5	47.0	62.9	65.9	48	44
Overlay & rehabilitation	46.2	59.3	134.5	164.9	65	64
Bridge repair	5.6	6.5	10.1	11.4	52	76
Traffic system management	5.5	6.1	43.4	46.5	58	87
Total	102.8	118.9	250.9	288.8	56	67

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) 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
Hubert Nove-Josserand	Sr. Urban Transport Specialist	SACIN	Engineering
Jocelyne do Sacramento	Language Program Assistant	AFTTR	Prog. Support
Karen Hudes	Sr. Counsel	-	Legal
Kristine Drike	Economist	-	Economist
Scott Sinclair	Lead Financial Specialist		Disbursement
Subhash C. Seth	Consultant	AFTTR	Engineering
Mark Walker	Lead Counsel		Legal
Melanie Jaya	Program Assistant		Prog. Support
Nina Chee	Environmental Specialist		Safeguards
Ntombie Siwale	Team Assistant	AFTTR	Prog. Support
Supervision/ICR			
Amos Abu	Sr Environmental Spec.	AFTEN	Safeguards
Sameer Akbar	Sr Environmental Spec.	ENV	Environmental management
Akinrinmola Oyenuga Akinyele	Sr Financial Management Specialist	AFTFM	FMS
Bayo Awosemusi	Lead Procurement Specialist	AFTPC	Procurement
George A. Banjo	Sr Transport. Spec.	ECSS5	Technical
Roger Gorham	Transport. Economist	AFTTR	Environmental management
Aisha D.A. Kaga	Program Assistant	AFCW2	Assistant
Antoine V. Lema	Senior Social Development Spec	AFTCS	Safeguards
Regina Oritshetemeyin Nesiama	Program Assistant	ECSHD	Assistant
Anne Njuguna	Program Assistant	AFTTR	Assistant

Hubert Nove-Josserand	Operations Adviser	SACIN	Engineering
Comfort Onyeje Olatunji	Program Assistant	SASDO	Assistant
Africa Eshogba Olojoba	Sr Environmental Spec.	AFTEN	Safeguards
Olatunji Ahmed	Transport Specialist	AFTTR	Engineering
Adenike Sherifat Oyeyiola	Sr Financial Management Specialist	AFTFM	FMS
Justin Runji	Sr Transport. Spec.	AFTTR	Engineering
Subhash C. Seth	Consultant	AFTTR	Engineering
Thomas Kwasi Siaw Anang	Procurement Specialist	AFTPC	Procurement
Rajiv Sondhi	Senior Finance Officer	CTRFC	FMS
Samuel L. Zimmerman	Consultant	MNSSD	Technical

(b) Staff Time and Cost

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

Annex 5. Beneficiary Survey Results

The project was developed within a city with little public knowledge of LAMATA, what organized public transport might be like, a history of poor delivery of transport improvements and systems that sought to ensure that profit was directed to the entrenched interests. As such, the potential for sk~~e~~epticism and suspicion of motives and intentions was rife. Therefore, the objective of the community engagement strategy launched by LAMATA at project commencement was aimed at developing a similar level of ownership of the project within the citizens of Lagos that exists with the delivery orientated stakeholders

A number of surveys were planned, designed, and implemented at various stages of project implementation to assess the impact of project interventions on multiple beneficiaries. The intended beneficiaries are local communities situated within and around project interventions, public transport users and the urban poor in general.

Methodology: Two evidence based approaches were employed: desk reviews and field surveys in gathering reliable data needed to prepare an ex-post evaluation of project interventions on key stakeholder beneficiaries.

Desk reviews: LAMATA conducted economic analysis of roads maintained in the DRN and consistently tracked progress of key outcome and output indicators by facilitating conduct of baseline/follow-on studies on different project components, including pilot BRT scheme. Copious data provided a rich and available source of secondary information for evaluation.

Field surveys – Field investigations were carried out primarily to clarify and update secondary sources of information obtained during desk reviews. They include data collection instruments such as questionnaire administration, focus group discussions, field observations and key informant interviews. These instruments were designed to elicit both qualitative and quantitative information on socio-economic, transport and environment impact of project interventions on beneficiaries. By random sampling, 500 households in the DRN were selected for user beneficiary responses on time and money spent on transport activities. A total of 900 respondents including commuters and transport operators were interviewed to evaluate BRT scheme on service quality, waiting, loading, travel time, cost savings, etc.

Validity of Survey Instruments – Survey instruments were pre-tested to ascertain suitability for respondents. The pre-test exercise afforded an opportunity to train enumerators, modify vague questions and improve quality of instruments used. For robustness and validity, instruments were scrutinized to ensure adequate collation of all relevant field information.
Data Analysis – Quantitative tools such as traffic data frequency tables, charts and sensitivity analysis were used to analyze baseline information and impact on beneficiaries after project interventions. ERRs were used to conduct economic evaluation of road investments in the DRN, including user benefits on VOCs, time and income savings. Qualitative information, administered questionnaires, and key informant interviews were also used in evaluating performance of project beneficiaries.

Cross section of respondents: The table below shows a cross section of user and other key stakeholder beneficiary respondents interviewed during the course of ICR field investigations.

Table __: Cross section of respondents

	Category	Typical Respondents
1	Institutional	• LAMATA • LASTMA • Road Safety • Nigerian Police • LASG MoT • LASG MoW • LASG Monistry of Women Affairs • LGA (ALIMOSHO, IKEJA) • FERMA • LASEPA
2	Contractors /Road Rehabilitation and Maintenance	Road rehabilitation and routine maintenance contractors. Routine maintenance labourers Communities around TSM junctions. Commuters on the 9 selected roads of the DRN for KPI survey
3	Bus Transport Service Providers	First BRT Cooperative (NURTW) Igbatuntun City Bus Cooperative (NURTW) Danfo owners Other transport providers
4	Beneficiaries –Users	Commuters on BRT and BFS Corridors School children Marketers Women Disabled
5	Gender and Disadvantaged groups	Women groups and NGOs Market women associations
6	NGOs and other Civil Society Organisations	Environmental scientists and NGOs

Surveys carried out at the BRT Design Phase

The BRT component of the project was defined according to the needs of the users and as such design was based upon an understanding of current difficulties experienced in using existing public transport. A series of structured focus group discussions were held in order to understand existing problems and test design concepts. Separate groups were held for younger and older citizens, as well as males and females. The needs of women were noted to be quite different to that of men, whereby women often felt intimidated by the competition for entry on arriving buses and overcrowding in vehicles. Younger men were best able to compete for entry but were often put off by the threat of violence and intimidation. All were dissatisfied by the overall cost of travel and long and variable journey times.

To understand the views of citizens and users following implementation, it is important to briefly explore their views of public transport services before implementation in order to put those comments in context. The focus groups undertaken with public transport users highlighted four key issues with services:

- Safety
- Comfort
- Fare differential

- Long journey times

Personal safety was a particular concern on board Danfo's with robberies being a genuine risk along with drivers not stopping for passengers to board and alight. On board Molue's which were perceived to be safer than Danfo's due to increased numbers of passengers on board, female participants highlighted incidents of sexual harassment.

Comfort was also an issue with overcrowding and a lack of an individual seat for every passenger cited as key issues. Journey times were also cited as issues in the surveys. Journey times are affected by both long journey distances and more importantly congestion of routes. The lack of alternative modes necessitated the use of public transport services and there was a level of acceptance with what was available.

Pre Delivery Phase

There were approximately 6 million people within the catchment corridor of the project and within this catchment three target groups were identified:

a) Those that have no vehicles and are captive to public transport who will be primary beneficiaries of BRT (approximately 65 percent of total catchment);

b) Those that have cars but are reluctant users. Given the right set of conditions they would use BRT (approximately 25 percent); and

c) Super rich. They will not be BRT users but have a strong voice and are able to exert influence (approximately 10 percent)

Contact with each of these parties in order to develop knowledge of BRT and the benefits to users were essential. The approach was to build upon the same principles that gave birth to the project concept, that of developing engagement from receiving and not giving information. As such each group was consulted upon and the scheme explained as a means of solving their own problems; not those identified by others and not imposing alien solutions upon users. Through this approach, a sense of local ownership was developed resulting in the project being seen as a user project and not one of technocrats or bureaucrats. The influence of such an approach spread to the often skeptical press whose reports both through and after construction, whilst sometimes pointing out problems, where not overtly negative and were quick to emphasize the positives.

The public relations strategy through development and construction consisted of advertising within the corridor, in newspapers, radio and on TV. TV commercials included a 90 second demonstration on how to use BRT, getting and paying for a ticket, how to wait, board and alight. Billboards were set up along the corridor and third party advocacy was applied where those with a voice in the community (local government chairman, local chiefs and community leaders) were welcomed to discussions on BRT; how it would operate and how people might benefit. Road shows were held at which handbills were distributed in a range of languages that explained the project.

Community meetings were endorsed by local community leaders through the prior discussions and were attended by senior LAMATA officers. The intention was to ensure that LAMATA was not a faceless organization, allow access to real decision makers and show accountability. The effect was to raise LAMATA's profile in general but also develop as an organization that listens and delivers.

In parallel, meetings continued to be held with bus association and its members at a local level, taxis drivers and haulage operators. Through the consultation process it became more clear that all users had the potential to benefit from the project and that the key objective was to *'Return life back to the citizens of Lagos'*

The approach to consultation as a means of gathering information made a genuine and meaningful contribution to scheme development. The project was not just about BRT-Lite but about facilitating movement within the corridor. As such works encompassed:

a) Segregated BRT running way for the majority of the corridor to ensure better and more reliable run times achieved largely by part removal of the median between main and service roads. This offered significant improvements to journey time and journey time reliability of direct benefit to the primary target group and gives a realistic alternative to the secondary target group.

b) Narrowing of the median to ensure main carriageway widths remained, largely, unaltered. This ensured the support of the super rich together with hauliers.

c) Banning of Molue and Danfo from the main carriageway. Increasing capacity of main carriageway and ensuring that travelers have an option of using BRT or other forms of public transport. This form of self balancing 'partial regulation'. ensured that the limited capacity of BRT-Lite in early operation had a release valve but also allowed some freedom of choice for captive users

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"Though there are still traffic jams on Ikorodu Road, especially during the rush hours, anyone caught in such traffic snarls is in such a situation by his choice because they have the option of keeping their vehicles at home and using the BRT buses, which are clean and safe." Mr Jide Babatola a commuter (*The Punch, March 23, 2008*)

Key to both stakeholder engagement and wider marketing was the engagement of the bus union. Whilst the union had become convinced that it was appropriate for the city to move to a more regulated form of public transport provision, its many members needed convincing and developing into ambassadors of the new transport mode. A sense of status was created for BRT personnel whereby the best Molue drivers were encouraged to re-train to become BRT 'pilots' of which their status amongst peers was greater and there was a feeling that they were engaged in the transport revolution that was sweeping across Lagos. It was also a case that there was now a need for more drivers than before and a change in working conditions; the previous tense, and often violent, atmosphere within vehicles and at stop was being replaced by a more ordered humane set of service-users. This new relationship is perceived as more synergistic as more respectful drivers lead to a more compliant population which in turn leads to more and further respectful drivers. BRT was seen as the catalyst for change.

Construction Phase

Whilst expectations and consciousness was being raised there were specific issues to address during the construction phase relating to safety of personnel and how drivers should react to the works being undertaken. New street lights were erected to ensure that work on the road was visible and newspaper and radio adverts reinforced the purpose of the works and the need to take into account the delay and the safety issues associated with construction works.

Operation Phase

Before official opening of the BRT system, shadow runs were undertaken to test the infrastructure and for familiarization of the BRT-Pilots. A free service was also offered to passengers to test the system at operational loading.

The official launch of BRT-Lite was preceded with the national anthem and the national pledge. The program of events started at 10:00am and was overseen by the Executive and Deputy State Governors. The event was televised and a Launch booklet produced, it was portrayed as a major step forward in the development of the City.

Opening of BRT-Lite saw almost immediate take up with eager customers waiting in line to buy tickets and board vehicles reducing the passenger ramp-up period often observed with new public transport schemes. In order to continue to foster scheme support, take on board and improve services and further increase knowledge of BRT-Lite, the following initiatives were launched to support the operations phase:

d) BRT Parliament: When BRT-Lite was 100 days old a BRT parliament was established in order to assess and debate performance and issues. The parliament consists of senior LAMATA officers, the lending bank, State Government representatives, user representatives (including the physically challenged and commuters). It is moderated independently by a senior academic from the University of Lagos. It is attended by approximately 1500 people and televised.

e) A Customer relations management line was established whereby those with comments and/ or questions could ring or text 24 hours a day 7 days per week. The line is manned by two operators. The nature of comment is logged and summarized in a Customer Relations Managers report and complaint tracking

f) BRT Half hour TV. From May 2008 a live TV program shown on Sunday (repeated Tuesday) was established to examine BRT issues. The program often consists of an interview with someone involved with BRT-Lite and/or someone who has an opinion on it or its operation. The program has a weekly audience of approximately 5 million.

BRT and LAMATA branding was used prior to implementation and intensified post implementation with all BRT related staff, and many others, issued with BRT-Lite polo shirts and baseball caps. This has ensured that BRT and LAMATA are brands that have a high awareness throughout the city.

A series of focus groups were carried out with BRT users, and it was evident that the vast majority of participants believed BRT-Lite to be the best means of public transport available to Lagosians. In comparison to other bus services it was described as the safest, fastest, cheapest most convenient, most comfortable and reliable service in the city and overall the quality of service provided was felt to be far superior to that provided by other commercial services. Journey times were considered to be one of the greatest benefits of BRT particularly when compared to other modes. Examples were given where journey times using BRT were around half the length of other services that did not have priority along the corridor.

The length of time that users generally have to wait at the BRT bus stop is an area that could be improved according to users. From 7am-11am queuing for a bus is common place at stops and

people generally wait for between 5 and 30 minutes for a bus unless there are particular issues along the route such as road works or a vehicle breakdown. In the reverse direction, queuing occurs on a regular basis between 4pm and 8pm. At other times of day, passengers may only wait for a short period of time or not at all.

"Around 9am-10am, you will still meet passengers but around 12pm you can just walk in and go. You don't have to wait at all."

In addition to the length of queues at certain times, inadequate shelters are a concern for some users who are forced to wait without a shelter and exposed to (potentially) harsh weather conditions.

"Not too comfortable. Especially at Ojota Station, the numbers of people that always stay away from the cover are much because of the queue. You have to wait under the Sun."
Despite the length of the queues and inadequate shelter at some stops, users generally tend to queue automatically in an orderly manner without any need for security staff to keep order. Indeed the civilized nature of the queue at bus stops and the lack of intimidation when waiting for the bus were seen as major benefits of BRT in comparison to other bus services.

The BRT service was praised in enabling passengers to alight more easily than when travelling by smaller buses. In particular, the use of the bell to alert the driver of the need to stop and the attitude of the drivers themselves were seen to contribute in this way to a superior service to the Danfo and Molue buses.

Although most users prefer to sit whilst travelling on the bus, they often find themselves standing at peak times. In the main the need to stand is accepted on the basis that this happens on many bus services around the world, although requests were made for more BRT buses on the route. Overall the standing experience on the BRT bus was acknowledged as being safer and more comfortable than on Molue services.

There were mixed opinions of the BRT bus drivers in terms of their driving style. Some people felt that the drivers were good while others had experienced instances of reckless or aggressive driving and insisted that the drivers be trained, monitored and dismissed if they fail to provide a minimum level of service. However, the overall view was that the BRT-Lite drivers were safer than their Danfo/Molue counterparts.

"Some of the drivers they drive rough, reckless"
"BRT drivers doesn't smoke and make call while driving compare to other commercial drivers, which causes distraction."

The reliability of the BRT service in terms of both overall journey time and number of breakdowns experienced was rated as being very good and superior to that of the Danfo and Molue services.

Finally, in October 2010 the Lagos Governor quoted a response from a BRT user which sums up well the public image of BRT in Lagos.

> *"I have to make special mention of the BRT project – I am always pleased to tell anyone that would listen that in my 39 years, this is the first policy project that I have experienced from any government in any era of the country's history to give the poor man advantage which the rich do not enjoy. Today Lagosians who used to take four buses*

in perilous condition over three and half hours to get from Ikorodu to CMS between 4.30am and 8.00am now leave Ikorodu at 6.30am and arrive at work before 8.00am. A reading culture is being enhanced by the BRT phenomenon alone. The orderly queues have also proven that when any people (Nigerians also) are given value for money they will maintain requisite order and decorum."

Performance Survey:

Surveys were set up to monitor the performance and assess the benefits realized one year after starting operation. The evaluation included comprehensive qualitative and quantitative surveys within the corridor as well as focus groups involving users. At this time it was carrying over 150,000 people per day and over 10,000 persons one way during the AM peak hour, although recent reports have shown that this might have increased significantly.

This passenger volume is accommodated by a peak service of 150 buses per hour. BRT usage equates to over one quarter of all trips within the corridor despite BRT-Lite vehicles representing just 4 percent of all vehicles on the route. Only 31 percent of all trips are BRT only showing the multimodal nature of the majority of trips in Lagos.

(Box 1) Article from the Punch
Residents Laud Introduction of Metro Buses
The Punch, April 16, 2007
"The introduction of Bus Rapid Transit (BRT) buses has been lauded by Lagos Island workers for adding value, respect and dignity to their livelihood apart from easing their means of transportation from the Lagos Mainland judging by the way they were been treated with respect by the operators of the scheme."

The Guardian, 18 March, 2008
"It has taken a long time for something so exciting and full of promise to happen in Lagos…We reached CMS within 45 minutes (against the normal 90 minutes)."
"I am happy for my children to use BRT to go to school. There used to be too much risk with *danfo*." —A mother
"My husband drops me at TBS and I get BRT to work most days." —A commuting lawyer

"I live in Ikorodu but work in Marina. When I closed from work by 5 pm, I decided to try this BRT because people had been talking about it. I boarded the bus at CMS and there was no problem at all. But it was from Fadeyi that I began to appreciate the advantages of the BRT. When I looked out of the window, all the other vehicles were caught in the go-slow and the BRT bus was just moving smoothly. From CMS to Mile 12, it took me just about one hour. Before the BRT, I sometimes spent more than four hours in the Ikorodu Road traffic jam. I pray to God that they can sustain it." —A commuter

Based on basic generalized cost characteristics, compared with other travel options, BRT-Lite is likely to be the most preferable choice for the average user. Table 9-1 compares the two obvious alternatives to BRT-Lite

Table ___: Basic Journey Characteristics for BRT-Lite and its Alternatives

TABLE

The reasons for choosing BRT-Lite were stated by users as:

- Quicker journey time (35% of respondents)
- Comfort (20%)
- Cheaper (18%)
- Safety/security (13%)
- Reliability (5%)

Emissions were calculated before and after the introduction of BRT-Lite, these are reported in Table ___.

Table ___: Environmental Emission Changes due to Lagos BRT-Lite

The significant decrease in particulates (PM) is attributed to the reduction in the number of smaller vehicles (Danfo) in the corridor. The increase in carbon monoxide (CO) is due to the increased numbers of cars and taxis in the corridor attracted by the smoother traffic flow.

A survey of users found:

a) 85% previously took Danfo (minibuses)
b) 8% used Molue (larger buses)
c) 4% car users
d) 2% taxi users

BRT-Lite ran at a loss during the first three months of operation before turning a profit in month four. Thereafter system revenue has been able to cover all operating costs and vehicle repayment. Current activities alongside the expansion of the BRT network centre upon mechanisms to secure profit for the further development of the system and maintenance of its infrastructure.

The Needs of the Traveler

The needs of the traveler were determined using the following methods:

- *Ethonographic observation.* This method consisted of discreet observation of travelers' access to transport, their contacts and relationships with the various actors involved in transport, and their demeanors and actions.
- *Qualitative/qualitative surveys.* Surveys were conducted to establish formal data such as fare elasticity and value of time, but also to gather details on the relative importance of walk, wait, and travel times, transport choice issues, and the most important obstacles to the ideal use of transport.
- *Focus groups.* A series of focus groups were held to explore in detail the issues related to travel in Lagos by different demographic groups, as well as to test the features that may or may not be applied within a BRT system.

The following concerns were identified as very important to travelers:

- *Safety*. The incidence of crime on vehicles and while waiting for vehicles to arrive was high. The crimes ranged from theft to physical abuse. The disorder and chaos surrounding public

transport was viewed as an opportunity for criminals, and, where crime was not present, the almost constant intimidation and general chaos led to undue stress on travelers.

- *Fare levels.* Public transport fare levels often varied according to demand, weather conditions, and the whim of the conductor. A significant proportion of the traveling public is highly fare sensitive, with some making daily decisions about whether to travel based on available funds.
- *Long and unreliable journey times.* The practice of vehicles not leaving until full, of short services that required transferring to another vehicle, and the lack of transport penetration into residential areas, together with the widespread and variable congestion ranging from high to intolerable, meant that public transport journeys were both long and uncertain.
- *Comfort.* The state of many buses was very bad. Lack of upholstery on seats and the rusted metal edges that ripped clothing or caused injury were common. Therefore, travelers placed value on a basic level of comfort that would avoid these problems.

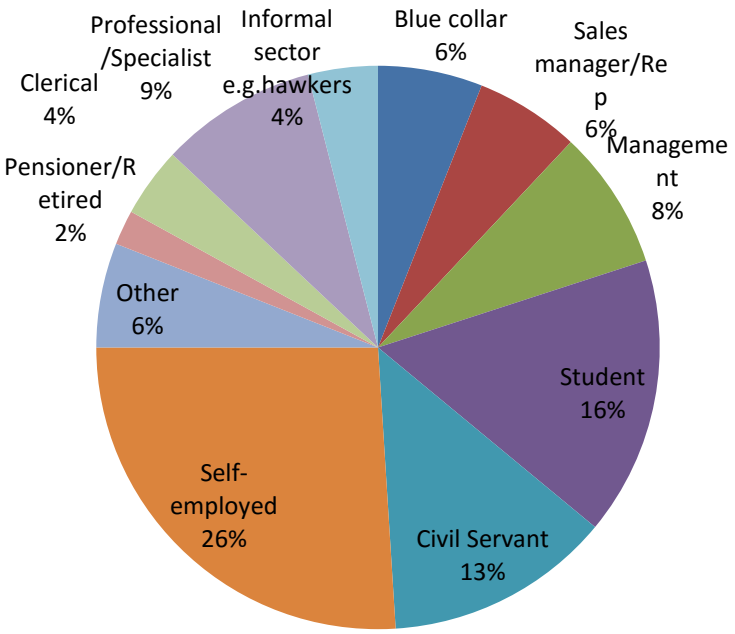
In satisfying traveler user needs the BRT system had to, above all else, have the following attributes:

- *Safe*, both on the vehicle and accessing it
- *Affordable*, with constant and easily understandable fares
- *Reliable*, offering improved and reliable journey times.

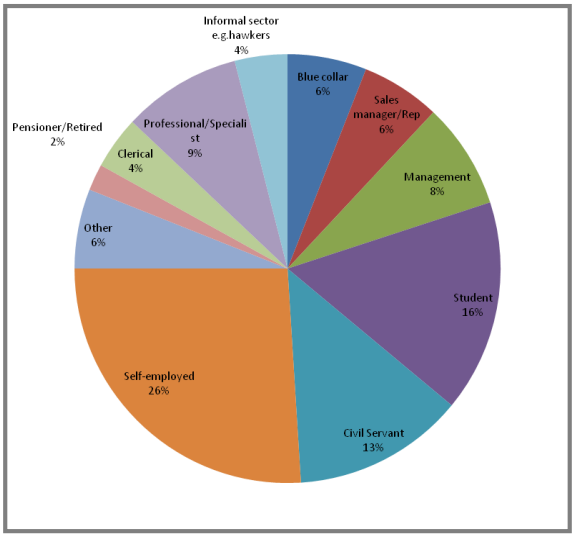
What is the mode share for the BRT-Lite system?

The BRT-Lite system currently carries over a quarter of all the trips recorded along its corridor (or 37 percent of public transport trips), even though BRT-Lite vehicles represent just 4 percent of vehicles on the route. The system carries nearly a tenth of all trips inbound to Lagos Island, the commercial heartland of Lagos and a main destination on the route. The level of demand is currently constrained by the capacity in peak periods. Thus by increasing its capacity, the BRT-Lite system could tap the demand currently being served by other transport modes.

Who uses the BRT-Lite system?



Analysis of the occupations of BRT-Lite users demonstrates that a broad range of travelers use the system. A large majority are self-employed, reflecting the local prevalence of entrepreneurs running their own businesses. Civil servants and students also constitute a significant proportion of the BRT-Lite ridership. And there is evidence of ridership among the higher-ranking employment categories, including management, professionals, and directors.



BRT-Lite Ridership by Occupation

What were passengers riding before the BRT-Lite system opened?

The majority of BRT-Lite passengers were using the existing public transport:

- Eight-five percent were taking *danfo*, the small commuter buses.

- Eight percent were using the larger *molue* or commercial buses.
- Four percent of passengers were traveling by car, and a further 2 percent were traveling by taxi, o*kada* (motorcycle taxis), or k*abu kabu* (shared taxis).

The modal shift from private transport appeared to be relatively low. However, evidence that even a small proportion of previous car users have been willing to use the new system is testimony to a change in thinking in a society in which car ownership is an aspiration, marking a change in status from which people rarely retreat.

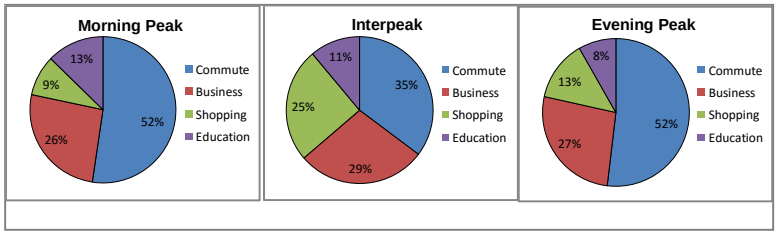
> "My husband drops me at TBS and I get BRT to work most days." –A commuting lawyer

What is the main travel purpose of BRT-Lite users?

Survey data show that during the morning (0600–1000) and evening (1600–1900) peak hours the majority of travelers are commuting to or from their places of work. Business customers account for over a quarter of all trips, and this proportion remains fairly consistent throughout the day. The majority of shopping trips occur during the inter-peak hours, accounting for a quarter of the trips during this period compared with under 10 percent during the morning peak hour and 13 percent in the evening.

> "I am happy for my children to use BRT to go to school. There used to be too much risk with *danfo*." –A mother

Education-related trips account for about 10 percent of trips across the day, with a slight bias toward morning and interpeak periods—that is, the main portion of return school trips are likely to take place before the evening peak period.



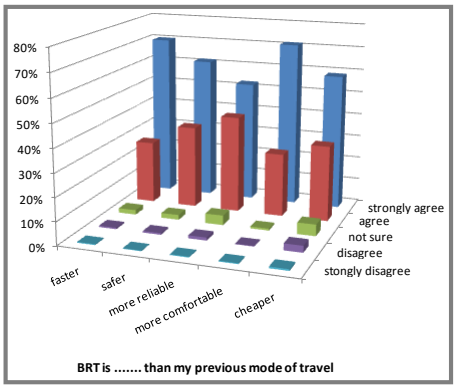
Journey Purpose of BRT-Lite Passengers by Time of Day

What do BRT-Lite users think of the new system?

User opinion of the new system is strongly positive in comparison with opinion on the alternative modes of transport. A majority strongly agreed that the BRT-Lite system is better than other modes in all the journey attributes mentioned. In particular, respondents found the BRT-Lite system to be faster and more comfortable than the alternatives.

In all attributes, over 90 percent of respondents agreed or strongly agreed that the BRT-Lite system is better than the previous mode of travel. The system is, then, clearly considered to be superior to other modes by the vast majority of users.

How does the BRT-Lite journey compare to alternative travel options?



The reasons for the popularity of the BRT-Lite service became clear when respondents compared the relative journey attributes of the system with those of the alternative modes of transport. Because the other public transport vehicles are now limited to the service lanes, those that still ply the route tend to focus on the shorter journeys, thereby attracting passengers who are traveling shorter distances or from intermediate stops where the BRT-Lite capacity is limited. It is therefore necessary to transfer from one transport to another to make an end-to-end journey from Mile 12 to CMS (central city on the Island)**[]**if traveling on other public transport modes. An example would be a two-stage trip from Mile 12 to Ojuelegba, and then on to CMS. The alternative from Mile 12 is to access the island via the Third Mainland Bridge, although the majority of services using this route terminate at Obalende from which a further short stage is required to reach CMS. The journey attributes for the two alternative journey options compared with the BRT journey are as follows:

Table:

Mile 12 to CMS	Other public transport on corridor	Via Third Mainland Bridge	BRT-Lite
Total in-vehicle journey time	78 minutes	64 minutes	55 minutes
Fare (Nigerian naira)	230	120	100
Interchange	1	1	0
Total wait time	45 minutes	10 minutes	15 minutes

For end-to-end journeys, the advantages of traveling by BRT-Lite are clear. The journey is faster than that using the other route options; passengers save about 10–20 minutes in vehicle time. Journey time advantages are further increased compared with other in-corridor trips by avoiding the need to change transport to access the central business district.
The BRT-Lite offers a premium service in terms of both run time and vehicle quality, but its fares are actually lower than those for other travel options. The BRT-Lite fare is particularly preferential to competing modes along the corridor, where the requirement to transfer from one vehicle to another and the high fares for shorter journeys lead to a significantly higher fare for the full journey. There is evidence that other operators are attempting to profit from the demand that does not choose the BRT-Lite service, primarily because of the capacity constraints of the system. So, with every aspect of the BRT-Lite journey comparing favorably against the competitive modes, what do BRT-Lite users point to the most important factor behind their choosing to use the system?

- Quicker journey time: 35 percent of respondents

- Comfort: 20 percent of respondents
- Cheaper than alternatives: just under 20 percent of respondents
- Safety or the improved security of the system: 13 percent of respondents
- More reliable: 5 percent of respondents.

Has the BRT-Lite system changed passengers' travel patterns?

The introduction of the BRT-Lite service has influenced some travelers to change their travel patterns. Nearly a quarter of travelers questioned said that their use of the service had led to a change in the time of day that they traveled. Eighty percent of these said that the greater speed or reliability of the BRT-Lite service allowed them to travel at the time they wanted rather than having to leave early to ensure reaching their destinations in time. Just 6 percent changed their time of travel for the negative reason of avoiding the queues for the service.

Fifteen percent of travelers stated that they changed the number of trips they made, of which four-fifths made more trips using the BRT-Lite system for positive reasons such as the reduced journey time, cost, comfort, or improved accessibility. Of the respondents who said they made fewer trips, some of these were attributed to the reduced requirement to transfer to another vehicles, which again is positive, if not strictly constituting a change in the number of trips (as opposed to trip stages).

Eighteen percent of travelers had changed their destinations, mainly to those served by the BRT-Lite route, although a couple of respondents mentioned that the BRT-Lite service allows them to travel to locations farther out than was practical previously. This is a clear indicator of the potential of the BRT-Lite service to influence land use decisions.

How does the BRT-Lite system fit into the full journey pattern of travelers?

Analysis of trip-making patterns has shown how the BRT-Lite system occupies part of a series of travel modes between origin and destination. Only around a third of travelers use the BRT-Lite service as the sole means of making a journey.

A large proportion of BRT-Lite users take *danfo* for a leg of their journeys, and *okada* is a popular mode as well, used as a means of access to the transport network and the BRT-Lite corridor. On average, the number of stages needed for BRT-Lite passengers to make a single trip for is 1.96.

Modes of Transport in the BRT-Lite Corridor

Mode taken	Percentage of travelers
BRT only	31
BRT, d*anfo*	41
BRT, o*kada*	17
BRT, d*anfo, okada*	7
BRT, taxi	1

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Annex 6. Stakeholder Workshop Report and Results

During project implementation, a number of workshops were held which involved a broad section of stakeholders and these helped considerably in defining the project and achieving its public acceptance. Existing and prospective bus operators have been closely involved in the definition of the bus services enhancement component of the project. During project implementation, stakeholder involvement was principally through the Safeguards and the 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 to consider matters brought before it or required to be addressed. Minutes of this group were usually forwarded to the Managing Director and the Corporate and Legal Secretary.

The External Relations unit generated a list of stakeholders envisaged at inception of LUTP and this was updated from time to time to reflect organizational changes. Additionally, a Stakeholders' forum was held in respect of the Strategic Transport Master Plan. Below are excerpts in respect of a few of the forums:

- **LAMATA stakeholders' workshop on Environmental and Social challenges confronting transport reforms in Lagos**

A number of workshops were held in Lagos between 2005 and 2009 to present the findings of the Sectoral Environment and Social Assessment (SE/SA) as well as to engage stakeholders in the process of defining the next steps for implementation of the Lagos Urban Transport Project and LAMATA's role in it. The following are the highlights of the workshop:

There are many agencies e.g. LASTMA, FRSC, LAMATA, LG, MoT etc and issues of overarching responsibilities arose. It was recommended that authorities should address them to remove overlap, rivalry, redundancy, and bottlenecks. The issue of outdated baseline information needs attention through close work with regulatory institutions and academic institutions.

Operational power issues can be resolved through agency cooperation e.g LAMATA with LASTMA, FMNEV and state EPA. The weak compliance with environmental regulations can be resolved through the energizing of EIAs to their responsibilities under the ambit of the EIA Act.

There are positive social and environmental impacts of the scheme on commuter time, poverty alleviation, economy, road safety, accident rates etc. There could also be negative impacts such as effect on air quality, public health, loss of natural habitats, social networks etc. The panacea lies in ecological transformation and efficient operational techniques and/or strategies.

- **LAMATA/NURTW/Triple E' Stakeholders' meetings on Resettlement Action Plan along Pilot Bus Route (Iyana Ipaja/Ikotun Rd.)**

Date: 2006-2008

Venue: NURTW (Iyana Ipaja Branch)

Purpose of meetings: RAP issues vis-a-vis distribution of ID Cards to Project Affected Persons (PAP)

Issues discussed are:

- Chairman, NURTW (Ipaja Branch) said that the consultant consulted with the union before embarking on the RAP census and the union gave its support by detailing two of its members to work with the consultant to prevent any form of embarrassment.
- Having concluded the census, the consultant did not come back to inform the union on the outcome of the job.
- That market women prevented the consultant from distributing the identity cards to Project Affected Persons due to lack of information on the ID card. Some of the market women and their heads gave negative meanings to the ID card and called on the union Chairman for explanation.
- External Relations Specialist, LAMATA blamed the consultant for not contacting LAMATA before commencement of the distribution of the ID cards. He said LAMATA has established good working relationship with NURTW both at state and branch levels and has always informed the union on its activities on the project. He thanked the Chairman and the union for their support to the project right from its inception.
- The Chairman responded that RAP consultant (Triple E) should contact him at his office, when he must have contacted the market heads and resolved issues with them. He confirmed that the ID card would be issued to the affected people.

- **The Strategic Transport Master Plan Stakeholders' Technical Session**

The Strategic Transport Master Plan Stakeholders' technical review session was held on 25th and 26th June, 2009 at the Lekki Peninsula Resort, Ajah, Lagos. The objectives of the review were as follows:

- To ensure that key transport and economic inputs from all Government ministries and agencies are incorporated in the Transport Master Plan
- To ensure that there are no gaps in the planning process
- To get buying from key stakeholders

The final resolutions as a result of the forum were as follows:

- Increase travel and transport choices
- Introduce integrated transport system
- Making transit attractive, convenient and affordable
- To make transport less polluting and less dependent on non- renewable energy
- Optimize use of roads, intersections and facilities.
- Transport infrastructural maintenance is imperative in STMP
- STMP should come up with a bus-feeder route network that will be linked to the residential areas
- A proper framework should be developed for safety, funding & renewal before going into the actual implementation
- **Road Sector**

1. Need to enforce existing law on regulation of Okada

2. Integration and sharing of traffic data among the stakeholders i.e., LAMATA, LASTMA, MoT, LAGBUS etc

3. Provision of road infrastructure

- **Water**

1. Improvement in jetties construction

2. Dredging of ferry routes

3. Enforcing use of life jackets especially on open boats

4. Provision of communication gadgets, control centres and effective emergency services

- **Rail**

1. The need to link airport and seaport with rail system

2. The need for more consultation and collaboration on granting of level crossing especially within the urban centers

- The need for an effective traffic management plan and strategies
- NMT should be encouraged by providing adequate facilities in the STMP
- The 'walking distance ' should be specific and should be between 1 to 2km maximum
- Okadas should be restricted to the inner roads by banning them from the major roads
- Parking policy should be implemented
- **Institutional/General**
- Develop Integrated multi-modal transport system
- Upgrade LAMATA to full scale Transport Authority
- Construct full high standard ring road and complimentary roads
- Clear all road encroachment including bus parks and markets
- Introduce common ticketing system
- Establish transit information centres
- Improve waterway network
- Introduce traffic control centre
- Introduce mandatory TIA
- Develop Investment strategy

- The vision of the Lagos State Government is to have a modern multi-modal transport system that will make Lagos a world class city

- A central Transport Authority with all modes of transportation under its responsibility & coordination.

- The new structure as proposed by the STMP was adopted with modifications to the effect that Licensing and enforcement should be ceded to the central Transport Authority, as against the State Ministry of Transport.

- For a seamless linkage with the Ministry of Transportation, the State Commissioner for Transport should be the Chairman of the Board of the Transportation Authority.

- The Transport Authority should report directly to the State Governor.

- Transport authority organogram to include department of corporate planning and monitoring with responsibility for corporate planning, procurement, monitoring and evaluation, reporting, external relations and inter-relationship with other states' transport agencies.

- Promotion of Non Motorised Transport (NMT) should be brought forward for immediate implementation. The provision of infrastructure for segregated corridors as well as pedestrian walkways and bicycle lanes should be adopted as state policy and fully implemented.

- The possibility of implementing congestion charges mid-way to 2020 should be considered as against post 2020 option

- Low emission zones and electric vehicles should be as a matter of urgency

- Extrapolations on other transport issues and developments post 2020, with strategies to address them should be considered in the plan.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

1. INTRODUCTION

The population of Lagos has been growing at an unprecedented rate of 6% per annum, pressurizing existing public transport (PT) infrastructure to almost breaking point. Through the phased implementation of LUTP, LASG has instituted a long-term strategy that defines policies relating value and needs of the urban public transport sector to macroeconomic considerations.

LAMATA was established by the LASG as a semi-autonomous implementing institution for LUTP. LAMATA is envisioned **to provide a strategic planning platform for addressing long-neglected transport needs of** the metropolis, and to provide a common and consistent basis for implementing urban transport policies and programs in Lagos. With WB support, LASG conceived and implemented Phase One of LUTP from inception in October 2003 to closure in December 2010. The overall objective of LUTP is to provide public transport infrastructure and services for the urban poor at least cost with measurable reduction of time and money spent by poor households on transport activities.

At project completion, LAMATA needed to assess overall impact of LUTP interventions made under the IDA funded project components by preparing a project Implementation Completion & Results Report (ICR) to provide key stakeholders with reasonable justification for continuity and future LUTP implementation. This involves an ex post evaluation of LUTP objectives measured by key performance indicators (KPIs) defined in the inception Project Appraisal Document (PAD). The ICR also examines salient lessons relevant for improving future LUTP implementation.

2. PROJECT DESIGN & OBJECTIVES

2.1 Project Objectives

The project development objective (PDO) of LUTP is to "ensure that capacity to manage the transport sector in the Lagos Metropolitan Area (LMA) is sustainably improved and efficiency of the PT network enhanced such that it contributes measurable to poverty reduction". Baseline surveys for socio-economic and transport impact KPIs were established within six months of project effectiveness.

Key outcome indicators measure achievement of the PDO while key output indicators measure success of LUTP implementation, in particular progress made under the IDA funded project components. The objectives remained unchanged throughout project implementation, which is an indication that the PDO and component objectives were properly conceived during project preparation. In line with project restructuring and redesign, planned LUTP interventions including timelines agreed during project preparation were modified at mid-term in 2005. Key outcome and output indicators were tracked consistently during the course of LUTP implementation. The project has therefore benefited from advantages of proper planning, monitoring and evaluation.

2.2 Project Components

LUTP Phase One is made up of five (5) major project components as follows:

i) **Institutional Capacity Building** for firmly establishing LAMATA and other transport related MDAs for effective coordination, management and financing of the transport system in LMA;

ii) **Road Network Efficiency** involving full rehabilitation of the 632km Declared Road Network (DRN) to reduce vehicle operating costs and improve road safety;

iii) **Bus Services Enhancement** relating to preparation of a regulatory framework and enabling environment for the organized private sector provision of bus services;

iv) **Water Transport Promotion** for the improvement of modal diversity within an integrated public transport system by promoting the enhanced provision and use of water transport by the private sector.

v) **Preparation for Future Phases**: Preparation of Strategic Transport Master Plan (STMP), and other studies for next phase implementation of LASG transport sector policy and strategy, including follow-on projects such as BRT, LRMT, ITS, etc.

The major project components funded by IDA comprise subcomponents with specific details on inputs, processes, outputs (plus coverage or "reach" across beneficiary groups), outcomes & impact, leading to identification of KPIs at each stage in the project Log Frame results chain, as well as associated risks which might impede the attainment of objectives. .

3. PROJECT OUTCOMES AND ACHIEVEMENT OF OBJECTIVES

3.1 Overall Project Performance

The basis for measuring LUTP performance involves an M&E assessment of project KPIs. The ICR has adjudged project performance highly satisfactory due to successful implementation of LUTP interventions by LAMATA. ICR findings show that LUTP achieved reasonable success in its contribution to poverty reduction. The M&E survey and assessment showed a reduction of time and cost savings by poor households and general improvement in social-economic status of the urban poor, especially communities located within and around LUTP interventions. The outcome indicators show that time spent by poor households on transport activities had reduced to 19.64 minutes at project end from 29.5 minutes at baseline and money spent by poor households on transport activities had reduced by 26% at project completion compared to baseline.

Overall efficiency of the project is deemed **satisfactory**. M&E findings show that inputs committed in terms of money, time, equipment and quality staff members were optimally utilised. Average ERR calculated in the PAD was about 56% and on completion, ERR is about 50%. Lack of road condition data and additional information on associated costs were factors responsible for a relatively lower project performance rating.

Economic analysis was undertaken to evaluate viability of investments for road rehabilitation based on a comparison of "with" and "without project" scenarios. Without the project, traffic becomes increasingly congested and average traffic speed remains low, resulting in higher vehicle operating costs (VOCs). With the project, average traffic speed increases thereby reducing VOCs. The ICR cost–benefit analysis covers a 15-year period using 2010 domestic prices.

3.2 Project Performance by Component

With implementation of LUTP's five (5) major components, LAMATA achieved considerable success on all 23 key outcome and output indicators, justifying a highly satisfactory ICR rating.
Capacity Building – LAMATA is now fully functional in terms of sustainable capacity to manage the transport sector in Lagos and all necessary procedures and processes are in place, with effective planning and project management functions.
Road Network Efficiency – LAMATA has maintained, upgraded and rehabilitated the 632 Declared Road Network (DRN) thereby reducing vehicle operating costs and improving road safety.

Bus Services Enhancement – With adoption of franchise regulation and licensing reforms, LASG has created an enabling environment for organized private sector provision of bus services. LAMATA's bus services reforms consist of two (2) subcomponents namely, BRT and BFS. The pilot BRT "*lite"* scheme (Mile 12-TBS) has been highly successful and widely acclaimed as the first example of a comprehensive and integrated approach to improving PT in sub-Saharan Africa.
Water Transport Promotion – LAMATA has successfully rehabilitated four (4) jetties essential for rural water transportation (RWT) of riverside dwellers and conducted comprehensive feasibility studies for developing ferry services in LMA. However, responsibility for developing water transportation has been ceded by law to the newly established Lagos State Waterways Authority (LASWA).
Preparation for Future Phases – LAMATA has successfully prepared the 2020 STMP for LMA and systematically identified a mass rapid transit (MRT) network comprising BRT, LRT and Ferry Transit routes. Plans are underway to expand BRT to other corridors while implementation of the Blue Line LRT (Okokomaiko-Marina) is already in progress.

4. PROJECT BENEFITS AND OVERARCHING THEMES

The project impacted positively on both direct and indirect beneficiaries including vulnerable groups consisting of women, children and the physically disadvantaged. LAMATA's effective IEC strategy ensured stakeholder awareness and support for LUTP interventions. The BRT *Lite* scheme has considerably generated immense benefits and positively affected the metropolis in several ways;

First, patronage has exceeded expectations. Average weekday ridership is twice projected estimates. Second, passengers now pay on average 30% less in fares and enjoy a greater degree of fare stability, even though fuel costs have risen by over 100% in the past few years. Third, the scheme has created direct employment for over 1,500 people, mostly graduates and, indirect employment for over 500,000 people in the state. Fourth, the scheme has demonstrated the capacity of local operators to successfully run formal PT operations and has subsequently generated intense interest from local banks and financiers.

Through the Safeguards Unit (SU), LAMATA has successfully incorporated environmental and social issues into the planning, design and implementation of PT projects. LUTP has facilitated conduct of the following: (i) Environmental Impact Assessment (EIA) along 5 corridors; (ii) Resettlement Action Plan (RAP) along 4 corridors; (iii) Lagos Vehicular Emission (Air Quality) Monitoring Study & Oshodi/Obalende Baseline Emission Study; (iv) Socio-Economic Baseline Survey for LMA & 3 Follow-on Surveys. LAMATA has effectively demonstrated the importance of environmental and social safeguards as key elements of an integrated urban transport development strategy. LAMATA is locally and internationally acknowledged for best practise safeguards standards and has received several commendations from the WB.

Effective leadership is one of the critical success factors responsible for successful implementation of LUTP interventions. LAMATA's creditable performance is largely due to effective leadership of the Managing Director who recognized the importance of employing competent professionals. Exemplary leadership encouraged a culture of dedication and professional integrity within LAMATA.

At project completion, sustainability and replicability appear highly probable. The rationalization of motor vehicle administration (MVA) has made the Transport Fund (TF) a veritable source of sector financial sustainability. For future sustainability of transport project investment gains made

under LUTP One, implementation of follow-on phase supported mainly by IDA credit and AFD funding assumes increased significance. It is highly critical that LAMATA remains a single autonomous legal entity with adequate and reliable sources of funding and financing for effective coordination of urban transport policies and programs in LMA.

5. LESSONS LEARNED

- Strict adherence to guidelines, procedures and processes were critical factors responsible for successful project implementation.
- Institutional capacity building is another critical success factor for LUTP because it produces knowledgeable professional staffs that are fully committed to the organization's vision and mission.
- A private sector model works well within Government setting. Governments should incorporate PPP in Bank financed projects.
- Project success can be facilitated by a credible financial management system, a competent and credible Financial Department and Procurement Unit.
- Projects benefit immensely from Stakeholder involvement in the design, planning and implementation life cycle and this should be vigorously encouraged.
- Environmental and social safeguards must be incorporated into the design, planning and implementation of all transport projects.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Annex 9. List of Supporting Documents

Bank's back to office and aide-memoires
Financial audits
Technical audit reports

(LAMATA—PLEASE MAKE A ALPHABETICAL LIST (BY AUTHOR) OF ALL REPORTS AND STUDIES CARRIED OUT SINCE 2001)

MAP

I N S E R T

M A P

H E R E

AFTER APPROVAL BY COUNTRY DIRECTOR

AN ORIGINAL MAP OBTAINED FROM GSD MAP DESIGN UNIT

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