



1. Project Data

Project ID
P112956

Project Name
NG - LUTP-II (FY10)

Country
Nigeria

Practice Area(Lead)
Transport & Digital Development

L/C/TF Number(s) IDA-47670	Closing Date (Original) 30-Jun-2015	Total Project Cost (USD) 519,500,000.00
Bank Approval Date 29-Jun-2010	Closing Date (Actual) 31-May-2017	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	190,000,000.00	0.00
Revised Commitment	190,000,000.00	0.00
Actual	175,109,294.66	0.00

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Group
IEGSD (Unit 4)

Project ID
P114762

Project Name
NG-Lagos Urban Transport Project 2 (P114762)

L/C/TF Number(s) TF-97347	Closing Date (Original) 30-Jun-2015	Total Project Cost (USD) 194,500,000.00
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Bank Approval Date	Closing Date (Actual)		
29-Jun-2010	31-May-2017		
	IBRD/IDA (USD)		Grants (USD)
Original Commitment	0.00		4,500,000.00
Revised Commitment	0.00		4,500,000.00
Actual	0.00		4,490,078.80

2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (FA) dated November 25, 2010 (page 5), the project development objectives were "to: (i) improve passengers' mobility along selected priority road corridors in the Lagos Metropolitan Area; and (ii) promote a shift to more environmentally sustainable urban transport modes". The Project Appraisal Document (PAD, page 8) had a similar statement and further specified that this was to be achieved through a combination of traffic engineering measures, management improvements, regulation of the public transport industry, and expansion and enhancement of Bus Rapid Transport (BRT) system. The project was fully blended with a Global Environment Facility (GEF) grant, with the specific global environmental objective (GEO) to promote an incremental shift to more environmentally sustainable urban transport modes among users with relatively high carbon foot print (PAD, p.8).

IEG assessment of the project is based on the project objective as stated in the legal document.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

No

d. Components

1: Institutional development and capacity building (total appraisal cost US\$ 34 million, of which IDA US\$23 million, Lagos State Government (LSG) US\$10 million, GEF US\$1 million; total actual cost not provided in the ICR, actual IDA US\$8.7 million). This component focused on capacity strengthening of Lagos Metropolitan Area Transport Authority (LAMATA) for continuing to provide the overall vision and a strategic planning basis for transport planning, regulation, monitoring, and administration and coordination



of sector-wide management; and provide support to bus operators and beneficiary agencies, including Lagos State Traffic Management Authority (LASTMA), Local Council Development Areas (LCDAs), Lagos State Ministry of Transportation (LSMT), and Lagos State Ministry of Works and Infrastructure (LSMWI). This component would finance goods, consultants' services, training, and operating cost for LAMATA to carry out its functions. The GEF was to finance studies, training and equipment to develop public transport delivery capacity in Kano.

2: Improvement of public transport infrastructure and enhancement of traffic management systems (total appraisal cost US\$236.5 million, of which IDA US\$133 million, French Development Agency (AFD) US\$100 million, GEF US\$3.5 million; total actual cost not provided in the ICR, actual IDA US\$149.5 million). This component was to finance the BRT infrastructure construction and supervision, including interchange and traffic management, at Oshodi-Mile 2-Obalende, investments in intelligent transport systems (ITS) and improvements in safety; pedestrian facilities; mass transit alternative analysis studies along major corridors; and development of bus feeder system including stations and terminals. The GEF component was to specifically finance: a) BRT consultation, communications, and media strategy for better acceptance of the new approaches; and b) upgrade and rationalize system operation. The AFD component was to finance BRT infrastructure construction and supervision along Oshodi-Mile 12-Ikorodu corridor.

3. Improvement of Lagos State metropolitan road network (total appraisal cost US\$50 million, of which IDA US\$25 million, LSG US\$25 million; total actual cost not provided in the ICR, actual IDA US\$24.3 million) This component was to finance routine maintenance of the declared road network; periodic maintenance of about 12 km of strategic roads; and rehabilitation of about 5 km of strategic roads identified to be structurally damaged; data collection, upgrading, and further enhancement of the existing Pavement Management System to enable LAMATA to build the foundation upon which the State could rationalize its road sector investments.

4: Project management and monitoring (total appraisal cost US\$9 million fully financed by IDA; total actual cost US\$7 million). This component was to finance technical assistance, equipment, vehicles, office equipment, and other operational support for monitoring project progress; transport system supply, demand and performance; institutional, technical, procurement and financial audit; project outcome monitoring in terms of transport (including safety), environment, social, and capacity development indicators.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost. The total project cost was US\$314.6 million at closure, 4.5 percent lower than the appraisal estimate of US\$329.5 million.

Financing. The project was financed through an IDA credit in the amount of US\$190 million, of which US\$ 189.5 million was disbursed at closure. The project is fully blended with and co-financed by a Global Environment Facility (GEF) grant in the amount of US\$4.5 million that was disbursed at US\$4.49 million. Co-financing was also provided by the French Development Agency (AFD) in the amount of US\$100 million.

Borrower Contribution. The borrower contributed US\$35 million as committed at appraisal.

Dates. The project original closing date was extended by a total of 23 months from June 30, 2015 to May



31, 2017 due to delays in commencement of works resulting from changes in the main activities and design. The project was restructured three months after it was declared effective in May 2011. The major change was at the first restructuring in August 2011, which included dropping of the BRT infrastructure construction and supervision of Oshodi–Mile 2–Obalende under Component 2 due to changes in the government priorities. In 2011, the Federal Government of Nigeria (FGN) commenced road maintenance works along Oshodi to Obalende corridor, which had been identified for Bus Rapid Transit (BRT) infrastructure investments under the project. The state government and the World Bank agreed to re-allocate IAD resources to start BRT construction on the Ikorodu–Mile 12 corridor, which was planned to be financed by the AFD, as the AFD loan effectiveness was delayed by one year. The GEF grant was also re-allocated to Ikorodu–Mile 12 corridor. The outcome indicator related to the reduction of travel time on Oshodi–Mile 2–Obalende was dropped. Under the second project restructuring in December 2012, the IDA project resources allocated to the construction of the LAMATA headquarters building (about US\$14 million) were reallocated to the construction of shelters, platforms and footbridges in the Mile 12 to Ikorodu BRT extension as the construction of LAMATA corporate head office was dropped due to a potential conflict of land use for the proposed site (Project Restructuring Paper dated December 3, 2012). Intermediate results indicators were modified to reflect changes in project design. Under the third restructuring in April 2015, the closing date was extended to May 31, 2017. The results framework was further revised with changes to several outcome-level indicators (see Section 10). IEG does not apply a split-rating assessment, as the outcome indicator related to the cancelled section was dropped prior to disbursements, and other outcome indicators were revised to reflect the application of a different methodology.

3. Relevance of Objectives & Design

a. Relevance of Objectives

By 2010, Nigeria had a population of about 151 million people, with about half residing in urban areas. The Lagos metropolitan area was the largest city in Sub-Saharan Africa, with a population of over 17.5 million by 2008 and an annual growth rate above four percent. Transport infrastructure and services in Lagos remained at levels that supported a population of no more than six million since the 1990s. The density of the road network (about 0.4 km per 1,000 population) was low even by African standards, and the provision of bus public transport was highly fragmented with multiple private operators operating poor-quality mini-buses (*danfos*) and midi-buses (*molues*). There were several organized mass transit systems that included the Bus Rapid Transit (BRT) constructed during the project predecessor -Lagos Urban Transport Project 1, LAGBUS, and a handful of inland waterway ferries. Bus fares were high and consumed over 20 percent of the average household's disposable income.

The project's objectives were consistent with the government's overall strategy for non-oil-dependent growth, as stipulated in the National Economic Empowerment and Development Strategy (NEEDS) and the Lagos State Economic Empowerment and Development Strategy (LSEEDS). The project also supported the Nigeria Vision 2020, which focuses on two transformational objectives: (i) optimizing the country's human and natural resource potential to achieve rapid economic growth, and (ii) translating that growth into equitable social development for all citizens. The project continues to be broadly aligned with the World Bank



Group's Nigeria Country Partnership Strategy FY2014–2017, in particular under the dimension of improving the quality and efficiency of social service delivery at the state level for greater social inclusion.

The federal government, however, changed its priorities shifting its focus away from one of the prioritized corridors, weakening the relevance of the objectives of improving mobility and a modal shift on the project-prioritized corridors.

Rating

Substantial

Revised Rating

Not Rated/Not Applicable

b. Relevance of Design

This is a follow-up project on the first World Bank urban transport project in Lagos that supported construction of the first BRT line in Lagos (the 22 km BRT-Lite between Mile 12 and Church Missionary Society (CMS) launched in 2008) and helped establish and build the capacity of the Lagos Metropolitan Area Transport Authority (LAMATA), responsible for formulation, coordination and implementation of urban transport policies and programs in the Lagos metropolitan area.

The links between the outputs, outcomes and objectives were clearly established in the results framework. Construction of the BRT infrastructure, rehabilitation of road network, and capacity strengthening of LAMATA were to reduce travel time along BRT corridors and increase the number of passengers carried per day by bus, thus improving mobility. The investments were geared to promote a shift to more environmentally sustainable urban transport modes, by increasing the share of trips made by BRT by households with cars, and reduce CO2 emissions from vehicles along the BRT corridor.

The project was designed to construct two additional BRT corridors along the prioritized roads in the Lagos Metropolitan Area; however, the design was subsequently modified by dropping one of the identified sections for BRT in response to shifting priorities of the federal government.

Rating

Substantial

Revised Rating

Not Rated/Not Applicable

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

Improve mobility along prioritized corridors in the Lagos Metropolitan Area.

Rationale

Main outputs



- Bus rapid transit (BRT) infrastructure was constructed on about 13 km road section from Mile 12 to Ikorodu, extending the BRT-Lite corridor built under the first urban transport project. The road section was expanded from a four-lane to six-lane highway with segregated BRT lanes running in the middle. Activities included installation of traffic management systems, BRT Ikorodu interchange, bridges, pedestrian facilities, and BRT depot.
- Construction of 27 km of bus rapid transit (BRT) infrastructure from Oshodi to Mile 2 to Obalende was cancelled and not implemented. The Federal Government of Nigeria (FGN) had started repair works on the identified road section for BRT shortly after the project effectiveness. The FGN is the owner of the roads, and the concession of roads from the FGN to the Lagos State Government (LSG) had not been obtained.
- The existing BRT-lite section from Mile 12 to CMS launched under the first Bank project in 2008 was upgraded (not originally planned under the project). This included the upgrade of 44 bus shelters of the BRT-lite (Mile 12–CMS). As the government decided to upgrade the pavement, as the ICR (page 13) reports that the original BRT corridor was in poor condition and suffered from persistent road-safety and traffic issues. Some sections experienced submersion during the rainy season due to perennial flooding, which made travel time unreliable during the rainy season.
- The Ikeja bus terminal was constructed to serve as a centralized motor park for all minibuses operations in and out of Ikeja. The terminal was expected to become operational after project closure.
- A bus-route network study was completed to improve the operating efficiency of all bus routes in Lagos.
- 383 staff training courses, 50 workshops, and 8 study tours in support of capacity strengthening of LAMATA were provided (no targets were identified).
- 5 Transport Planning Units were established as planned.
- 17.05 km of strategic roads of the Lagos State metropolitan road network were rehabilitated as per target of 17.8 km. The size of the road network in Lagos metropolis is over 5,200 km, of which the state roads are about 3,000 km.
- Routine maintenance activities of road surface and drainage systems to be executed by small scale labor based contractors covering the 532 km of the declared road network were cancelled.
- For Kano, Nigeria's second-largest city, technical assistance was provided to develop the concept for hubs and terminals program, which substituted the originally planned study to develop a conceptual transport planning framework for Kano in support of bus-based mass transport system initiatives. The ICR notes (page 8) that violence and disruption in Kano, associated with a terror campaign by anti-government forces, were concerns during implementation and directly affected the project by delaying the start of the concept design studies (and related data collection) for the proposed pilot bus corridor scheme, which were expected to start in January 2012.

Outcomes

- BRT provided an alternative mode in the corridor that reduced travel time along the BRT corridor by 28% measured from Ikorodu to Tafawa Balewa Square, or from 120 minutes to 86 minutes (the target was 90 min). The original measurement and baseline 120 min was for the Oshodi-Mile 12-Ikorodu section, and during project restructuring in 2015, the baseline indicator was revised for Mile 12-Ikorodu, which was



indicated as 75 minutes (Project Restructuring Paper (PRP), 2015). This is not explained in the ICR. The ICR on page 15 reports that at project closure, it took non-BRT buses on average about 49 minutes to go from Ikorodu to Mile 12; and for the same section, car owners recorded travel times between 18 and 20 minutes, compared to the original 100 minutes.

- The average travel speed of the BRT buses is 23 km/h, higher than the target of 18 km/h.
- The average amount spent monthly by individuals on bus travel along the project corridor decreased from NGN 4,120 to NGN 2,141 (in 2012 Naira), surpassing the target of 3,500 NGN. The original indicator measured the target as reduction of transport share of household expenditure on the BRT corridor from 20 % to 15%. Given reported difficulties in constructing the transport share in household expenditure, the indicator was simplified during project restructuring in 2015 (PRP, 2015).
- The traffic accident rate along the project corridor reduced from 139 to 96 accidents per 100,000 vehicles, exceeding the target of 112.
- The average travel speed along resurfaced and rehabilitated corridors reached 50 km/h, compared to the original 12 km/h and the target of 18 km/h.

The objective of improving mobility on the prioritized corridors is assessed as *high*. There were significant time savings for all transport users of the corridors by project closure. The reduction in travel time was accompanied by 80 % satisfaction with public transport and improved safety.

Rating
High

Objective 2

Objective

Promote a shift to more environmentally sustainable urban transport modes.

Rationale

Main Outputs

- BRT-Lite construction on Mile 12–Ikorodu Road, expanding from a four-lane to six-lane highway with segregated BRT lanes running in the middle (described above under Objective 1).
- The air-quality monitoring component was dropped, which was designed to measure before and after air quality in the BRT corridor. Baseline data were not gathered before BRT started operating due to delays in procurement.

Outcomes

- BRT ridership by the project's closing date was 156,000 passengers per day (of which 73,320 women). This was below the target of 300,000 direct beneficiaries. It is not clear why the ICR considers to include all public transport users in the corridor as direct beneficiaries and reports a total of 440,000 public



transport users in the corridor; these include users of LAGBUS as well as low-quality minibuses (*danfos*), which the project expected to decrease in numbers due to availability of the new BRT service. As noted by the ICR (page 16), the number of *danfos* in the corridor decreased only by 11 percent from 2013 to 2016, and LAGBUS increased the service provided in the corridor. This was largely due to more affordable fares as compared to the BRT services. The average number of passengers carried per standard bus per day along the BRT corridor was 458. The value was under the expected target of 800 passengers per bus per day.

- The original indicator to measure the increase in percentage of trips made by BRT among households owning cars or motor bikes was dropped. Instead, a survey was conducted among BRT users to establish who owns a car or two-wheeler, and showed the increase from 14% in 2010 to 30% in 2017, above the target of 21%. The percentage, however, varies throughout the ICR: 23% on page 22 and 34% on page 41.
- The weighted average reduction of CO2 emissions in the corridor was estimated at 13 percent when the 2016 scenario was compared with BRT and the equivalent without BRT. The greatest impact of emission reduction was due to the reduction of private vehicle emissions (by 18 percent), followed by the reduction of emissions from *danfos* and coaster buses in the corridor. At the same time, however, the taxi ridership increased by about 10 percent and there was a fourfold increase in ridership on motorcycles (*okadas*) and tricycles accompanied by a significant increase in CO2 emissions (ICR, Table 4, page 18).

Rating

Substantial

5. Efficiency

Economic Analysis

At appraisal, a cost-benefit economic analysis was conducted for the Bus Rapid Transport (BRT) for the two planned corridors. The economic benefits were quantified in terms of operating cost savings and value of travel time savings by users. Other expected benefits such as a positive impact on pollution and air quality levels along the corridor and reduction in accident rate were not quantified. The ex-ante (economic internal rate of return) EIRR for the Oshodi-Mile 12- Ikorodu corridor was estimated at 15%, and 17% for the Oshodi-Mile 2- Obalende corridor (PAD, Annex 9).

At closure, the ex-post EIRR was estimated for Mile 12-Ikorodu Corridor at 36%, with the net present value (NPV) of US\$486 million over 15 years (2015 prices discounted at 12 percent). The original methodology for calculation at appraisal was modified by adding the benefits estimated from travel time savings from private car users and the GHG emission reduction. The main reason for the much higher ex-post rate of return was the increase in net passenger-related benefits associated with the increased value of time (value of time considered at appraisal was NGN 84 per hour; in the post-economic analysis, the value is NGN 231 per hour in public transport and NGN 299 per hour in private vehicles). It constituted 88 % in share of all the estimated



benefits, while the share of VOC savings was 9%, and reduced GHG emissions of 3%.

Cost-effectiveness. The unit cost of BRT infrastructure in Lagos is indicated as US\$10.4 million per km by the ICR. Actual capital costs of the BRT corridor from Mile 12 to Ikorodu were NGN 35.228 billion (US\$226 million, at an exchange rate of 1 US\$=NGN 155) compared to appraisal estimates of NGN 11.264 billion (US\$88 million, at an exchange rate of 1 US\$=NGN 128). This was a three-fold increase in the actual cost as compared to the original cost. The ICR (page 19) attributes this high cost-overflow to high inflation during the life of the project and a twofold increase in construction prices. Imports, especially the ITS equipment, were affected by the devaluation of the Naira to the dollar, which moved from NGN 150 to NGN315 to US\$1 during the life of the project. This high increase, however, cannot be explained only by the above claims, as costs of construction materials are linked to oil prices that dropped significantly in 2010/2011, and the devaluation of local currency would lead to savings in dollar terms.

Operational/administrative efficiency. The project efficiency was largely affected by cancellation of the construction of BRT on an additional road section Oshodi-Mile 2- Obalende. After all preparation costs and appraisal, the planned BRT section was cancelled three months after project effectiveness. Significant IDA credit funds estimated for this section of more than US\$100 million were shifted to the Mile 12-Ikorodu Corridor after project appraisal. In addition, there were delays in completion of the project due to the delayed start of works resulting from delays in effectiveness and the decision to start repair works on the existing BRT segment from Mile 12 to CMS (constructed under the first project) due to recurring pavement failure that was attributed to high ridership and intensive use since opening in 2009 (PRP 2015).

Overall, despite the satisfactory economic internal rate of return for the Mile 12-Ikorodu Corridor BRT section, which largely reflects the benefit estimated in terms of increased value of time of the users of public transport and private car in the corridor, the project's efficiency is assessed as modest due to (1) cancellation of the construction of the BRT section of 27 km that involved preparation and appraisal costs, and (2) 200% cost overruns under the Mile 12-Ikorodu Corridor that cannot be fully explained by inflation and construction cost increase.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	15.00	0 <input checked="" type="checkbox"/> Not Applicable
ICR Estimate	✓	36.00	0 <input checked="" type="checkbox"/> Not Applicable



* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objectives and that of design are rated substantial; while the project development objectives were relevant to the urban transport challenges in the metropolitan area of Lagos, the government shifted its development priorities from building one of the identified corridors for the Bus Rapid Transit (BRT) system in Lagos. The project design was subsequently modified by dropping one of the BRT sections planned as an extension of the existing BRT-Lite system built under the first World Bank-financed project in Lagos. The first project objective of the current project of improving mobility on the prioritized corridors is assessed high due to significant time savings for all transport users of the corridors, accompanied by 80 % satisfaction with public transport and improved safety. The second objective of promoting a shift to a more environmentally sustainable urban transport modes is assessed as substantially achieved. There was a shift from private vehicles to high-capacity vehicles in the corridor, accompanied by the reduction in private vehicle emissions; at the same time, however, there was a significant increase in ridership on motorcycles (*okadas*) and tricycles in the corridor. The project estimated a satisfactory economic internal rate of return for the Mile 12-Ikorodu Corridor BRT section, which largely reflected the benefit in terms of the increased value of time of the users of public transport and private cars in the corridor, however, the overall project's efficiency is assessed as modest due to (1) cancellation of the construction of the BRT section of 27 km that involved preparation and appraisal costs, and (2) 200% cost overruns under the Mile 12-Ikorodu Corridor that cannot be fully explained by inflation and construction cost increase.

a. Outcome Rating

Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

Financial. With regard to LAMATA'S financial sustainability, the risk is substantial. The Transport Fund was set up in 2006 under the first Bank project that received dedicated funds from: (a) Lagos State budget provision, (b) license fees (taxi permits, road taxes, license plate registration, and vehicle registration), (c) bus concession fees, and (d) other road-user charges (tolls). The fund represented a stable source of revenue for LAMATA that received 50% of the dedicated fund each month. However, transfers from the Transport Fund decreased from US\$12.2 million per year in 2014 to US\$5.3 million in 2016. In 2017, LAMATA only received transfers for the first two months. With relation to the BRT operation, the risk is moderate. At project closure, the BRT operator covered its O&M costs and paid a franchise fee to LAMATA.

Institutional. While the political commitment to transportation at the highest levels (state and federal) were the key factors for the creation of LAMATA and launch of the first BRT system in the country, political changes could reduce the government ownership of LAMATA's vision and reduce institutional support. There were signs of changing federal government priorities with cancellation of the construction of one BRT section under the project and the reduction of transfers from the Transport Fund.

Technical. The LAMATA ITS team and the local ITS ecosystem in Lagos has a good capacity to maintain the



ITS infrastructure . Special attention would need to be paid to facilitate the introduction of smart cards for BRT and integration with other modes of transportation.

Overall, the BRT system's sustainability will depend on: (a) the successful implementation of a broad-based bus reform program to integrate BRT with the rest of the network and feed the mass-transport mode; (b) the suppression of demand by other modes in the corridor; and (c) the enforcement of exclusive use of dedicated lanes by BRT.

a. Risk to Development Outcome Rating

Substantial

8. Assessment of Bank Performance

a. Quality-at-Entry

The project was a continuation of Bank support to urban transport in the Lagos metropolitan area. Project design built on the first Urban Transport Project in Lagos that helped construct the first BRT line and established the metropolitan transport coordination authority- LAMATA. This second project was to support the extension of the BRT system in two additional corridors and capacity strengthening of LAMATA. A series of planning activities and stakeholder consultations were conducted to prepare for the project, including feasibility studies, route selection and design by appointed consulting firms, study tours, high-level meetings with the National Union of Road Transport Workers' executives and involvement of senior government management.

With regard to cancellation of a 27-km road BRT section, as explained in the project restructuring paper in 2015, during project preparation, it was understood that LAMATA would be given permission to develop this as a BRT corridor; however, after the project was approved, the FGN moved ahead with civil works for traffic-flow improvements along the corridor.

There were shortcomings at entry that relate to underestimation of social risk that materialized with regard to street traders and weaknesses in the M&E design (see Section 11 and 10).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

The World Bank worked closely with the government, the implementation agency LAMATA and co-financiers to support the project implementation in compliance with Bank safeguards and fiduciary policies. Supervision is reported to be regular, and Implementation Status and Results Reports were prepared every six months.

There were three project restructurings. As a result of the Federal Government's decision to proceed with the traffic-flow improvements along the corridor appraised for BRT under the project, the process to decide on the



reallocation of resources and finalize the restructuring took over a year to complete (PRP, 2015). It is not clear from the ICR what was the rationale for IDA funds of US\$133 million earmarked for the new BRT section to be moved to the other section and what were the design changes, apart from the construction of the Ikeja bus terminal. There were a number of re-allocations of funds between categories, cancellation of some activities and adding new ones.

The project team formally revised the M&E results framework only two years before the project closure, with baseline and targets changed and simplification of measurement. The ICR (page 4) notes that modifications to key indicators were agreed at the time of mid-term review in 2013; the team informed that the aide-memoires used a new results framework agreed in 2013. Several social safeguard issues were still not fully finalized at project closure that related to the relocation of street traders (see Section 11).

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Lagos State Government (LSG) demonstrated ownership by introducing institutional, legal and regulatory reforms in the public transport sector, and construction of the BRT system. The LSG showed strong support and commitment to the project by active participation in project supervision missions and wrap-up meetings. It continued to support and provide needed resources to the implementation agency, LAMATA, which was created under the first project. At the same time, the ICR (page 7) notes that the state administration support to LAMATA was undermined in some instances. LAMATA has been active under three state administrations, with transitions in 2007 and 2015. The last transition in 2015 caused a complete turnover of LAMATA's senior management, including the managing director who had served LAMATA for 13 years. Other issues include delays in project effectiveness of the AFD co-financing agreement; and the issue with sorting out the site control over the Oshodi-Mile 2-Obalendi corridor prior to the project approval. The rating for the Government performance is also affected by the decision of Federal Government of Nigeria (FGN) to proceed with works on one of the project-appraised corridors for the BRT extension, resulting in cancellation of the related activity.

Government Performance Rating

Moderately Unsatisfactory

b. Implementing Agency Performance

LAMATA is reported to have responded efficiently on project issues, adhered to project implementation requirements and engaged with the World Bank missions (ICR, page 24). LAMATA provided progress and other reports on time, monitored environmental and social aspects, and suggested good practices for environmental methodologies. LAMATA monitored resettlement and processed payment of compensation



to project- affected persons, there were, however, still outstanding issues of payments at project closure. The performance rating is affected by the overall modest project efficiency due to issues of cost effectiveness and operational/administrative issues (see Section 5).

Implementing Agency Performance Rating

Moderately Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The results framework had eight outcome indicators, with baselines and targets identified where applicable. The main indicators were properly linked to the objectives, i.e., reduced travel time, increase in percent of trips made by BRT among households owning cars or motorbikes, and reduced CO2 emissions along BRT corridor. The ICR (page 8) notes that data collection methods for some indicators were complex, in particular, such as "transport share of household expenditure on BRT corridor" that required to construct the share of transport household expenditure in order to calculate the indicator value. Some of the PDO level indicators were more appropriate at the intermediate level (such as the length of road network rehabilitated). Apparently, there were errors in some baseline values and methodology for CO2 emission reduction, as these were subsequently revised.

M&E of the project was the responsibility of LAMATA's Department of Corporate and Investment Planning (DCIP).

b. M&E Implementation

The M&E design was officially revised in 2015, two years before actual project closing. The ICR (page 9) notes that the need to modify the M&E framework was recognized during the mid-term in 2013. According to the Project Restructuring Paper 2015, the baseline for travel time on Mile 12-Ikorodu was revised from 120 to 72 minutes from the socioeconomic survey conducted under the first project but the ICR does not mention this or use it. Overall, the main outcome indicators related to the household expenditures, share of trips, and CO2 emission reduction were revised and modified in terms of measurement.

There were issues in implementation of the M&E. As the ICR (page 9) describes, the limitation of the DCIP's capacity was evidenced by the need to monitor a revised structure for performance indicators and baseline values after the 2013 midterm review, and LAMATA had to strengthen its M&E team with a consultant team to proceed with the proposed changes in the M&E framework.



c. M&E Utilization

The ICR only mentions the use of the revised M&E that helped track progress toward the project closing date.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

This was a safeguard category B project. The safeguard policies triggered were Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11), and Involuntary Resettlement (OP/BP 4.12). The Environmental and Social Management Framework (ESMF) and the Resettlement Policy Framework (RPF), including several site-specific environmental management plans (EMPs) for known project activity sites, were prepared, reviewed and disclosed as required (ICR, p. 9).

Environmental Assessment (OP/BP 4.01). The ICR reports that “the project complied with safeguards policy OP/BP 4.01”. A number of environmentally sensitive areas along the sites (Mile 12–Tafawa Balewa Square [TBS] BRT-lite upgrade, Mile 12–Ikorodu extension, and Ikeja bus terminal) were identified at appraisal. In compliance with OP/BP 4.01, the final EA documents (Environmental and Social Impact Assessment for Mile 12–Ikorodu Road and Ikeja bus terminal, EMPs for rehabilitation of Wempco and Akin–Adesola Roads) were prepared and disclosed in Nigeria and the World Bank’s Infoshop.

Physical Cultural Resources (OP/BP 4.11). OP 4.11 was triggered due to likelihood of significant civil works, as earth works have the potential of exposing chance finds. The ESMF has made provisions for addressing potential chance finds of cultural heritage (PAD, page 25). The ICR (page 9) reports that no cultural resources were identified and therefore no corresponding measure was needed.

Involuntary Resettlement (OP/BP 4.12). The ICR (page 10) reports that the project complied with safeguards policy OP/BP 4.12. In total, acquired land along the BRT corridors and other sites affected 2,231 individuals and all were compensated appropriately as planned. The ICR (page 10) points out, however, that some social safeguards issues were not finalized by project closing and resulted in the moderately satisfactory rating for social safeguards. Issues were related to (a) relocation of street traders at Ikorodu Roundabout to the newly built Oluwo Oduikan Market at the town of Agric who moved back to trade near Ikorodu station and refused to go to Agric. After project closing, the Ikorodu West Council Development (local government) officially took over the operations of the new market and reached the agreement with them to move back. (b) a group of plantain market traders originally relocated from the Mile 12 terminal site to the nearby Ajelogo market, under a three-year lease agreement. Since the lease expired in 2017, these traders had to move to another location. An official agreement, signed by all stakeholders, stated that the LSG would move the plantain traders to a permanent site at Imota, Ikorodu once the construction is complete. (c) eight of the PAPs identified in the Ikeja Bus Terminal RAP failed to collect their compensation by project closing in May 2017 and had come to receive the compensation by September 2017.



b. Fiduciary Compliance

Financial management. The ICR (page 11) reports that the project had adequate and efficient internal control systems and satisfactory banking arrangements, and there was compliance with report-based disbursement, interim financial reports, quarterly submission, and external audits as required. The ICR does not report if the audits were unqualified. The project was adversely affected by the exchange-rate fluctuation of the US dollar against SDR and the Naira, resulting in a loss of US\$14,890,705 against the original IDA allocation. From early 2016, due to the changes to the Lagos State financial management and payment authorization process, the project experienced delays in payments to civil works contractors, although the process stabilized over time.

Procurement. According to the ICR (page 11), the procurement of goods, civil works, and consultancy service contracts was arranged in a timely manner. The ICR (page 7) points to slight delays in procurement for ancillary civil works contracts (construction of bus stations, footbridges and terminals) and the rehabilitation of Wempeco Road. There were also delays in procuring the supply and installation of the ITS. There was poor and insufficient response from potential bidders during the first bidding in January 2015; the contract was awarded to a consortium of international firms in association with a local firm after the second bidding in July 2015. The BRT extension Mile 12-Ikorodu experienced 200% cost overruns, that are partially attributable to high inflation and an increase in construction cost during project period. At the same time, the estimated costs included sufficiently high contingency allowance to accommodate possible cost escalations, according to the PAD (page 20).

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	Relevance of project objectives and design is rated substantial. The first project objective of improving mobility on the prioritized corridors is assessed as high. The second



			objective of promoting a shift to more environmentally sustainable urban transport modes is assessed as substantially achieved. Efficiency is rated modest for high cost overruns in construction of the Mile 12-Ikorodu Corridor and cancellation of another 27km BRT section appraised under the project.
Risk to Development Outcome	Modest	Substantial	Financial and institutional risks are substantial.
Bank Performance	Satisfactory	Moderately Satisfactory	Both Bank's Quality at Entry and Supervision are rated moderately satisfactory.
Borrower Performance	Satisfactory	Moderately Satisfactory	Government performance is rated moderately unsatisfactory, and that of Implementing Agency is rated moderately satisfactory. As the outcome is assessed as moderately satisfactory, the overall rating becomes moderately satisfactory.
Quality of ICR		Modest	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

IEG has selected four lessons from the ICR, with some adaptation of the language.

- **It is important to develop an incremental phased approach to a Bus Rapid Transit system with a focus on early deliverability.** In the case of Lagos, the first BRT-lite implemented under the first World Bank-financed project created awareness and appreciation of the concept and made it politically and technically possible to embark on a more ambitious agenda and extend the BRT system. At the same time, while applying an incremental, phased approach to demonstrate the concept and build popular momentum, it is critical to develop the BRT network, not just a single corridor. And it is important to show sensitivity to the city-specific context rather than adopt a "best-technology, one-size-fits-all" solution".



- **Competition for the market and integration of informal transport should be sought to improve efficiency gains of a BRT.** The project evidenced that LAMATA's negotiating capacity may be limited, with the existence of a single operator in Lagos. International experience in urban areas shows that multiple competing operators have generally improved the productivity of public transport systems. The transition from a single operator to a competitive environment in Lagos may allow efficiency gains in the tendering of future BRT corridors. Efforts to eliminate informal transport from the BRT corridor were not effective in Lagos: informal transport remained an important component of overall transport services.
- **In the creation of a unit within an institution, it is important to develop a thorough stakeholder analysis which recognizes and incorporates the system of incentives governing the institution's behavior.** The transport planning units created within the local government areas regularly undermined the strategic efforts being made by the broader city administration at a state level. These issues were not simply a question of the TPUs' low capacity; the underlying factors have a substantially structural component. The new unit's sustainability depends on a design that recognizes and tries to incorporate the system of incentives governing the behavior of the institutions where the new unit is hosted.
- **The intelligent transport system (ITS) is needed to be planned in such a way that it would be flexible enough to accommodate multiple bus-operator models, to potentially introduce smart cards for BRT, and to facilitate integration with other modes of transport in the future.** It is important to allow sufficient time for bidders to prepare high-quality proposals, consider instructions to bidders that would encourage international firms to collaborate with local partners through joint ventures, bring ITS expertise on board in the first phases of the project preparation to advise on the design and planning process, plan for a phased deployment with adequate time for testing, and strengthen the ITS capacity within the implementing agency to closely monitor deployment and rollout.

14. Assessment Recommended?

Yes

Please explain

IEG has prepared a project performance assessment report (PPAR) for the first urban transport project in Lagos. This follow-up project that financed the extension of the BRT-Lite and capacity strengthening of LAMATA would merit an assessment to follow on the financial, institutional, and environmental sustainability of the first BRT system in Sub-Saharan Africa.



15. Comments on Quality of ICR

The ICR is concise and follows the OPCS guidelines. It is particularly diligent in reporting on the project compliance with safeguards and fiduciary issues. The ICR, however, is not sufficiently candid in describing issues that affected the project implementation and results. It underplays the issue of cancellation of a new 27- km BRT corridor after project approval, and does not sufficiently explain how US\$133 million of the Bank loan were re-allocated. The project restructuring papers and aide-memoires have more adequately covered the implementation issues and necessary details. The analysis of evidence is not comprehensive, and the data analysis is presented in a limited way. The ICR is written in a defensive way and is not internally consistent. The assessments of Borrower and Bank performance do not take into account in their ratings the issues that were under their control. The lessons though have value and tend to contain more insights into the project experience than those found in other portions of the ICR. The project team did not respond to the IEG queries that would have helped to clarify important aspects of the project experience.

Minor errors/typos include: disbursement profile does not correspond to the project years of implementation (from 1998 to 2006 (page xvi)); total costs for components are not available in Annex 1; ridership is indicated as 156,000 on page and 165,000 on page 40; and the outcome indicator of the percentage of BRT users owning a car or two-wheeler has different values: 30% in the results framework, 23% on page 22 and 34% on page 41. The following statement from the ICR (page 17) needs to be clarified: "The main emission reductions were in the categories of personal cars and *danfos*, both in absolute and relative terms, while the major increase in emissions came from BRT, LAGBUS, trucks and *okadas*".

a. Quality of ICR Rating

Modest