PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA98414

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Transport Sector Improvement Project (P151026)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td>AFRICA</td>
</tr>
<tr>
<td>Country</td>
<td>Ghana</td>
</tr>
<tr>
<td>Lending Instrument</td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td>Project ID</td>
<td>P151026</td>
</tr>
<tr>
<td>Borrower(s)</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>Implementing Agency</td>
<td>Ministry of Transport, Ministry of Roads and Highways</td>
</tr>
<tr>
<td>Environmental Category</td>
<td>B-Partial Assessment</td>
</tr>
<tr>
<td>Date PID Prepared/Updated</td>
<td>06-Apr-2017</td>
</tr>
<tr>
<td>Date PID Approved/Disclosed</td>
<td>07-Apr-2017</td>
</tr>
<tr>
<td>Estimated Date of Board Approval</td>
<td>23-May-2017</td>
</tr>
<tr>
<td>Appraisal Review Decision (from Decision Note)</td>
<td></td>
</tr>
<tr>
<td>Other Decision</td>
<td></td>
</tr>
</tbody>
</table>

I. Project Context

Country Context


2. Falling commodity prices from 2012 to 2015 had a negative impact on Ghana’s economy, resulting in substantially lower gross domestic product (GDP) growth and a rapid increase in the net public debt stock, rising from 38.7 percent of GDP in 2011 to 65 percent of GDP in 2014. In 2014, Ghana entered into a three-year program, with the support of the World Bank and the International Monetary Fund (IMF), to restore debt sustainability and to implement structural changes to strengthen public financial management and expenditure controls.

3. Even with this impressive progress, income inequality remains significant between regions and between urban and rural areas, with the Northern regions having the highest poverty incidence. There are also significant regional and urban/rural disparities in access to economic opportunities and social services. Ghana’s recent medium-term economic plans have focused on addressing these challenges, including generating employment and improving living standards.
4. Agriculture contributed 22 percent (as of 2015) of Ghana’s GDP. However, farming activities remain the biggest employment creator and income provider in most regions. Ghana’s rapid urbanization and the growth of employment opportunities in the informal sector reduced dependence on the agricultural sector in the South and Central regions. In the North, agriculture remains the major employer for up to 50 percent of the labor force, mostly as small landholders.

**Sectoral and Institutional Context**

**Sectoral Context**

5. Ghana has well-developed regional connections with neighboring countries, through the North-South corridors and the East-West corridors along the coast in the South. The East-West corridors in the Central and Northern parts of Ghana currently serve predominantly as internal connectors between the national North-South corridors because of inadequate customs and immigration facilities on the borders with Côte d’Ivoire and Burkina Faso in the West and Togo in the East. The establishment of an operational border post at Tatale with Togo will lead to increased utilization of the Central East-West corridor, which is already improved west of Tamale.

6. The Ghana Poverty and Inequality Profile (June 2015) shows a high correlation between the presence of road infrastructure and poverty rates, based on plots of poverty information to the proximity of roads and maize yields, respectively. Southwestern Ghana, where poverty is below 20 percent in most districts, has the best road network; the nearest road is, on average, less than an hour away from the rural poor. In the North, the average distance to the nearest road increases for the rural poor, in some areas increasing to more than 3.3 hours.

7. Road transport is the predominant mode of transportation in Ghana, carrying over 95 percent of passenger and freight traffic. The road network grew considerably from 47,824 km in 2002 to 71,063 km, of which about 30 percent is paved. It provides good national coverage, consisting of 14,873 km of trunk roads, 14,000 km of urban roads, and 42,190 km of feeder roads. Farm roads, providing the last mile connections between the feeder road network, farms, and villages, are poorly developed with little network-wide data available. Currently, 45 percent of the road network is in good condition, 25 percent is in fair condition, and 30 percent is in poor condition. The trunk road network links all districts and regions as well as most population centers and is considered adequate to meet the minimal requirements for sub-regional integration. The feeder and farm road networks are in a poorer condition overall.

8. The strong economic growth of Ghana has resulted in an increase in vehicle ownership and demand for freight and passenger services. In response, the Government has invested primarily in road capacity expansion, especially in urban areas where traffic congestion became more acute over time. However, much still needs to be done to improve road infrastructure to accommodate the existing demand. Road users experience long travel times as a result of delays and congestion in major urban centers, faster deterioration because of weak maintenance practices, and limited connectivity in rural areas where more than 50 percent of the rural population lives within 2 km of an all-season road.

9. Ghana has a poor road safety record with high accident rates. This is because of poor road conditions caused by faster deterioration due to weak maintenance practices and lack of enforceable road safety measures. The National Road Safety Commission (NRSC) is the lead agency for road safety in Ghana, established by Act of Parliament in 1999. The NRSC’s 2015–2017 Action Plan gives high priority to pedestrian safety as well as bus and heavy goods vehicle safety interventions, reflecting the high numbers of deaths and serious injuries associated with these road users. In 2014,
there were 1,836 road crash fatalities, about 40 percent being pedestrians, and 23 percent of the total pedestrian deaths were children under 16 with the initial 2015 data showing a similar trend.

10. Road Fund contribution to road maintenance. Until 1997, when the Road Fund was established, the Ministry of Roads and Highways (MRH) was responsible for road maintenance that was funded from the ministry’s annual budget. As more roads were constructed as part of the economic recovery program launched by the Government in the 1980s, cost of maintenance began to rise beyond the competence of annual budgetary provisions. The funding sources of the Road Fund are derived from a fuel levy, road and bridge tolls, and various road-related tariffs (vehicle registration fees, license fees); however, the mobilization of funding through the Road Fund is not a guarantee that the Government will prioritize maintenance over the extension of its road network. Although the current toll rates, established in 2010, reflect a significant increase from the levels that were set in 1999, these rates are barely sufficient to recover the maintenance costs and/or costs associated with major rehabilitation or expansion programs, thereby resulting in a maintenance backlog with the road network condition deteriorating over time. A recent increase in the fuel levy in January 2016 to GHS 0.40 per liter (approximately US$0.10 per liter) is an attempt to restore the level of funding available for maintenance, but the immediate impact remains to be seen, given the current arrears to the contractors.

11. While continued expansion of the network is desirable, more attention needs to be given to improving and maintaining road quality through proper asset management. The project will introduce performance-based contract (PBC) on selected, prioritized sections of the road network and will complete the establishment of a road asset management system (RAMS) for at least the trunk and feeder road networks. These actions will provide opportunities for the establishment of asset management principles as the basis for network management.

12. The project will also assess the impact of climate change on the selected road networks. The key climate issues are changes in rainfall patterns with shorter duration and higher rainfall intensity storms. The drainage structures and drains as well as overall accessibility on the critical parts of the networks will be assessed to determine any mitigation that would be included in the works.

13. Public-Private Partnerships (PPPs). Because of increased transportation demand and the costly investments required for transport infrastructure improvements, the Government adopted and is studying further PPP options in the port, railway, and road subsectors. In the Port of Tema, concessions are already in place and are one of Ghana’s most successful examples of PPPs. The World Bank is currently supporting several feasibility studies under the ongoing PPP project, most notably, the expansion of the Accra-Tema Road, the Accra-Takoradi Road, Takoradi Port, Boankra Inland Port, and the Eastern Railway Line.

14. Maritime sector is managed by the Ghana Port and Harbours Authority and is dominated by two main deep-sea ports on the Atlantic Ocean at Tema and Takoradi. Both ports are currently undergoing expansion and upgrading to accommodate the increasing trade volumes and to maintain their competitive position for regional traffic. Most of the container traffic in Ghana is gateway traffic (import/export) to Ghana and to the landlocked countries (Burkina Faso, Mali, and Niger). The Tema Port, one of the five largest ports in West Africa region (Lagos, Tema, Pointe Noire, Abidjan, and Dakar), handling 94 percent of the country’s container volumes, is strategically located close to the country’s main consumption centers. The container volumes at Tema Port grew at a compound annual growth rate of 8 percent between 2005 and 2014 (870,000 twenty-foot equivalent units [TEUs] in 2014) and are expected to grow at an average rate of 5 percent until 2030. The Port of Takoradi, Ghana’s second port, handling 4.3 million tons of cargo (75,000 TEUs) in 2014, is located 229 km from Accra, making it less competitive in terms of transport costs versus the Tema Port. However, it
remains Ghana’s primary export port, accounting for about 70 percent of outbound seaborne trade, partly because it is the major port for bulk cargoes and is located closer to Ghana’s main export producing areas (cocoa, gold, bauxite, manganese, and oil). The Takoradi Port caters mainly to dry and liquid bulk cargo and is positioning itself as the oil and gas hub for the country.

15. Inland water transportation focuses largely on Volta Lake, providing 1,125 km of arterial and feeder waterways, where the Volta Lake Transport Company (VLTC), owned by the Volta River Authority, is responsible for the management of all inland transport. The freight and ferry services of the VLTC deteriorated significantly over time due to insufficient investment and maintenance.

16. Air transport. The Ghana Civil Aviation Authority is responsible for development, maintenance, and operation of aviation infrastructure. It provides navigational services and operates three international airports (Accra, Kumasi, and Tamale) and several domestic airports. International civil aviation demand decreased over the last few years. However, the ongoing investment in new terminals and related infrastructure at the Kotoka International Airport in Accra will accommodate future demand based on the 2.4 million passengers (1.7 million international and 720,000 domestic passengers) and about 162,000 tons of cargo handled in 2014. Domestic air traffic rose with increased scheduled services between Accra, Takoradi, Kumasi, and Tamale airports. The expansion of scheduled airline services is restrained by high airport usage charges.

17. Rail transport. Rail transport is the only alternative to roads for the movement of bulk commodities from collection centers to/from the ports. The existing railway network has limited coverage and is made up of three narrow gauge lines, the Western (Takoradi Port to Kumasi), Eastern (Accra-Kumasi), and Central lines (Huni Valley to Kotoky) that, together with some branch lines, extend for approximately 940 km. Only 14 percent (133.6 km) of the entire rail network is currently operational due to lack of utilization and maintenance. The southern part of the Eastern line is open for urban passenger services and a part of the Western line is used for manganese export shipments.

18. Overall, Ghana is positioning itself as a competitor for international transit traffic to and from the landlocked countries to its north. Competition comes from the transport corridors and ports in neighboring Coté d’Ivoire and Togo. The World Bank assisted with the improvement of the Abidjan-Lagos and Central (Accra-Burkina Faso border) corridors with the Government investing in the Eastern and Western corridors. However, Ghana still has a long way to go to become truly competitive. Its Logistics Performance Index (quality of trade and transport-related infrastructure) has changed little over the last 10 years (2005–2015), from 2.3 to 2.7 out of a maximum score of 5.0.

Institutional Context

19. The transport sector is managed and overseen by four ministries (two established and two recently created ministries):

(a) The Ministry of Transport (MOT) is responsible for policy and oversight of the sector in general. The MOT also has the responsibility for managing the outcomes of several agencies: Ghana Ports and Harbours Authority; Ghana Shippers Authority; Driver and Vehicle Licensing Authority (DVLA); and, the National Road Safety Commission (NRSC), among others.

(b) The MRH is responsible for the provision and maintenance of the classified road network. The Ghana Highway Authority (GHA) is responsible for the trunk road network, and the Departments of Feeder (DFR) and Urban Roads (DUR) are responsible for the feeder and urban roads networks, respectively. Government’s decentralization policy will have a major impact on the responsibilities of, especially, the DFR and DUR with the management of many road links earmarked for transfer to the local authority level. The Road Fund, responsible for providing funds for maintenance and rehabilitation of classified roads, also reports to the MRH. The Road Fund has been able to fund only
about 60 percent of the maintenance needs and a very small part of the rehabilitation needs from the various road user charges.

(c) The Ministry of Railway Development is responsible for the provision and maintenance of the railway network through the Ghana Railway Development Authority for regulation and the Ghana Railway Company Limited for asset management and operations.

(d) The Ministry of Aviation is responsible for the regulation and oversight of the civil aviation sector. Two prominent agencies are the Ghana Civil Aviation Authority, responsible for regulation and safety oversight of the civil aviation sector, and the Ghana Airports Company Limited, responsible for the provision and maintenance of the airport assets of Ghana.

20. The sector policy documents are outdated. The National Transport Policy (NTP) (2008) guides the management of the transport sector, and the Integrated Development Plan (2008) was initially used to guide the development and rehabilitation of transport infrastructure. Currently, the Government does not have an up-to-date National Multimodal Transport Master Plan (NMMTMP) to guide overall strategy leading to overlapping subsectoral development initiatives, and the Road Tolling Policy requires an update to support the proposed PPP arrangements mentioned earlier.

21. Drawing from the NMTDP, both the MRH and the MOT developed their Sector’s Medium-term Development Plans (SMTDPs) for 2014–2017. The SMTDP for the MRH outlines the following priorities: (a) asset preservation, (b) road rehabilitation and international corridor development, (c) improved financing and cost recovery, (d) installation and utilization of planning and budgeting systems, (e) improvement in road management, (f) capacity building, (g) mainstreaming of cross-cutting issues such as climate change, (h) pro-poor programs, and (i) collaboration with other sectors. The SMTDP of the MOT seeks to remove operational and policy bottlenecks in the transport sector in support of economic growth and to facilitate and promote the development of transparent policy instruments.

II. Proposed Development Objective(s)

The Project Development Objectives are to: (i) reduce travel time on selected parts of the classified road network in Northern Ghana, (ii) promote road safety, and (iii) strengthen the institutional management of the transport sector.

III. Project Description

Component Name
Component 1 : Road Asset Preservation
Comments (optional)
This Component aims at improving the sustainable management of the Ghana roads network with support for the establishment of a network-wide Road Asset Management System and the ongoing axle load control program as well as the introduction of performance-based contracting (PBC), based on design- build- operate- maintain- transfer principles, on selected Trunk, Feeder and Farm roads, and if savings allow, on selected Urban roads as well.

Component Name
Component 2 : Improved Road Safety
Comments (optional)
This Component will support activities related to improving and promoting road safety in Ghana. The National Road Safety Commission (NRSC) will implement, amongst others, an online crash database and will establish safer pedestrian crossings at schools through a mix of awareness building and low-cost traffic calming measures. The DVLA will develop and pilot vehicle inspections by private
garages and will develop and implement an integrated Driver and Vehicle Licensing System that will replace the current stand-alone systems.

**Component Name**
Component 3: Institutional Strengthening and Capacity Building

**Comments (optional)**
This Component will finance, among others, the implementation of the updated National Transport Policy and the Tolling Policy, the development of a National Multi-Modal Transport Master Plan, a Road Sub-sector Agency review and the implementation of some of its recommendations; a training program for selected Agencies and support to implement the Project.

### IV. Financing (in USD Million)

<table>
<thead>
<tr>
<th>Total Project Cost: 150.00</th>
<th>Total Bank Financing: 150.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing Gap: 0.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>150.00</td>
</tr>
<tr>
<td>Total</td>
<td>150.00</td>
</tr>
</tbody>
</table>

### V. Implementation

**Institutional and Implementation Arrangements**

22. The MRH and MOT have overall responsibility for project implementation. The MRH developed a Project Implementation Manual (PIM), reviewed and accepted by the Bank, that includes (a) institutional coordination and day-to-day execution arrangements of the project; (b) disbursement and financial management; (c) procurement; (d) environmental and social safeguards; (e) monitoring, evaluation, reporting, and communication; and (g) other administrative, financial, technical, and organizational arrangements and procedures as may be required.

23. The Government adopted an implementation structure consisting of (a) a Project Steering Committee (PSC); (b) a dedicated, full-time PC; and (c) three AITs headed by full-time managers and complemented by additional full-time or part-time staff, as implementation requires.

24. The PSC is responsible for reviewing and approving the project’s annual work plans and budgets, providing policy and program guidance to the PC, overseeing implementation progress, and ensuring communication and cooperation among stakeholders. The PSC will be co-chaired by the Chief Directors of the MRH and MOT and will include officials from the MRH, MOT, Ministry of Finance (MOF), Ministry of Food and Agriculture (MOFA), GHA, DFR, DVLA, and NRSC. It is expected to meet on a regular basis (quarterly) and, at any other time, should the project require it.

25. The PC is responsible for coordinating and implementing the project activities, and will be selected competitively and be appointed by the MRH and MOT. The PC will report directly to the PSC and will be supported by a Project Office adequately staffed and housed in the MRH. The PC will be responsible for the overall coordination of the project subcomponents. More specifically, the PC will (a) lead the preparation of annual work plans and budget for the project for consideration and approval by the PSC and clearance by the World Bank; (b) coordinate the procurement actions taken by the three AITs for all agreed activities; (c) ensure that the agreed implementation schedules are followed...
by the AITs; (d) provide overall management of the financial accounts, including external financial
audit; (e) arrange independent technical audits of the works and procurement audit of all project
components; (f) prepare and distribute aggregated quarterly implementation progress reports for all
project stakeholders; (g) consolidate agency updates for review by implementation support missions
by the World Bank; and (h) lead the preparation of a midterm review (MTR) report and the
Implementation Completion and Results Report with assistance from the implementing agencies,
beneficiary agencies (BAs), key stakeholders, and the World Bank.

26. The three AITs shall report to the PC in all matters of project implementation, coordination, and
reporting. The three AITs are the MRH, also responsible for specific DFR activities; the GHA; and,
the MOT, also responsible for the DVLA and the NRSC activities. The AITs shall assist the PC with
project implementation and shall, among others, be responsible for (a) preparing AIT annual work
plans, Procurement Plans, and budget as part of the project’s annual work plans and budgets; (b)
providing implementation progress updates; (c) implementing the procurement process and
deliverables including liaison with agency entities (formally constituted procurement committees
required under Ghana Law) to secure procurement clearances and payment for eligible activities; (d)
ensuring quality control of procurement-related activities and assessment of suppliers outputs
including evaluation of technical design and specifications; (e) ensuring compliance of agency
activities with the World Bank fiduciary (including safeguards policies) policies, in liaison with
relevant agency departments; (f) quarterly reporting on the progress of agency activities; and (g)
preparing ad hoc project updates on agency components for review by the PC.

27. During project implementation, the PC will arrange monthly implementation meetings with the
AITs to review progress and address any implementation-related issues. The monthly reports will be
aggregated into a quarterly report to be submitted to the PSC for discussions and critical decision
making on the project.

28. The PC will share these monthly reports and the monthly progress reports generated under the
individual activities with the World Bank.

29. All components will be managed in line with the World Bank fiduciary and safeguards
requirements. In those areas where the Government expertise would require strengthening during
implementation, short-term consulting specialists (contract management, engineering, procurement,
financial management, environmental and social safeguards management) would be employed to
enhance performance and project implementation. The short-term specialists would be financed as part
of the capacity building component of the MRH and MOT.

30. MTR. The Government and the World Bank will undertake an MTR about three years after project
approval to review the continued relevance of the PDO and results framework against the actual
implementation progress at that time. The outcome of the MTR could either confirm the original
design of the project or recommend project restructuring, the extent to be agreed by both the
Government and the World Bank.

VI. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Forests OP/BP 4.36</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
VII. Contact point

World Bank

Contact: Petrus Benjamin Gericke
Title: Lead Transport Specialist
Tel: 473-6092
Email: bgericke@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Finance
Contact: Patrick NOMO
Title: Chief Director
Tel: +233 302 662448
Email: chiefdirector@mofep.gov.gh

Implementing Agencies

Name: Ministry of Transport
Contact: Twumasi Ankrah-Selby
Title: Chief Director
Tel: 233302685637
Email: taselby@hotmail.com
Name: Ministry of Roads and Highways
Contact: Godwin J. Brocke
Title: Chief Director
Tel: 233302661575
Email: aboretum@hotmail.com

VIII. For more information contact:

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects