

TRANSPORT INFRASTRUCTURE AND MOBILITY IN NIGERIA

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Abstract

Transport can be viewed as a public utility which supplies essential goods and services, where essential means they cannot be cut off without danger of total or partial collapse of an economy. In what follows, the transport situation in Nigeria is reviewed in order to provide a somewhat qualitative impression of the need to rebuild the infrastructure. Then follows a comment on the transport policy to the extent to which it provides a guide to planning in the sector. A review of the current reform efforts is next provided along with proposed institutional frameworks. The paper concludes with a list of investment programmes proposed to support the implementation of the seven-point agenda on the transport sector.

Keywords: Transport, infrastructure, mobility, essential

Introduction

Transport can be viewed as a public utility which supplies essential goods and services, where essential means they cannot be cut off without danger of total or partial collapse of an economy (Dieter Bos, 2003). Along with power and communication, transport is one of the social overhead capitals which must be developed to a critical minimum level in order to facilitate investments in the other sectors. From the allocative point of view transport contributes to the infrastructure of the economy, while from the distributional point of view it contributes to providing consumers with necessities of life. There is a pressing need to rebuild the infrastructure of the country as a whole, but rebuilding transport infrastructure should drive this effort so as to provide the basis for addressing the distributional aspects of transport in the context of economic development, especially at this time when the entire national transport system is in the process of transformation, following global trends.

The key components of transport in focus are roads and road transport operators, railway and rail transport operations, airports and airlines, ports and shipping companies, inland waterways, and urban public transport.

We can associate some public institutions with the provision and operation of services in these sectors, such as, for example, the Federal Ministry of Works, the Nigerian Railway Corporation, the Federal Airports Authority and the Nigerian Ports Authority. It is not so much the ownership and control of these modes that are in question as far as transport reforms are concerned, but the nature of competition needed to bring about both allocative and distributional efficiency in the transport sector.

Much of the corporations that control the transport modes listed were considered to be natural monopolies with a sub-additive cost function, and the ability to operate cheaper than when there are many firms. The realization that the economies of scale or scope attributed to these public utilities can be transformed by unbundling the monopolies, and by separating the network from the users of the network, has considerably improved our understanding of the transport market, and the extent of restructuring that is possible, in terms of institutional framework and economic regulation.

National transport policy

The NEEDS framework constitutes a transport development strategy that is private-sector-driven, providing an environment capable of addressing the issues of wealth creation, employment generation and poverty reduction. This overarching strategy formed the basis of the fundamental objective of the country's National Transport Policy which is "to develop an adequate, safe, environmentally sound and efficient transport system in the context of a progressive and competitive market economy" (The Draft National Transport Document, 2010).

According to the national transport policy document, the transport sector would take advantage of the private sector initiative to do the following:

1. Improve efficiency of operatives and management of transport parastatals.
2. Achieve the desired reduction in the cost of providing transport services.
3. Facilitate further development in the nation's transport infrastructure.
4. Eliminate congestion both in the intercity and intra-city traffic flows.
5. Encourage the emergence of Nigeria as a transport hub for West and Central Africa Sub-region.

The National Transport Policy was an attempt to document a transport policy of government in one publication which contains policy statements, objectives and possible implementation strategies. The existing transport policy document was written in 1993; it has been revised twice since then, and the current version is awaiting legislation. The policy covers all modes, but it is not clear whether it should supersede all other existing transport related policy statements, for example, the ones on aviation, and on a separate shipping policy associated with the National Maritime Authority and Safety Agency (NIMASA).

However, significant progress has been made in the transport reform

efforts of the National Council on Privatization and the Bureau of Public Enterprises, based on the national transport policy. The most outstanding outcome of the reform which was the creation of the single Ministry of Transportation from the merger of the ministries of transport, aviation and works, was, unfortunately, overturned in 2007, resulting in a major upset of the transport reform effort. The reform process continues in other aspects, however slowly. The concessioning of the ports is practically completed and much progress is awaited in the process of airport concessioning. The reforms in the road sector and the railway sector are currently being addressed as are the problems of institutions, legal frameworks, and capacity building in the transport sector.

Existing transport situation and challenges

Road transport

Road transport is the dominant mode of transportation in Nigeria. It also presents the most complex situation in that the body that is responsible for the provision of the supporting infrastructure – the roads/highways- is not responsible for road transport operations, or the regulation of road transport. We should therefore distinguish between the road network and transport operators who use the network. Road transport operation is largely in the private sector. Its growth has, however, been encouraged through what is relatively a massive investment program on roads compared to investment in railways and inland waterways. It can therefore be argued that the road sector has taken advantage of the government's relative neglect of the other modes of transport to gain a competitive edge in the market.

As a result of the predominance of road transport, Nigeria's transport

system is clearly imbalanced. Over 90 per cent of internal goods and passengers are moved by road. Current transport operations are characterized by large-scale movements of goods and passengers that could have been moved more cost-effectively by other modes, such as railways and inland waterways. The predominance of truck transportation accounts for the excessive damage of the road infrastructure and the attendant cost imposition on the economy, estimated recently in the order of 21 billion Naira or USD 156 million at 2008 prices, by BPE Report on Axle Load Study of Nigeria (BPE, 2008).

Some transport corridors are very heavily travelled, showing patterns of linkages that are strategic to planning and investments within the sector. Such corridors include:

1. Lagos – Ibadan/Lagos-Shagamu
2. Lagos - Ibadan-Kaduna-Kano
3. Port Harcourt – Aba-Abuja-Kaduna-Kano
4. Lagos-Shagamu-Benin city
5. Lagos – Onitsha
6. Port Harcourt – Aba-Enugu
7. Kano – Maiduguri – Ngala.

According to Botha and Filani (2005), one of the major problems associated with the overreliance on road transport in Nigeria is illustrated by the dominant role played by the Lagos ports in Nigeria’s foreign trade. Most of Nigeria’s traffic still originates in Lagos as Lagos accounts for almost 90 per cent of containerized cargo through put (441,040

TEU). Also about 60 per cent of general dry and liquid cargoes are handled in Lagos. This accounts for the current congestion costs which are a significant burden on the economy of the nation. Average port calls are still longer for Lagos compared to other West African ports. The response of shipping lines is to impose steep congestion charges on all cargoes destined for Lagos (about \$660/TEU at 2005 prices). Additional charges are imposed on cargoes destined for Apapa (about \$ 108 at 2005 prices); with the result that port charges are over 35 per cent higher in the Lagos port complex than those of other West African states.

Other problems associated with the over-concentration on road transport include:

1. Misallocation of bulk traffic which could have been carried by rail and inland waterways.
2. Low safety levels and poor service quality provision.
3. Lack of regulation of the industry
4. A proliferation of enforcement agencies.

In particular, the lack of axle load regulation seriously affects the ability of the railways to compete with road transport. It also contributes to road pavement damage in the country. Indeed, the BPE Axle Load Study showed that 51.9% of the vehicles studied were overloaded and the average percentage overload per axle was 48.8 for the 5,563 km of the Federal Roads included in the study (Table 1).

Table 1: Summary of results of independent axle load survey

Heavy Vehicle class	% vehicles O/L	Average% O/L per axle
2 Axle	30.7	36.1
3 Axle	61.7	57.4
4 Axle	58.9	51.1
5 Axle	53.6	46.8
6 & more Axle	46.7	35.4
Totals	51.9	48.8

Source: BPE Axle load study, 2008

In view of the cost to the economy due to truck transportation and excessive axle loads, efforts must be made to actualize the road sector reforms, which will regulate the sector, revitalize rail links, and improve rail performance and logistics in the transport sector.

Railways

The current imbalance in modal share between rail and road transportation emerged after the 1960s. Up until then, the railway carried over 60% of the freight tonnage compared to its current share of

less than 5%. The length of the network is 3,505km running from North-South. The basic characteristic is narrow gauge (1.067m) and single track. In the last twenty years until the recent initiatives for which data are not yet confirmed, the highest number of passengers carried was 15.5million in 1984 and the highest volume of freight was 2.4 million tonnes in 1977. By 2000/2001, traffic had fallen to 2 million passengers and less than 300,000 tonnes of freight.

Table 2: Table of density of country railway networks (2003)

Data	South Africa	China	U.S.A	Canada	Russia	India	Germany	Japan Korea	Korea	Nigeria
Population (10000 person)	2100	125146	28532	3108	14475	103236	8233	12703	4734	14000
Area (10000 km ²)	122	960	962.9	997.1	1707.5	328.7	35.7	37.7	9.9	92.38
Operating route of railway (km)	22477	77000	160000	39400	86075	62759	36652	20165	3123	3505
Km/10000 person	10.7	0.61	5.6	12.7	5.9	0.6	4.5	1.6	0.7	0.25
Density (km/10000 km ²)	184.2	80.2	166.2	39.5	50.4	190.9	1026.7	534.9	315.5	37.94
GDP (US\$ billions)		1,200	7,576	585	300	500	2,353	4,600	400	212

Source: Cited in a Draft Report by the Technical Committee on Transport for VISION 2020.

The deterioration in the railways has been partly a result of insufficient budget provision by the Federal Government coupled with poor management by the monopoly operator, namely, the Nigerian Railway Corporation. In terms of infrastructure, locomotives and rolling stock are in very poor condition. In 2004, for example, 57.5 % of the wagon available were defective and could not be used, leaving only 36.6% in good working condition. The conditions of coaching stock and locomotive were also very poor resulting in reduced number of reliable service provided because of locomotive failures. In addition to lack of funding, uncoordinated purchases of equipment from different suppliers, and inconsistencies in human capacity development and use of management consultants, made interchange of parts impossible.

Yet the future of rail transportation in Nigeria is potentially bright. Nigeria is a large country and railway transport operation has a potentially good market in terms of both passenger and freight. The Nigerian railway network is the most appropriate mode of transport for the haulage of bulk load over long distances. It is also suitable for transporting goods to and from ports in response to the problems earlier discussed concerning road transport and ports in the Lagos port complex. There is under-investment in the rail sector. This is clearly illustrated when compared to the density of rail systems of other countries (Table 2).

A standard gauge line is being built to supply the Ajaokuta steel company in Ajaokuta. The section between Itakpe and Ajaokuta has been completed and serves the purpose of supplying Ajaokuta with iron ore while the Delta Steel Company in Warri will be supplied with iron ore super concentrate when the Ajaokuta – Warri

line is completed. Various bulk goods will be traded between the two companies at Ajaokuta and Warri.

The Nigerian Railway Corporation has been unable to maintain the existing track, locomotives and rolling stock, and the permanent way is old and worn-out in many parts. Attempts to revive the railways as a monopoly in the last two decades have failed, thereby emphasizing the need for reforms in the rail sector following global best practices.

Inland waterways

In the past, inland waterways were used for the movement of both passenger and freight traffic, although its total tonnage had been modest when compared to road and rail.

Filani (2006) reported that a study on the Master Plan for Integrated Transportation Infrastructure (MITI) in Nigeria estimated that in 1960 to 2002, river barges transported between 100,000 to 200,000 tonnes of cargo annually. In the 1990's, up to 125,000 tonnes of construction materials were carried annually between 100,000 to 200,000 tonnes of cargo annually. In the 1990's up to 125,000 tonnes of construction material were carried annually between Warri and Ajaokuta. Although no reliable statistics are available, MITI estimates show that up to 100,000 tonnes of cargo are still being transported along the Bight of Benin where inland waterways are the only available mode of transportation. This represents less than 1.0 per cent of the total cargo throughout Nigeria's port system.

In terms of passengers, inland waterways have mainly offered low cost passenger ferry services at low key crossings in about 26 locations nationwide. However, statistics of passengers carried are available for only 2 or 3 locations. These indicate that 146,000 passengers were conveyed between Calabar and Oron and

50,000 between Lokoja and Shintaku in 2001.

Air transport

By international standards, the size of Nigeria's aviation sector is modest. At present there are 19 airports under the Federal Airports Authority of Nigeria (FAAN), but approximately 78 airfields exist in Nigeria out of which 30 are privately owned and operated. Four of these airports namely, Lagos, Abuja, Kano and Port Harcourt are of international standards and serve intercontinental, international and domestic destinations. Taken together, Lagos, Abuja and Kano account for between 77 – 90 per cent of passenger movements and 64 – 89 per cent of aircraft movements in Nigeria, while Lagos alone accounts for slightly over half of the international and domestic passengers carried. From an intermodal perspective, the major airports are well-integrated with road infrastructure, and all access roads to airport have federal status. Land transport connections are, however, poor. Trips to airports are by cars, taxis or hotel shuttle transport. There is no access to the airport by the conventional mode of public transport, namely, bus or rail.

The air transport sector is largely deregulated with domestic airlines competing in the market, but it is not clear how much economic regulation of the sector is provided by the National Civil Aviation Authority whose main focus appears to be primarily on aviation safety. The reform in the sector should include as well the unbundling of the Federal Airport Authority of Nigeria to reflect the countervailing structure needed to guarantee autonomy or financial independence and to promote competition and fair trading among domestic airports.

Water transport

The main ports in Nigeria are Lagos, Port Harcourt, Warri and Calabar. In the mid 1970s these ports were overstretched as a result of oil boom and sharp increase in imports, resulting in ship handling and demurrage. Government had made a massive investment that increased port capacity by 300% between 1975 and 1980. At present, the Nigerian Ports Authority (NPA) has 13 major ports under eight port managements, 11 oil terminals and 128 private jetties within the port system. There are 102 hard quay berths, 62 buoys and over 650 different cargo types of handling plants and equipment. Put together, the port facilities have a total cargo handling capacity of over 35 million tonnes.

The ports mainly handle imports, ranging between 31.6% and 6.7% for general cargo, and 53.5% and 44.5% for bulk cargo, and 23.6% and 22.6% for containerized traffic. Overall cargo throughput increased from 20 million tonnes in 1998 to 30million tonnes in 2000.

The government has practically completed a program of concessioning the operation of the ports along with reforms in structure, institutional arrangements and operational modalities. The Nigerian Ports Authority has become a landlord of the port system and BOT contracts have been granted for port improvements. Six inland container depots are also being constructed as BOOT projects. These inland ports are:

- Isiala NGWA
- Bauchi
- Jos
- Ibadan
- Maiduguri

Urban transport

Urban transportation in Nigeria is largely an unregulated market and small scaled. The technology used is of a combination of para-transit modes, consisting of shared taxis, mini-buses, motor-cycles and converted motor-cycles, locally known as **keke napep**. Only in the cities of Lagos and Abuja are conventional buses in use similar to what obtains in most cities worldwide; but even in both cities the use of para-transit modes of transport is clearly dominant. For this reason, Nigeria remains the only country in the world where densely populated cities with over 6 million people do not have an organized urban transport system based on a combination of conventional buses and rail. The Federal Government had made an attempt to establish a technology of urban transportation based on bus transit through the failed urban Mass Transit Program of 1988 -94.

In view of government efforts to reform the transport sector, urban transportation in Nigeria should be modernized in keeping with best global practice, which is based on the use of conventional buses with the introduction, as well, of urban rail services in the cities of Abuja, Lagos, Ibadan and Kano. The following strategies will be useful to adopt for implementing a modern urban transport system in Nigeria:

- An Initiative of government to encourage corporatization of urban bus services in Nigeria, that is, a scheme for persuading/directing bus operators to form viable bus companies for the purpose of providing urban transport service based on conventional buses.
- Establishing Urban Mass Transit Agencies (UMTA) in Each State of the Federation as proposed in the Vision 2020 Document.
- Legislation on UMTA to give it effect.
- Establishing a continuing education program on the operation of Urban Bus Transit for service providers.

A government program to encourage effective UMTA in Nigeria, for example (1) government to subsidize bus service providers (2) government to act as guarantor when bus operators obtain approved loans and (3) the use of Public-Private sector partnership arrangements.

Institutional reforms

Much of the reforms in the sector have been pursued through the efforts of the National Council on Privatization and the Bureau of Public Enterprises. Expectedly, the program is sometimes stalled by politics until it is again invigorated. For now, many of the institutional reforms that could bring about significant changes in responsibilities across the sector, in order to make it more modern, integrated and efficient, have already been planned. In many cases the enabling legislation has been drafted, but has yet to be presented to the National Assembly and enacted. The creation of the *National Transport Commission* as economic regulator in the transport sector and the creation of the *Federal Roads Authority* are very crucial reforms which will be critical in the implementation of the improvements needed to achieve the transport component of Vision 2020. It is important to ensure that the new institutions have the skills and resources to manage the planning, financing, regulation and operation of services across the sectors

Objectives of reforms

The reforms in the transport sector are intended to achieve the following objectives:

1. Improve service delivery in the sector
2. Create institutional structures
3. As far as possible, separate functions of policy, management, operations, regulations and implementation of works.
4. Involve private sector in financing and management of the sector.

5. Separate infrastructure development and management from operation.

The following reforms have been concluded:

- (a) The Nigerian Ports Authority becoming a landlord type authority instead of an operator.
- (b) 26 port terminals concessioned to private operators.

It seems clear therefore that the success so far achieved has been limited to the port sector. The following sectors are in the reform programs of the Bureau of Public Enterprise (BPE) acting for government:

- Road Sector
- Road transport sector
- Rail sector
- Inland water sector

In order to conclude the most essential aspects of the reforms, the following bills, already prepared by the Bureau of Public Enterprises, need to be legislated upon and their import implemented:

1. National Transport Commission Bill
2. The Railway Bill
3. The Inland waterway Bill
4. The Roads Authority Bill
5. The Roads Fund Bill
6. The Ports and Harbor Bill

Policies, strategies and investments

The most important features of the national transport policy which will ensure an integrated transportation system in Nigeria require that (See Ogwude, 2008):

1. The transport sector should provide a seamless transport service that is capable of providing total mobility of people and goods in an economic manner.
2. The transport sector should provide a service that is safe and secure and free

from fatalities and injuries.

3. The transport sector shall be conducive to private sector investments and driven by private sector participation.
4. The transport sector should be organized around strong institutions in keeping with international best practice.
5. The transport sector should be professionalized through a coordinated program of effective capacity building.
6. The transport sector should be innovative and as much as possible pursue an increasing measure of self reliance in the area of transport technology peculiar to our needs.

A key element in the above policy thrust is that it is functional and applies to all modes, according to the abstract mode concept, whereby focus is on the characteristics of transport service provided rather than the transport mode itself. This ideal is desirable in order to re-build the transport infrastructure base and to supply the best attributes of service delivery in the transport sector. That is, service delivery in the sector should be at its optimum when the services of the various transport modes overlap. The strategy of transport development envisaged for the country should approximate this ideal in providing total mobility to everyone and for all goods, all the time.

To conclude this discourse, the following programs are recommended for implementation in the context of institutional reforms and also towards the efforts to improve infrastructural development in the transport sector.

Reforms

As already mentioned, a major feature of the ongoing reform program in the transport sector is the establishment of institutions which will facilitate the implementation of transport policies as well as provide the legal and

regulatory framework for private sector participation in the sector. The role of the private sector in partnership with the public sector is critical for re-building infrastructure in the country, both in terms of improved competition and efficiency and in injection of funds to the system.

Capacity building in the transport sector

Transportation is vital to the growth of the economy. As the economy grows so does the need increase for the transport infrastructure to sustain it. Given the reforms in the sector, the range of institutions in the sector, and the business opportunities that will become available due to private sector participation, there is a great need to professionalize the sector and to initiate a capacity building program to provide the manpower needed in the sector. To address this need, the government should do the following:

1. Conduct a manpower survey of the transport sector to determine manpower gaps as well as training needs.
2. Encourage the establishment of transport engineering and technology programs; naval architecture/marine engineering and railway engineering programs in a selection of Nigerian universities.
3. Establish institutes/centers of transport studies in each of the six zones of the country. They should have the capacities to participate in the research programs of the Federal Ministry of Transport through the coordinated research activities of an invigorated Nigerian Institute of Transport Technology.
4. Encourage the establishment of aeronautical engineering studies in two Nigerian universities where there are strong traditions of excellence in associated fields.

Transport technology programme

Government should initiate a program of indigenous transport technology towards transport infrastructural needs. Without participation in transport technology, it will be difficult to realize fully the objectives of a modern transport industry.

Urban transport investments

Traditionally, urban transportation in Nigeria has been in private hands, with service provision by a system of para-transit modes. In 1988, Nigeria intended to initiate an organized urban public transportation system based on conventional buses. There is yet another opportunity to kick start an urban transportation program with business orientation. For this purpose, the following strategies should be adopted:

1. Use of a combination of conventional bus and light rail transportation in the four major cities of Abuja, Lagos, Kano and Ibadan.
2. Use of conventional bus transportation in all state capital cities
3. Encourage bus and rail service providers to form companies so as to limit the number of operators in the system.
4. Create Urban Mass Transit Agencies in each State.

Rail transport investments

The following strategies should be adopted:

1. Conclude reforms in the railway sector which include deregulation and introduction of private sector participation
2. Conclude rehabilitation and modernization of the rail network
3. Enlarge the rail network to cover the major industrial areas of Nigeria and take advantage of rail freight transportation as an alternative to road transportation
4. Extend the rail network to link the East and the West and to link up the iron and steel industrial areas of Ajaokuta,

Itakpe, Warri and Osogbo.

5. Extend the rail network to link up with the airports and seaports in the country
6. Commission a major study of the economics of rail network expansion and commence the exploration of the opportunity of rail network expansion to other West African countries including those that are land locked.
7. Encourage the establishment of railway companies and market to them opportunities in rail transportation as a business. Small and large railway companies should be defined on the basis of capitalization and /or expected gross annual revenue, and on the basis of market segments or regions covered.
8. Railway companies to have rail networks concessioned to them and required to maintain the rail lines , provide locomotives and rolling stock to offer freight as well as passenger services.

Road transport investments

There are two concerns in this sector, namely the aspect of road infrastructure and the road transport operations aspect. The following strategies should be adopted:

1. Conclude reforms in the sector, incorporating deregulation and introduction of private sector participation. Establish the Federal Roads Authority, the Roads Fund and a Road Transport Safety Authority, which will be responsible for the technical and safety regulation of road transport operations in the country.
2. Regulate road transport operations by setting operational and safety standards through the National Road Transport Safety Authority.
3. Conclude rehabilitation of existing federal road network
4. Introduce the principle of service for

fee on federal roads.

5. Introduce concessionaires and concession sections of federal highways for maintenance and running as a business venture.
6. Encourage BOT arrangements for roads and bridges
7. .

Inland waterways investments

A major objective of the reform program in the sector is to cede the operations, management and investment to the private sector. Accordingly, the following strategies should be adopted:

1. Conclude the deregulation of the inland waterways sector by the enactment of a new legal framework, making the National Inland Waterways Authority a landlord authority as in the seaport model. Encourage private sector participation.
2. Commission a study to confirm the cost of extending the network of inland waterways transportation along riverbanks between (I) Baro and Warri/Port Harcourt and (ii) Lokoja and Markurdi. The study would also advise on a marketing strategy to encourage private investors to patronize the sector.
3. Concession jetties located at Lagos, Port Harcourt, Onitsha and Warri, and, subsequently, concession as well, all the river ports to private investors as investments in the sector begin to grow.
4. Encourage the establishment of inland waterways companies to participate in a specialized shipping venture and to combine their operations with coastal shipping within West Africa.
5. Concession a shipping company to run coastal services between Port Harcourt, Warri, and Lagos as practiced previously in Nigeria, and between

Nigeria and Sierra Leone.

Airports and seaport investments

The most viable option for re-building and maintenance of ports infrastructure in Nigeria is through private sector participation, including concessioning, BOT and so on. Accordingly,

1. 26 seaport terminals have been concessioned to private investors who have commenced operations
2. West African Container Terminal (WACT), a consortium that includes Maersk Lones, has developed a container terminal at Onne through BOT and Grimade Group has developed a modern RORO port in Nigeria through BOT.
3. With a national transport policy in place, a landlord port model has been introduced. The draft bills for Ports and Harbour Authority and for an independent economic regulator are in place. The legislation of these institutions should be completed so as to formally conclude the deregulation of the seaport sector.
4. The concessioning of Airports to private investors should be completed, especially Lagos, Port Harcourt and Kano, which are the most commercially viable. The rest could be concessioned through some bundling arrangements, and others returned to the states that originally built them.
5. Efforts should be made to market the opportunity available to investors in the airport sector in order to attract investments on the less viable airports.

Conclusion

The major argument of this paper has focused on the need to rebuild the transport infrastructure of Nigeria in order to expand and modernize it so as to meet the needs of

the economy, the Gross Domestic Product of which is envisaged to grow between 10-13 percent up to the year 2020, implying a corresponding growth rate of transport demand of about 12-16 percent within the same period. Transport infrastructure in Nigeria is currently inadequate and a lot of funding is required to increase its capacity to cope with an enormous transport demand made possible by an expanding economy. The cost of rebuilding the roads is estimated at USD 14 billion within the next five years, while the rehabilitation and upgrading of the railway tracks would cost about USD 14 billion, at 2007 prices, according to government estimates. Whilst government would provide the funds to bridge the existing transport infrastructure gap in the country, much of the funding needed to drive the development of the transport sector in the years ahead is expected from the private sector under the public-private partnership program. The task of government is therefore to encourage the private sector to meet this expectation by completing the key reforms described in this paper and by growing the financial sector, including the capital market.

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