A. Sector Performance, Problems, and Opportunities

1. **Key sector challenges.** The Philippine’s archipelagic setting and increasingly urban population make the accessibility of and mobility within the islands the primary goals of transport infrastructure; that infrastructure is critical for strengthening the country’s investment climate and economic growth. The islands need to be linked by a seamless transport infrastructure network that would enable cost-efficient movement of goods and services within the country to achieve inclusive growth. Moreover, the levels of service of public transport systems need to be immediately addressed to improve productivity and meet the demands of an urbanized economy. In the Global Competitiveness Report 2011–2012, out of 142 countries the Philippines was ranked 100th for quality of roads, 101st for railroads, 123rd for port infrastructure, and 115th for airports.\(^2\) The main challenges include (i) poor conditions of the road network; (ii) weak intermodal integration; (iii) lack of quality public transport systems; (iv) weak sector governance, (v) uneven public spending and private investment; (vi) low planning and implementation capacity; and (vii) competing local political interests. Improving sustainable financing, supporting infrastructure development and maintenance activities, contributing to governance reforms (such as procurement, financial management, and quality control), and supporting private sector participation remain the keys to strengthening the transport sector.

2. **Road network quality.** Roads are used to transport most persons and goods, with a 98% share of passenger and 58% share of cargo traffic. At the start of 2009, the country’s road system was 205,778 kilometers (km) in length. National roads accounted for 14.4% of the road system; 75.1% of national roads were paved with asphalt and/or concrete, compared with only 22% of local roads. Only 56.2% of national roads were in good or fair condition, however. Investment in road transport has remained at about 0.6% of gross domestic product, much lower than in other countries in the Southeast Asia region. The low level of investment has resulted in a low road density (22.4 km per 10,000 persons), one of the worst in the region, as well as high vehicle operating costs. Furthermore, according to the Department of Health, road accidents are now the fourth leading cause of death in the Philippines. The national cost of traffic accidents was estimated at $1.9 billion, which is roughly 2.8% of the country’s gross domestic product. There are also inadequate planning systems and tools to link roads to other modes of transport. As a result, the advantages of using combinations of modes to produce optimum transport schemes have not been realized fully. More investment could be directed to improving roads to existing ports and airports or roll-on/roll-off (RORO) nautical transport facilities. Use of the road fund, which accumulated to around P56.5 billion, has not been efficient, as only 38% went to prioritized road projects. Other lower-priority activities (such as roadside cleaning and beautification) took up about 25%–35% of routine maintenance funds. Lax enforcement of truck overloading regulations has also contributed to the poor road conditions.

3. **Level of transportation service.** While transport infrastructure has been developed and spread out across the country (more than 200,000 km of roads, 1,300 public and private ports, and 150 public and private airports), the quality of the infrastructure has not been sustained due to lack of sustainable financing and insufficient expenditures. Moreover, the level of service

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provided by various modes of public transport is considered poor in terms of travel time, safety, convenience, and ease of transfers. This has reinforced the perception that the country is not a good investment location due to loss of economic opportunities, increased pollution, and decreased productivity resulting from poor transport infrastructure. However, efforts to improve this are underway. In recent years there has been significant development of RORO ferry services which are aimed at providing an alternative to traditional long-distance inter-island shipping services, as well as significant liberalization of air transport.

4. **Urban transport.** Urban transport in the Philippines is characterized by insufficient and ineffective transport planning and traffic management, which is evident in most Philippine towns and cities. Traffic control devices, such as traffic signs, signals, and road markings, often do not conform to official standards or meet needs. Road networks are poor and inadequate as a result of underinvestment and lack of attention to proper road maintenance. Road traffic accidents are increasing and are a leading cause of death. In large urban areas, air pollution has become a serious concern. Nationwide, urban public transport is dominated by jeepneys, utility vehicles, and tricycles, providing door-to-door service. They contribute to severe traffic congestion, particularly around transit terminals and public markets, due to ineffective franchising and enforcement practices. Buses are prevalent in Manila but not in smaller urban centers. Urban light rail transit is confined to Metro Manila and is heavily subsidized. New public transport terminals that integrate different modes of public transport are in great demand and could help reduce the high logistic costs, and thereby improve the economic productivity and competitiveness of urban areas. With rapid urbanization (by 2030, 77% of the population is expected to be living in urban areas), urban transport infrastructure will be put under tremendous pressure, with further deterioration of urban mobility.

5. **Governance.** The capacity of transport agencies to undertake procurement, financial management, and implement quality control continues to be weak. For example, in 2007, the Department of Public Works and Highways (DPWH) disbursed just 66% of its budget. Technical capacity in planning, intermodal integration, project appraisal, and monitoring is also insufficient. DPWH has not yet been able to take full advantage of the information technology (IT)-enabled planning and programming systems developed with funding from the World Bank and the Asian Development Bank (ADB). Also, the technical and financial capacity of local government units to manage local roads has generally been inadequate. Furthermore, transport projects included in the national budget need to be validated in terms of their contribution to the country's development strategy. When the identification of these projects is politicized and nontransparent, the integrity of the procurement, design, and implementation processes suffers. In addition, a road functional classification system has not been fully implemented.

6. **Role of the private sector.** While the Build–Operate–Transfer Law has been in place since 1990, only a few projects have been pursued under an open, competitive bidding process. The more common approach has been unsolicited proposals or joint ventures by government corporations with mandates for infrastructure development, which has resulted largely from the failure to invest adequately in project preparation. The key prerequisites for an open, competitive bidding process are (i) the selection of priority projects; (ii) carrying out of feasibility studies; and (iii) preparation of bidding documents.

7. **Institutional coordination.** DPWH and the Department of Transportation and Communications are the principal agencies responsible for the delivery of infrastructure; other agencies involved in the sector include the Philippine Ports Authority, Civil Aviation Authority of the Philippines, Toll Regulatory Board, and Light Rail Transit Authority. Coordination is lacking, both among transport agencies and with economic sector agencies. The link between planning
for transport infrastructure and for potential growth sectors (such as manufacturing, tourism, and agriculture) is not based on an active consultative process. The link between DPWH and Department of Transportation and Communications agency plans and regional development plans is also generally weak. Proposed institutional reforms to separate regulatory powers and operations in the ports, airports, and rail subsectors have not progressed despite being recommended in past medium-term plans. A problem tree is provided on page 6 of this document.

B. **Government’s Sector Strategy**

8. **Philippine Development Plan (PDP).** The Government’s PDP, 2011-2016\(^3\) sets five objectives for infrastructure development, including the transport sector. These are (i) to optimize resources and investments; (ii) to attract investments to infrastructure; (iii) to foster transparency and accountability in infrastructure development; (iv) to adapt to climate change and to mitigate the impacts of natural disasters; and (v) to provide productive employment opportunities. To achieve “a safe, secure, efficient, viable, competitive, dependable, integrated, environmentally sustainable and people-oriented Philippine transportation system” the PDP sets out a strategy containing the following four elements: development of an integrated and coordinated transport network, rationalize the functions of transport agencies, ensure transport safety and security, and promote development of impoverished and conflict-affected areas.

9. **Draft national transport plan.** The draft national transport plan envisions “a safe, efficient, viable, dependable, integrated, environmentally sustainable, and people-oriented transportation system.”\(^4\) Seven key policy areas are addressed: (i) resource generation and allocation; (ii) criteria for the preparation of agency plans, programs, and projects; (iii) cost recovery and subsidies; (iv) regulation of passenger transport services; (v) urban transport; (vi) transport logistics; and (vii) governance. A strategic national transport network that supports major economic activities in the country is also described in the plan, and includes (i) the national road network; (ii) the national port network; (iii) the national airport network; (iv) the national railway network; (v) the road–RORO terminal system; and (vi) urban transport networks in the metropolitan areas. Specifically, the government aims to (i) enhance rehabilitation, reconstruction, preventive maintenance, and upgrading of transportation networks, including road, air, water, and rail transport; (ii) prioritize assets to maintain existing infrastructure instead of only new construction; (iii) focus on and prioritize strategic projects with larger national impacts, instead of smaller projects with little impact; (iv) increase the use of IT-aided systems and tools in planning and implementation of projects; (v) strengthen the capacity of transport agencies, particularly in procurement, project management, financial management, quality control, accountability, and transparency systems; and (vi) fully implement the road classification system and support anti-truck-overloading enforcement.

C. **ADB Sector Experience and Assistance Program**

10. **ADB strategy.** ADB-financed projects in the Philippines have focused on maintaining and improving the existing road network. As part of ADB’s strategy to promote pro-poor economic growth, as well as support the government’s priority investment program, ADB’s future operations will support the improvement of national highways, sector governance, urban transport, and private sector infrastructure development. A sector results framework is provided on page 7 of this document.

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11. **Road Sector Institutional Development and Investment Project.** ADB is undertaking a major initiative to help the government address core issues facing the national road network through the Road Improvement and Institutional Development Project approved in December 2011. The project includes periodic maintenance of about 340 km of 9 national roads, improved governance and strengthened institutional capacity, and preparation of detailed engineering design of roads to be improved under future projects. Periodic maintenance will be carried out on roads located in three areas: the west coast of central Luzon, the southwestern Visayas, and the northern coast of Mindanao. Improved transport sector governance will be achieved through implementation of the comprehensive governance risk mitigation plan focusing on (i) corruption; (ii) public expenditure and financial management; and (iii) procurement. The institutional capacity development activities to be financed under the project are part of an effort by bilateral and multilateral development partners to improve the capacity of DPWH and the efficiency of the road system. Activities include (i) institutionalization of the road maintenance and management system; (ii) enhancement of the traffic accident recording and analysis system and improvement of the road safety audit system; (iii) development and installation of a program management information system for planning, design, implementation, and monitoring as well as for assessment of improved accessibility and service levels on the movement of goods and services; (iv) strengthening environmental and social assessment capability and mainstreaming gender in DPWH's infrastructure development; (v) improvement of communication between the DPWH central office and 47 district engineering offices; (vi) improvement of IT capacity through procurement of computer equipment and software for the 47 district offices; (vii) comprehensive human resource development; and (viii) support for infrastructure development and DPWH's quality assurance system.

12. **Strengthened road sector transparency and accountability.** ADB is supporting increased transparency and accountability of road subsector budgets and investments through a technical assistance (TA) operation. The TA will play a key role in mitigating corruption risks for planned ADB-financed road subsector activities and in strengthening governance and capacity to achieve improved transparency and accountability.

13. **Urban transport.** ADB has undertaken prefeasibility analysis under regional TA for a project to improve public transport services in Davao. Project preparatory TA is planned for 2015 to prepare and conduct the necessary due diligence for the Davao Public Transport Modernization Project, based on the outcomes of the prefeasibility analysis. The project is expected to comprise investment in the construction of a bus rapid transit system, as well as in capacity development for sustainable management of traffic in Davao which is included in the program for 2016.

14. **Private sector and regional operations.** Through its private sector operations, ADB will be responsive to the government’s transport sector priorities. Private sector operations will be

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6 The TA will (i) mitigate procurement risks for planned ADB-financed road subsector activities through support for a procurement advisory team; (ii) strengthen internal accountability mechanisms within DPWH by strengthening internal audit capacity; and (iii) strengthen the external accountability mechanisms and organizational and network capacity of key stakeholders (Commission on Audit and civil society organizations) through support for joint participatory audits and monitoring of public expenditures.

7 ADB. 2009. *Technical Assistance for Preparing the Implementation of Asian City Transport—Promoting Sustainable Urban Transport in Asia Project.* Manila. Outputs include a plan to rationalize bus operations and franchising arrangements, a program for fleet renewal and associated financing mechanisms, and a feasibility study of a mass transit system and public transport stations and terminals at key locations in the city.
directed toward supporting private sector projects for (i) the construction, expansion or modernization, and operation of toll roads; (ii) construction and operation of mass transport systems such as light and/or metro rail systems, bus rapid transit systems and nautical highway systems; (iii) modernization or expansion of transport fleets or rolling stock; and (iv) construction, expansion or modernization, and operation of ports (including airports). ADB will support regional integration through possible support for improvement of ports, particularly those handling RORO ferry operations, and roads providing access to ports of regional significance.
Problem Tree for the Transport Sector

Poverty and inequality

Reduced economic growth and poor investment climate

Reduced economic activity due to deaths and injuries

Restricted mobility of people

Inefficient movement of goods and services

Poor transport safety record

Inadequate transport infrastructure and poor quality transport services

Weak institutional capacity in development planning, and implementation

Weak governance in transport sector

Nontransparent identification of transport projects

Insufficient coordination among transport agencies

Weak procurement, financial management, and quality control

Excessive political influence on allocation of limited funds

Slow road network expansion and inadequate maintenance of existing road sector assets

Low expenditure levels of private and public funds

Diversion of maintenance funds to other uses

Inadequate enforcement of truck overloading regulations

Slow rate of road paving

Increased demand due to population and motorization growth

Uneven quality of port infrastructure and marine transport services

PPA regulation of private ports in competition with the operation of its own ports

High marine cargo-handling charges

Inadequate enforcement of truck overloading regulations

Inadequate intermodal connectivity

Growing capacity constraints on international air gateways

Increasing visitor and overseas worker arrivals by air

LGU = local government unit, PPA = Philippine Ports Authority.
<table>
<thead>
<tr>
<th>Country Sector Outcomes</th>
<th>Country Sector Outputs</th>
<th>ADB Sector Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improved accessibility of transport infrastructure and services</strong></td>
<td><strong>Population road density improves to 23.5 km per 10,000 persons by 2016 (2010 baseline: 22.4)</strong>*</td>
<td><strong>Road system maintained, roads improved or built</strong></td>
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<tr>
<td><strong>Increase in use of RORO network to 3.3 million passengers and 462,000 vehicles by 2016 in Western Nautical Highway (2008 baseline: 3 million passengers and 420,000 vehicles)</strong></td>
<td><strong>Nonroad systems maintained, improved or built</strong></td>
<td><strong>Paved national arterial and secondary road ratio increased to 1.0 in 2016 (2010 baseline: 0.81)</strong></td>
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<td><strong>Average road user cost reduced to P17/km in 2016 (2008 baseline: P21.17/km)</strong></td>
<td><strong>Increased institutional capacity to maintain and expand transportation systems</strong></td>
<td><strong>Percentage of roads in good and fair condition increased to 80% in 2016 (2008 baseline: 55%)</strong></td>
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<td><strong>Percentage of accidents in accident black spots reduced to 9% in 2016 (2008 baseline: 18%)</strong></td>
<td><strong>Paved national road density increased to 0.30 km/1,000 people in 2016 (2008 baseline: 0.25 km/1,000 people)</strong></td>
<td><strong>Number of ports accommodating RORO vessels increased to 70 (government) and 26 (private) by 2016 (2009 baseline: 65 [government] and 24 [private])</strong></td>
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<td><strong>Population road density improves to 23.5 km per 10,000 persons by 2016 (2010 baseline: 22.4)</strong></td>
<td><strong>DPWH budget disbursement increased to 90% in 2016 (2007 baseline: 66%)</strong></td>
<td><strong>Integrated Transport Terminal Project (2015 standby: $100 million)</strong></td>
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<td><strong>Population road density improves to 23.5 km per 10,000 persons by 2016 (2010 baseline: 22.4)</strong></td>
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<td><strong>PPTA for Second RIIDP (2013: $1.1 million) and Third RIIDP (2014: $0.8 million)</strong></td>
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<td><strong>PATA on Davao Sustainable Urban Transport Project (2012: $1 million)</strong></td>
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**ADB Sector Operations**

- **Planned key activity areas**
  - National roads maintenance and improvement (75% of funds)
  - Consultancy for project supervision and detailed design, asset preservation and road (12% of funds)
  - Institutional capacity building (11% of funds)
- **Pipeline projects**
  - Second Road Improvement and Institutional Development Project (RIIDP) (2015: $200 million)
  - Integrated Transport Terminal Project (2015 standby: $100 million)
- **Planned key activity areas**
  - Civil works for asset preservation and road improvement
  - Consulting services for project implementation and detailed design
- **Pipeline projects**
  - Periodic maintenance and improvement of about 1,200 km of national roads throughout the Philippines
  - Improved governance and strengthened institutional capacity in the transport sector
  - Preparation of detailed engineering design for about 1,480 km of national roads to be maintained or improved under future projects
  - 10 km of bus rapid transit system constructed
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<tr>
<th>Ongoing projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Improvement and Institutional Development Project (RIIDP), (2011: $62 million)</td>
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<tr>
<td>CDTA for Strengthening Transparency and Accountability in the Road Sector ($1.0 million)</td>
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<td>Mitigation of procurement risks for planned ADB-financed road subsector activities</td>
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<td>Improved internal accountability mechanisms within DPWH</td>
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<td>Strengthened external accountability mechanisms, and organizational and network capacity of key stakeholders</td>
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ADB = Asian Development Bank, CDTA = capacity development technical assistance, DPWH = Department of Public Works and Highways, km = kilometer, PATA = policy advisory technical assistance, PPTA = project preparatory technical assistance, RORO = roll-on/roll-off, RIIDP = Road Improvement and Institutional Development Project.