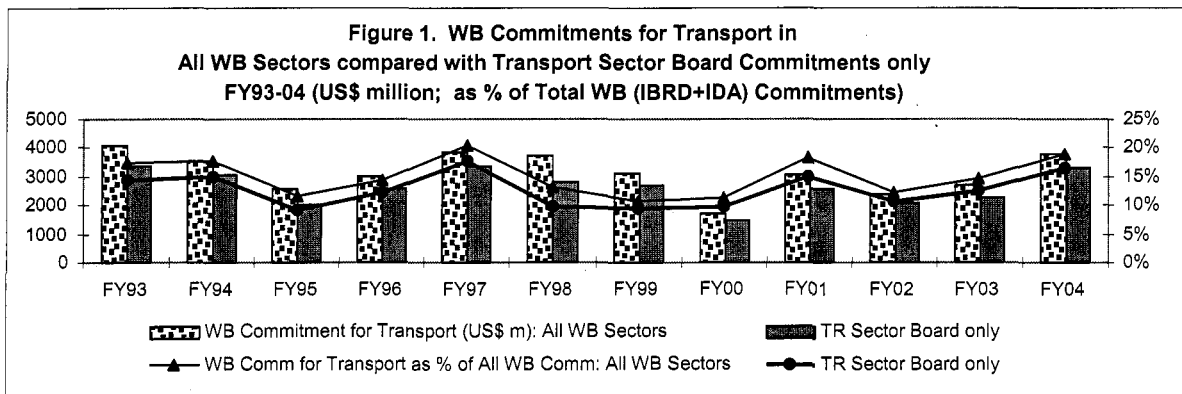


# Public and Private Financing of Transport: An OED Review of World Bank Assistance Approach Paper

## Background

1. Transport is crucial to providing poor people with the ability to participate more fully in development opportunities. Rural roads give people access to markets, jobs, schools and health facilities, while main highways, railways, ports and airports underpin economic development. Consequently, transport has been and continues to be a pivotal sector for World Bank lending. Transport lending by IBRD and IDA has fluctuated cyclically in the past decade, peaking in FY93, FY97-FY98 and again in FY04. At its highest volume, US\$4.0 billion in FY93, it constituted 18 percent of all Bank lending. At its lowest point, US\$1.7 billion in FY2000, it was only 11 percent of total Bank lending (Figure 1).



2. The sharp declines in lending from an annual average of US\$3.4 billion between FY93-99 to US\$2.5 billion between FY00-03 and concurrent declines in private investment were experienced in all the infrastructure sectors, and could potentially limit both economic growth and poverty reduction, as well as the attainment of the *Millennium Development Goals*.<sup>1</sup> The Bank reacted by developing an *Infrastructure Action Plan* in 2003<sup>2</sup> to revitalize its infrastructure business as well as to investigate the reasons for the significant decline in both public and private investment in infrastructure in general. In support of this initiative Bank transport lending increased to US\$3.8 billion or 19 percent of total Bank lending in FY04 and is poised to deliver a significant share of the additional lending expected under the Plan. This is therefore an opportune time to review Bank's assistance to the transport sector.

1. The Millennium Development Goals represent an expanded vision of development with essential objectives, including halving world poverty by 2015. They were adopted at the International Conference on Financing for Development, Monterrey, Mexico, March 2002.

2. Infrastructure Action Plan, July, 2003. Infrastructure Vice Presidency. World Bank. Washington DC.

## Evolution of Bank Policy and Strategy

3. The Bank from its inception has been supportive of the transport sector and from time to time issued important documents such as the Transport Sector Working Paper (1972), Road Deterioration in Developing Countries Policy Paper (1988), and the Urban Transport Sector Policy Paper (1986), updated in the Urban Transport Strategy document, Cities on the Move (2002). Since 1972 there has not been a single overarching policy or strategy of the transport sector as a whole, but *de facto* transport policy may be inferred from more generic documents such as the 1994 World Development Report, Infrastructure for Development, and the Poverty Reduction Strategy of 1999. Useful guidance is also available from documents approved by the Transport Sector Board in common usage by operational staff or publications disseminated internationally. These include the Sustainable Transport Development Practice Paper (1996), the Poverty and Transport Discussion Paper (1997) and the World Report on Road Traffic Injury Prevention (jointly with the World Health Organization, 2004).

4. The 1994 World Development Report<sup>3</sup> recommended that the Bank assist in expanding the role of competition and involvement of the private sector to increase efficiency in the provision and operation of infrastructure and services. The Sustainable Transport Paper<sup>4</sup> further elaborated this concept to examine specifically the potential for expanding competition and market mechanisms across the different transport modes. The paper advocated a holistic approach whereby economic and financial sustainability could be achieved if resources were used efficiently and assets properly maintained. Environmental and ecological sustainability meanwhile necessitated proper consideration of the external effects of transport, while social sustainability required that the benefits of improved transport reach all sections of the community.

5. The 1986 urban transport policy paper<sup>5</sup> emphasized *the importance of planning and managing infrastructure and traffic to secure economically efficient urban movement*. Since then, a broader perspective of urban transport policy has been developing and the strategy review, Cities on the Move<sup>6</sup>, stressed that *the livability of cities depends on their being economically competitive, financially sustainable, well-governed, and well-managed*. At the same time, there should also be *a focus on the poorest*, not only in terms of income, but also in terms of the broader dimensions of social exclusion,<sup>7</sup> such as inaccessibility to jobs, facilities, and amenities and the impact of HIV/AIDS.

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3. World Bank, 1994. *World Development Report*. Infrastructure for Development.

4. World Bank, 1996. *Sustainable Transport*. Development Practice Report.

5. World Bank, 1986. *Urban Transport: Sector Policy Paper*. World Bank Policy Paper.

6. World bank, 2002. *Cities on the Move*. A World bank Urban Transport Strategy Review.

7. For example: Baker J and Grosh M *Poverty Reduction Trough Geographic Targeting: How Well Does it Work?* World Bank LSMS, Working Paper 99, Washington DC.

## The Bank's Approach to Financing of Transport

6. The Bank serves its clients through lending assistance and advice in the provision of both transport infrastructure and services. In general, the provision of road infrastructure has predominated over other transport infrastructure in the Bank's lending program. Transport services have frequently been provided by the private sector, and here the Bank's role has been to assist client states in ensuring such services are provided within an appropriate policy and regulatory environment. However, for many projects private sector financing is inappropriate or there are insufficient willing investors. This means that the Bank's role can be crucial in assessing how best to bring together the relative strengths of the public and private sectors, especially in the poorer countries with limited institutional capacity.

7. During the early 1990s, there was worldwide support for a greater degree of privatization and commercialization. The Bank strengthened its assistance in this direction through supporting more transport rehabilitation projects, linked to technical assistance components aimed at institutional strengthening, policy assistance and regulatory reform. The Bank has encouraged, where appropriate, the establishment of autonomous road agencies and road funds, contract maintenance, the restructuring of railways and ports, and the commercial orientation of public passenger transport. In May, 2004 it approved operational guidelines on the public and private sector roles in the supply of transport and infrastructural services.<sup>8</sup> This provides a framework for Bank staff in identifying and assessing the different models for public and private roles in the transport sector. There is also a "toolkit" for private participation in port development<sup>9</sup> and some useful work on railway restructuring and privatization.<sup>10</sup> A key issue is the relative performance of transport projects falling under the direct responsibility of the transport sector in comparison to projects managed under other sectors such as urban or rural development.

### Objectives and Scope

8. Given the complexity, diversity and size of the transport sector two factors predominated in selecting an appropriate focus for this review. First, the Bank has declared its intent to encourage competition in those parts of the sector where a commercial market can operate; and second, the impact of such changes has to be measurable. Therefore this review will:

- Take stock of Bank *lessons of experience* with *public and private financing* for the supply of transport infrastructure and services in order to understand better what has been successful, what has not worked, and why; and,

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8. Amos, P, 2004. *Public and Private Sector Roles in the Supply of Transport Infrastructure and Services*. Operational Guidance for World Bank Staff. Transport Paper TP-1, World Bank, Washington DC.

9. *Port Reform Toolkit*, 2003. World Bank, Washington DC.

10. Kopicki R and Thompson L, 1997. *Best Methods of Railway Restructuring and Privatization*. Second edition. World Bank CFS Discussion Paper 11. Washington DC.

- Evaluate available evidence from Bank projects and other sources to show whether the assistance rendered in the transport sector has resulted in *sustainable physical projects* and led to *effective transport strategies and development outcomes* for the borrowers.

9. The review will fill a significant gap in OED's evaluations of the effectiveness of lending in infrastructure at a time of renewed Bank emphasis in the sector. It will complement reviews already completed in the water, energy, urban development, and telecommunications areas. The study will be cross-cutting and cover the full spectrum of transport modes in the urban, rural, and regional contexts for the period 1993-2004. Most of the Bank Group's assistance to the transport sector during this time has been through IBRD/IDA operations and has averaged US\$ 3.1 billion annually over this period.<sup>11</sup>

### **Main Evaluative Questions** (See also Annexes 1 and 2)

- How effectively has the Bank assisted member countries to formulate economic and financial strategies to meet their transport infrastructural and service needs and to what extent has it increased the usage of competitive markets where appropriate?
- Has the Bank's assistance in transport been aligned with its broad policy principles and strategy and is there also consistency with Country Assistance Strategy objectives?
- To what extent has the Bank been successful in promoting the establishment of transport organizations, systems and resources to enable member countries to sustain their physical infrastructure investments and service quality?

Some additional questions will include:

- To what degree has the Bank's transport assistance been consistent with Bank sector strategy and country priorities (*relevance*)?
- To what extent have the Bank's strategic transport sector goals been achieved (*efficacy*) and to what extent have the projects and strategies continued successfully after Bank intervention? Have achievements differed depending on whether assistance was provided under stand-alone transport projects versus transport components of non-transport projects?
- How *efficient* have the projects and sector support been, in terms, *inter alia*, of the adequacy of the return on investment (economic and financial), and the economic pricing of transportation?
- How *sustainable* have the strategies pursued been? This includes expected future funding streams, the adequacy of maintenance resources as well as the appropriateness of technical standards and organizational arrangements (taking into account the likely capacity and capability of available institutional support).
- What has been the *Bank's performance* in respect of the various transport-related initiatives and strategies to build institutional capacity?

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11. As the share of transport in IFC's portfolio is small (about four percent) – negligible for MIGA – the study will focus primarily on Bank assistance. However, inputs will be sought from both IFC and MIGA as needed.

- How effective has the Bank been as a *knowledge organization* internally and externally in disseminating its transport experiences and supporting capacity building?

## Methodology

10. **Portfolio Analysis and Review:** The portfolio analysis will be a quantitative analysis based on information from the World Bank database of Bank-financed transport projects supplemented by an analysis of trends in investment commitments by the private sector. Differences between modes and regions will be highlighted and, where possible, specific hypotheses will be tested. OED has recently evaluated the performance of the Bank's urban portfolio,<sup>12</sup> and the transport component of this will be valuable input into the transport review. In addition, three Lessons and Practices Notes covering railways,<sup>13</sup> ports,<sup>14</sup> and urban transport,<sup>15</sup> will be taken into account. Project Performance Assessment Reports (PPARs) and Country Assistance Evaluations (CAEs) will be additional key inputs.

11. **AAA Review and Borrower Survey:** Selected Bank analytical and advisory activities in transport will be evaluated for strategic relevance, quality and impact and surveyed through a series of structured interviews. The review will cover economic and sector work (ESW) and will include relevant outputs of the World Bank Institute. In addition, recent developments under the Infrastructure Action Plan, such as initiating standardized infrastructure assessments and standardized databases on infrastructure, will be assessed. The findings of QAG Quality assessments of ESW will also be reviewed. Additionally, a sample survey of Borrowers will be carried out.

12. **Literature Review and Thematic Background Paper:** This review will focus on documented examples of successes and failures with public and private financing of transport and the sustainability of the investment outcomes. The review will draw upon both Bank and non-Bank sources. Research and policy papers will be accessed where relevant, and both theoretical approaches to the relationship between public and private entities and the evidence from documented experiences of actual implementation, will be reviewed. A background paper will be prepared by an international expert covering the latest developments in transport financing and sustainability. It will cover both transport infrastructure and transport services and will take into account *inter alia* technical efficiency, allocation efficiency, and economic and financial performance.

13. **Country Case Studies:** The final selection of case studies will emerge primarily from the literature and portfolio reviews. Four to five countries will be chosen purposively to be representative of the various regions, income levels, and diversity of transport operations in the

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12. Gilbert R, 2004. *Improving the lives of the poor Through Investment in Cities ; an Update of the Performance of the World Bank's Urban Portfolio*. OED, World Bank. Washington DC.

13. Clare K & de Weille J, 1993. *Railway Projects*. OED, Lessons & Practices, No1. World Bank. Washington DC

14. Grosdidier de Matons J, 1996. *Ports*. OED, Lessons & Practices, No 9. World Bank. Washington DC.

15. Talvitie A and Reja B, 1997. *Urban Transport*. Lessons & Practices, No 11. World bank. Washington DC.

countries chosen.<sup>16</sup> PPARs and CAE sector background papers will also be used to extend and supplement the coverage of the case studies. Focus areas of investigation will include concessions, toll facilities, contract maintenance, road funds, conventional highway and road safety funding, urban passenger transport financing, the regulatory framework, and capacity, and organizational issues.

### **External Advisory Panel and Dissemination**

14. An external advisory panel will be established comprising at least three independent, internationally renowned experts in transportation. This panel will provide advice on both the findings and recommendations. The final report, including country case studies, will be posted on OED's website and disseminated widely to both internal and external audiences. Internal dissemination will be through the Transport Learning Week, presentations to the Transport and other interested Sector Boards as well as a general awareness campaign. A workshop with external participants will also be held in Washington, DC.

### **Resource Requirements, Budget and Timetable**

15. *Staffing:* The study will be undertaken by a core study team comprising a task manager and two research assistants. They will be supported by short-term consultants to prepare the background papers and case studies.

16. *Budget:* The total study budget is estimated at \$658,000 of which \$352,000 to be incurred through FY05, with the balance of \$306,000 in FY06. Partial funding from evaluation trust funds will be sought.

17. *Timetable:* The literature review, thematic background paper as well as the portfolio and AAA analyses will be completed by December, 2005, while the country case studies will be completed by February, 2006. The final report will be submitted to CODE in May, 2006.

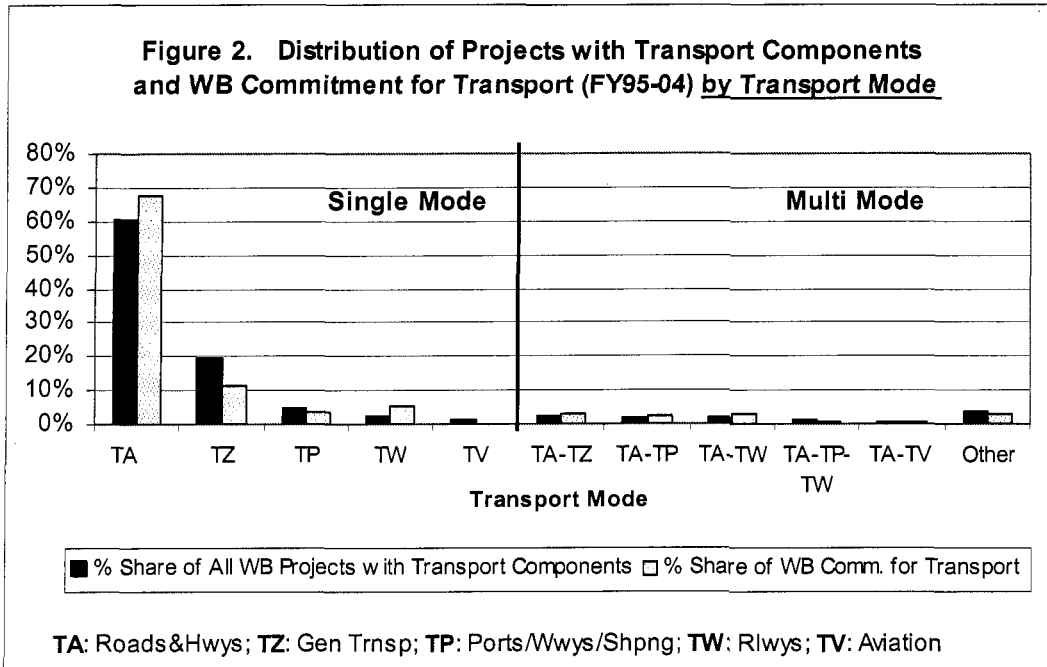
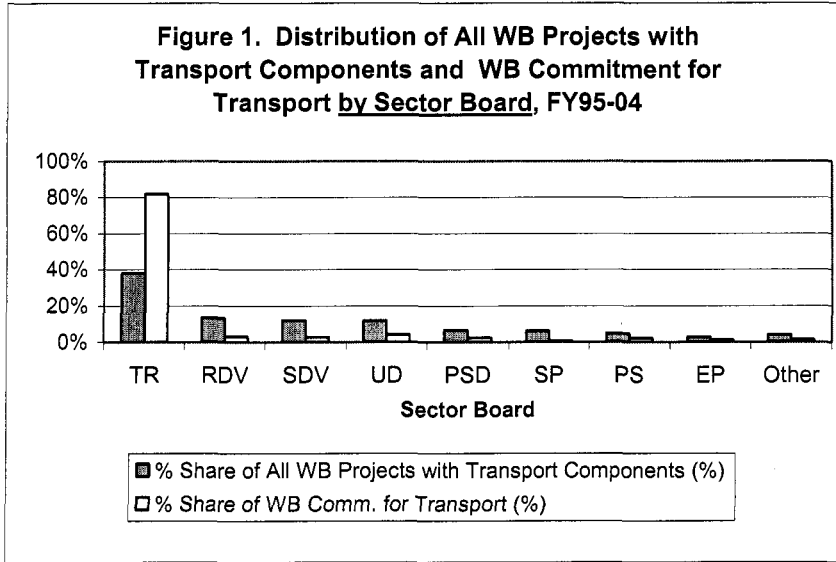
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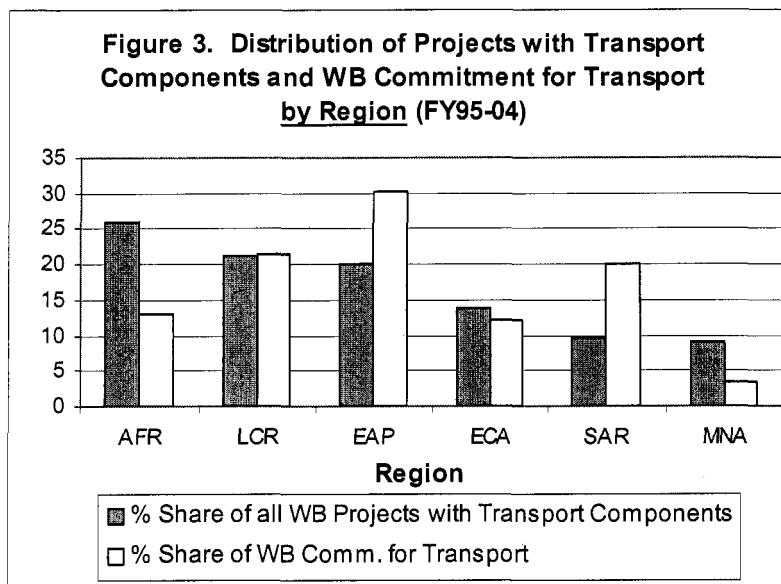
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16. Potential candidate countries include Brazil, Bulgaria, China, Colombia, Ethiopia, India, Indonesia, Laos, Lesotho, Mauritius, Mozambique, Peru, Romania, Russian Federation, Tanzania, Turkey, Uganda, Vietnam and Yemen.

# Annex 1. Figures and Tables

## DISTRIBUTION OF ALL WB PROJECTS WITH TRANSPORT COMPONENTS AND NET WB COMMITMENT FOR TRANSPORT (FY95-04)





**Table 1. Distribution of All WB Projects with Transport Components by Sector Board: Active and Closed (approved during FY95-04)**

<i>Sector Board</i>	<i>Closed</i>	<i>Active</i>	<i>Total</i>
TRANSPORT	70	170	240
Rural Development	21	63	84
Social Development	3	9	12
Urban Development	25	45	70
PSD	23	17	40
Social Protection	16	20	36
Public Sector	14	15	29
Economic Policy	15	1	16
Other	4	24	33
<b>TOTAL</b>	<b>191</b>	<b>364</b>	<b>555</b>

**Table 2. All WB Projects with Transport Components classified by major components\* (FY95-04)**

Physical works	450
Private sector development	144
Institutional development	56
Maintenance by contract	54
Road Funds	34
Railways and Ports restructuring and concessioning	31
Toll roads and highway concessioning	23
Disaster Rehabilitation	21
Post-Conflict Rehabilitation	18

\* projects may have multiple components



## Annex 2. Illustrative Detailed Questions

Major Questions	Illustrative Questions <i>and Methodological Sources (LR: Literature Review; PR: Portfolio Review; CS: Country Studies; SS: Staff Survey; TS: Thematic Studies)</i>
<p><u>Relevance of WB Strategy:</u> To what extent does WB's transport strategy address client country needs?</p>	<ul style="list-style-type: none"> <li>• How has WB's transport strategy -- as expressed through sector strategy documents and other sources -- evolved to address the changing needs of the transport sector over the last decade (as evidenced by the Bank's economic and sector work; and external sources including feedback from stakeholders)? (PR CS SS TS)</li> <li>• To what extent does WB's strategy address financing mechanisms for various modes of transport, and their linkages to policy and regulatory issues, institutional development and capacity building, governance, etc.? (PR CS SS TS)</li> <li>• How well do CASS/PRSPs reflect the specific needs of client countries in the transport sector? (PR CS)</li> </ul>
<p><u>Lending vis-à-vis sector strategy:</u> To what extent does WB's lending to the transport sector accord with relevant Bank strategy?</p>	<ul style="list-style-type: none"> <li>• To what extent has the pattern of Bank's lending for the transport sector reflected the priorities in relevant sector strategy? (PR SS)</li> <li>• To what extent has the Bank's mix of lending instruments been appropriate?; Has the Bank been innovative in adapting to client country needs? (SS)</li> <li>• Has the Bank offered a broad menu of options for public and private provision of transport infrastructure and services, including a choice of financial instruments? (PR SS)</li> <li>• In addressing the financial needs of the transport sector, has project design accounted sufficiently for linkages with policy and regulatory issues, institutional development and capacity building, governance, etc.? (PR CS SS)</li> </ul>
<p><u>AAA/ESW vis-à-vis sector strategy:</u> To what extent do WB's AAA activities accord with relevant Bank strategy?</p>	<ul style="list-style-type: none"> <li>• To what extent has the pattern of the Bank's AAA activities in the sector reflected priorities in relevant Bank strategy? (PR SS)</li> <li>• To what extent do the Bank's AAA activities address the linkages between financing mechanisms for the transport sector and institutional, policy and regulatory issues? (PR CS SS)</li> <li>• To what extent have the recent initiatives (under the Infrastructure Action Plan) for infrastructure diagnostic assessments been coordinated effectively with other assessments such as PSD's Investment Climate Assessments (ICAs) to avoid overlap and add to the existing body of knowledge? (PR CS SS)</li> </ul>
<p><u>Lending outcomes vis-à-vis objectives:</u> To what extent have project outcomes met project objectives?</p>	<ul style="list-style-type: none"> <li>• To what extent has WB's lending addressed the changing needs of the transport sector over the last decade (PR CS SS)</li> <li>• To what extent has the Bank's lending addressed financing mechanisms for various modes of transport, and their linkages to policy and regulatory issues, institutional development and capacity building, governance, etc.? (PR CS SS)</li> <li>• To what extent has WB's lending met the objectives laid out in CASS/PRSPs? (PR CS)</li> </ul>
<p><u>AAA outcomes vis-vis objectives:</u> To what extent have project outcomes met project objectives?</p>	<ul style="list-style-type: none"> <li>• To what extent has the Bank been successful in improving the quality and impact of AAA/ESW in the sector? (PR SS)</li> <li>• How effective has the Bank been as a knowledge organization in respect of the transport sector, and been able to disseminate its findings and experiences in the field of transport financing to internal and external audiences? (PR SS)</li> <li>• To what extent has the Bank been successful in linking transport/infrastructure related diagnostics with other Bank diagnostics? (SS)</li> </ul>
<p><u>Sustainability of lending and AAA</u></p>	<ul style="list-style-type: none"> <li>• To what extent do the Bank's efforts in the transport sector help sustain future funding streams and the adequacy of maintenance resources, the relationship with technical standards and the appropriateness of financial arrangements, given the likely extent and capability of available institutional support? (PR CS SS)</li> </ul>

<p><u>Sector staffing, skills, and organizational issues:</u> How has the staff and skills mix in the sector evolved to address evolving sector and client needs.</p>	<ul style="list-style-type: none"> <li>• To what extent has the mix of staff and skills in the sector responded to changing sector and client country needs? (CS SS)</li> <li>• Have staff training and incentives for improved performance been adequate? (SS)</li> <li>• To what extent has the sector coordinated with other networks on their activities that impinge directly or indirectly on the transport sector? (SS)</li> <li>• To what extent has there been coordination between various components of the WBG – IBRD/IDA, IFC and MIGA? Has there been any progress towards encouraging joint IFC/MIGA missions, training Bank staff on IFC/MIGA instruments and vice versa? (PR SS)</li> </ul>
<p><u>Client orientation:</u></p>	<ul style="list-style-type: none"> <li>• To what extent has the Bank helped develop capacity in client countries to generate relevant data and information in the transport sector? (PR CS SS)</li> <li>• To what extent has the Bank’s work helped improve communication with clients and NGOs/civil society groups on Bank Group approaches to infrastructure provision? (PR CS SS)</li> <li>• To what extent has the Bank addressed regional infrastructure needs, and investigated solutions to provide incentives for and overcome budgetary impediments to multi-country work? (PR CS SS)</li> </ul>
<p><u>Coordination with IFIs and Donors:</u></p>	<ul style="list-style-type: none"> <li>• To what extent has WB clarified its role in infrastructure service provision vis-à-vis MDBs and other donors to tap synergies for scaling up transport sectors in client countries? (SS)</li> </ul>
<p><u>M&amp;E</u></p>	<ul style="list-style-type: none"> <li>• What progress has WB made in developing a core set of indicators for the transport sector and to maintain up-to-date sector databases ? (SS)</li> <li>• To what extent is WB improving results measurement of development outcomes at the project level in transport projects? (PR SS)</li> </ul>