

Sector Assistance
Program Evaluation

The Asian Development Bank's Support for the Transport Sector in Sri Lanka



Sector Assistance Program Evaluation
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NOTES

- (i) In this report, "\$" refers to US dollars.
- (ii) For an explanation of rating descriptions used in evaluation reports of the Asian Development Bank, see ADB. 2010. *Revised Guidelines for the Preparation of Country Assistance Program Evaluations*. Manila.

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Abbreviations

AASL	–	Airport and Aviation Services Sri Lanka
ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
BOT	–	build-operate-transfer
CAPE	–	country assistance program evaluation
COS	–	country operational strategy
CPDP	–	Colombo Port Development Project
CPEEP	–	Colombo Port Efficiency and Expansion Project
CPEP	–	Colombo Port Expansion Project
CPS	–	country partnership strategy
CRP	–	compliance review panel
CSP	–	country strategy and program
DBST	–	double bituminous surface treatment
EIA	–	environmental impact assessment
EIRR	–	economic internal rate of return
ENCPRP	–	Eastern and North Central Provincial Road Project
GDP	–	gross domestic product
IED	–	Independent Evaluation Department
IRI	–	international roughness index
JBIC	–	Japan Bank for International Cooperation
JCT	–	Jaya Container Terminal
JICA	–	Japan International Cooperation Agency
km	–	kilometer
m	–	meter
MOH	–	Ministry of Highways
MPA	–	Ministry of Ports and Aviation
MPDH	–	Ministry of Port Development and Highways
NHSP	–	National Highways Sector Project
NRCP	–	Northern Road Connectivity Project
O&M	–	operation and maintenance
PCR	–	project completion report
PPER	–	project performance evaluation report
PPP	–	public-private partnership
PPTA	–	project preparatory technical assistance
PRA	–	provincial road administration
RDA	–	Road Development Authority
RDD	–	Road Development Department
RFP	–	request for proposal
RMTF	–	road maintenance trust fund
RPPF	–	road project preparatory facility
RRP	–	report and recommendation of the President
RSDP	–	Road Sector Development Project
SAGT	–	South Asia Gateway Terminal
SAPE	–	sector assistance program evaluation
SLPA	–	Sri Lanka Ports Authority
STDP	–	Southern Transport Development Project
TA	–	technical assistance
TEU	–	twenty-foot equivalent
WSA	–	Wilbur Smith Associates

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Executive Summary

The Asian Development Bank's (ADB) lending assistance to the transport sector in Sri Lanka started in 1970 with a loan to the port subsector, followed by a loan to the road subsector in 1980. As of December 2010, cumulative ADB lending to the transport sector in Sri Lanka amounted to at least \$1.24 billion for 16 sovereign and 1 nonsovereign project and 17 advisory technical assistance (TA) operations. Although this includes four port subsector projects, ADB assistance has focused mainly on the road subsector.

This sector assistance program evaluation (SAPE) was undertaken to (i) provide an independent assessment of ADB projects and TA in the sector approved during the 12-year period 1999–2010, in total 10 projects and 14 advisory TA operations for a total cost of \$986.0 million; (ii) identify areas for improving the effectiveness of ADB interventions; and (iii) provide evaluation lessons and recommendations.

Transport Sector Context

Sri Lanka relies heavily on road transport. The current demand for passenger travel is around 80 billion passenger-kilometers (km) per year, of which road transport accounts for 93%. About 97% of freight traffic, measured in ton-km, is conveyed by road. The 113,000-km road network in the country includes about 11,900 km of national highways. The condition and the standards of these roads are inadequate to accommodate rapidly growing freight and passenger traffic. Sri Lanka has three deep seaports—Colombo, Trincomalee, and Galle—but only Colombo Port has gained commercial significance. After economic liberalization, a port expansion program, and the onset of containerization and transshipment cargo, port traffic grew at an average rate of 6.5% per year and reached the equivalent of 4 million containers of twenty-foot equivalent units in 2010.

The Government of Sri Lanka has prioritized the improvement of the road network in the country. It has invested about \$3.7 billion for the improvement and rehabilitation of national, provincial, and rural roads. Approximately 2,900 km of national roads were improved or rehabilitated during 2000–2010, and approximately 2,300 km of national roads were widened to multiple lane standards. Around 380 bridges were constructed or reconstructed. As a result of this large program, 60% of the national road network reached acceptable standards during the last 6 years. This was in spite of a legacy of civil strife in the country, which was a drain on the available public resources.

Program Implementation

Two ADB-supported investment projects and a TA loan project approved during the 1999–2010 evaluation period were completed, and five other investment projects and a TA loan project were still ongoing at the time of the evaluation missions (early 2011). Of the three completed projects, the Colombo Port Development Project (CPDP) was completed first (2006). ADB provided a private sector loan of \$35.0 million and an equity investment of \$7.4 million in the first privately operated container terminal in the port. Completed second (2009) was the Colombo Port Efficiency and Expansion Project (CPEEP), based on a TA loan of \$10.0 million. Completed third was the Road

Sector Development Project (RSDP), supported by a \$56.5 million ADB loan and leading to improvement of 780 km of roads and construction of 74 bridges. Four road projects (supported by a total of \$554.4 million in ADB loans) that were still ongoing at the time of the evaluation mission planned to complete 580 km of national highways and 510 km of provincial roads: (i) the Southern Transport Development Project (a public highway supported by a loan of \$180.0 million), completed end-2011 as toll road; (ii) the National Highways Sector Project (supported by a loan of \$150.0 million), approved in 2005; (iii) the Eastern and North Central Provincial Road Project (supported by a loan of \$70.0 million), approved in 2009; and (iv) the Northern Road Connectivity Project (supported by a loan of \$154.4 million), approved in 2010. Lastly, one large port project, the Colombo Port Expansion Project (CPEP), supported by a nonsovereign loan of \$300.0 million, was approved in 2007 and is constructing a new breakwater at the Colombo port and installing navigational aids.

ADB's portfolio of projects in Sri Lanka's transport sector has encountered a variety of implementation challenges, leading to delays and loan extensions. Of the completed projects, Independent Evaluation Department (IED) project performance evaluation reports (PPERs) rated the RSDP partly successful, and the CPDP as successful. Due in part to implementation challenges, most road projects initiated over the period have suffered from cost overruns, necessitating either supplementary loan financing or a reduction in scope. While the reasons for delay and cost overruns were often specific to the individual project, several factors recurred frequently, including (i) lengthy tendering and procurement procedures; (ii) land acquisition issues; (iii) unsatisfactory performance by contractors; (iv) poor engineering design and planning by both the consultants and government agencies, as well as a lack of preparedness and slow preconstruction processes that delayed the calling of tenders; and (v) an overlong time lag between project preparation and actual construction, sometimes leading to detailed redesign, which then affected the implementation of safeguards. The scarcity of materials and the recovery activities that followed the December 2004 tsunami were also a common contributing factor in some delays.

Evaluation of ADB Support

Strategic positioning. This SAPE rates the strategic positioning of ADB's Sri Lanka transport sector support *satisfactory*. Infrastructure is one of ADB's five core areas of operation under Strategy 2020. ADB has been involved in the transport sector in Sri Lanka since the 1970s, and its sector strategies have evolved and adjusted to changes as needs have arisen. The thrust of ADB's sector strategies was on overall improvement of road sector performance. In the last decade, ADB paid greater attention to networks, connectivity, and sector reforms. ADB's country operational strategy for 1998–2003 emphasized the need for greater private sector participation and policy dialogue to promote sustainable project investments. The subsequent country partnership strategy (CPS) for 2004–2008 reiterated ADB's support for policy and institutional reforms and underscored the importance of (i) policy, regulation, and planning to enable strategic management of the road network, (ii) promotion of public-private partnerships in road investments, (iii) development of a sustainable funding mechanism for road operation and maintenance, (iv) preparation of a road sector master plan, and (v) enhancement of preconstruction processes. The sector strategies were positioned well, and the sector assistance program that ADB delivered was consistent with the principles established by these strategies.

ADB did not involve itself in the rail subsector beyond a single advisory TA operation because of concerns about the commitment of the government to railway

reforms and trade union opposition to such reforms. This study can agree with ADB's focus on road transport, as the island is small and road density is already high, there is less need for railway or river transport. ADB's further focus on port development was also appropriate, given Sri Lanka's island status and the problems with the existing ports. ADB also coordinated well with other donors in terms of its positioning, to ensure that no duplication of effort would take place.

Relevance. ADB's assistance to the transport sector in Sri Lanka is rated *relevant*. It supported the government's primary objective of promoting economic growth and has also been consistent with ADB's country and sector strategies, which were also aligned with the government's strategy. The relevance and quality of project designs has varied, with some having been too complex to achieve their targets or to implement smoothly. The complex RSDP is an example: it does not clearly link the numerous components and subcomponents to the project objectives. In addition, the designs of some TA operations and TA components in loans have overlapped, causing duplication and redundancy (para. 57). On the other hand, some projects were of strategic importance to the government. The CPEP is one of those; it aims to facilitate private sector investment.

Efficiency. ADB support is rated *efficient*. This is largely a result of the good economic internal rate of return (EIRR) of two completed projects, one port project (CPDP) and one road project (RSDP). This evaluation did not recalculate the EIRR for the Southern Transport Development Project (STDP) and more recent, still ongoing projects, on account of the toll road not yet having been opened at the time of the evaluation missions, and other projects lacking the data. The PPER for the port project calculated its EIRR to be 30%. The PPER for the road project calculated EIRRs for 31 of about 150 road sections and readjusted the appraisal's envisaged life of the double bituminous surface treatment from 20 years to 10 years, because the assumptions of the economic analysis in the report and recommendation of the President did not include the resurfacing cost. The average EIRR was calculated as 20.1%, however, with the EIRRs for the 31 road sections ranging between -2.5% and 68.2%, and 19 registering an EIRR below the cutoff 12%. The implementation process and performance of the six still ongoing projects including the TA loan for the road project preparatory facility are poor. Most projects were delayed and affected by the cost overruns. IED may revise the ratings if it reviews the ongoing projects at a later date.

The STDP, which commenced in 1999 and supported by a \$90.0 million ADB loan, was completed only in November 2011, after the time of the evaluation missions for this study. The project was the subject of a compliance review. ADB's Compliance Review Panel found that there were lapses in compliance with ADB's operational policies and procedures in several areas between project processing and implementation (para. 64), caused mostly by changes in project scope that shifted the highway traces. The safeguard documentation was inconsistent with the changes, and detailed design work could not be carried out in a timely manner. This led to delays. Although the original project cost of \$132.0 million had increased to \$449.0 million in 2008, the EIRR at the approval of a supplementary \$90.0 million loan in March 2008 was 15.3%, which was increased from 14.5% at the original appraisal in 1999. The reasons for the increase in EIRR were not clearly explained, because the traffic forecast was not reported in the economic analysis for the supplementary loan. The Road Development Authority and ADB need to carefully monitor traffic volume, review whether the anticipated economic benefits will indeed be generated, and relate these to the project costs, which had increased by 340% as of 2008.

Effectiveness. ADB support to the transport sector in Sri Lanka is rated *less than effective*, mainly on account of findings relating to completed projects; ongoing projects at the time of the evaluation missions were not rated in this respect. A PPER rated the CPDP effective, and another rated the RSDP less effective. This SAPE assesses the TA loan less than effective, as the CPEEP was closed with only completion of project preparation for the CPEP, and the remaining outputs were not delivered. Most of the TA operations and capacity development components of loans have been less than effective, because the TA activities were incomplete or their outputs not used. In the case of the RSDP, the investment component improved 780 km of roads compared with the 980 km anticipated at appraisal. The number of bridges was anticipated at 125, but only 74 could be built with the funds available. Only about one-third of the reform plan was completed or partly completed under the project, although the project did contribute to institutional strengthening by reorganizing the Road Development Authority and the provincial road administrations.

The CPDP was rated effective overall in delivering its outcomes and impact. This was based on its (i) business performance, (ii) contribution to economic development, (iii) contribution to private sector development, and (iv) compliance with environmental and social policies. The South Asia Gateway Terminal generated large profits from high tariffs on domestic cargo, productivity improvement, and operating costs that were lower than originally forecast. It demonstrated that modern logistics practices and staff management can be applied successfully in Sri Lanka's ports. The CPEEP, supported by a \$10.0 million ADB loan, consisted of (i) institutional capacity development; (ii) formulation of concession packages; and (iii) project preparation for the CPEP to develop detailed engineering parameters, including geotechnical surveys and environmental impact assessment. The CPEEP was closed with only the engineering studies and environmental impact assessment completed.

Sustainability. This SAPE rates the sustainability of ADB support to the Sri Lanka transport sector *less than likely*. This rating takes into account issues with the financing of recurrent costs, institutional arrangements, and operation and maintenance. The current resources for maintenance of roads are deemed not enough to fully fund the required routine and periodic maintenance. The government continues to request development partners to consider financing road maintenance when road rehabilitation or development projects are prepared. The SAPE also observed some lapses in government commitment and ownership, which are affecting the sustainability of institutional capacity developed through the projects and TA activities. Road maintenance for national highways has been financed from annual government allocations from its national budget. A road maintenance trust fund (RMTF) with a more independent and predictable source of income had been ratified already in 2005 under the provisions of a Trust Ordinance. However, the fuel levy that was going to provide the funds has not yet materialized.

Impact. ADB's contribution to impacts as specified for its transport sector program is rated *less than satisfactory*. The transport sector results framework of ADB's CPS for 2009–2011, which aimed to increase economic growth and socially inclusive development, specified four key targets: (i) reducing road transport cost, (ii) improving connectivity, (iii) increasing port capacity, and (iv) increasing public-private partnerships. Milestone and tracking indicators to monitor accomplishments were laid down in the CPS and the transport sector results frameworks, but the CPS final review did not report on whether they were achieved. This study assessed that the following key aims that defined ADB's CPS for 2009–2011 have not yet been achieved: (i) 100% funding for national highways maintained by 2010 through the RMTF (ii) completion of

the southern highway by 2009, (iii) reduction in travel time from Colombo to Matara from 4–5 hours in 2007 to 2 hours by 2010, and (iv) increasing public-private partnerships by piloting performance-based maintenance contracts for priority national highways by 2010.

Looking at the impacts of some of the completed projects, the following observations can be made: The project impact of the RSDP was rated partly satisfactory. The project improved roads along existing alignments, requiring very little land acquisition. For the physical investment, field assessments showed that people who had assets benefited from the project, since they could improve the productivity of those assets. But two-thirds of the targets in the reform program under the RSDP were not achieved. The CPDP largely achieved its private sector development objectives; it more than doubled the effective container capacity at the port, operating in a much smaller area than the Jaya Container Terminal. The project achieved excellent financial and economic performance standards; and the environmental, social, health, and safety performance was also satisfactory. However, the envisaged output of legal and institutional reform was not achieved, and an acceptable operator of the envisaged terminal concession was not selected during implementation of the project.

The Southern Expressway developed by the STDP was opened to the public on 27 November 2011 and is the first large-scale greenfield road development in Sri Lanka. The government has by now had a lot of experience with the development of such projects, which is positive. However, the cost overruns incurred for this project will reduce its intended positive economic return, and a scope change that put tolls on what was originally planned as a free public highway will negatively affect the project's envisaged beneficial impacts, limiting access to and use of the highway and the transport network and thus reducing the project's economic benefits. In addition, the National Council for Road Safety of Sri Lanka has pointed out that no independent safety audit has been carried out on the highway and has observed several safety issues. The Chartered Institute of Logistics and Transport Sri Lanka also expressed safety concerns, because the lane width was reduced to 3.5 meters due to budget overruns and changes to design (para. 89). Furthermore, 20,000 people were displaced for this project, which took a toll in human suffering, although they were eventually compensated. The government has to be commended for bringing the project back into compliance with ADB's safeguard policies, and it needs to focus now on safety issues.

Overall assessment. Using ADB's standard methodology for weighing various ratings, the overall rating of ADB's assistance program for the transport sector in Sri Lanka is *less than successful*.

Performance of ADB and the government. ADB's performance in the Sri Lanka transport sector is rated *less than satisfactory*. Coordination of the development agency was successfully arranged at the sector and project levels, but shortcomings in building government ownership, leadership, and in the adequacy and quality of its project processing and implementation hurt ADB's overall performance. In addition, ADB's monitoring and supervision of capacity development efforts were not comprehensive. Government performance is also rated *less than satisfactory*. The government did not comply with some key loan covenants including ensuring that road maintenance would be adequately funded. Weak institutional capacity within the executing agency continues to be a problem.

Lessons and Recommendations for Future Assistance

The SAPE identified several lessons that ADB can apply to future support. Project design needs to be undertaken more carefully and must remain focused to avoid future implementation delays and cost overruns. TA and capacity development outputs need to be structured more carefully to avoid overlaps between projects. Monitoring and supervision of implementation should be comprehensive. It is essential that the rehabilitation of project roads be sustainable, and ADB needs to investigate funding mechanisms for maintenance needs in coordination with other aid agencies.

Recommendations to Management for ADB's future support to the transport sector in Sri Lanka are summarized below.

Undertake due diligence on the Southern Expressway; address road safety. ADB needs to conduct due diligence regarding the unplanned imposition of tolls on the STDP highway. This will involve revising traffic forecasts and economic analysis, conducting a financial analysis, and reviewing institutional readiness and the level of acceptance of the change by road users. The safety issues related to the expressway should also be reviewed and the steps to improve road safety should be developed (main text, para. 112).

Prepare a long term capacity development road map. Too many of ADB TA efforts were one-off projects. TA activities need to be coordinated within ADB and with outside to avoid overlapping and duplication between TA operations and TA loan components. Capacity development and institutional strengthening take time and should have a broad, long-term outlook with a results framework (main text, para. 113).

Continue efforts to make the road maintenance fund self-sustainable. ADB, in association with the World Bank and other aid agencies, should continue discussions with the government to encourage better funding of maintenance that is essential to sustaining and preserving the road network and to develop the rules and procedures required for the technical operation and financial management of the RMTF (main text, para. 114).

Assess the effectiveness and efficiency of the road project preparatory facility. This facility to support preparation of safeguards, detailed engineering, and tendering documents can make the processing and implementation of projects more timely and efficient. After the facility project is completed, ADB should evaluate its effectiveness in speeding up the processing and implementation of road projects and the efficiency of funds allocation (main text, para. 115).

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Introduction

A. Background

1. Sri Lanka has a population of 20.7 million people and a land area of about 65,000 square kilometers (km²). Sri Lanka's strategic location at an intersection of maritime trading routes in Asia has contributed to its growth as a regional trading hub. Nevertheless, roads are the backbone of its internal transport system. About 65% of the country's people live in villages, and roads are the only way for most rural people to reach generally distant essential services such as hospitals, schools, markets, and banks. Not only vital to the movement of people and goods, roads also play an important role in integrating the country, facilitating economic growth, and ultimately helping to reduce poverty. Even though a large part of the road network has been rehabilitated through assistance from the Asian Development Bank (ADB) as well as several other development partners, a considerable amount of the road network has not been properly maintained. Years of civil conflict have added to the neglect and damage in some areas. Much work needs to be done to improve and sustain the country's road system and thereby promote economic growth, integrate the country, and reduce poverty now and in the future.

2. ADB lending for the transport sector in Sri Lanka started in 1970 with a loan to the port subsector. This was followed by a loan to the road subsector in 1980. ADB has focused its transport sector assistance mainly on roads. It also provided four loans to the port subsector. Cumulative ADB lending for the transport sector in Sri Lanka stood at \$1.24 billion, and covered 16 sovereign and 1 nonsovereign project, and 17 advisory technical assistance (TA) operations. This sector assistance program evaluation (SAPE) focuses on the period 1999–2010, when 10 projects and 14 advisory TA operations were approved. Appendix 1 provides details on ADB's completed and ongoing loans and TA activities.

ADB has focused its transport sector assistance mainly on roads

B. Objectives and Scope

3. The objectives of the SAPE are to (i) provide an independent assessment of ADB assistance between 1999 and 2010 to the Sri Lanka transport sector, (ii) identify areas for improving the effectiveness of ADB's interventions, and (iii) provide evaluation lessons and recommendations. This evaluation report draws on implementation experiences and lessons from earlier projects. Taking into account the sector context, the SAPE evaluates the contribution of ADB to specific development results in Sri Lanka. Five road projects were initiated over the 12-year period, and 2 ports projects. Loans for

a road project preparatory facility (RPPF)¹ and the Colombo Port Efficiency and Expansion Project (CPEEP)² were also provided over the period.

C. Evaluation Framework and Methodology

4. In conducting the SAPE, the Independent Evaluation Department (IED) followed the Revised Guidelines for the Preparation of Country Assistance Program Evaluation Reports.³ The SAPE framework is in Appendix 2. The evaluation criteria for the sector are (i) strategic positioning, (ii) relevance, (iii) efficiency, (iv) effectiveness, (v) sustainability, and (vi) development impacts. The SAPE takes the findings of these assessments into account to provide an overall rating for the transport sector assistance.

5. The SAPE drew on a combination of desk reviews, project documents, and primary data collection to analyze the transport sector and the findings during the missions. A Reconnaissance Mission was fielded in Sri Lanka from 12 to 19 October 2010 to discuss with the government and other stakeholders the scope and procedures for the SAPE, and to start reviewing ADB's support to the transport sector. Consultations took place with senior level officials from the (i) Ministry of Finance and Planning; (ii) Ministry of Port Development and Highways (MPDH), including Road Development Authority (RDA) and Sri Lanka Ports Authority (SLPA); (iii) Ministry of Transport; (iv) Ministry of Local Government and Provincial Councils; (v) Western Province Road Development Authority; (vi) North Western Province Road Development Department; (vii) North Central Province Road Development Authority; (viii) Uva province; (ix) Japan International Cooperation Agency (JICA); and (x) World Bank. An Independent Evaluation Mission was fielded to Sri Lanka from 31 January to 10 February 2011. The Mission held discussions with the same ministries and development partners visited during the reconnaissance mission, and also visited the Uva Provincial Road Development Department.

6. The IED missions evaluated all road and water projects approved between 1999 and 2010, including the Southern Transport Development Project (STDP)⁴ and the Colombo Port Development Project (CPDP),⁵ both approved in 1999. Completed projects were evaluated through assessment of both project completion reports (PCRs) and project performance evaluation reports (PPERs). These evaluation reports provided a comprehensive analysis of the completed projects. The draft SAPE report was shared with ADB's South Asia Department and the Government of Sri Lanka; comments received were considered and incorporated as appropriate. Table 1 shows the assessed nine loan projects, and Appendix 1 details ADB's loans, grants, and TA to Sri Lanka.

The IED missions evaluated all road and water projects approved between 1999 and 2010

¹ ADB. 2004. *Report and Recommendation of the President to the Board of Directors: Proposed Technical Assistance Loan to the Democratic Socialist Republic of Sri Lanka for the Road Project Preparatory Facility*. Manila (Loan 2080-SRI[SF], approved on 13 April).

² ADB 2001. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Colombo Port Efficiency and Expansion Project*. Manila (Loan 1841-SRI[SF], approved on 27 September).

³ ADB. 2010. *Revised Guidelines for the Preparation of Country Assistance Program Evaluations*. Manila.

⁴ ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

⁵ ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to and an Equity Investment in South Asia Gateway Terminals (Private) Limited for the Colombo Port Development Project in the Democratic Socialist Republic of Sri Lanka*. Manila (Equity Investment 7153 and Loan 1689-SRI, approved on 11 May).

Table 1: ADB Supported Projects to the Transport Sector of Sri Lanka, 1999-2010

Project Name	Amount (\$ million)	Date Approved	Date Closed	Expected Closing
Road Transport				
Southern Transport Development	180.0 ^a	25 Nov 1999	25 Feb 2011	
Road Sector Development	56.5	19 Dec 2002	14 May 2009	
Road Project Preparatory Facility	15.0	13 Apr 2004	Active	30 Jun 2012
National Highways Sector	150.0 ^b	15 Dec 2005	Active	31 Dec 2012
Eastern and North Central Provincial Road	70.0	16 Sep 2009	Active	30 Jun 2014
Northern Road Connectivity	154.4	18 Jun 2010	Active	30 Dec 2015
Water Transport				
Colombo Port Development	43.5	11 May 1999	21 Sep 2006	
Colombo Port Efficiency and Expansion	10.0	27 Sep 2001	16 Nov 2009	
Colombo Port Expansion	300.0	27 Feb 2007	Active	30 Apr 2013

ADB = Asian Development Bank.

^a The amount of ADB finance includes a supplemental loan, which is expected to financially close in December 2012.

^b Additional financing for the National Highways Sector Project was approved on 5 August 2011 (Loan 2767-SRI), which increases the total loan amount to \$235.0 million.

Source: Asian Development Bank databases.

D. Findings of Earlier Evaluation

7. ADB's Operations Evaluation Department, the predecessor of IED, assessed the performance of transport sector assistance in Sri Lanka in 2007 as part of a country assistance program evaluation (CAPE) for Sri Lanka.⁶ The CAPE rated the overall performance of ADB's transport sector assistance programs as *successful*. ADB's assistance was rated *highly relevant*. Loans and TA operations were found to have responded to critical sector needs and to have addressed physical, institutional, and policy constraints. The sector assistance program was rated *effective* and *efficient*. Outcomes were rated *likely to be sustainable*.

8. The 2007 CAPE nevertheless pointed out several challenges facing the transport sector: (i) fragmented planning and policy formulation, with responsibilities divided among several ministries and agencies; (ii) poor intercity and urban mobility; (iii) the need for innovative financing schemes to enable the construction of intercity expressways in strategic transport corridors; and (iv) institutional and governance constraints that impeded efficient delivery of transport infrastructure and services. The CAPE findings were addressed in the transport sector strategy included in the 2009–2011 country partnership strategy (CPS).⁷

9. ADB focused its transport sector strategy for Sri Lanka on the need for greater connectivity, including more efficient links between rural areas and national roads and urban areas. Key improvements viewed as needed to strengthen Sri Lanka's international competitive position included (i) reducing transport costs; (ii) improving

ADB focused its transport sector strategy for Sri Lanka on the need for greater connectivity, including more efficient links between rural areas and national roads and urban areas

⁶ IED. 2007. *Country Assistance Program Evaluation: Sri Lanka, Inclusive Development and Conflict Resolution: Major Challenges in the Future*. Manila: ADB.

⁷ ADB. 2008. *Country Partnership Strategy: Sri Lanka, 2009–2011*. Manila.

connectivity; (iii) increasing port capacity; (iv) increasing public–private partnerships (PPPs); and (v) improving the policy, regulatory, and institutional frameworks. ADB continues to support capacity development to establish a centralized procurement unit and enhance institutional capacity for independently preparing feasibility studies and detailed designs.

E. Organization of the Report

10. Chapter II of this SAPE describes the Sri Lanka transport sector and identifies some development challenges. Chapter III provides a summary of ADB strategy and assistance for the sector. Chapter IV evaluates ADB sector support. Chapter V provides the conclusions, lessons, and recommendations for future sector support.

Sector Context

A. Sector Profile

11. The transport sector in Sri Lanka is heavily dependent on roads. The current demand for passenger travel is around 80 billion passenger-kilometers (km) per year, of which road transport accounts for 93%. Of this, buses carry 61% of the passengers, while para-transit in the form of three-wheelers and taxis make up another 6%, private vehicles carry around 24%, and trucks about 3%. For freight traffic, in terms of ton-km, about 97% is conveyed by road. The remaining passenger and freight traffic is carried by railways and waterways. A detailed description of Sri Lanka's transport sector is given in Appendix 3. The following paragraphs give an overview of the main elements of the sector.

12. **Roads.** Sri Lanka's roads are classified as national, provincial, urban, or rural depending on their functionality and ownership. Of the total road network of about 113,000 km, about 11,900 km are national highways, categorized as class A (trunk roads) or class B (main roads). They are administered by the RDA,⁸ together with their 4,200 bridges and other structures. The 16,000 km of provincial roads are managed by the respective provincial administrations and designated as class C, D, or E. There are about 65,000 km of local authority roads in both the urban and rural sectors. The remaining roads, estimated to total 20,000 km, are owned or controlled by irrigation and wildlife authorities or other government agencies.

13. Although road density and the proportion of roads that are paved are higher in Sri Lanka than in many developing countries, road conditions are inadequate and cannot handle rapidly growing freight and passenger traffic effectively. More than 50% of the national roads have poor or very poor surface conditions, and many are seriously congested. Although traffic has been growing substantially, investments in new highways or the widening and improvement of existing roads have not kept up. Road sector investment during the past decade concentrated on rehabilitation of the existing network.

14. The poor condition of the country's roads constrains social and economic development. According to roughness data collected for 2006–2008, only about 33% of the national highway network is in an acceptable condition—i.e., is measured at less than 5.5 meters per kilometer (m/km) by the international roughness index (IRI). About 19% of the network measures 5.5–7.0 m/km on the IRI.⁹ Approximately 9% has an IRI measurement of more than 10.0 m/km.

15. By the end of 2007, more than 3.1 million motor vehicles had been registered, and about 2.2 million were in operation. Only around one-quarter of the active fleet

Road conditions are inadequate and cannot handle rapidly growing freight and passenger traffic effectively

⁸ RDA is a statutory body under the former Ministry of Highways, now the Ministry of Ports and Highways, incorporated under the RDA Act No. 73 of 1981.

⁹ Government of Sri Lanka, RDA Planning Division. 2008. *International Roughness Index*. Colombo.

were four- or six-wheeled vehicles. The vehicle ownership rate is currently more than 100 vehicles per 1,000 persons. Two- and three-wheelers and goods vehicles, including vans, are categorized as dual purpose and subject to import duties that, until only recently, were modest compared with the 300%–400% combined duties levied on imported passenger cars, which make up only around 10% of the fleet. In June 2010,¹⁰ the Government of Sri Lanka reduced import duties on passenger cars and utility vehicles by half. With this concession, vehicle registration has increased.

16. **Inland waterways and ports.** The development of a 175-km canal network of waterways in the 18th century and the subsequent rapid growth of import-export activities after the Suez Canal was opened made Colombo a focal transit point for freight moving to and from the country's inland regions. The inland waterways were instrumental in the economic development of Western Province before being replaced by railways in the 19th century and by roads in the early 20th century. They are largely unused today and for the most part are not navigable, although some sections have been redeveloped and are used for passenger boat services operated by the Sri Lankan navy.

17. Shipping plays a vital role in this trade. Sri Lanka's has three deep seaports at Colombo, Trincomalee, and Galle. Only Colombo Port has attained commercial significance. After economic liberalization and a port expansion program, as well as the onset of containerization and transshipment of cargo, port traffic grew at an average rate of 6.5% per year, reaching a level equivalent to 4 million containers of twenty-foot equivalent units (TEU) in 2010. Around 50% of this cargo is handled by the South Asia Gateway Terminal (SAGT), which was built in 1999 and located within the port as a PPP undertaking and is functioning successfully. About two-thirds of the port's transshipment cargo is to and from India. Colombo Port has almost reached peak annual traffic capacity of approximately 4.1 million TEU. Because traffic is expected to grow by at least 9.5% per year, this will pose difficulties until a planned new South Port is completed.

B. Institutional Arrangements

Responsibilities in Sri Lanka's transport sector have traditionally been fragmented

18. Responsibilities in Sri Lanka's transport sector have traditionally been fragmented and are spread over several ministries and agencies. The various transport agencies have tended to tackle their own challenges and problems in isolation, with insufficient attention to integrated, multimodal planning. This has impeded rational allocation of investments and affected the government's capacity to formulate consistent transport policies. The Ministry of Ports and Aviation (MPA) had three distinct functional areas of operation: ports, shipping, and civil aviation. In April 2010, the SLPA was transferred to MPDH as part of reorganization. However, national highways, provincial roads, and rural roads are still administered separately by MPDH, the Ministry of Provincial Council and Local Government, and local authorities, while public transport except aviation has been managed by the Ministry of Transport.

19. **Roads.** Class A and class B roads are national roads managed by the government through MPDH and RDA. Provincial roads, which are usually situated entirely within a province, are managed by the respective provincial councils through provincial road administrations (PRAs).¹¹ Roads that are not classified as national or

¹⁰ Ministry of Finance and Planning. 2010. Press Release. Colombo. 1 June. <http://www.treasury.gov.lk/docs/pressrelease/tax-reduce-20100602.pdf>

¹¹ These are called the provincial Road Development Authority (RDA) in some provinces and the provincial roads development department (RDD) in other provinces.

provincial roads but are located entirely within municipal or urban council areas are maintained by urban local governments.

20. Some urban roads, such as those in the cities of Colombo and Kandy, are heavily used and are in a functional sense part of the national highway network. A total of 18 municipal councils and 48 urban councils manage around 5,176 km of urban road. Rural roads are those maintained by the rural district administrations, which are known as *pradeshiya sabhas*. Unlike all other roads, most are unpaved and have earth or gravel surfaces. Some rural roads are maintained by other government agencies and, while not considered as public roads, receive public funds for their maintenance because they are used as public thoroughfares by the rural population.

21. RDA receives all its recurrent and capital allocations for development and maintenance through the government budget. A road maintenance trust fund (RMTF) was set up in 2005 and came into operation in January 2006 to finance both routine and periodic maintenance of national roads. The RMTF was supposed to be replenished directly from fuel levies, but in practice the funding comes from allocations made by the Treasury. Capital allocations for the PRAs also come from the Treasury through a Finance Commission and from funding approved directly by the respective provincial councils. In municipal areas, local tax revenues are inadequate to meet the costs of maintaining roads and capital and recurrent maintenance is subsidized by the Treasury, which unfortunately has insufficient funds for this.

22. **Inland waterways and ports.** MPA had until recently three distinct areas of operation: ports, shipping, and civil aviation. Since April 2010, port development and SLPA have been integrated with highways under the newly constituted MPDH. The Directorate of Merchant Shipping, the Ceylon Shipping Corporation, the Civil Aviation Authority of Sri Lanka, the Airport and Aviation Services Sri Lanka, Sri Lankan Airlines, and Mihin Lanka are some of the agencies currently under MPA.

23. SLPA is a multiport landlord port operator engaged in the development and operation of all the ports in the country. It earns most of its revenue from handling and other charges at the ports. This is, however, insufficient for capital investments, and most of the capital allocations for port development have been made through the Treasury. The CPDP has been partly funded by ADB, with terminals to be financed by the private sector. The SAGT, begun in 1999 in Colombo Port, was part of an ADB project that included both a loan and an equity investment in the SAGT for private sector development.

C. Development Challenges

24. Improving overall institutional performance in a range of activities in the transport sector is necessary to sustain any investments in the sector. In addition to these investments, more effective institutional capacity and arrangements are needed so that the responsible sector agencies can carry out their programs effectively and efficiently. ADB has focused on several key deficiencies and constraints in the past, with some positive results, but not all these efforts have achieved the intended outcomes.

25. Key areas requiring continuing attention include the following:

- (i) **Institutional and organizational weaknesses.** Despite ADB's support for both institutional and sector reform, the sector continues to lack sufficient capacity. Many government officers consulted during the evaluation agreed that capacity in the sector needed to be

Despite ADB's support for both institutional and sector reform, the sector continues to lack sufficient capacity

strengthened. One objective of ADB's support to sector reform is to enhance RDA's efficiency in fulfilling its mandate and in addressing its challenges. Developing capacity must be accompanied by an effective structural reorganization.

- (ii) **Road maintenance.** Although government funding tripled in the past few years, the RMTF has remained unable to supply adequate funding for recurrent and periodic maintenance, and no arrangement exists as yet for the originally intended direct contribution to the fund from the government's fuel levy. The RMTF operates as a separate budget line in the government budget and is not managed independently outside the control of the Treasury as envisaged. The original intention that the RMTF would have total budgetary autonomy has not materialized. The intended extension of a road fund to the provinces has not taken place.
- (iii) **Project implementation arrangements.** Although a central procurement unit was set up within RDA under ADB TA, its procurement continues to be undertaken through individual project management units. The unit needs to be made effective to streamline procurement.
- (iv) **Multimodal transport.** ADB's CPS for 2009–2011 proposed support for developing intermodal transport planning through a transport study and a multimodal transport project, focusing on the trade logistics chain as the primary means of raising incomes. Intermodal connectivity issues that need to be addressed include rail connections to ports, road-to-port connections, and bus-to-rail services.
- (v) **Sector priority and funding constraints.** Although large investments have been made in the road network, they were used for new construction of roads or for rehabilitation, not for preventive maintenance. As a consequence, existing roads have fallen into disrepair in several areas. Where possible, the government should focus on rehabilitating these roads rather than building new ones. Capital investments are financed predominantly by international assistance, which generally requires government counterpart funds. This, then, reduces the funds available for maintenance from the already constrained national budget. To some extent, international assistance for large infrastructure investments has in this way depleted the government budget resources available for maintenance.

D. Government Strategy

26. Over the past two decades, the primary government objectives in Sri Lanka have been to promote economic growth and to ensure equitable distribution of benefits arising from this growth. A national transport policy approved in 1991 aimed to establish, maintain, and operate an adequate and publicly acceptable transport system at the least cost possible to the economy. This required a significant improvement in transport infrastructure, and the government substantially increased its budgetary allocations for the transport sector. Allocations for road maintenance remained low until 1997 compared with substantially increasing needs, while the allocations for railways increased significantly despite rail's declining share of the transport market.

27. Institutional and policy reform was also deemed necessary to improve the performance of the road sector and foster its contribution to economic growth. A need was recognized for more private sector participation and better road maintenance. In 2000, the government prepared action plans under ADB's TA for Reengineering of Road

Sector Institutions¹² to improve overall sector performance through institutional and sector reforms.¹³ The reform program was aimed at (i) reengineering central government sector agencies, (ii) bolstering private sector participation, (iii) strengthening the functions of provincial councils with respect to roads, and (iv) supporting priority investments in road improvement. The government's Framework for Poverty Reduction recognized that one of the main challenges in creating opportunities for the poor was to link poor regions to rapidly growing domestic and international markets. It prioritized (i) building up the national highway system, (ii) integrating the road network, and (iii) boosting the performance of the bus system. It also recognized the need for institutional and policy reform, more private sector participation, and better road maintenance to improve the road sector's performance.

28. In 2006, the Ministry of Finance and Planning prepared a 10-year framework providing a vision for Sri Lanka's development.¹⁴ It focused on strengthening the investment climate, including road network improvement and socially inclusive and regionally balanced growth. The framework set out a vision for the transport sector "to provide accessibility to all populations in the country and to have a high and quality mobility road network for the transportation of passengers and goods." It noted key issues that needed to be addressed to achieve this, including (i) inadequate quality and capacity of roads, (ii) increasing road user costs, (iii) inadequate coordination among sector institutions, and (iv) capacity development of provincial-level authorities. The framework reiterated strategies, policy principles, and action plans that had been proposed under previous initiatives.

29. The government has invested about \$3,693 million since 2006 for road improvement, of which half was financed from domestic sources and half from foreign financing. It submits that during this period, around 2,690 km of national roads was rehabilitated and improved, and 2,315 km—around 59% of the existing national road network—was widened to multiple-lane standards. Also, around 375 bridges including 27 tsunami-damaged bridges were constructed or reconstructed, and 116 other bridges are under construction. In total, around 42% of the national road network was improved.

30. **Ports.** The development framework for 2006–2012 aimed to (i) develop the country's main ports to facilitate trade associated with the economic development of the country and the region by taking advantage of trade liberalization and globalization; (ii) decongest Colombo's international port by constructing and developing Colombo South Port and Galle and Hambantota ports; (iii) develop medium-scale ports in the south, east, and north of the country to divert growing volumes of domestic bulk freight transport from road to sea transport; (iv) encourage alternative sources of funding for new investments in port-related infrastructure development; (v) operate ports as commercial entities without support from the government treasury; and (vi) encourage PPP arrangements for new investments in the ports subsector. While continuing the state ownership of existing ports, the government's strategy is to increase the efficiency of existing ports, operate ports as commercial entities, and establish container terminals as PPP projects.

The government has invested about \$3,693 million since 2006 for road improvement, of which half was financed from domestic sources and half from foreign financing

¹² ADB. 2000. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Reengineering of Road Sector Institutions*. Manila (Supplementary TA 3110-SRI, approved on 17 May). The TA conducted institutional analysis of RDA, providing the basis of the road map in the Road Sector Development Project.

¹³ ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

¹⁴ Government of Sri Lanka, Ministry of Finance and Planning. 2006. *Mahinda Chintana: Vision for a New Sri Lanka – A Ten-Year Horizon Development Framework 2006–2016*. Colombo.

The government noted that it has enhanced the capacity of local road contractors in Sri Lanka, with the result that some of these have now evolved as international road constructors

31. Overall, government strategies for the transport sector over the past two decades have attempted to align with evolving sector issues and have been consistent with the overall objective of reducing poverty. In a recent letter to IED, the government noted that it has enhanced the capacity of local road contractors in Sri Lanka, with the result that some of these have now evolved as international road constructors. The approach toward the transport sector described in the 10-year development framework for 2006–2016 would benefit from a closer focus on efficiency and affordability. Government policies and programs have largely recognized the key constraints on the sector and have formulated relevant strategies to address them. Given the pending reform agenda, actual policy and institutional reforms have been less comprehensive than planned, and overall progress has been limited.

ADB Strategy and Program

A. Sector Strategy

32. ADB's strategy for the transport sector has centered on increasing efficiency and improving service quality. It included promotion of policy reforms and sector restructuring to create the environment necessary for efficient and sustainable infrastructure provision and the mobilization of the resources needed for future infrastructure development. The strategy also foresaw PPP arrangements for financially viable transport infrastructure development, such as container terminals in ports. The strategy has pursued policy changes in the areas of cost recovery, tariffs and regulations, competition, and resource mobilization. ADB's sector strategy has aligned with the government's strategies and plans, with no major discrepancies. The ADB strategy was based on thorough sector knowledge and assessment, including close coordination with the comprehensive transport strategy formulated by the United Nations Development Programme and the World Bank.

33. Since the 1980s, ADB support to the transport sector has concentrated on improving the road network. Early interventions were not based on explicit sector strategies and were directed mainly at preserving the national road infrastructure through support for operation and maintenance (O&M) and rehabilitation works. Loans were accompanied by TA to address various road transport issues. While new areas have been added to ADB's agenda, road maintenance issues have been a major, persistent concern, and addressing them has remained difficult. Effecting broader organizational, institutional, and procedural changes within a project or TA context has usually not been achieved. In the late 1980s, ADB emphasized the improvement and upgrading of key road links that underpin national economic growth, and policy and institutional support remained a relatively minor part of its assistance. The World Bank played a lead role in policy dialogue and institutional development in the sector during this period. When the World Bank scaled down its involvement in the transport sector from the mid-1990s until very recently, ADB broadened its approach beyond investment financing and ad hoc policy engagement to include wide-ranging dialogue on policy, institutional, and investment matters.

34. ADB's 1993–1997 country operational strategy (COS)¹⁵ maintained its focus on roads, leaving support for railway transport to other development partners. The strategic aim was infrastructure improvement to stimulate economic activity and ensuring that growth would not be impeded by infrastructure bottlenecks. The COS also sought to create an environment conducive to participation by, and the development of, the domestic contracting industry. It adopted a regional focus on areas where poverty and unemployment were pervasive. The northern and eastern regions needed infrastructure rehabilitation, but risks arising from civil war prevented ADB operations in the area. Instead, parts of the southern region that were both

¹⁵ ADB. 1993. *Country Operational Strategy Study for Sri Lanka*. Manila.

underdeveloped and somewhat isolated were selected as potential targets for intervention. The COS for 1998–2003¹⁶ maintained the ADB focus on roads, given their continuing importance to achieving equitable growth. This was when the sector strategy broadened and supported a reform program to integrate the road network with other transport modes, develop capacity in sector institutions, and promote strategic financing of O&M, private sector participation, social and environmental safeguards, and road safety.

35. In the 2004–2008 country strategy and program,¹⁷ ADB renewed its support for policy and institutional reform in the sector and emphasized the need to ensure national ownership of the reform processes. The key country strategy and program thrusts were to (i) explore the potential for PPP in developing expressways, (ii) develop a mechanism for sustainable funding of road maintenance, (iii) assist in the preparation of a comprehensive road sector master plan to guide future physical development in the sector, and (iv) assist in the establishment of a project preparatory facility for designing future road projects. With the exception of one TA operation, ADB has not been active in the railway sector, although it has repeatedly emphasized integration of the road network with other modes of transport and intermodal coordination.

36. The CPS for 2009–2011 saw a serious infrastructure bottleneck as a key obstacle to achieving high, equitable growth and reducing poverty. The CPS considered this to be especially evident in the inadequate connectivity provided by the transport network between global and domestic markets as well as between the hinterland and economic centers. ADB's assistance to the transport sector throughout the CPS period was guided by the fact that the government had asked ADB to continue its support for developing large-scale infrastructure. As a result, the outcomes to be supported under the CPS were to be developed as a subset of the government's sector plan for the national highway network. The previous ADB country strategies are outlined in Appendix 4.

37. In the ports subsector, ADB's strategy has been to increase the overall efficiency of the SLPA-operated Jaya Container Terminal (JCT) in Colombo Port by making a landlord port model the dominant model there. While the original approach was to corporatize the Jaya Container Terminal, the prevailing government policy does not support this. In response, ADB encouraged the government to adopt a PPP approach to make the landlord port model workable. Subsequently, the government agreed to adopt the PPP approach for the expansion of Colombo Port.

B. Sector Program

38. ADB's first loan in the Sri Lanka transport sector was in 1970 for the Colombo Port Tanker Berth. Three other loans for projects involving Colombo Port followed in 1999, 2001, and 2007, but the bulk of ADB assistance has gone to the roads subsector, starting with the Mahaweli Area Roads Development Project in 1980.

39. ADB has approved 19 loans to the transport sector totaling \$1.24 billion. All but the four for Colombo Port projects went to the roads subsector. ADB also provided advisory TA totaling \$8.21 million for 17 operations in the sector. Four loans to the road subsector were approved in the 1980s, four in the 1990s, and seven in the 2000s. No ADB lending has gone to the railway or civil aviation subsectors. Assistance to the

The CPS for 2009–2011 saw a serious infrastructure bottleneck as a key obstacle to achieving high, equitable growth and reducing poverty

ADB has approved 19 loans to the transport sector totaling \$1.24 billion

¹⁶ ADB. 1998. *Country Operational Strategy Study*. Manila.

¹⁷ ADB. 2003. *Country Strategy and Program: Sri Lanka, 2004–2008*. Manila.

road subsector has amounted to \$879.40 million, while assistance for ports has totaled \$356.10 million.

40. Except for a \$150,000 TA activity in the rail subsector in 2000 and another for the same amount in the port subsector in 2003, all of ADB's advisory TA operations have been in the road subsector. Half of the 14 advisory TA operations in the road subsector were approved prior to 2001.

C. Program Implementation

1. Lending Assistance

41. Two projects and a TA loan approved during the 1999–2010 evaluation period were completed, and five projects and a TA loan were still ongoing at the time of the evaluation missions (early 2011). The completed Road Sector Development Project (RSDP) improved 780 km of roads and 74 bridges, although this fell short of the 1,000 km target in the project framework, and the project's capacity development components were only partly completed. The CPDP was the second project that had been completed at the time of the missions. ADB had been active in Colombo Port since 1999, with a focus on encouraging private sector development, when it provided a private sector loan of \$35.0 million and made an equity investment of \$7.4 million in the first privately operated container terminal in the port. This project had an important demonstration effect in a country where it had been difficult to attract private sector financiers and lenders. The PPER¹⁸ found that its impacts on port productivity and capacity exceeded expectations and that it had stimulated further development in the port. The project was followed by an ADB TA loan for \$10.0 million in 2001, and a loan of \$300.0 million approved in February 2007 for the Colombo Port Expansion Project (CPEP).¹⁹

42. ADB loan-financed projects in the transport sector during the 1999–2010 evaluation period often encountered implementation problems, delays, and several loan extensions. Most road projects suffered cost overruns, due in part to delays, as well as reductions in their intended scope. While the reasons for delay and cost overruns were often specific to the individual project, several factors recurred frequently, including (i) lengthy tendering and procurement procedures; (ii) land acquisition issues; (iii) unsatisfactory performance by contractors; (iv) poor engineering design and planning by both the consultants and government agencies, as well as a lack of preparedness and slow preconstruction processes that delayed the calling of tenders; and (v) an overlong time lag between project preparation and actual construction, sometimes leading to detailed redesign, which then affected implementation of safeguards. The scarcity of materials and the recovery activities that followed the December 2004 tsunami were also a common contributing factor to some delays. The Northern Road Connectivity Project (NRCP), approved in June 2010,²⁰ and the Eastern and North Central Provincial Road Project (ENCPRP), approved in

Most road projects suffered cost overruns, due in part to delays, as well as reductions in their intended scope

¹⁸ ADB. 2008. *Performance Evaluation Report: Equity Investment in and Loan to South Asia Gateway Terminal Limited in Sri Lanka*. Manila (Equity Investment 7153 and Loan 1689-SRI, approved in May 1999).

¹⁹ ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Colombo Port Expansion Project*. Manila (Loan 2319-SRI, approved on 27 February).

²⁰ ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Northern Road Connectivity Project*. Manila (Loan 2639-SRI and Loan 2640-SRI[SFI], approved on 18 June).

September 2009,²¹ began only recently. However, all of the remaining projects should have been completed by now but have not been. The National Highways Sector Project (NHSP), for example, was scheduled at approval in December 2005²² to be completed by 31 December 2009, but completion of the original scope was extended to March 2012. Civil works for the CPEP were originally scheduled to be finished by 31 October 2010, with loan closing originally set for 30 April 2011, but they remained incomplete at the time of the IED mission in February 2011.

A compliance review was conducted by ADB's Compliance Review Panel in 2005

43. In the case of the STDP, approved in November 1999 and scheduled for completion by 31 December 2005, prolonged delays were due mainly to safeguards issues that mostly resulted from repeated adjustments to the highway alignment during project preparation and implementation. In response to a request from the Joint Organization of the Affected Communities of the Colombo-Matara Highway,²³ a compliance review was conducted by ADB's Compliance Review Panel (CRP) in 2005. The CRP found that there were lapses in compliance with ADB's operational policies and procedures in several areas.²⁴

44. The government had already started studies for this new project highway along the general route of existing highway A2²⁵ in the 1990s, and identified the new highway's original trace along a mountainside route in inland areas in 1996. In October 1997, ADB approved TA of \$1.0 million for a project feasibility study. The TA consultant proposed an alternate oceanside trace, where high traffic could be expected. The final feasibility study of the project preparatory technical assistance (PPTA) proposed the combined trace as the basis for progressing with the project, due to the extent of preparatory work completed and level of government commitment. In February 1999, ADB changed its safeguard classification of the STDP from Category B to Category A, and in March 1999 it approved another PPTA²⁶ of \$190,000 to help RDA implement a development and poverty impact study and an enhanced economic analysis and to prepare a summary environmental impact assessment (SEIA). An ADB fact-finding mission in April–May 1999 noted that the project did not include a satisfactory road link to Galle. After RDA and ADB agreed it was necessary, the link was included in the Report and Recommendation of the President (RRP) on the project, but without any social or environmental assessments. Following appraisal in June–July 1999 and Board approval in November 1999, ADB fielded an inception mission in Sri Lanka in

²¹ ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Eastern and North Central Provincial Road Project*. Manila (Loan 2546-SRI[SF], approved on 16 September).

²² ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the National Highways Sector Project*. Manila (Loan 2217-SRI, approved on 15 December).

²³ The requesters contended that the report and recommendation of the President to ADB's Board of Directors for the STDP was for a trace known as the combined trace, but that at least 40% of the combined trace had been altered to form what has been described as the final trace, for which the required studies and consultations had not been conducted according to ADB policies. The requesters said they were suffering from harm, including loss of homes, loss of livelihoods, damage to the environment, degradation to wetlands, dispersion of integrated communities, damage to five temples, negative effects of resettlement, and human rights violations.

²⁴ ADB. 2005. *Final Report to the Board of Directors on Compliance Review Panel Request No. 2004/1 on the Southern Transport Development Project in Sri Lanka*. Manila; and ADB. 2006. *Annual Monitoring Report 2005–2006 to the Board of Directors on Compliance Review Panel Request No. 2004/1 on the Southern Transport Development Project in Sri Lanka*. Manila.

²⁵ The A2 is an A-grade road in Sri Lanka connecting Colombo and Wellawaya via Hambantota. It passes through Wellawatte, Ratmalana, Kalutara, Wadduwa, Beruwala, Bentota, Kosgoda, Ambalangoda, Hikkaduwa, Galle, Koggala, Weligama, Matara, Gandara, Dikwella, Tangalle, Hungama, Hambantota, Weligatta, Tanamalwila, Kuda Oya, and Teluulla.

²⁶ ADB. 1999. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Preparation of the Southern Transport Development Project*. Manila (TA 3184-SRI, approved on 14 April).

December 1999, which agreed that additional changes to the approved alignment could be made. In December 1999 and January 2000, Wilbur Smith Associates (WSA), the ADB-funded detailed design consultants,²⁷ walked the length of the ADB section. On 17 January 2000, RDA officially confirmed what was to be the final trace of the highway, and in June 2000, WSA provided RDA with a detailed map of the 3–4 km wide corridor within which this final route was to be built. Soon afterwards, however, WSA, RDA, and ADB agreed on further deviations. The route that finally emerged was closer to the original trace proposed by the government in most areas. The loan became effective in October 2002, and the request for compliance review was filed in June 2004. Because the safeguard documents did not cover the changes of the trace, detailed design work could not be carried out in a timely manner. Appendix 5 gives a more detailed description of STDP implementation.

45. In some projects, increases in costs were addressed through a reduction in scope. NHSP costs increased due to a change in design from double bituminous surface treatment (DBST) to asphalt concrete and the unfortunate significant increase in the price of construction materials over the period.²⁸ Underestimation of the costs of the road improvements at the project appraisal stage, due to wrong assumptions, also played a part. Due to reallocation of funding, the proposed rehabilitation of some sections of road had to be cancelled. The bulk of the reallocation came from cancelling the component for financing land acquisition and resettlement along Colombo links. This was originally included to help enhance implementation readiness for Colombo links. But, over time, the potential funding source necessary to carry out the civil works became uncertain, and the government was concerned to lock in funding because of the significant potential social impact of large-scale land acquisition. Cost overruns are also expected in the ENCPRP due to (i) a request by the Eastern Province RDA for widening of the project road in anticipation of an increase in traffic once a bridge across Batticaloa Lagoon being funded by JICA is completed, (ii) an underestimation of quantities of civil works in the contract documents, and (iii) flood damage that occurred before work started and during implementation.²⁹

In some projects, increases in costs were addressed through a reduction in scope

2. Technical Assistance

46. TA amounted to \$6.64 million during the evaluation period. Twelve of the 14 TA operations (9 for policy advisory and 3 for capacity development) were for the road subsector, which received \$6.34 million (95%) of the overall amount, while the rail and the port subsectors received one TA grant of \$0.15 million each.

47. The TA activities for roads focused on capacity development and institutional support for both RDA and the PRAs for (i) road maintenance, (ii)

²⁷ A contract funded by ADB under the Road Network Improvement Project (ADB, 1998. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Network Improvement Project*. Manila [Loan 1649-SRI(SF), approved on 8 December]) was signed on 28 October 1999 between RDA and WSA in association with Resources Development Consultants, Pacific Consultants International, and Beca International Consultants to carry out the engineering design services.

²⁸ As reported by the operations department, the primary contributors to the cost overrun were overall inflation and the global price escalation of key construction commodities during the period between March 2004, when the feasibility estimate was being carried out, and March 2008, when bidders were preparing the bids. During this period, the indexes published by the Institute for Construction Training and Development (ICTAD), upon which change in cost is measured under the construction contracts in Sri Lanka and upon which contractors are likely to measure inflation, rose by 107%.

²⁹ The operations department has suggested that increased costs due to flood damage and underestimated quantities can be covered by the contingency included in the original cost estimates, so a reduction of the original project scope is not envisaged.

The TA activities for roads focused on capacity development and institutional support for both RDA and the PRAs

environmental and social management, (iii) procurement, (iv) preparing PPPs, and (v) other topics. The types of interventions included the (i) conduct of studies; (ii) formulation of policy guidelines, legal frameworks, and investment plans; (iii) provision of on-the-job training to officers and staff; and (iv) improvement of systems and procedures for planning and budgeting road maintenance. Some TA activities recommended mitigation measures to address the potential adverse environmental and social impacts of road projects. These included TA for the Independent External Monitoring of Resettlement Activities of the STDP³⁰ and TA for Capacity Building of the Environmental and Social Division of RDA.³¹

48. Government ownership of these TA activities was weak. One TA on the reengineering of road sector institutions³² was not effectively taken up by the consultants in the RSDP. The TA tried to cover too broad a scope and do too many things. Continuity was lacking from one activity to the next. Several were merely one-time attempts to solve specific capacity development problems. The wide variety of TA topics resulted at times in an unfocused approach to improving capacity in the sector. This was also confirmed by government staff during the evaluation mission. The SAPE found that several TA activities overlapped in design and themes with other TA and capacity development efforts (para. 57).

49. Nonetheless, some TA was successful in achieving capacity development objectives. The TA on Capacity Building of the Environmental and Social Division of RDA produced two manuals, one on environmental safeguards compliance and another on social assessment and involuntary resettlement compliance. They were effective in helping to undertake environmental and social investigations for the NHSP.

³⁰ ADB. 2005. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Independent External Monitoring of Resettlement Activities of the Southern Transport Development Project*. Manila (TA 4748-SRI, approved on 19 December).

³¹ ADB. 2005. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Capacity Building of the Environmental and Social Division of the Road Development Authority*. Manila (TA 4736-SRI, approved on 14 December); attached to ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the National Highways Sector Project*. Manila (Loan 2217-SRI, approved on 15 December).

³² ADB. 1998. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Reengineering of Road Sector Institutions*. Manila (TA 3110-SRI[SF], approved on 8 December); attached to ADB. 1998. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Road Network Improvement Project*. Manila (Loan 1649-SRI[SF], approved on 8 December).

Evaluation of ADB Support

50. The evaluation of the support to the Sri Lanka transport sector over 1999–2010 is based on the six evaluation criteria identified by the IED's revised CAPE guidelines.³³ These are strategic positioning, relevance, efficiency, effectiveness, sustainability, and development impacts. Each can be rated on a scale of four, from, for instance, highly relevant, to relevant, less relevant, and irrelevant. The evaluation is influenced by the fact that most of the projects under evaluation are still ongoing, and the economic returns cannot yet be calculated. Assumptions regarding project efficiency needed to be made, and assessments were sometimes based on process efficiency rather than efficiency of investment. The evaluation of completed projects drew mainly on examination of PCRs, project completion report validation reports, PPERs, and qualitative analysis. Interviews were conducted with project staff, and some consultant reports and related project documents were examined as well.

A. Strategic Positioning

51. The strategic positioning of ADB's transport sector strategy for Sri Lanka is rated *satisfactory*. Infrastructure is one of ADB's five core areas of operation under Strategy 2020.³⁴ ADB has been involved in the transport sector in Sri Lanka since the 1980s and its sector strategies have evolved and adjusted to changes as the need has arisen. The thrust of ADB's sector strategies was on overall improvement of road sector performance. In the last decade, ADB paid greater attention to networks, connectivity, and sector reforms. ADB's COS for 1998–2003 already emphasized the need for greater private sector participation and for policy dialogue to promote sustainable project investments. The subsequent CPS for 2004–2008 reiterated ADB's support for policy and institutional reforms and underscored the importance of (i) policy, regulation, and planning to enable strategic management of the road network; (ii) promotion of PPP in road investments (particularly expressways); (iii) development of a sustainable funding mechanism for road O&M; (iv) preparation of a road sector master plan; and (v) enhancement of preconstruction processes. The sector strategies were positioned well, and the sector assistance program that ADB delivered was consistent with the principles established by these strategies. Risk factors were identified on a project-to-project basis but were not explicitly defined at the sector level. For performance monitoring, the strategies identified benchmarks to be used, including the accomplishment of policy and institutional reform action plans, private sector participation, improved road conditions, bus transport services, and road safety.

The strategic positioning of ADB's transport sector strategy for Sri Lanka is rated satisfactory

52. In the 1980s, the World Bank Group was the primary development partner providing assistance to the transport sector. ADB was starting operations in the sector

³³ Independent Evaluation Department. 2010. *Revised Guidelines for the Preparation of Country Assistance Program Evaluations*. Manila: ADB.

³⁴ ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila. <http://www.adb.org/documents/Policies/Strategy2020/default.asp?p=strtg>

at that time and benefited from its liaison with the World Bank on project and policy matters. In 1988, the Overseas Economic Cooperation Fund (OECF) of Japan emerged as a new development partner, and the fund and ADB became the most active providers of development finance for priority investments related to Sri Lanka's primary and secondary road networks. Although the World Bank took the lead in policy dialogue, it did not provide new loans for almost a decade from 1999 until the late 2000s. As the World Bank gradually withdrew from substantial lending to the transport sector during the 1990s, ADB became the lead agency in engaging the government in policy dialogue and discussions on institutional reforms in the sector. This was much appreciated by the government, which had prioritized road development. In the mid-1990s, ADB's focus on the transport sector in Sri Lanka's southern region generated synergies with the government's program for the development of that region.

ADB did not involve itself in the rail subsector beyond a single TA because of concern that the government might not agree to reforms in the sector for political reasons and due to trade union opposition to such moves

53. ADB did not involve itself in the rail subsector beyond a single advisory TA because of concern that the government might not agree to reforms in the sector for political reasons and due to trade union opposition to such moves. This SAPE can agree with ADB's focus on road transport within the transport sector, as the island is small and road density is already high, so there is less need for railway or river transport. ADB focused on the road subsector, and its strategies were closely related to the government's plans for roads. ADB also coordinated with other development partners in the sector, including the World Bank and the Japan Bank for International Cooperation (JBIC), to avoid duplication of effort. ADB is now the largest external funding agency to the road sector in Sri Lanka and continues to coordinate with other major external funding agencies in terms of geographic coverage. ADB projects have covered a wide geographical area and have addressed both national and provincial roads.

54. An improved road network will reduce transport costs and increase connectivity between local and global markets via Colombo Port. Transport sector interventions to support the development of policy, regulatory, and institutional frameworks help address the core issue of ensuring sustainable funding to maintain the road network. The capacity development initiatives help to develop technical and financial management capacities at the central and provincial government levels. ADB's past approach to mainstreaming governance in project design has been continued. The transport sector interventions also supported the development of the national contracting industry so that it can gradually undertake more maintenance work in the road sector through increased use of performance-based maintenance contracts. There has been adequate coordination among development partners. Overall, therefore, this SAPE assesses the positioning of the transport sector strategies for the evaluation period *satisfactory*. A summary evaluation of the positioning of ADB's consecutive strategies is presented in Appendix 6.

B. Relevance

ADB's support to the transport sector in Sri Lanka is rated relevant

55. ADB's support to the transport sector in Sri Lanka is rated *relevant*, as it supported the government's primary objective of promoting economic growth and was also consistent with ADB's country and sector strategies, which were also aligned with the government's strategy.

56. Some projects are viewed as strategic by the government. The CPEP aims to facilitate private sector investment, which is a priority for the government. The ENCPRP addresses the urgent need for improved infrastructure after almost three decades of civil conflict in the Northern and Eastern provinces. The violence left roads in need of

repair, especially in the Northern Province, where the damage to infrastructure was most acute, and ADB's involvement in this area was extremely relevant in restoring roads to their previous condition. The provincial road component of the RSDP was a follow-on project to the ADB-funded Southern Provincial Roads Improvement Project,³⁵ and was considered a model for improving provincial roads in other provinces. The RSDP was consistent with ADB's operational strategy for the road subsector in Sri Lanka and with the government's development goals, although the project's design was complex, and it did not succeed in giving the intended priority to social impacts including poverty reduction in the selection of its road sections. The selection methodology was to provide a mix of roads that overall provided sufficient economic return to support investment as well as an attractive range of social benefits including the potential to reduce poverty. However, when the social benefit was combined with the economic benefit, in most cases high traffic roads were given priority (Appendix 7).

57. Although the designs of most projects were adequate, there are exceptions. Some were overly complex, making them less relevant. Some project and TA designs also overlapped, resulting in duplication of effort. The NHSP was designed to address both investment and institutional improvement needs in the sector, and its capacity development component was to be a continuation of the RSDP. However, the NHSP design failed to take the work done under the RSDP into consideration and in effect duplicated its efforts. Its capacity development components for planning and programming, O&M, procurement, environment, and social safeguards were redundant.³⁶ The same problem afflicted other projects and TA. ADB assistance should review the achievements and incorporate the lessons of the projects that precede it, but this was not done in the transport sector during the evaluation period. However, some project designs were coordinated with those of other development partners in the sector—the NRCP, for example, which was designed based on consultation to ensure equitable geographic coverage and to avoid overlaps.

58. The quality of TA scope and design was mixed. The TA to prepare a PPP expressway project³⁷ did not fully investigate whether the essential prerequisite of a favorable climate for private sector investment in the road sector existed, either during initial formulation or design; the scope was revised in January 2006. The target of the TA was changed to capacity development for financial management of road projects. The envisaged outputs included private sector participation in O&M. The design of the TA on Road Maintenance Budgeting and Expenditure Control was weak, as this was essentially a software development project that could have been avoided by the procurement of suitable modification of commercially available software. RDA abandoned the software after only 1 year of use, citing a problem in the model. On the other hand, the TA on Reengineering of Road Sector Institutions had a complex design to be implemented in the RSDP. Individual smaller TA activities to address this project's individual components could have been more effective.

³⁵ ADB. 1997. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Southern Provincial Roads Improvement Project*. Manila (Loan 1567-SRI[SF], approved on 30 October).

³⁶ The other cases of overlap are between the TA on Road Maintenance Budgeting and Expenditure Control, TA on Preparing a Public-Private Partnership Expressway Project, and TA on Road Sector Master Plan, and the capacity development components of the RSDP and NHSP. Overlaps concerned (i) assistance in the sector reform to complete reengineering action plans started under one project or another, (ii) road maintenance budgeting and expenditure control in two projects, (iii) capacity development for financial management of road projects, and (iv) road sector master plans under two projects.

³⁷ ADB. 2003. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for Preparing a Public-Private Partnership Expressway Project*. Manila (TA 4178-SRI, approved on 17 September). This TA is classified as a PPTA but discussed here because the objectives and outcomes are advisory in nature. The TA was later renamed Capacity Building for Financial Management of Road Projects.

C. Efficiency

ADB support is rated efficient

59. ADB support is rated *efficient*. This is largely a result of the good economic internal rate of return (EIRR) of two completed projects, one port project (CPDP) and one road project (RSDP). The PPER for the port project calculated its EIRR to be 30%. The PPER for the road project calculated EIRRs for 31 of about 150 road sections and readjusted the appraisal's envisaged life of the DBST from 20 years to 10 years, because the assumptions of the economic analysis in the RRP did not include the resurfacing cost. The average EIRR was calculated as 20.1%, however, with the EIRRs for the 31 road sections ranging between -2.5% and 68.2%, and 19 registering an EIRR below the cutoff 12%. The implementation process and performance of the six still ongoing projects including the TA loan for the road project preparatory facility are poor. Most projects were delayed and affected by the cost overruns. IED may revise the ratings if it reviews the ongoing projects at a later date.

60. Only two projects with physical components that were started during the 12-year evaluation period were also completed: the CPDP and the RSDP, and both have a PCR and a PPER. Both were supported by relatively small ADB loans, compared for instance to the size of the loan and its supplement given to the STDP. The estimated EIRR for the CPDP at appraisal was 19.9%. The PCR³⁸ recalculated the EIRR as 38.8%. The PPER calculated the EIRR to be a high 30.0%. Although the project was rated efficient, the PPER noted that the RRP and the PCR used a number of incorrect assumptions and thus the re-estimated EIRR was lower.

61. The PCR³⁹ for the RSDP recalculated its EIRR at 29%. A PCR validation report⁴⁰ disagreed and concluded that, because no traffic count or road condition survey was conducted for the PCR, the EIRR was hypothetical. IED's PPER conducted traffic counts and then calculated EIRRs for 31 sample sections out of about 150 road sections. The PPER used the same assumptions as the economic analysis in the RRP of the RSDP, but it did not use a benefit period of 20 years. The RRP's assumptions for road maintenance included only routine maintenance, and periodical maintenance such as refracting was not considered. As a result, the counted maintenance cost in the RRP was just 2% of the investment cost over 20 years. Since no resurfacing was considered, the PPER reduced the benefit period to 10 years. The average EIRR was 20.1%, although EIRRs for individual road sections varied greatly, ranging from -2.5% to 68.2%; 19 of the 31 road sections observed had an EIRR below 12%.

62. The SAPE found issues for the implementation performance of the six projects that were still ongoing at the time of evaluation or did not have a PCR or a PPER (Appendix 8). The CPEEP had six loan extensions before being closed, partly unfinished. The original completion date of 29 February 2004, set when the project began in 2001, was extended to 31 August 2005, 31 August 2006, 31 August 2007,

The SAPE found issues for the implementation performance of the six projects that were still ongoing at the time of evaluation

³⁸ ADB. 2005. *Completion Report: Equity Investment and Loan to the Colombo Port Development Project in the Democratic Socialist Republic of Sri Lanka*. Manila (Equity Investment 7153 and Loan 1689-SRI, approved in May 1999).

³⁹ ADB. 2009. *Completion Report: Road Sector Development Project in Sri Lanka*. Manila (Loan 1986-SRI[SF], approved on 19 December 2002).

⁴⁰ ADB. 2010. *Validation Report: Road Sector Development Project in Sri Lanka*. Manila (Loan 1986-SRI[SF], approved on 19 December 2002).

31 August 2008, 28 February 2010, and 31 December 2011.⁴¹ No activity occurred during the last extension. Although components were not completed,⁴² the loan was closed in August 2010. The closing date was retroactively set to 16 November 2009, because no disbursement had been made after 12 November 2009. A combined PCR on the CPEEP and the CPEP, which has an estimated completion date of 30 April 2013, has been proposed based on an interpretation of ADB's Project Administration Instructions.⁴³ This SAPE finds the timing of the PCR arguable.

63. The large STDP, which commenced in 1999, took 12 years to complete the Southern Expressway. More than 20,000 people had to be resettled. ADB's failure to comply with its own operational and safeguards policies was the main cause of the delays. This led to the request for the CRP review by representatives of people who stated that the trace changes had caused them loss of homes and livelihoods and harm through damage to the environment, degradation to wetlands, dispersion of communities, negative effects of resettlement, and human rights violations. The CRP final report concluded in 2005 that lapses of compliance with ADB policies and operational procedures had occurred during the period from project processing to implementation.⁴⁴

64. The STDP's scope continued to be changed after the start of the compliance review.⁴⁵ A major change in scope,⁴⁶ to shift the alignment once more, was approved in February 2008. A supplementary loan⁴⁷ was processed at the same time to widen the road from two lanes to four. One more change occurred when the government, with assistance from JICA—which was cofinancing the STDP—installed a toll system on the highway. This change from a free highway to a toll road was achieved with the system's completion in 2011. Issues were raised about insufficient due diligence. No feasibility study was done, although this was to be the country's first toll road and it was therefore difficult to assess what the public reaction would be, whether potential users would use it, and whether the tolling of the road would result in a decline in projected traffic flows. A reduction in traffic from the appraisal forecast is likely to mean a lower EIRR for the project. In the view of this SAPE, the traffic forecast and the economic evaluation of the STDP should have been updated. In addition, a financial assessment to determine the financial internal rate of return should have been conducted. ADB did not conduct other institutional due diligence related to tolling, either. The requirements for regulation,

The large STDP, which commenced in 1999, took 12 years to complete the Southern Expressway

⁴¹ The operations department responsible has argued that the six extensions were due mainly to prolonged negotiations between the Government and the bidder for the terminal concessions, not due to the project implementation being less efficient, but rather to practices more usual in the case of PPPs.

⁴² There were two major components: (i) preparation of the tender documents, and (ii) preparation of the concession bid documents for the CPEP.

⁴³ ADB. 2009. Project Completion Report for Sovereign Operation. *Project Administration Instructions*. PAI 6.04A. Manila.

⁴⁴ The lapses involved (i) Operations Manual (OM) Section 20: environmental considerations in ADB operations; (ii) OM Section 21: gender and development in operations; (iii) OM Section 22: benefit monitoring and evaluation; (iv) OM Section 40: formulation and implementation of loan covenants; (v) incorporation of social dimensions in operations; (vi) OM Section 50: involuntary resettlement; and (vii) PAI No. 5.04: changes in project scope or implementation arrangements.

⁴⁵ The operations department responsible has argued that the consideration of five different traces in the process of finalizing the STDP trace was perhaps unfortunate but also reflects the high level of public consultation undertaken for the project. Furthermore, the final trace was selected in response to Sri Lanka's Central Environmental Agency's recommendation to avoid the wetlands.

⁴⁶ ADB. 2008. *Major Change in Scope to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Project*. Manila.

⁴⁷ ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Supplementary Loan 2413-SRI, approved on 6 March).

**RDA and ADB
need to carefully
monitor traffic
volume after the
STDP is
completed**

tariffs, and O&M of a toll road were not clarified. This need for ADB due diligence should have been addressed through the formal approval of a major change in scope.⁴⁸ The need for this is all the more apparent, given the fact that the imposition of tolls is likely to have a more significant influence on the outcome of the STDP than the change of alignment, which received an approval for a scope change in 2008.⁴⁹ The original project cost of \$132.0 million was raised to \$449.0 million in 2008. The EIRR at the approval of the supplementary loan was 15.3%, which was increased from 14.5% at the original appraisal in 1999. The reasons of the increase in EIRR were not clearly explained, because the traffic forecast was not reported in the economic analysis for the supplementary loan. It should be noted that the PPTA for the STDP calculated an EIRR lower than 10% in 1999, although the RRP of the supplemental loan in 2008 projected greater traffic than did the original RRP. RDA and ADB need to carefully monitor traffic volume after the STDP is completed, review what kind of economic benefits will be generated, and compare these with the project's costs, which had increased by 340% as of 2008 from the original RRP estimate.

65. Disbursements for the large NHSP were slow at the beginning, improved later, and reached \$35.6 million by the end of 2010 against a target of \$32.0 million. A major design change early in the project from surfacing with DBST to asphalt concrete, as well as rising prices for construction materials, resulted in cost overruns. RDA estimated that the cost of the road rehabilitation component more than doubled from the appraisal estimate—rising from \$83.0 million to \$187.0 million. The scope of this component was then revisited based on reallocating \$47.3 million from land acquisition for the Colombo links to the road rehabilitation component, thus increasing the funds available for civil works to \$142.1 million. The original project scope of about 270 km of road was reduced by 22%, to 211 km.

66. The CPEP was delayed due to the postponement of loan effectiveness. The project was scheduled to be completed by August 2010, but the component will be completed only by 2012. A condition of loan effectiveness was not complied with; it required the borrower to have issued an invitation for the negotiation of the concession agreement to the selected private operator(s), following an open competitive bidding procedure in accordance with the borrower's laws and procedures. The south container terminal concession bidding component encountered unforeseen difficulties after attracting keen interest from the private sector and five bidders, including internationally renowned and well-recognized terminal operators. After the bid opening and while the bid evaluation was still in process, the government issued a new requirement in the form of a Cabinet memorandum⁵⁰ that took effect immediately and was judged by the Attorney General to be applicable to all procurement cases and to constitute a part of the "borrower's laws and procedures." As such, the memorandum applied to the bidding process for the project terminal concession and necessitated a rebidding that took place from 15 March 2008 to 15 June 2008.

⁴⁸ ADB. 2011. Change in Scope of Loan and/or Grant Funded Projects. *Project Administration Instructions*. PAI 5.02. Manila.

⁴⁹ In the view of the operations department responsible, a scope change was not necessary, as the tolling, in principle, was not expected to substantially affect the attainment of the project's purpose and immediate objectives. It is not considered a major change in route, location, road classification, as referenced in Project Administration Instructions 5.04. This SAPE maintains that, especially since this is the first toll road in Sri Lanka, a financial assessment and an assessment of user acceptance should have been done.

⁵⁰ According to the Government, this memorandum was approved so that the government procurement process would secure maximum socioeconomic benefits for the country. This memorandum requires all Cabinet-appointed negotiation committees to consider the national interest before technical and financial considerations when submitting tender outcomes to the Cabinet for approval.

67. Meanwhile, the bidding process for the harbor infrastructure works component had been completed, and the government had issued a letter of acceptance to the selected contractor on 22 November 2007. But the contract had yet to be signed, because it was awaiting loan effectiveness and consequent availability of the loan proceeds. Loan effectiveness in turn was conditional on the issue of an invitation letter to the selected terminal operator, which had yet to take place. This required renegotiation between the borrower and ADB. The loan agreement was amended to waive the given effectiveness condition and to introduce a new condition that the award of the container terminal concession should be made within 18 months after the effective date of the loan. Subject to this new condition, the loan became effective on 2 May 2008. The new deadline to select an operator was thus 2 November 2009. The original 18-month period was extended to 41 months on 30 August 2011. After the cancelation of the original request for proposal (RFP) for the south terminal concession, a new RFP was issued on 16 February 2009. The new RFP document changed the concession agreement to build-operate-transfer (BOT). The BOT agreement for one of three terminals, namely the south terminal, was signed in August 2011. Work was permitted to go ahead on the harbor infrastructure works component based on the new condition in the amended loan agreement. Implementation of the harbor infrastructure works was about 15 months behind schedule at the time, although 9 months of this delay was due to additional contracted work.

68. Many TA activities also experienced delays. For the TA on Reengineering of Road Sector Institutions, five contract variations were required, and the 8-month project had to be extended by 6 months. This indicated a deficiency in its initial design. The TA for the Road Sector Master Plan⁵¹ was also delayed, and its scope was drastically reduced to eliminate provincial and rural roads and to cover national roads only. RDA states that the initial report of the consultant for the reduced scope was rejected because it used outdated data. The current road sector master plan was completed by the planning division of RDA with additional consulting inputs provided by ADB and after incorporating road data collected under the RSDP. The lack of statistical information at the beginning affected TA implementation and caused delays. Data were collected through the RSDP and were used to complete this TA. The delay was about 3 years. RDA developed the National Road Master Plan with further assistance from ADB.

69. Consultants for some TA and capacity development were replaced due to unsatisfactory performance. The TA on Capacity Building of the Environmental and Social Division of the Road Development Authority was delayed when RDA reported that some consultants selected were not satisfactory. ADB replaced them with suitable consultants. The initial international consultant for the TA on Establishment of a Central Procurement Unit in RDA⁵² was terminated due to poor performance and replaced by ADB.

Many TA activities also experienced delays

ADB support to the transport sector in Sri Lanka is rated less than effective

D. Effectiveness

70. ADB support to the transport sector in Sri Lanka is rated *less than effective*. Two investment projects and a TA loan project were completed. The PPER rates the CPDP effective, and the PPER rates the RSDP less effective. The SAPE assesses the TA

⁵¹ ADB. 2004. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Road Sector Master Plan Project*. Manila (TA 4315-SRI, approved on 20 January).

⁵² ADB. 2008. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Establishment of a Central Procurement Unit in the Road Development Authority Project*. Manila (Small-Scale TA 7153-SRI, approved on 17 October).

loan less than effective, as the CPEP was closed with only the project preparation for the CPEP (para. 62) completed, while the remaining outputs were undelivered. In addition, most of the TA and capacity development loan components are assessed *less than effective* because either the TA operations were incomplete or their outputs were not used.

71. The CPDP in particular delivered its outcomes and impact effectively. This is based on its (i) business performance, (ii) contribution to economic development, (iii) contribution to private sector development, and (iv) compliance with environmental and social policies. The SAGT generated large profits from high tariffs on domestic cargo, productivity improvement, and operating costs that were lower than originally forecast. It made profits from the start, as it took over existing berths and began operations immediately. The SAGT has demonstrated that modern logistics practices and staff management can be applied successfully in Sri Lanka's ports. In addition to the direct SAGT impacts, port cargo volume increased substantially from 1.0 million TEUs in 1995 to 1.7 million TEUs in 2002. The project achieved the private sector development objective presented in the RRP and helped catalyze the development of Colombo Port.

72. The RSDP improved or constructed 780 km of roads, compared with about 1,000 km expected at appraisal, a 22% shortfall due to cost increase. The number of bridges was reduced from 125 to 74. The shortage of funds meant that 40 km of community roads were dropped or cancelled from the scope of the project, although field assessments showed that local residents around project roads benefited from the project because it improved the productivity of those assets. The PCR reported that many project objectives were not achieved. The consulting services for the detailed engineering design and the accompanying TA for the Passenger Transport Services Improvement Project⁵³ were incomplete. No assessment was carried out of the effectiveness of the reorganization of RDA, and the road maintenance financing scheme was not successfully established. The PPER found only about one-third of the project's reform plan was completed or partly completed. There are several reasons for the unmet targets: (i) the reform program was not provided in the RRP and the project administration memorandum, and could not be found in the implementation agencies; (ii) RDA and the PRAs had limited understanding and ownership of the reform program, even by the time the project ended, so that not enough attention and effort were spent on meeting the targets; (iii) the consultant took the initiative in implementing the reform program instead of RDA and the PRAs; (iv) the budget for the reform program was reduced; and (v) monitoring of the progress of the reform program was weak. Even in the PCR and the government completion reports prepared by RDA and the Ministry of Local Government and Provincial Councils, more than 50% of the targets were not discussed, and their progress and achievement were not mentioned at all. Although the reform program did not achieve the envisaged outputs, the project still contributed to institutional strengthening by reorganizing RDA and the PRAs.

73. The CPEP consisted of (i) institutional capacity development on port sector policy, institutional, and regulatory issues, including preparation of the regulatory and planning framework; (ii) formulation of concession packages that would maximize

⁵³ ADB. 2002. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Passenger Transport Services Improvement Project*. Manila (TA 4075-SRI, approved on 19 December); attached to ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

private sector participation; and (iii) project preparation for the CPEP to develop detailed engineering parameters, including geotechnical surveys and environmental impact assessment. The CPEEP was closed with only the engineering studies and environmental impact assessment completed and the remaining outputs undelivered. The envisaged legal and institutional reform was not achieved. The government decided not to corporatize the JCT in view of lack of consensus from all interested parties. The BOT concession did not materialize before the loan closed (para. 67), and there were the canceled components to support the concession (para. 70).

74. The road project preparatory facility to support preparation of safeguards, detailed engineering, and tendering documents may fall short of its targeted outcome (i.e., its outputs may not be used). About 30% of the detailed designs prepared under the loan would have been taken up by ADB and 14% of the detailed designs would have been taken up by other development partners. This TA loan aims to shorten project processing and implementation periods, and it supported project preparation for the ENCPRP and NRCP efficiently.⁵⁴ However, the remaining 56% of the design and other work produced under the project will become outdated if it is not put to use soon. Particularly, the costing will become obsolete soon. This will require redesigns, with additional costs, and longer time lags between project preparation and actual construction, resulting in further deterioration in roads, price increases, and cost overruns.

75. For the STDP, several concerns regarding road safety were raised before opening the Southern Expressway to the public. The National Council for Road Safety of Sri Lanka has pointed out that no independent safety audit was carried out at any stage of the expressway development, which it considers an important prerequisite to opening the highway to the public. The road safety issues, in the Council's view, include the following: (i) the outer shoulder (1.7 m) is not wide enough for emergency stops by vehicles; (ii) a very small inner interface zone (0.5 m) between a running lane and a center guardrail; (iii) no agreed-upon mechanism to enforce a speed limit; (iv) the possibility that users might be confused at entry and exit ramps, since the ramp designs vary, and this is the first traffic-controlled highway in Sri Lanka; (v) merging lanes that are not long enough at some interchanges; (vi) the difficulty some vehicles would face reaching sufficient speed for safe merging, because the toll gates are located in the middle of the ramps, which were not considered in the highway's initial design; and (vii) a road design that may mean headlight glare from opposing traffic and may affect the drivers on the opposite side of the road. The Chartered Institute of Logistics and Transport Sri Lanka expressed safety concerns, because the lane width has been reduced to 3.5 meters (m) due to budget overruns and changes in design, and the hard shoulder is of insufficient width. The Institute recommended safety actions, starting with lower speed than the current speed limit of 100 km/h, as drivers may not be disciplined and skillful for the first expressway, and phased entry of heavy vehicles. The Institute also mentioned that it is important that the toll road be assessed on sound economic terms and on the basis of "user-pays" principles so that motorists know and pay for the cost of the infrastructure they use.

Several concerns regarding road safety were raised before opening the Southern Expressway to the public

⁵⁴ The operations department has opined that the TA loan should be considered as a major change in ADB's approach in delivering road projects. It allows the government to directly proceed to preparing detailed engineering and tendering documents, and thereby significantly enhances project readiness and ownership.

The TA for land use planning in the southern highway corridor has the potential to initiate new policy for land use developments for expressways and new roads

76. The TA for land use planning in the southern highway corridor⁵⁵ has the potential to initiate new policy for land use developments for expressways and new roads. The TA on Capacity Building of the Environmental and Social Division of the Road Development Authority has produced manuals on environmental safeguards compliance and social assessment and involuntary resettlement compliance, and helped successfully undertake environmental and social investigations on the NHSP. The output in terms of equipment and training received under this project was favorably received by RDA and is currently being used. These interventions will assist in project implementation and in the social acceptability of projects.

77. Other TA has been less than effective—the TA on preparing a public-private partnership expressway project, for example. After general elections, the government changed its policies and requested first a termination and then a change of scope. The TA completion report stated that the TA was well formulated and relevant at that time, but the revised project has not been very useful even though dialogue on it with the government has continued over several years. The TA on Road Maintenance Budgeting and Expenditure Control developed a system to calculate budgetary requirements for maintenance. The IED SAPE mission verified that this system operated for about 1 year and was then dropped due to problems with the software. The TA for the Road Sector Master Plan was not successful, because the master plan was incomplete due to lack of accurate road inventory. Only a National Road Master Plan was completed, with additional support from the consulting service of the RSDP and RDA's own efforts. The TA for the Establishment of a Central Procurement Unit in RDA, although established and functional, has not undertaken a considerable amount of procurement, and mainly only local procurement. Most foreign project procurement is still undertaken by the project implementation units.

E. Sustainability

This SAPE rates the sustainability of ADB support to the Sri Lanka transport sector less than likely

78. This SAPE rates the sustainability of ADB support to the Sri Lanka transport sector *less than likely*. This takes into consideration the financing of recurrent costs, institutional arrangements, and O&M. Appendix 9 gives a more detailed assessment regarding the sustainability of the ADB-supported projects.

79. Several of the RRP for the projects examined did not adequately describe the risks to sustainability or ways to mitigate them. Although other RRP briefly discussed risks, appropriate measures to mitigate the problems were not taken. The allocation in the government budget for recurrent costs for all road projects has remained inadequate, although it grew over the period in nominal terms, and it always remained less than the amount requested by RDA. The government revenues available for maintenance come from import duties, surcharges, levies, and value-added tax on inputs to road transport, as well as licensing and registration fees, but they are inadequate to properly maintain the national network. Maintenance funding for provincial roads is also inadequate. The government funds about 90% of the budgets of all provincial councils, with provincial revenue funding only about 10%. About 20%–25% of provincial revenues are earned through vehicle license fees.

80. Government commitment to policy reform and institutional strengthening is a key to sustainability, but it has centered on road construction and rehabilitation rather than maintenance. Although institutional capacity has grown over the period due to

⁵⁵ ADB. 2008. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Land Use Planning of the Southern Highway Corridor Project*. Manila (TA 7065-SRI, approved on 6 March).

government efforts and ADB TA, it continues to be constrained by a lack of resources. The reengineering action plans of RSDP included an activity pertaining to road maintenance funding. It was to increase road maintenance financing and streamline road maintenance budgeting and expenditure control, so that a sustainable mechanism could be agreed upon by 2005. Road maintenance funding for national highways has been financed from allocations under the central government's budget line of road maintenance. From 2006, it has been titled RMTF under the provisions of a Trust Ordinance. Road and bridge maintenance was, however, supposed to be financed from a separate fund outside the central government's budget framework and directly financed from road user charges. There is no arrangement yet for such a direct contribution. The fund itself operates only as a separate budget line in the government budget. The RMTF became operational in 2006 with a budgetary allocation of SLRs3 billion. The government has to be commended for increasing this significantly to SLRs6.7 billion for 2010 (disbursement in dollar terms increased from \$28.0 million in 2006 to \$58.0 million in 2010).⁵⁶ However, this SAPE submits that, due to the large increase in the budget for new road construction and improvement, the percentage share for maintenance allocation in the RDA budget in 2010 was less than that in 2006, and that maintenance of national roads is still not fully funded. The government still requests development partners to consider financing road maintenance when road projects are prepared. The fact that some ADB-supported projects have included performance-based maintenance as part of the contracts for civil works is another sign of incremental rather than systematic road maintenance financing. The backlog in road maintenance built up over the years should also be taken into consideration.⁵⁷

Maintenance of national roads is still not fully funded

81. In addition, the extension of a road fund to the provinces has not happened. The provincial roads funds received for road maintenance from the central government through the Finance Commission have remained relatively unchanged for all PRAs. Budget allocations are made as "recurrent expenditure—buildings and structures" for office maintenance and staff salaries and as "capital expenditure—rehabilitation and improvement—structures" for maintenance contracts or materials. After deliberations with the Finance Commission, the provincial councils receive an untied block grant, which means that the PRAs have to then compete for resources with other provincial maintenance requirements. This funding is driven largely by political concerns, not road network requirements. The actual funding for maintenance of provincial roads has remained around 40%–70% of the average SLRs100,000 needed per kilometer, except in Western Province, which has a significantly higher income from revenue received for annual licensing of motor vehicles.

82. The SAPE found limited government commitment to and ownership of institutional capacity development provided through the loans and TA. This puts the sustainability of these outcomes at risk. The central procurement unit established in RDA does only a limited amount of work, with a director, five engineers, and 13 nonprofessional staff, but no procurement specialist. The TA on Road Maintenance Budgeting and Expenditure Control model fell into disuse only 1 year after its completion. It appeared to the IED SAPE mission that there was no incentive or commitment to improve budgeting and expenditure control. Another example is the NHSP. A 4-year performance-based maintenance program was to be established to

⁵⁶ The government has submitted that the income from the fuel levy is far less than what the Treasury makes available for road maintenance.

⁵⁷ The operations department responsible holds a more positive view of the sustainability of road maintenance due to increased government funding, and innovative performance-based road maintenance contracts. It also contends that RDA has taken a policy decision to allocate all toll revenue for operation and maintenance of expressways.

cover about 500 km of roads at a cost of about \$8.0 million. This was reduced to only 180 km over a 1.5-year contract period for a value of about \$2.0 million.

83. The ENCPRP envisioned that vehicle license fee revenues would be dedicated to road maintenance, which would help finance routine maintenance and a part of periodic maintenance. It is expected that at least 70% of the required funds for periodic road maintenance will be provided by 2012. If this is achieved, it will support the sustainability of road infrastructure.

F. Impact

ADB's contribution to development impacts specific to the transport sector is rated less than satisfactory

84. ADB's contribution to development impacts specific to the transport sector is rated *less than satisfactory*. The picture is mixed; while some specific safeguards or institutional impacts were positive, others were more negative.

85. The transport sector results framework of ADB's CPS for 2009–2011 was linked to two objectives of the CPS—increased economic growth and socially inclusive development—and set four key objectives in the transport sector: (i) reducing road transport cost, (ii) improving connectivity, (iii) increasing port capacity, and (iv) increasing PPPs. Milestone and tracking indicators to monitor accomplishment were laid down in the CPS and the transport sector results frameworks, but the country Operational strategy final review⁵⁸ did not report on whether they were achieved. This study found that the following key indicators have not yet been achieved: (i) 100% funding for national highways maintained by 2010 through the RMTF, (ii) completion of the southern highway by 2009, (iii) reduction in travel time from Colombo to Matara from 4–5 hours in 2007 to 2 hours by 2010, and (iv) increasing PPPs by piloting performance-based maintenance contracts for priority national highways by 2010.

86. The impact of the RSDP was moderate. The project improved roads along existing alignments, requiring very little land acquisition. With ADB assistance, resettlement activities were satisfactory, and no pending resettlement issues were reported. The environmental safeguard requirements were generally complied with during project preparation, and the RSDP produced no long-term negative environmental impacts. The IED mission carried out a rapid benefits survey on 10 selected project road sections in four provinces in February 2011. The field assessments showed that people who had assets benefited from the project because they could improve the productivity of those assets. Although the reform program under the RSDP was not fully achieved, the project still contributed to institutional strengthening by reorganizing RDA and the PRAs, strengthening the preconstruction and construction process, and encouraging private sector participation. The provincial roads under the RSDP were selected based on both economic and socioeconomic criteria. The objective of the selection methodology was to provide a mix of roads that, overall, provided sufficient economic return to support investment, as well as an attractive range of social benefits including the potential to reduce poverty. The selection methodology did not clearly link the priority roads to poverty reduction, and the project did not select roads that would support proactive poverty reduction. Thus, the impact on poverty reduction of road rehabilitation was limited.

87. The PPER evaluated the CPDP impacts under four headings: (i) private sector development; (ii) business success; (iii) economic sustainability; and (iv) environmental, social, health, and safety performance. The overall impact was *satisfactory*. The project

⁵⁸ ADB. 2011. *Country Operational Strategy Final Review for Sri Lanka*. Manila.

largely achieved the private sector development objectives. The PPER states that the project more than doubled the effective container capacity at the port, operating in a much smaller area than the JCT. The project also achieved its financial and economic performance targets. Its environmental, social, health, and safety performance was also satisfactory. The project has generated benefits for both exporters and importers, because the port has remained a transshipment hub.

88. The CPEEP has had a limited impact on Colombo Port's efficiency and international competitiveness, since the legal and institutional reform output was not achieved and the concession was not made during the implementation of the CPEEP (para. 73).

89. The Southern Expressway developed by the STDP was opened to the public on 27 November 2011 and is the first large-scale greenfield road development in Sri Lanka. The STDP built about 143 km of the highway, which could be seen as a landmark, but it also had some negative impacts. As mentioned earlier, repeated changes in the original route led to a failure to implement safeguards for many affected people. The acquisition of land and other property resulted in the physical displacement of 5,683 households with 20,340 people. About 38% were relocated at 32 resettlement sites, and other physically displaced households (62%) opted for self-relocation. In addition, others lost employment sources such as sharecropping in rice fields, wage work in small tea and rubber plantations, and small businesses. However, the public was not fully informed of the issues affecting them. The final report of the CRP in 2005 provided 19 recommendations to remedy the various environmental, social, and resettlement issues (paras. 43, 44, and 63). In addition, overruns more than tripled the costs as of 2008, and a scope change that put tolls on what was originally planned as a free public highway will affect the project's envisaged beneficial impacts, limiting access to and use of the highway and the transport network and thus the project's economic benefits, and having environmental and social effects (para. 64).

90. An innovation under the ENCPRP, which is not yet completed, will have a beneficial impact. The provinces under this project have agreed to dedicate their vehicle license fee revenues to road maintenance. This will provide enough funding to finance routine maintenance and a portion of periodic maintenance and could have an additional impact by encouraging other provinces to do the same. The innovation provides a sense of ownership and an incentive to maintain the country's provincial roads.

G. ADB Performance

91. ADB's performance in the Sri Lanka transport sector is rated *less than satisfactory*. Coordination with other development agencies was successfully arranged at the sector and project levels, but there were shortcomings in building government ownership and leadership, and in the adequacy and quality of ADB's project processing and implementation.

92. In Sri Lanka, ADB's major development partners in the road transport subsector are the World Bank and JICA. The three closely coordinate their strategies and collaborate on key focus areas to avoid overlap and ensure efficient use of resources. Efforts in institutional and capacity strengthening at the sector level are aligned synergistically—institutional capacity strengthening activities by ADB, JICA's work to strengthen the capacity of domestic contractors, and road maintenance by the World Bank. The development partners consult closely on project operations to

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agency in the
road sector**

ensure wide geographic coverage and to spread benefits in an equitable manner. For example, the ADB projects under the NRCP cover two of the five districts in Northern Province (Mannar and Vavuniya), and a World Bank project covers one district (Jaffna). The two remaining districts, Mullaitivu and Kilinochchi, are expected to be covered under future assistance from ADB.

93. ADB has been the lead development agency in the road sector, assisting the government in planning and implementing projects. The SAPE team's discussions with government officials indicated general satisfaction with the quality of ADB's responsiveness and assistance. However, some projects have not been prepared soundly and have not properly analyzed risk. This has caused substantial delays, cost increases, and scope changes. For example, implementation of the CPEEP was extended six times due to the failure to select a suitable operator to which to award the concession for the south container terminal. Because the awarding of this concession was a loan effectiveness condition⁵⁹ of the CPEP, this in turn delayed the start of the CPEP until the loan agreement was amended to remove the condition after renegotiations between the borrower and ADB. A replacement condition called for the award of the concession to be made within 18 months after the effective date, but this was not met either. Details of these ADB projects are in Appendix 10.

94. The RRP for the CPEEP noted that the World Bank had attempted a port reform agenda⁶⁰ under a proposed port efficiency project in 1997 but had suspended the project in 1999 due to lack of agreement with the government on restructuring the port sector. Although the World Bank suspended its port reform agenda, ADB tried through CPEEP to continue on a similar track. ADB's rationale for this new attempt was the need for reform to improve the efficiency of the port sector and the belief that the 2000 elections had brought in a government committed to reform. This proved to be an unsound assessment in the case of the envisaged port sector reforms. The project's key outputs were not accomplished (para. 74). The several policy covenants in the CPEEP on reform of the regulatory structure through legislation and corporatization of the JCT were not complied with.

95. The other example is the STDP. The frequent changes of the traces caused lapses in compliance with ADB's operational policies and safeguard procedures. Cost overruns and long delays resulted from ADB's initial opposition to the government's originally proposed route (paras. 43, 44, and 63). Yet the final route that emerged from the frequent trace changes was very similar to that first proposed by the government. ADB assumed that an ADB engineering loan would be provided before the construction loan, because this was to be the first motor highway constructed in Sri Lanka and the project processing schedule required that a sound preliminary design be completed prior to appraisal of the highway project itself. But a TA loan for engineering included in the December 1996 memorandum of understanding was not included in ADB's COS for 1998–2003 for Sri Lanka. Nevertheless, ADB approved the construction loan even though a preliminary design should have been completed prior to appraisal,

⁵⁹The conditions for loan effectiveness of the CPEP were that, following an open competitive bidding process, the government would ensure that (i) SLPA had issued an invitation to the selected terminal operator(s) prior to commencing the negotiations for the terminal BOT concession agreement; and (ii) a subsidiary loan agreement would be signed between the government and SLPA; and submission of legal opinion on the subsidiary loan agreement, the loan agreement, and the project agreement in a form and substance satisfactory to ADB would be submitted by the government and SLPA to ADB.

⁶⁰The proposals had included (i) corporatization of the JCT, (ii) setting up of a port regulator, (iii) amendment to the SLPA act, and (iv) ring fencing and handover of commercial activities in the port to the private sector.

particularly given the manifold socioeconomic implications of this major, first-of-its-kind greenfield highway project.

96. Some of ADB's capacity development and institutional strengthening efforts were overly ambitious and complex. ADB could also have designed and implemented these TA activities and loan components more effectively. In several cases, capacity development work overlapped between one project and the next and was duplicated. In other cases, more than one loan and TA supported institutional capacity development on the same topic at the same time in such areas as road maintenance budgeting and expenditure control, financial management of road projects, a road sector master plan, and improvement of environment and social divisions. This duplication confused the executing agencies and damaged the ownership of these projects. ADB was not successful in building client ownership of institutional capacity development and needs to take a more focused approach in the future.

Some of ADB's capacity development and institutional strengthening efforts were overly ambitious and complex

97. In addition, ADB's monitoring and supervision of capacity development efforts were not comprehensive. The SAPE report team found, for example, that ADB's PCR and the government's completion report for the RSDP each failed to discuss more than 50% of the 60 envisaged reform targets, even though only one-third of them were implemented. Some of the six CPEP loan extensions could have been avoided through better project monitoring.

H. Government Performance

98. Government performance is rated *less than satisfactory*. The government did not comply with some key loan covenants. All the road projects included loan covenants meant to ensure that road maintenance would be adequately funded, but the financing of the road subsector remains a chronic problem, and the government continues to provide insufficient funds to undertake routine and periodic maintenance.

99. RDA has been the executing agency for most of ADB's road projects, but weak institutional capacity within the authority and in the PRAs continues to be a problem, as does a general weakness in ownership. RDA made poor use of several capacity development TA operations. Although consultants working on institutional capacity development have often taken the initiative during project implementation, participation by the executing agencies at both the project design stage and during implementation has been inadequate.

100. Among the improvements that have been made was the establishment of a separate environment and social unit through a TA in RDA. The unit is staffed and operational, assists in project implementation, produces user manuals, and will ensure that ADB safeguard policies are followed in future ADB-funded projects. While it will need considerable further institutional and capacity strengthening, RDA has planned and implemented projects better gradually over time due to ADB TA, and, even though the projects have not been entirely effective, delays and cost overruns have become less frequent. The executing agency needs to continue developing capacity through its involvement with ADB and other aid agencies.

Among the improvements that have been made was the establishment of a separate environment and social unit through a TA in RDA

I. Overall Assessment

ADB's transport sector program in Sri Lanka is rated less than successful overall

101. ADB's transport sector program in Sri Lanka is rated *less than successful* overall.⁶¹ This is based on the overall weighted average of the formal ratings for each of the evaluation's six criteria. ADB's contribution to the transport sector has been consistent with the country's needs and has been relevant. The assistance has been less than effective overall, because not all physical outputs were achieved and most of the TA operations and the capacity development components of loans have been less than effective. Considerable room exists for improvement in efficiency, for reductions in implementation delays and cost overruns, and for better project preparation. However, the assistance has been efficient largely because of the good EIRRs of two completed projects. Sustainability also needs to be improved if the assets are to be adequately maintained.

⁶¹ The evaluation scoring system rates the overall sector performance based on the following criteria: highly successful, successful, less than successful, and unsuccessful. Less than successful replaced earlier partly successful rating.

Conclusions, Lessons, and Recommendations

102. ADB has been the leading development partner in Sri Lanka's transport sector. ADB support to the sector has responded to the changing needs of the sector and has been enhanced by additional support for policy and institutional development through TA and capacity development loan components.

103. Nonetheless, some of ADB's interventions during the evaluation period have not accomplished, or are not likely to fully accomplish, what they were intended to achieve. Loan-financed projects have consistently been overambitious in their result targets and time schedules. Implementation has sometimes been poor. Delays have been frequent, and lack of proper consideration of all aspects of design in preparing some projects has led to cost overruns. Some of these cost overruns have forced reductions in project scope. This has included the elimination of some road sections that these projects were intended to improve or build.

A. Lessons for Future Support

104. The following lessons from the loan and TA operations examined by the SAPE need to be considered when undertaking future projects:

105. **Transport project design should not be too ambitious.** Several loan-financed and TA operations have been too ambitious or have been poorly designed based on previous lessons in the sector or have somewhat predictable obstacles to regulatory reform (paras. 48, 58, and 73). Design changes have been necessary in some projects because not enough time and care was taken in preparing the project in detail at the outset (para. 65). Resettlement and environmental problems in the STDP were caused by changing the road alignment during project preparation (para. 95). ADB needs to ensure that sufficient time, attention to detail, and the proper steps are taken when a project is formulated and designed so that the kind of changes to the scope, cost overruns, and implementation delays encountered in the Sri Lanka transport sector portfolio are avoided in the future.

106. **Capacity development and reform initiatives need comprehensive and long-term planning.** The outputs of several of ADB's TA activities have not been used, and they turned out not to be useful (paras. 48 and 58). Institutional and capacity development TA and capacity development loan components also need to avoid overlap and duplication and become more integrated (para. 96). This means that ADB must take into account what has already been achieved in the sector when designing new TA that will build on previous work and meet new needs.

ADB support to the sector has responded to the changing needs of the sector and has been enhanced by additional support for policy and institutional development

107. **Complex transport projects need much attention to regular project monitoring and timely evaluation.** The monitoring and supervision of project implementation in the sector have not been comprehensive (para. 97). ADB should have done better, especially during implementation of the RSDP and the CPEEP, which included challenging institutional reform components.

108. The SAPE team believes that a PCR for the CPEEP should be undertaken forthwith and should not be held up until the completion of the CPEP (para. 62). The main objective of a PCR is to learn from the experiences of borrowers, executing agencies, and ADB in implementing projects and to use the lessons to improve the performance of ongoing and future ADB-financed projects. The CPEEP holds valuable and important lessons that should be made use of as soon as possible.

109. **Road maintenance funding is a key issue in the transport sector.** For road projects to be sustainable in Sri Lanka, road maintenance must be financed adequately (paras. 79 and 80). The World Bank has provided TA since July 2008 to develop a financial and technical system for management of the RMTF and a fund allocation system. It has allocated \$10.0 million for road maintenance and is initiating a technical auditing arrangement for the RMTF as well. However, to manage the RMTF, a numbers of rules and procedures for technical operation and financial management still need to be developed.

110. **Unused project designs need rapid action and funding, because their shelf life is short.** The road project preparatory facility can make the processing and implementation of projects more timely and efficient. Although about 44% of the detailed road project designs prepared under the facility have been or will be taken up, the remaining designs need to be put to use soon (para. 74). Otherwise, the designs and other documents will become outdated.

B. Recommendations

111. The following recommendations to ADB Management are based on the lessons described in this SAPE report. The impact of these recommendations should be measured after 5 years to evaluate their effectiveness.

112. **Undertake due diligence on Southern Expressway tolls, and address road safety.** ADB needs to conduct due diligence regarding the unplanned imposition of tolls on the STDP highway. This will involve revising traffic forecasts and the economic assessment, implementing a financial analysis, and reviewing institutional readiness and the level of acceptance of the change by road users. The safety issues related to the expressway should also be reviewed, and steps to improve road safety should be taken.

113. **Prepare a long term capacity development road map.** Too much of ADB's TA efforts appeared to be one-off activities. TA operations need to be coordinated within ADB and with outside to avoid overlapping and duplication between TA and TA loan components. Capacity development and institutional strengthening take time and should be based on a broad, long-term outlook and a results framework.

114. **Continue efforts to make the road maintenance fund self-sustainable.** Although the initiative on the RMTF has been transferred from ADB to the World Bank, ADB, in association with the World Bank and other funding agencies, should continue discussions with the government to encourage the better maintenance funding that is essential to sustaining and preserving the road network and to develop the rules and

procedures required for the technical operation and financial management of the RMTF. Enhancing the independence and resources of the RMTF is one of the key outputs and intended sector outcomes in the Sri Lanka CPS for 2009–2011. To strengthen the sustainability of ADB assistance, this effort should be continued.

115. **Assess the effectiveness and efficiency of the road project preparatory facility.** After the facility project is completed, ADB should evaluate its effectiveness in speeding up the processing and implementation of the road projects it helped prepare and in allocating funds efficiently.

Appendixes

APPENDIX 1: ADB LOANS AND TECHNICAL ASSISTANCE GRANTS FOR THE TRANSPORT SECTOR

Table A1.1 ADB Loans to the Transport Sector of Sri Lanka, 1970–2010

Loan No.		Project Name	Amount (\$ million)	Date Approved	Date Closed	Expected Closing Date
Road Transport						
0471	ADF	Mahaweli Area Roads Development	10.0	30 Sep 1980	5 Dec 1990	
0753	ADF ^a	Trunk Roads Improvement	22.0	19 Nov 1985	16 Dec 1993	
0864	ADF ^a	Second Road Improvement	36.5	24 Nov 1987	29 Nov 1996	
0865	ADF ^a	Emergency Road Restoration	20.0	24 Nov 1987	24 Jan 1994	
1312	ADF ^a	Third Road Improvement	55.0	15 Sep 1994	3 Feb 2005	
1567	ADF ^a	Southern Provincial Roads Improvement	30.0	30 Oct 1997	27 Oct 2005	
1649	ADF ^a	Road Network Improvement	80.0	8 Dec 1998	7 Apr 2009	
1711	ADF ^a	Southern Transport Development	90.0	25 Nov 1999	25 Feb 2011	
1986	ADF ^a	Road Sector Development	56.5	19 Dec 2002	14 May 2009	
2080	ADF ^a	Road Project Preparatory Facility	15.0	13 Apr 2004	Active	30 Jun 2012
2217	OCR ^a	National Highways Sector ^b	150.0	15 Dec 2005	Active	31 Dec 2012
2413	OCR	Southern Transport Development (Supplementary Loan)	90.0	6 Mar 2008	Active	31 Dec 2012
2546	ADF	Eastern and North Central Provincial Road	70.0	16 Sep 2009	Active	30 Jun 2014
2639	OCR	Northern Road Connectivity	130.0	18 Jun 2010	Active	30 Dec 2015
2640	ADF	Northern Road Connectivity	24.4	18 Jun 2010	Active	30 Dec 2015
Water Transport						
0031	OCR	Colombo Port Tanker Berth	2.6	30 Mar 1970	19 Apr 1973	
7153	NSO ^a	Colombo Port Development	43.5	11 May 1999	21 Sep 2006	
1841	ADF	Colombo Port Efficiency and Expansion	10.0	27 Sep 2001	16 Nov 2009 ^c	
2319	OCR	Colombo Port Expansion	300.0	27 Feb 2007	Active	30 Apr 2013

ADB = Asian Development Bank, ADF = Asian Development Fund, No. = number, NSO = nonsovereign operations, OCR = ordinary capital resources.

^a Covered in the 2007 Country Assistance Program Evaluation.

^b Additional financing for the National Highways Sector Project was approved on 5 August 2011 (Loan 2767-SRI), which increases the total loan amount to \$235.0 million.

^c The loan was closed retroactively in August 2010.

Source: Asian Development Bank databases.

**Table A1.2 ADB Advisory and Capacity Development Technical Assistance Grants
to the Transport Sector of Sri Lanka, 1970–2010**

TA No.	Project Name	Amount (\$)	Date Approved	Date Closed	Expected Closing
Rail Transport					
3410	TA to Establish Public–Private Partnerships for Railways	150,000	8 Mar 2000	30 Sep 2003	
Road Transport					
0718	Institutional Strengthening of MOH	200,000	19 Nov 1985	31 Dec 1988	
1110	Institutional Strengthening of Road Development Authority	575,000	17 Jan 1989	31 Mar 1994	
2152	Road Safety Study	800,000	15 Sep 1994	30 Apr 1998	
3110	Reengineering of Road Sector Institutions	640,000	8 Dec 1998	30 Sep 2003	
3110	Reengineering of Road Sector Institutions (Supplementary)	360,000	17 May 2000	30 Sep 2003	
3691	Road Maintenance Budgeting and Expenditure Control	150,000	27 Jul 2001	30 Sep 2003	
4075	Passenger Transport Services Improvement	500,000	19 Dec 2002	11 Jul 2007	
4178	Preparing a Public–Private Partnership Expressway Project ^a	800,000	17 Sep 2003	31 Oct 09	
4315	Road Sector Plan	1,000,000	20 Jan 2004	25 Mar 2008	
4736	Capacity Building of the Environmental and Social Division of the Road Development Authority	400,000	14 Dec 2005	16 Sep 2010	
4748	Independent External Monitoring of Resettlement Activities of the Southern Transport Development	336,000	19 Dec 2005	Active	31 Dec 2010
4748	Independent External Monitoring of Resettlement Activities of the Southern Transport Development Project (Supplementary)	175,000	25 Nov 2008	Active	31 Dec 2010
7065	Land Use Planning of the Southern Highway Corridor	300,000	6 Mar 2008	27 May 2010	
7153	Establishment of a Central Procurement Unit in the Road Development Authority	225,000	17 Oct 2008	Active	30 May 2011
7239 ^b	Strengthening Road Development Authority in Implementation of the Environmental Management Plan of the Southern Transport Development Project	150,000	12 Feb 2009	26 Nov 2010	
7347 ^b	Capacity Development of the Provincial Road Agencies	800,000	16 Sep 2009	Active	29 Feb 2012
7545 ^b	Capacity Development of the Northern Provincial Road Development Department	500,000	18 Jun 2010	Active	31 Dec 2012
Water Transport					
4121	Port Sector Master Plan	150,000	27 May 2003	20 Jan 2005	

ADB = Asian Development Bank, CDTA = capacity development technical assistance, HS = highly successful, MOH = Ministry of Highways, S = successful, TA = technical assistance, TCR = technical assistance completion report, US = unsuccessful.

^a This TA is classified as PPTA but its objectives and outcomes are advisory in nature.

^b These TA projects are CDTA grants.

Source: Asian Development Bank databases.

APPENDIX 2: EVALUATION FRAMEWORK FOR TRANSPORT SECTOR ASSESSMENT

Evaluation Criteria	Areas of Evaluation and Subcriteria	Major Indicators and Areas of Consideration	Sources of Information	Evaluation Process
Strategic Positioning	<p>Does the Government of Sri Lanka's plan focus on priority needs?</p> <p>Does ADB's strategy support the government's plan?</p> <p>Is the sector one of the Asian Development Bank's (ADB) core operations areas, drivers of change, etc.?</p> <p>Does the country strategy and program (CSP) recognize and suitably adjust to constraints on the government's absorptive capacity?</p> <p>What is ADB's previous experience in the sector?</p> <p>What is the strategy for concentrating or diffusing ADB's efforts geographically?</p> <p>What is ADB's strategy and participation in sector meetings or events, formal partnerships, etc.?</p> <p>Does the sector results framework (SRF) have relevant indicators, benchmarks, deadlines, and targets?</p> <p>What is the strategy for retaining or dropping sub-sector programs, and linking technical assistance (TA) and loans?</p> <p>What is the strategy for choosing project loans, sector loans, etc.?</p>	<p>Macroeconomic indicators, including Sri Lanka's fiscal position and debt burden</p> <p>Economic reform milestones</p> <p>Evolution of Sri Lanka's development plans</p> <p>Evolution of ADB's CSPs</p> <p>Coordination of activities and strategies of other development partners</p>	<p>The government's medium-term plan</p> <p>Country economic reports</p> <p>CSPs</p>	<p>Desk review of all relevant documents</p> <p>Discussions with ADB regional department, government officials, development partners, and other stakeholders</p>
Relevance	<p>Does the program follow the country strategy, or depart with justification?</p>	<p>Assessment of policies, economic and political conditions, and financial management</p>	<p>CSPs, country operational business plan , reports and</p>	<p>Desk review of all relevant documents</p> <p>Discussions with</p>

Evaluation Criteria	Areas of Evaluation and Subcriteria	Major Indicators and Areas of Consideration	Sources of Information	Evaluation Process
	<p>How well were projects designed?</p> <p>Do design and monitoring frameworks (DMFs) have relevant indicators with baselines, deadlines, and targets? Are DMFs consistent with the sector results framework?</p>	<p>of the transport sector</p> <p>Changes in ADB strategy areas of intervention</p> <p>Lessons and findings identified in project completion reports (PCRs) and project performance evaluation reports (PPERs) and technical assistance performance evaluation reports (TPERs)</p> <p>DMFs</p>	<p>recommendations of the President (RRPs), TA reports, PCRs, PPERs, TPERs, and ADB databases</p> <p>Discussions with development partners, government, and other stakeholders</p>	<p>ADB Regional Department, government officials, and development partners</p>
Efficiency	<p>What are the economic internal rates of return (EIRRs) of completed projects? For ongoing projects, confirm or update EIRRs in RRP.</p> <p>Are projects well administered? Review project performance reports (PPRs), contract awards, actual vs. projected disbursements, delays in implementation, cost overruns, etc.</p> <p>How long are loan processing times, responsiveness to government's queries, resources at the Resident Mission, perceptions of the government?</p>	<p>Implementation delays and cost overruns, disbursement issues, if any</p> <p>Timeliness and frequency of data and collection</p> <p>Quality of data collected</p> <p>Timeliness and adequacy of counterpart funding</p> <p>Procurement issues, including timeliness and transparency</p>	<p>PCRs, PPERs, executing agency completion reports</p> <p>Back-to-office reports</p> <p>Discussion with government agencies and ADB regional departments</p>	<p>Desk review of relevant documents.</p> <p>Independent Evaluation Mission (IEM) and field observations and discussions</p>
Effectiveness	<p>What policy changes occurred that were supported by ADB?</p> <p>What capacity development efforts or organizational change occurred that was supported by ADB?</p> <p>How did physical investment achieve outcome?</p> <p>How is progress on outcomes in the sector results framework?</p>	<p>Fulfillment by completed projects of project's intended objectives</p> <p>Feasibility of achievement of objectives based on current projects</p> <p>Performance of ADB transport sector portfolio in Sri Lanka</p>	<p>Findings of PCRs, PPERs, TPERs, and project completion report validation reports (PVRs)</p> <p>ADB status reports, back-to-office reports, and other ADB reports</p> <p>Literature reviews</p>	<p>Desk review of relevant documents</p> <p>IEM field observations</p> <p>Key informant interviews with government staff, observers, development partners, and other stakeholders</p>

Evaluation Criteria	Areas of Evaluation and Subcriteria	Major Indicators and Areas of Consideration	Sources of Information	Evaluation Process
Sustainability	<p>How is progress on recommendations of advisory technical assistance (ADTA) grants, viability of conditions in completed program loans, progress on conditions in ongoing program loans, etc.?</p> <p>How is progress on recommendations of capacity development ADTA grants, viability of changes under completed projects, progress of changes in ongoing projects, etc.?</p> <p>Is there adequate forward planning and budgeting for recurrent costs?</p> <p>How are continuing operations of completed projects? Review planned systems for ongoing projects.</p> <p>Were there any adverse policy changes? How is progress on needed reforms?</p> <p>Did RRP recognize risks to sustainability? Efforts to mitigate risks? Appropriate project design?</p> <p>What are the sustainability ratings of completed projects?</p>	<p>Performance and adequacy of the Road Maintenance Trust Fund</p> <p>Availability of other funding and resources</p> <p>Availability and adequacy of funding allocated by project owners for maintenance</p> <p>Financial internal rates of returns</p> <p>Assessment of political will of the government to support reforms</p> <p>Government ownership and commitment to projects and reforms</p>	<p>PCRs, PPERs</p> <p>Macroeconomic indicators such as government's fiscal position and budget</p> <p>Literature reviews</p> <p>Discussions with government officials and other development partners</p>	<p>Desk review of relevant documents</p> <p>IEM and field observations</p>
Development Impacts	<p>How is progress on impacts in the sector results framework?</p> <p>What were achievements and expected achievements of key projects?</p> <p>Are there any other notable contributions to poverty reduction or other country-wide development goals?</p>	<p>Contribution of ADB transport sector operations to sustainable economic growth, gender issues, poverty reduction, environmental sustainability, and governance reforms</p>	<p>RRPs and PPERs</p> <p>Time series of macroeconomic indicators from government sources</p> <p>Discussions with government agencies and other stakeholders</p>	<p>Desk reviews of relevant documents</p> <p>IEM and field interviews</p>

Source: Asian Development Bank Independent Evaluation Department.

APPENDIX 3: PROFILE OF THE TRANSPORT SECTOR IN THE DEMOCRATIC SOCIALIST REPUBLIC

A. Sector Context

1. The island nation of Sri Lanka lies in the Indian Ocean just north of the equator and south of India, separated by the Palk Strait, which at its narrowest point is only 32 kilometers (km) wide. The country occupies a strategic position near the main sea lanes between Europe and Asia, a factor that allowed Colombo to develop very early as an international port city and subsequently as a transshipment point for cargo destined to the South Asian subcontinent. Sri Lanka has a population of 20.7 million, which is growing at around 1.2% per annum.¹ The land area is 65,610 square kilometers (km²) with a population density of 316 persons per km².

2. Despite its small size, Sri Lanka has a great deal of geographic and climatic diversity. As a result, it possesses agricultural diversity as well as an abundance of scenic beaches and ecological attractions that have, along with its historical sites, become major tourist attractions. Agricultural produce includes coconut, rubber, and tea plantations with production for export, while rice and horticultural production are primarily for domestic consumption. Tea is grown mainly in the mountainous interior of the southern half of the country. In the dry northern region, rice is cultivated with irrigation. The manufacturing industries are located mainly in and around Colombo, the capital and principal port of Sri Lanka.

3. During the last 5 decades, Sri Lanka's economy grew by an annual average rate of 4.4% but this has not attained a high growth path. This is due to deep-rooted deficiencies in growth promotion factors, including a protracted armed conflict. In 2010, the nominal gross domestic product (GDP) of Sri Lanka was estimated to have reached about \$50.0 billion and GDP per capita was approximately \$2,400.² The labor force in 2009 was estimated at 8.1 million, with an unemployment rate of 5.8%. The United Nations Development Programme Human Development Index in 2010 ranked Sri Lanka 91st among 169 countries, with a score of 0.66.³

4. Sri Lanka's manufacturing industry has become part of the international value chain. Imported intermediate goods for domestic processing have to a large extent replaced fully manufactured goods and in 2006 accounted for about 55% of total imports. With a share of 73% in total export earnings, manufactured items, rather than agricultural products, currently dominate exports.⁴ The major part of this consisted of export-oriented garment and apparel production. The service sector showed a similar trend, recording 7.4% growth per annum during 2005–2007. The most dynamic subsectors were trade, transport, banking and insurance, and posts and telecommunications.

5. Despite a prolonged civil conflict in the country, the growth performance of the economy has been relatively good. Table A3.1 shows the development of gross domestic product by sector. Nevertheless, the country has not lived up to its growth potential and economic performance still lags well behind East and Southeast Asia. The Government of Sri Lanka now seeks to attain greater stability and has adopted higher GDP growth targets. The Ten-Year Development Framework⁵ notes that the achievement of these targets will depend crucially on the application of more radical reforms, following the settlement of the long-running conflict in the country's Northeast. The development of the

¹ Government of Sri Lanka, Department of Census and Statistics of Sri Lanka. 2011. Colombo. <http://www.statistics.gov.lk>

² Central Bank of Sri Lanka. 2010. *Annual Report*. Colombo.

³ United Nations Development Programme. 2010. *Human Development Report*. New York. <http://www.hdrstats.undp.org>

⁴ ADB. 2007. *Country Assistance Program Evaluation for Sri Lanka in the Transport Sector*. Colombo.

⁵ Government of Sri Lanka, National Planning Department. 2006. *Mahinda Chinthanaya—Ten Year Development Framework, 2006–2016*. Colombo.

economic infrastructure needed for faster growth is to be accelerated through continued policy, market, social, institutional, and infrastructure reforms.

Table A3.1: The Structure of the Gross Domestic Product, 2005–2009
(SLRs million, constant 2002 prices)

Sector	Gross Domestic Product				
	2005	2006	2007	2008	2009
Agriculture	241,851	257,147	265,870	285,897	294,921
1. Agriculture, Livestock and Forestry	228,006	235,887	241,285	258,881	266,033
1.1 Tea	27,544	26,988	26,494	27,601	25,154
1.2 Rubber	4,773	4,993	5,205	5,743	6,198
1.3 Coconut	27,204	28,933	30,403	31,975	33,646
1.4 Minor Export Crops	9,966	10,187	10,706	10,478	11,028
1.5 Paddy	36,541	37,608	35,261	43,406	41,179
1.6 Livestock	16,644	17,992	19,415	20,495	21,761
1.7 Other Food Crops	79,587	81,937	85,503	89,536	95,799
1.8 Firewood and Forestry	12,081	12,882	13,544	14,499	15,357
1.9 Other Agricultural Products	13,666	14,368	14,755	15,147	15,911
2. Fishing	13,846	21,260	24,585	27,016	28,888
Industry	545,981	590,298	635,199	672,791	701,129
Services	1,153,839	1,243,119	1,331,587	1,406,813	1,453,254
1. Wholesale and Retail Trade	480,402	514,511	546,145	571,911	570,152
2. Transport and Communication	230,597	259,546	286,764	310,029	330,390
3. Banking, Insurance, and Real Estate	163,863	177,817	193,375	206,048	217,819
4. Government Services	153,866	161,611	171,259	181,051	191,778
5. Other	125,112	129,633	134,044	137,774	143,116
Gross Domestic Product	1,941,671	2,090,564	2,232,656	2,365,501	2,449,304

Source: Central Bank of Sri Lanka.

B. Transport Sector

6. Sri Lanka has an operational fleet of 2.2 million vehicles, which together travel around 20 billion vehicle-kilometers (vehicle-km) annually. The current demand for passenger travel is around 80 billion passenger-kilometers (passenger-km) per annum, of which road transport accounts for 93%. Of this, buses carry 61% of the passengers and transit in the form of three-wheelers and taxis makes up another 6%. Private vehicles carrying 24% of all passengers (Figure A3.1).⁶ This has been growing at around 5% per annum, while overall vehicle-km has grown at a higher rate of 7% to 8% per annum, with goods movements increasing by around 3% to 4% per annum. The demand for freight transport is around 7 billion ton km per annum, of which 98% is carried by road. Transport activity is most dominant in the Colombo area.

7. The summary of Sri Lanka's transport modal shares for 2007 is given in Table A3.2. Even though Sri Lanka's geography and spatial distribution of economic activities mean that movements of goods and people involve relatively short distances, the average per capita mobility is 4,000 passenger-km per annum and vehicle use is 1,000 vehicle-km per annum. According to international norms, this is around three times the mobility observed for other countries having a per capita income similar to that of Sri Lanka.⁷ As shown in Figure A3.3, this high level of mobility has been observed for several decades, starting with the provision of extensive bus services by the Ceylon Transport Board in the 1960s.

⁶ University of Moratuwa, TransPlan Database. 2010. *Quoted in Review of Transport Sector in Sri Lanka*, World Bank.

⁷ Shaefer, Andreas. 2008. *Long-Term Trends in Global Passenger Mobility*. United Kingdom.

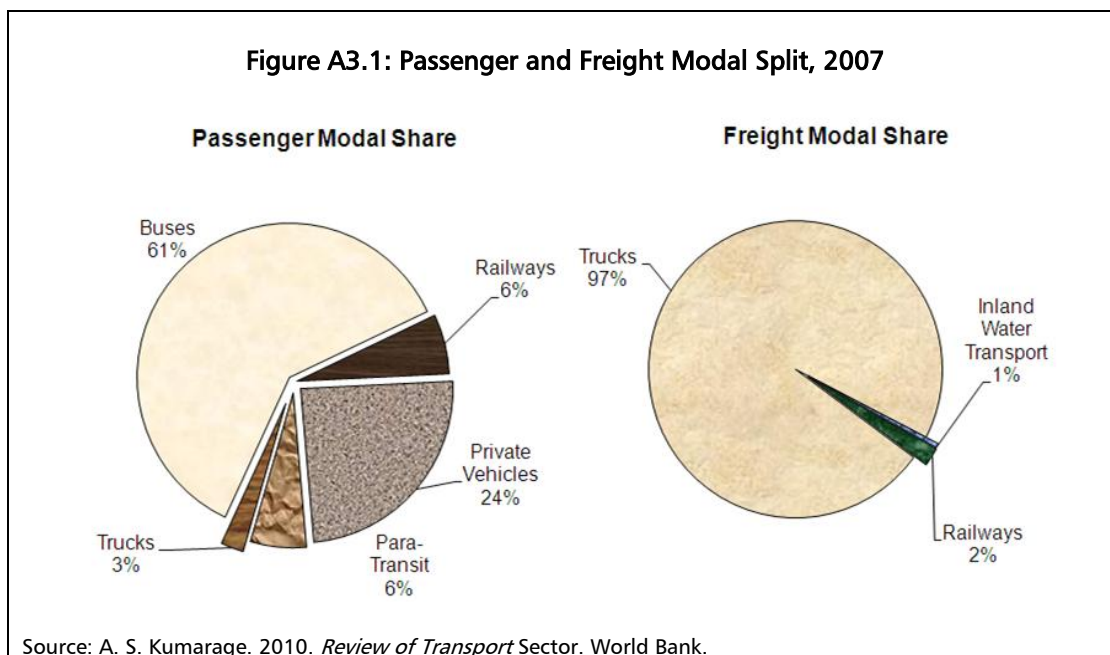
Table A3.2: Transport Modal Shares, 2007

Mode of Transportation	Vehicle (million km)	%	Passenger (million km)	%	Ton (million km)	%
Buses	1,326	6.9	46,396	61.0		
Railways	8	0.0	4,767	6.3	134.8	2.0
Private Vehicles	11,972	62.7	18,536	24.4		
Para-Transit	2,123	11.1	4,492	5.9		
Trucks/Land Vehicles	3,678	19.2	1,839	2.4	6,436	97.5
Inland Water Transport	3	0.0		0.0	32	0.5
Total	19,109	100.0	76,031	100.0	6,603	100.0

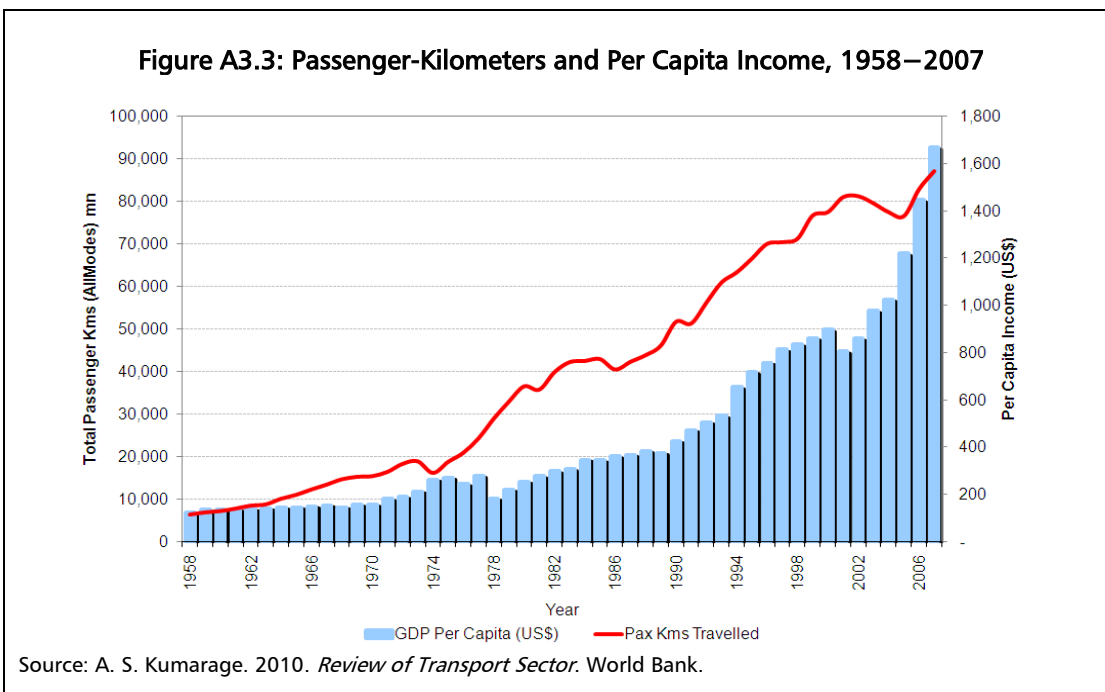
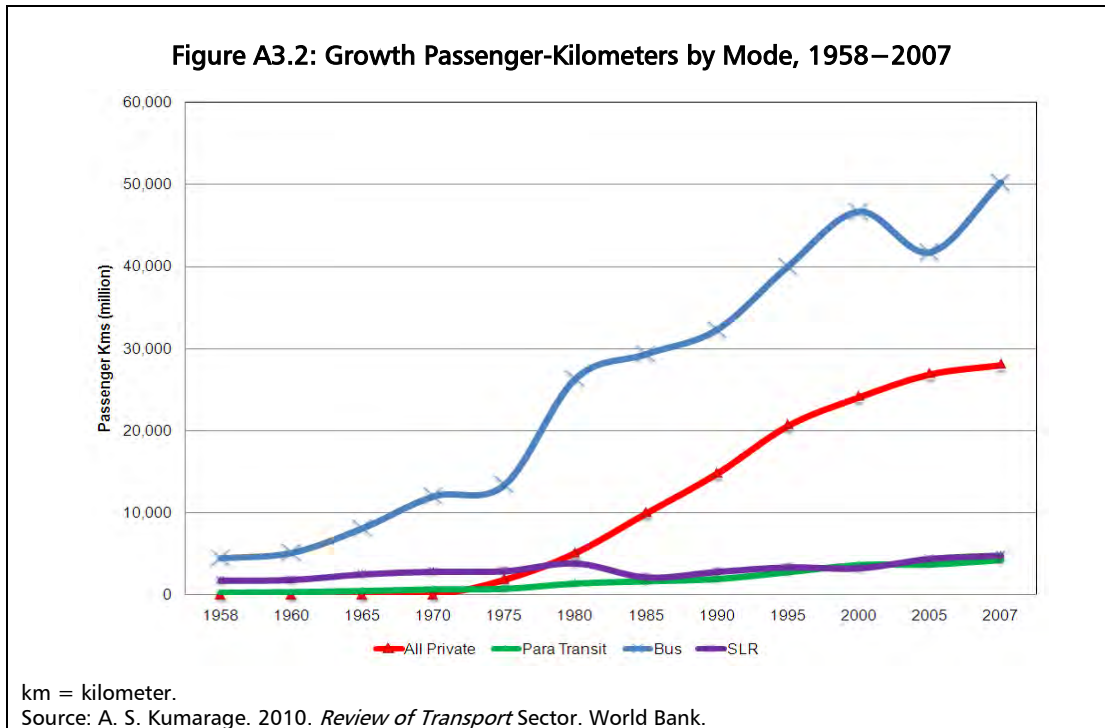
km = kilometer.

Source: A. S. Kumarage. 2008. National Atlas. Department of Surveys. Colombo.

Figure A3.1: Passenger and Freight Modal Split, 2007



Source: A. S. Kumarage. 2010. *Review of Transport Sector*. World Bank.



8. As Sri Lanka is an island, there are no regional roads or railways. A railway line runs between Colombo and to northwestern coast city of Talaimannar Pier, which is directly across the Palk Strait from Rameshwaram in Tamil Nadu State in India. The rail lines on both sides of the strait have been designated as links in the Trans-Asian Railway and also parts of the South Asian Association for Regional Cooperation (SAARC) Railway Corridors.⁸ Although a seasonal ferry provided a connection

⁸ SAARC. 2008. *Regional Multimodal Transport Study*. Colombo. Supported by ADB. 2004. *Technical Assistance for E-Rural Demonstration in the Pacific*. Manila (TA 6178-REG, approved on 15 July).

until 1984, this was abandoned due to conflict in the area. Plans are underway to restore both damaged track and the ferry connectivity.⁹ Sri Lanka and India have agreed to a feasibility study for a road and rail land bridge. An agreement to begin ferry services between Colombo and Tuticorin in Southern India was concluded in January 2011. There is also a proposal for a second service to Cochin.¹⁰

1. Road Transport

9. Sri Lanka's roads are classified as national, provincial, urban, or rural depending on their functionality and ownership. Of the total road network of about 113,000 km, about 11,900 km are national highways, categorized as class A (trunk roads) and class B (main roads). They are administered by the Road Development Authority (RDA), together with their 4,200 bridges and other structures. The 16,000 km of provincial roads are managed by the respective provincial administrations and designated class C, D, or E. There are about 65,000 km of local authority roads in both the urban and rural sectors. The remaining roads, estimated to total 20,000 km, are owned or controlled by irrigation and wildlife authorities or other government agencies. Road density is over 1.7 km per km². Details of the network's historical growth are in Table A3.3.

Table A3.3: Growth of Road Network by Administrative Level

Year	RDA	Provincial	Urban	Rural	Total
1815	Commencement of Road Building				
1905	6,024				6,024
1959	7,034	←12,070→			19,104
1990	10,447	14,916	2,791	66,054	94,208
2002	11,760	15,743	5,200	77,800	110,503
2009 ^a	11,919	16,000	5,176	80,000	113,095

RDA = Road Development Authority.

^a National roads, based on RDA Planning Division database. Other data is based on assumed growth rates.

Source: National Roads, RDA Planning Division; University of Moratuwa—TransPlan Database. Colombo.

10. Although road density is higher in Sri Lanka than in many developing countries, the conditions and standards of its roads, as well as the level of safety, are less than satisfactory. According to roughness data collected in 2006–2008, about one-third of the national highway network is in an acceptable condition in terms of roughness measured by on the International Roughness Index (IRI)—i.e., less than 5.5 meters per km (m/km). About 19% of road has a measured of 5.5 to 7.0 m/km roughness.¹¹ In fact, about 9% of network has an IRI of more than 10 m/km, which is considered most unsatisfactory. While the national network in itself in very poor condition, the provincial and local authority roads for which there are no measured indicators are bound to have much worse indicators. Average journey speeds of the road network have been projected for 2015¹² and are generally low and may be summarized as follows:

Colombo and suburbs	–10 to 20 kilometers per hour (km/hr)
National Highways (Western Province)	–15 to 30 km/hr
National Highways (Wet Zone and Upcountry) ¹³	–20 to 40 km/hr
National Highways (Dry Zone)	–30 to 50 km/hr
Provincial Roads	–15 to 45 km/hr
Urban Roads	–10 to 30 km/hr

⁹ SAARC. 2007. *Second Transport Ministers Conference*. Islamabad. The line from Medawachchiya to Talaimannar, which was destroyed, is to be restored by 2012.

¹⁰ SAARC. 2009. *Third Transport Ministers Conference*. Colombo.

¹¹ Government of Sri Lanka, RDA Planning Division. 2008.

¹² University of Moratuwa. 2010. *TransPlan Estimates*. Colombo.

¹³ Wet Zone refers to the more populous areas that include Western, Southern, and Sabaragamuwa provinces, as well as parts of North Western Province, while upcountry refers to Central Province and parts of Uva Province.

11. Low speeds are attributed to different attributes in different parts of the network. In some rural areas, the roads have poor geometry and are not wide enough, while in the populated areas including Western Province it result from congestion. Low speeds can also be due to road conditions being poor.

12. By end of 2007, the total number of motor vehicles that had been registered exceeded 3.1 million, of which approximately 2.2 million are estimated to be in operation, as shown in Table A3.4. Of these, only around one-quarter of the fleet are four- or six-wheel vehicles. Buses used for public transport make up around 24,000 units, representing 1% of the fleet, while all forms of goods vehicles, including land vehicles, make up around 300,000 units. Vehicle ownership is over 100 vehicles per 1,000 persons. Around two and three wheelers as well as goods vehicles including vans which are categorized as dual purpose are taxed at modest import duties when compared to the 300% to 400% combined duties that were levied on importation of passenger cars which only make up around 10% of the fleet. This has changed since June 2010¹⁴ when the government announced the reduction of import duties by half on passenger cars and utility vehicles. With this concession, vehicle registrations have increased.

Table A3.4: Road Transport Vehicles Operating, 2007

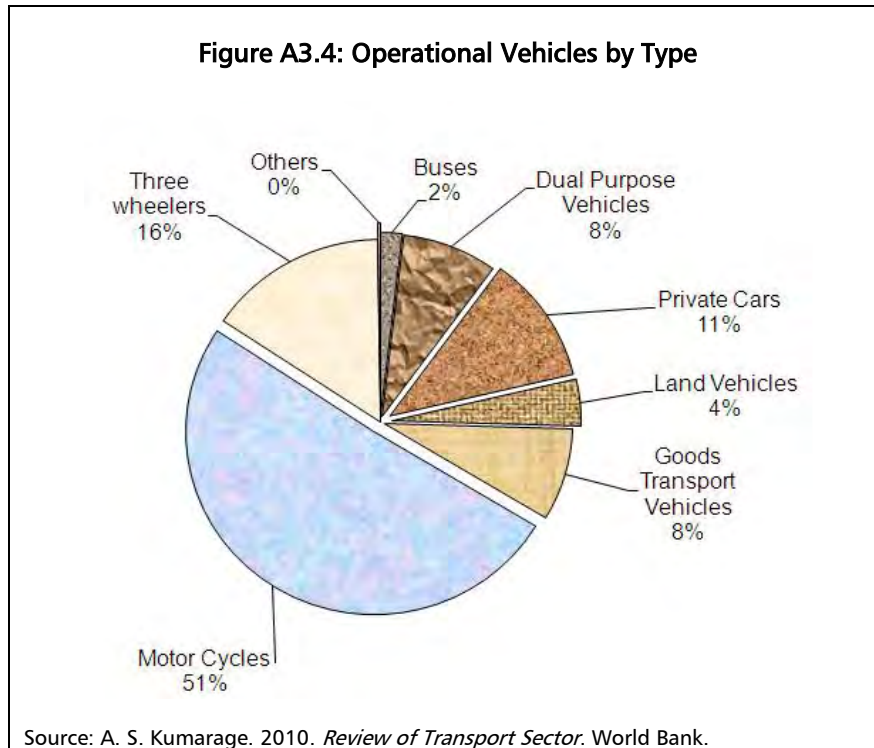
Vehicle Type	No. of Vehicles
Omni buses	15,819
Private coaches	25,107
Dual purpose vehicles	180,923
Private cars	252,027
Land vehicles	92,028
Goods transport vehicles	182,045
Motorcycles	1,126,831
Three wheelers	342,286
Others	5,737
Total	2,222,803

Source: National Atlas. 2007. Sri Lanka Department of Surveys.

13. Currently, heavy traffic flows are experienced in and around Colombo, with short sections of national road carrying in excess of 100,000 vehicles per day. Most class A national roads within a distance of up to 20 km from the city carry between 20,000 to 50,000 vehicles per day, while other class A roads in Western Province average around 10,000, decreasing to around 5,000 vehicles per day elsewhere, except within town areas where it increases. Class B national roads in most instances carry less traffic less than class A roads. With the anticipated 8% growth in GDP expected in the next decade, the demand for passenger mobility is estimated by the TransPlan model to increase by around 10% per annum. If quality of public transport does not improve or if there are further reduction of taxes on vehicle imports, this growth rate could increase further.¹⁵ The percentage of operational vehicles by type is shown in Figure A3.4.

¹⁴ Ministry of Finance and Planning. 2010. <http://www.treasury.gov.lk/docs/pressrelease/tax-reduce-20100602.pdf>

¹⁵ A. S. Kumarage. 2010. *Review of Transport Sector*. World Bank.



14. The number of fatal road accidents has increased over the years, as shown in Figure A.3.5, even though this has somewhat stabilized over the last decade. There are on average 2,100 road traffic fatalities and a further 4,500 or more serious injuries per year.¹⁶ This translates to a fatality rate of 8 per 10,000 operational vehicles, while the fatality rate per billion vehicle-km is 11. Around 45% of such fatalities are pedestrians and cyclists. There are also over 270,000 accident claims from insurance companies per year. The major causes for these have been identified as the poor condition of infrastructure, including the absence of facilities for pedestrians and cyclists in many instances, traffic congestion in urban areas, undisciplined behavior of all road users, and inadequate enforcement, training, and testing.¹⁷ Some of the roads rehabilitated under funding from international financing institutions have also shown an increase in accidents due to inadequate safety audits, particularly a lack of measures for pedestrian safety, and the failure to realign and ease curves to accommodate higher operating speeds.¹⁸ The National Council for Road Safety and its National Road Safety Secretariat are responsible for coordinating road safety activities. A road safety fund was set up in 2,300 utilizing part of insurance premium but abandoned as the proceeds were not being utilized due to administrative and procedural issues.

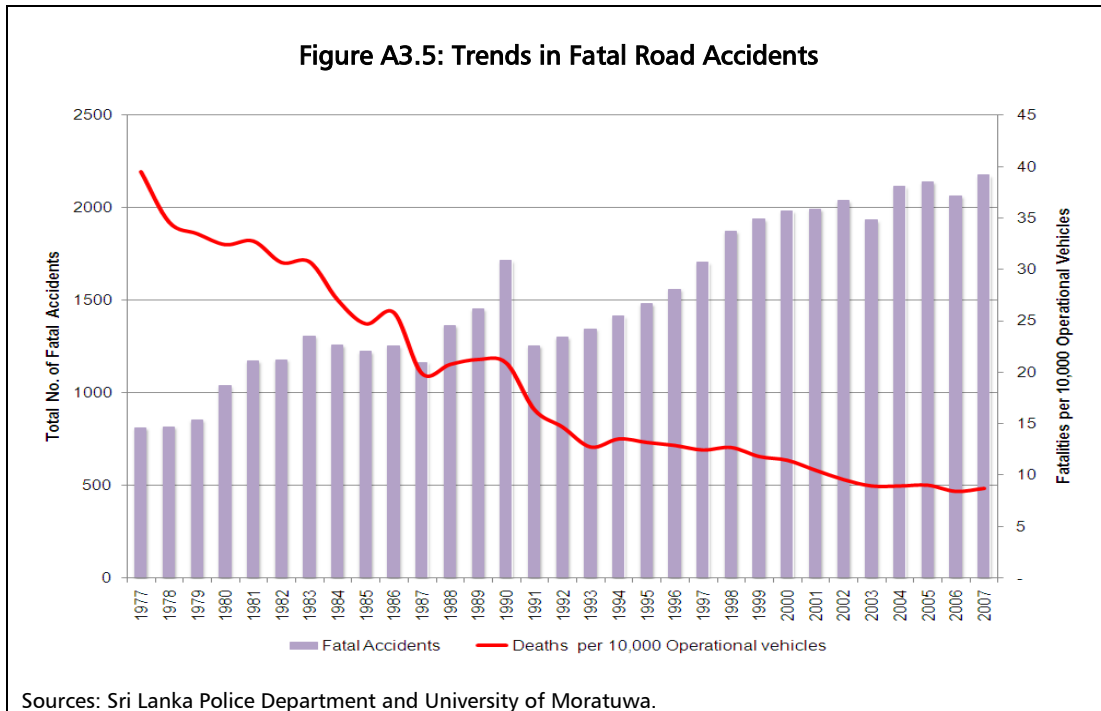
15. Surveys on axle loads show that overloading is significant and frequent and occurs in all types of road haulage vehicles. Some surveys showed average overloading of trucks to be as much as 50%.¹⁹ No program exists for monitoring of axle loads. Roadside surveys carried out by the RDA are not specifically designed to monitor trends or be used for enforcement purposes. The first permanent weighing station is expected to be inaugurated on the A1 highway in March this year.

¹⁶ Sri Lanka police traffic Accident Statistics.

¹⁷ Report of Select Committee to look into the alarming increase in traffic accidents, 6th Parliament of Sri Lanka, 2009.

¹⁸ This is based on studies done by the RDA Planning Division on public and police complaints.

¹⁹ University of Moratuwa. 2005. *Study on Axle Loads and overloading on Highways in Sri Lanka*. SIDA.



16. Sri Lanka is currently building a network of its expressways. The first was the Southern Expressway, which was built under ADB’s Southern Transport Development Project.²⁰ The Colombo Katunayake Expressway, Outer Circular Highway are also under construction, and will complete 200 km of a full expressway network of 600 km that the RDA expects to build. Funds provided by the Asian Development Bank (ADB) and the Japan International Cooperation Agency (JICA) funds, as well as commercial financing from the People’s Republic of China, are being used for these projects. The rehabilitation of national and provincial roads has also been ongoing in parallel, mostly under ADB, JICA, and World Bank funding. Rural roads are developed mostly with local funds, even though foreign funding has also been used in recent times. Table A3.5 shows the status of the network in terms of rehabilitation carried out or committed during the last 10 years and the estimated extent that will require rehabilitation in the next 10 years in each network. Steady progress has been made in rehabilitating all types of roads. In the category of national roads and urban roads, the number of kilometers for which rehabilitation is due is less than what has been completed or is in progress. In the case of provincial and rural roads, a greater percentage of km is yet to be rehabilitated.

Table A3.5: Burden of Repair of Road Network

Type of Road	Network (km)	Rehabilitated or Committed (km)	Balance Extent Requiring Rehabilitation in the Next 10 Years (km)
National	11,919	4,653	4,100
Provincial	16,000	2,970	7,200
Urban Local Authority	5,176	3,710	1,590
Rural Local Authority	80,000	19,700	39,000

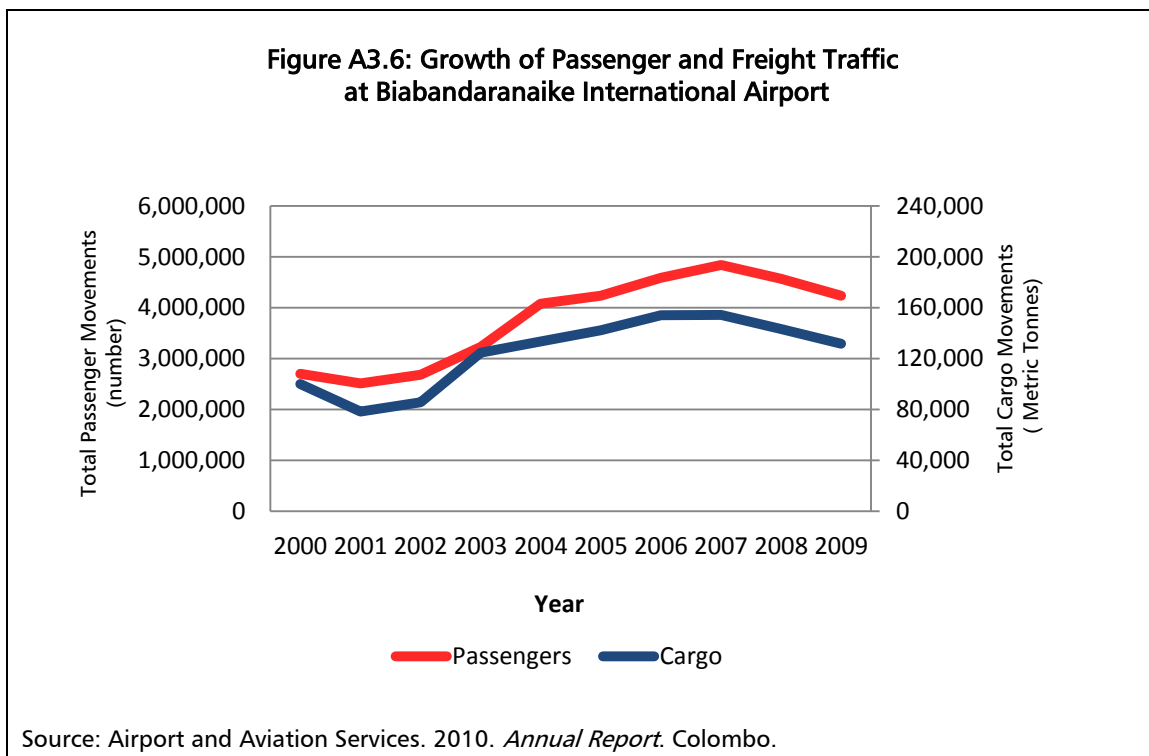
Source: RDA Planning Division data, M/PC&LA and estimates computed from A. S. Kumarage. 2009. *Public Expenditure Review: Highways*. World Bank.

²⁰ ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

2. Air Transport

17. The Bandaranaike International Airport built in 1958 and located at Katunayake, 32 km north of Colombo, is the only international airport in Sri Lanka. Due to the poor security situation, most of the 13 domestic airports were limited to military use only. The Biabandaranaike International Airport has a runway that is 3,350 m in length and handles around 35,000 flights a year. The annual passenger throughput in 2008, as shown in Figure A3.6, was around 4.8 million, while the cargo tonnage handled was over 150,000 metric tons, making it the second largest airport in the South Asian region.²¹ Over 40 different air carriers, including 9 cargo carriers, use the airport, providing flights to around 50 destinations. While the study for a second runway for the Biabandaranaike International Airport is in progress, a new second international airport is under construction at Udamattala, 20 km from Hambantota. A development plan for domestic airports is under preparation by the government.

18. The operation of international air transport services is mainly based on bilateral air services agreements. Sri Lanka has signed 59 bilateral agreements with 59 countries. Around 30 such agreements are operational. Having followed worldwide trends, Sri Lanka has secured open skies air service agreements with six countries. Sri Lanka's Aviation Policy stipulates that multiple local carriers are to be promoted for international air services.²² Currently, however, the only two international carriers registered in Sri Lanka are state-owned. SriLankan Airlines is the business successor to Air Lanka and previously Air Ceylon, both of which were fully owned by the government. Emirates bought over 40% of the shares of SriLankan Airlines in 1998 and was appointed as the strategic management partner for the airline. This ended with the government terminating the management contract and repurchasing the shares from Emirates in 2010. Mihin Lanka is the other state-owned low-cost air services provider. It began operations in 2007. The country's air force has also entered the domestic air passenger transport service, joining several other private operators.



²¹ Government of Sri Lanka, Civil Aviation Authority. 2009. *Annual Report*. Colombo.

²² Government of Sri Lanka, Ministry of Ports and Aviation. 2010. *Aviation Policy*. Colombo.

3. Railway Transport

19. The construction of the first railway line began in 1858 and the full extent of the country's current rail network was achieved in 1923, when it reached 1,540 km in length. Since then except for a few new links and double tracking, lines have been removed or abandoned in several areas, reducing the overall network to 1,447 km, served by 172 stations and 161 substations. The annual railway operation from 2000 to 2008 is shown in Table A3.6. The Sri Lanka Railways, which operates the railways, has around 140 locomotives and power sets in active service, with around 550 passenger carriages and 900 freight wagons in operating condition.²³

Table A3.6: Annual Railway Operations

Year	Train (million km)	Passengers (million)	Passenger (million km)	Freight Ton (million)	Freight Ton (million km)
2000	8.5	84.2	3,207.5	1.20	88.4
2001	8.8	95.6	3,979.0	1.26	106.5
2002	8.4	106.3	4,079.3	1.45	130.5
2003	8.0	113.1	4,606.2	1.50	128.6
2004	7.9	114.6	4,684.2	1.60	134.2
2005	7.8	114.4	4,357.6	1.50	134.8
2006	8.0	105.6	4,311.8	1.65	138.2
2007	8.3	110.3	4,766.9	1.70	134.8
2008	8.9	96.4	4,668.6	1.69	120.7

km = kilometer.

Sources: Sri Lanka Railways annual reports.

20. The railway has lost its market share to road transport over the last several decades and needs to compete effectively to regain a place in both passenger and freight markets. With road traffic congestion imposing restrictions on urban travel, the railway subsector requires more market-oriented approaches, including a strategy to (i) develop urban passenger traffic by improving access to the airport and multimodal passenger terminals, inclusive of park-and-ride facilities; (ii) improve carriage of containers to and from the port to multimodal logistics centers; and (iii) compete with improving road transport, including the challenges that will be posed by the new expressway system.

21. The National Land Transport Policy envisages making rail transport an attractive and efficient mode of public transport by improving the utilization of existing resources and the infusion of new and modern equipment and fixed infrastructure. It also seeks to enhance its commercial orientation as well as to develop the use of information and communication technology and rolling stock technology and also to expand the railway network.²⁴ Restoration of track in the North and East is given priority. A proposal for electrification of the suburban railway network in Colombo is under discussion.

4. Port and Inland Waterways Transport

22. The development of the 175-km canal network or waterways in the 18th century and the subsequent rapid growth of import-export activities after the opening of the Suez Canal led to Colombo becoming a focal point for inland traffic. Though inland waterways were instrumental in the economic development of Western Province, they were replaced by railways in the 19th century and by roads in the early part of the 20th century and today are unused and for the most part are non-navigable. Some sections have been redeveloped in recent times and are used for passenger boat services operated by the navy.

23. Sri Lanka's economy has been open to international trade with exports and imports averaging more than 60% of GDP over the past two decades, with the exception of the 1970s when the government pursued an inward looking policy of import substitution. In this respect, ports and

²³ Ministry of Transport, Sri Lanka. <http://www.transport.gov.lk>

²⁴ Government of Sri Lanka, National Transport Commission. 2009. *Land Transport Policy*. Colombo. <http://www.ntc.gov.lk>

shipping play a vital role, while coastal shipping is relatively insignificant. Sri Lanka has three deep seaports—Colombo, Trincomalee, and Galle. However, only the Port of Colombo has attained commercial significance. Following economic liberalization, the port expansion program together with the onset of containerization, and transshipment cargo, port traffic grew at an average rate of 6.5% per annum reaching a level equivalent to 4 million containers of twenty-foot equivalent units (TEU), in 2010. Of this, less than 50% of the cargo is handled by the South Asia Gateway Terminal (SAGT) built in 1999 and located within the port, as a private-public partnership and is functioning successfully. About two-thirds of the cargo throughput is transshipment cargo to and from India. The current traffic levels have almost reached Colombo Port's annual capacity of approximately 4.1 million TEUs, and the port traffic is expected to grow by at least 9.5%²⁵ per year making handling future demand difficult up until the new South Port is completed. The new port is expected to lower costs and improve delivery times thus improving Sri Lanka's competitiveness to remain as a hub port in the region as identified in the SAARC Multimodal Transport Study.

24. The South Port expansion will add three new terminals of 2.4 million TEUs each, thus increasing total capacity of Colombo Port, along with other efficiency improvements, to around 12 million TEUs by 2015. It also provides for deeper draft of 18 m. The development of phase 1 of the Colombo South Harbor is to be carried out in two stages. The first stage of development involves the infrastructure with public funds (\$300 million) and the second stage involves terminal facilities (\$700 million) with private sector participation. The harbor infrastructure works—e.g., dredging and breakwater construction—have already commenced.²⁶

25. The entirely new Port of Hambantota, located in the south, is to be developed as a service and industrial port. Hambantota is one of the lowest per capita income regions in Sri Lanka. The construction of the port will be an important catalyst for major economic development, especially in Southern Province. Total estimated cost of the phase 1 of the project is \$361 million and construction is nearing completion. The Sri Lanka Port Authority (SLPA) has also issued requests for proposals from prospective investors for cement, gas, warehousing, flour milling, and food processing industries adjacent to the port. The SLPA has also development plans for Galle, Trincomalee, and Oluvil harbors.

26. The Logistics Performance Index computed by the World Bank International Trade and Transport Departments ranked Sri Lanka quite low, at 137th out of 155 countries, for 2010. This was a drop from 92nd out of 150 countries in 2007. The reasons have been identified as outdated manual-based customs procedures, lack of information and communication technology, road congestion in access roads and at gates, poor quality of trucking operations, government rules and regulations, poor performance in port operations, and unauthorized payments.²⁷ Due to congestion in the road system around Colombo, the government intends to set up two integrated multimodal logistics centers near Colombo and connect these by railway to the port.

5. Urban Transport

27. Only 21% of the population in Sri Lanka resides in areas defined as urban. However, given that overall population density is 316 per km², most parts of the country have relatively high population densities. Because of this, urban transport strategies are required for most areas in the country. It is due to this population density that bus transport, which began in 1907 in Sri Lanka, became popular and continues to provide the backbone of urban transport system, with 5,000 routes. After the government failed to effectively regulate the pioneering private entrepreneurs, bus services were nationalized in 1958, with the creation of the Ceylon Transport Board, which due to politicization was later decentralized and restructured beginning in 1978. Private sector operators were reintroduced

²⁵ ADB. 2010. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Multimodal Transport*. Manila (TA 7600-SRI, approved on 17 September).

²⁶ Sri Lanka Ports Authority. <http://www.slpa.lk>

²⁷ A. Jeevitha. 2010. *Analysis of Logistics Performance Index for Colombo Port*. University of Moratuwa: Colombo.

from 1979. Around 18,000 permits are currently issued for private bus operations, supplemented by a fleet of over 5,000 state-owned buses of the Sri Lanka Transport Board (SLTB), successor to the Ceylon Transport Board. Most of the private buses are operated by single bus owners. Most long-distance routes and main commuter routes supply around-the-clock services, with urban feeder routes providing 14 to 16 hours service. There are subsidized services provided for school children, as well as to remote rural areas and at night in suburban areas.

28. Buses provide over 50 billion passenger-km annually, about 61% of the market, with the SLTB carrying around one-third of this share. However, the overall bus market share is decreasing due to the continuing increase in two- and three-wheelers and the slow progress in modernizing public transport. Although a national regulator—the National Transport Commission (NTC)—has been set up along with provincial regulators, regulatory interventions have been intermittent, ineffective, and not consistent over time or with each other. After many years of ad hoc fare increases, a fares index was introduced in 2004, which brought stability in pricing and investment. More recent attempts at introducing competitive bidding for route permits, enforcement of integrated time tables, rationalizing subsidies, and corporatizing individual owners have not been continued due to lack of clear political, even though this policy was set out in the National Land Transport Policy (NLTP).

29. Three-wheeler taxis also provide a significant contribution to urban transport supply. There are an estimated 342,286²⁸ three-wheelers in Sri Lanka, accounting for around 15% of the active motor vehicle fleet and 6% of the passenger-km. They have become a popular mode of transport due to their ready availability, provision of door-to-door service, ease in contacting, and perception of being affordable even when they are not.²⁹ Three-wheelers are completely unregulated by any level of government.

30. An estimated 220,000 vehicles enter the city of Colombo daily, carrying over 1 million passengers, with 68% arriving by bus, 5% by rail, and another 26% using modes of private transport.³⁰ The ever increasing problem of urban transport in Colombo and its suburbs is a serious threat to the sustainability of urban development. This is demonstrated by the fact that 1995–2005 saw the number of vehicles entering the city increase by 53%, while the number of people entering the city decreased by 3%. This continuing increase in the use of private vehicles in urban areas has put enormous pressure on the urban road system, which in most instances cannot be widened easily. Thus, transport demand management measures have become urgent. Although the National Land Transport Policy outlined the strategy to promote high occupancy vehicles, including quality public transport, there has not been any initiative in this respect. Ad hoc measure including implementation of one-way systems and the construction of flyovers at busy intersections do not appear to provide sustainable solutions, even though they ease traffic bottlenecks in the short term. A prefeasibility study for a bus rapid transit system and electronic road pricing was carried out by the NTC in 2009 and is awaiting implementation. An urban transport study was carried out by JICA in 2006 but its proposals have not been considered for implementation since then.

C. Institutional Arrangements

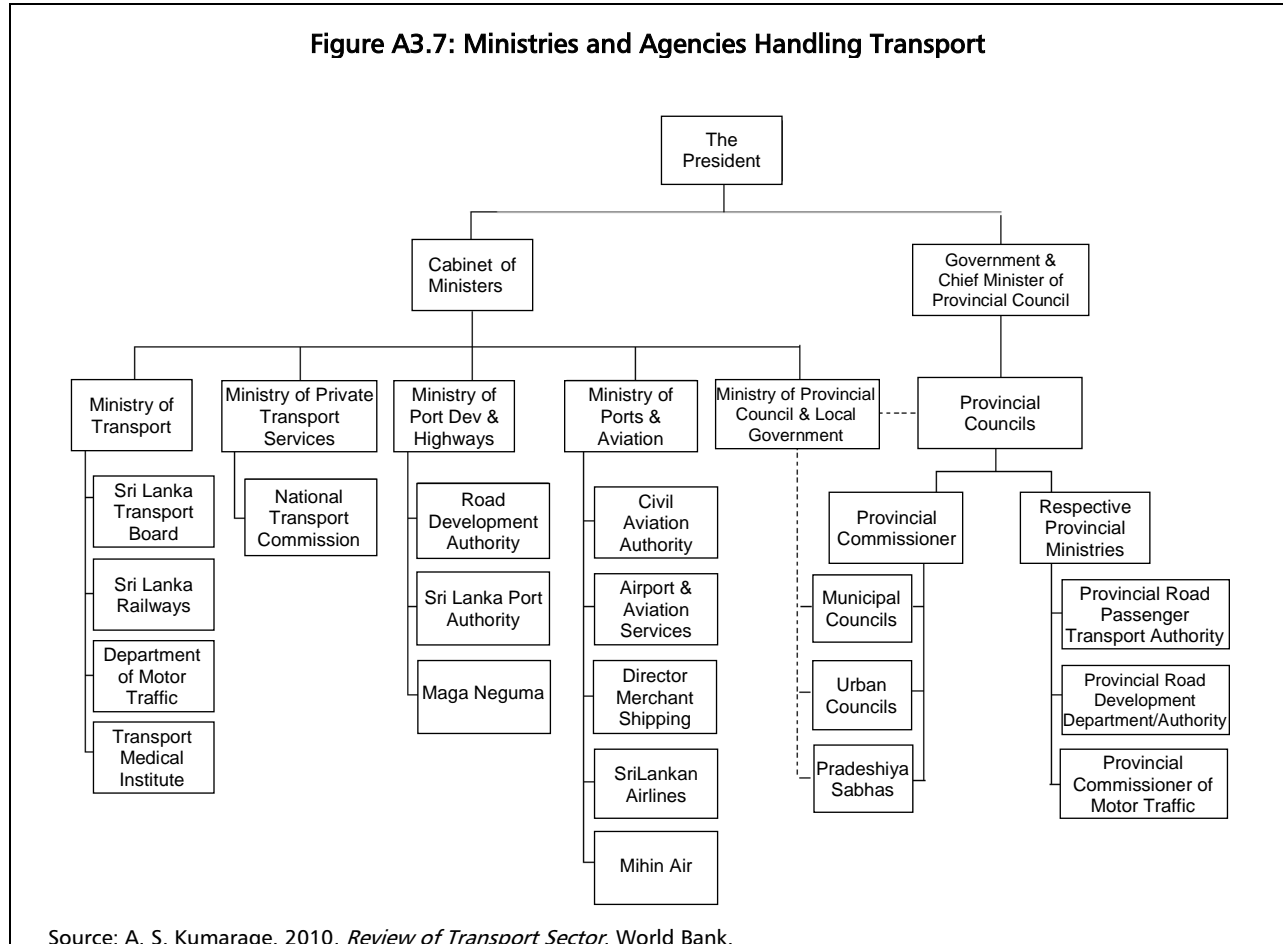
31. The 13th Amendment to the Constitution put into effect in 1989 allows a provincial council to make statues pertaining to the regulation and provision of road transport services within the province, provided they are in conformity with national policy and acts of Parliament. There are three agencies in each province executing the functions that are devolved to the provinces. These are the (i) provincial road administrations (PRAs), (ii) provincial road passenger transport authorities (PTAs), and (iii)

²⁸ Central Bank of Sri Lanka. 2008.

²⁹ A. S. Kumarage, M. Bandara, and D. Munasinghe. 2010. *Analysis of the Economic and Social Parameters of Three Wheeler Taxi Services in Sri Lanka, Research in Transport Economics*. Colombo: Volume 29, pp. 395–400.

³⁰ A. S. Kumarage and J. Weerawardena. 2009. *Greater Colombo Traffic Management Report*. Colombo: Department of Transport & Logistics Management, University of Moratuwa.

provincial commissioners of motor traffic. Other functions pertaining to transport between provinces, national highways, railways, and waterways are reserved for the central government and implemented through acts of Parliament, such as the Railway Ordinance, RDA Act, Motor Traffic Act, Civil Aviation Authority Act, Maritime Act, SLPA Act, and NTC Act. Figure A3.7 shows the different agencies and ministries set up under the different levels of government.



1. Road Transport

32. Until 1989, all major roads were managed by the Public Works Department. Currently, the class A and B roads are classified as national roads and are managed by the central government through the Ministry of Port Development and Highways (MPDH) and the RDA. The provincial roads, which are usually situated entirely within the province, are managed by the respective provincial councils, through a PRA.³¹ Roads that are not classified as national roads or provincial roads and are located fully within municipal or urban council areas are maintained by urban local governments. Traffic is heavy on some roads in urban areas, such as in the cities of Colombo and Kandy, and are in a functional sense part of the national highway network. The country's 18 municipal councils and 48 urban councils manage 5,176 km of road. Rural roads are those in rural areas and are maintained by rural local authorities called *pradeshiya sabhas*. Unlike Sri Lanka's other roads, most of these roads are unpaved and have earth or gravel surfaces. Some rural roads are also maintained by other government agencies and, while not formally designated as public roads, receive public funds for maintenance because most are used as public thoroughfares and accessed by the rural population.

³¹ The authorities are called the RDA in some provinces and the Roads Department (RDD) in other provinces.

33. The RDA receives all its recurrent and capital allocations for development through the budget. Fuel levies constitute a part of the allocation of the Road Maintenance Trust Fund (RMTF), which is also voted through the budget for administration through the MPDH. The capital allocations for the PRAs are also received from the Treasury through the Finance Commission, as well as from funds voted directly from the respective provincial councils. In municipal areas, the taxes are considered inadequate to meet the cost of maintaining roads³² and both capital and recurrent costs of maintaining roads are borne by the Treasury. At the rural level, numerous government agencies provide capital allocations for rehabilitating rural roads because they are politically attractive projects.

2. Railway Transport

34. Railway operations in Sri Lanka have from its inception been in the hands of the government. Private sector participation is limited and restricted to noncore functions. The Railway Ordinance under which the railway operated does not allow outsourcing of its operational activities. In 2003, the government proposed to make the railways a statutory agency. However, trade union opposition arose and the new government, that came to office in 2004 reverted railways to a department. The strategic enterprise management agency under the presidential secretariat is helping the railways develop its business and management areas. The SLR earns only around 25% of its total expenditure through earned revenues. The balance is provided as an operating subsidy together with all capital requirements. There is no substantial private sector involvement in the railways. The annual railway operational details are summarized in Table A3.7.

Table A3.7: Summary of Annual Railway Operational Details

Annual Operations	2004	2005	2006	2007	2008	2009
Total number of trains scheduled	116,051	116,024	115,281	122,132	...	...
Total number of trains operated	107,216	106,074	107,055	112,956	117,129	109,717
Passenger km carried (million)	4,684.2	4,357.6	4,311.8	4,766.9	4,668.6	4,568
Freight ton km carried (million)	134.2	134.8	138.2	133.2	120.7	118.0
Train km scheduled (million)	8.64	8.73	8.76	10.00	10.00	11.00
Train km operated (million)	7.63	7.57	8.11	8.3	8.0	9.1
Number of cancellations	8,835	9,950	8,226	9,176	...	...
On-time arrivals +/- 5 min. at destination	44,259	40,171	39,469	35,456		

... = not available, km = kilometer, min. = minute.

Source: Sri Lanka Railways, Planning Division. Include both passenger and freight trains.

3. Urban Transport

35. The NTC, set up under the NTC act No. 37 of 1991, is the only agency under the newly constituted Ministry of Private Transport Services (MPTS). The NTC's functions are to advise the government on the national policy relating to passenger transport services by omnibuses; and, having regard to such policy, to regulate interprovincial bus services, as well as services for which subsidies are paid. Regulation of the sector is through control of access for new services by a competitive bidding process, preparation of integrated demand-based schedules between state and private operators, quality assurance, fare control, and implementation of standards. It has also engaged in planning and coordination of urban and intermodal transport in recent times, since there is no agency responsible for this activity. It recovers most of its recurrent expenditure through the issue and renewal of route permits. Its capital allocations consist mostly of subsidies disbursed to both state and private operators for providing discounted school bus services, remote and rural bus subsidies, and subsidies for late evening operations.

³² A. S. Kumarage. 2006. *Public Expenditure Review of Highways*. World Bank.

36. The PTAs regulate intraprovincial passenger services. The PTAs are set up under the provincial minister responsible for transport and headed by a chairman and board of directors. Regulation in this instance is chiefly for entry—usually awarded based on political affiliations, fare control, and scheduling of services. The PTAs earn revenue from the services provided. The revenue shortfall, as well as all capital expenditure, is met through pre-agreed Treasury funding through the Finance Commission.

37. Bus services are provided by both the private and state sector, with the private sector providing approximately two-third of capacity. The SLTB is the state-owned bus operator whose functions are to provide an efficient and qualitative bus transport service, including socially necessary services. It collects around 75% of its expenditure through the fare box. The balance is financed through general operating subsidies. Capital expenditure for new buses and other assets is through separate Treasury allocations. It is not regulated by either the national or provincial regulators and operates through consultation with regulators, a process that has created numerous problems in the coordination of services and implementing service standards. The private buses, on the other hand, are mostly owned by one-bus operators and are generally represented in operational matters by loosely formed unions. They have no operational organization and, hence, their services have to be monitored by the respective regulator, which has become a daunting task given that there are over 18,000 such buses in operation owned by around 15,000 individuals. Private buses, along with state buses, also participate in providing unremunerative services by availing of the subsidy programs offered by the NTC.

38. Three-wheelers that offer taxi services as well as other transport service providers such as chartered office and school transport services are also the responsibility of the PTAs. But regulation in these instances is only nominal. In smaller town centers, the respective municipal council or urban council is responsible for urban traffic management. However, in larger metropolitan areas such as in Colombo, transport demand management and multimodal integration are not undertaken. Individual agencies responsible for transport each carry on their planning and development activities without reference to an integrated plan. No overarching agency responsible for overall coordination, planning and monitoring of transport exists in larger metropolitan areas. Hence neither the traffic congestion costs in Western Province, which were estimated at SLRs32.0 billion in 2006, nor the SLRs20.0 billion per annum³³ loss due to accidents is an assigned priority for any transport sector agency.

4. Port and Inland Waterways Transport

39. The Ministry of Ports and Aviation (MPA) had three distinct functional areas of operation: ports, shipping, and civil aviation. Since April 2010, port development and the SLPA have been announced together with highways under the MPDH. The Directorate of Merchant Shipping, Ceylon Shipping Corporation, the Civil Aviation Authority of Sri Lanka, Airport and Aviation Services Sri Lanka (AASL), Sri Lankan Airlines, and Mihin Lanka are some of the agencies currently under MPA.

40. The SLPA is a multiport landlord port operator engaged in the development and operation of all the ports in the country. It earns most of its revenue through handling and other charges at the ports. Capital allocations for port development are made through the Treasury. The Colombo South Port development has been partly funded by ADB, with terminals to be financed by private sector. The SAGT, begun in 1999 in the Port of Colombo, is a private entity that also competes with SLPA. There is no government financial commitment to the SAGT.

5. Air Transport

41. All airports in Sri Lanka are managed by the state-owned Airport and Aviation Services Sri Lanka Limited (AASSL) which comes under the MPA. The Airport and Aviation Services

³³ A. S. Kumaraige. 2008. Report on Transport Statistics (Unpublished).

earns its revenue from user charges at its airport—mainly the Biabandaranaik International Airport—the surplus over expenditure of which is sent to Treasury.

42. The summary of income and expenditure of the organizations, discussed above, are given in Table A3.8, showing the varied nature of financing of the different subsectors and different agencies. Overall, the road expenditure is funded entirely by direct government allocations. Treasury recovers these through fuel taxes and vehicle import duties and other revenues. The exact degree of recovery is difficult to calculate given the nature of price variations. In the case of ports and airports, the revenues are collected through direct user charges and credited to the Treasury, while capital expenditure is met through the Treasury allocations. In the case of state bus operations, as well as the railways, the operating deficit and the total capital expenditure are provided by the Treasury. These are most often considered general subsidies, even though many external benefits have been identified. The private service providers, such as bus and three-wheeler operators and private infrastructure providers—i.e., the SAGT—all show the potential of surplus of earnings even when directly competing with state-provided services.

Table A3.8: Summary of Income and Expenditure by Agency, 2004–2008

Institute		2004	2005	2006	2007	2008
RDA	Revenue	0.0	0.0	0.0	0.0	0.0
	Expenditure		26,047.0	45,870.0	47,681.0	52,018.0
DMT ^a	Revenue			1,218.9	2,338.8	1,890.7
	Expenditure			527.7	618.2	875.4 ^a
SLR	Revenue	1,678.0	1,957.4	2,491.0	2,999.0	3,771.3
	Expenditure	6,657.4	8,423.0	10,042.6	13,252.0	14,270.4
NTC	Revenue					
	Expenditure	25.6	141.6	190.9	269.1	744.0
SLTB ^b	Revenue	8,999.2	10,007.3	12,668.3	15,441.1	18,083.2
	Expenditure	10,128.7	11,533.5	13,650.3	15,806.9	19,351.3
NTMI ^c	Revenue			97.5	130.3	155.7
CAASL ^d	Income	132.9	159.9	155.9	120.6	167.6
	Expenditure	67.0	88.6	105.8	117.9	131.4
AASL ^e	Revenue	2,402.0	2,619.0	4,454.0	5,340.0	5,832.0
	Expenditure	1,846.0	1,949.0	2,434.0	2,871.0	4,090.0
SriLankan Airlines	Revenue	45,397.5	53,808.8	61,160.1	67,963.8	79,128.7
	Expenditure	39,441.8	54,145.2	60,720.3	69,406.7	82,154.0
All PRAs ^f	Revenue	...	...	...	...	...
	Expenditure	1,615.6	2,438.9	2,706.0	2,150.7	3,681.5
All PTAs ^g	Revenue			15.4	35.3	64.5
	Expenditure			57.0	93.0	133.0
PCMTs ^h	Revenue			2,256.0	2,587.8	1,684.2
	Expenditure			...	...	...

... = not available, AASL = Airport and Aviation Services Sri Lanka, CAASL = Civil Aviation Authority of Sri Lanka, DMT = Department of Motor Traffic, NTMI = National Transport Medical Institute, PCMT = Provincial Commissioner of Motor Traffic, PRA = provincial road administration, PTA = Provincial Transport Authority, RDA = Road Development Authority, SLR = Sri Lanka Railways, SLTB = Sri Lanka Transport Board.

^a Estimated from expenditure for first 9 months.

^b State-owned bus operator.

^c State-owned institute.

^d Aviation regulator.

^e State-owned monopoly airport operators.

^f Estimated by using the data collected from all provinces.

^g Revenue taken as the fees collected through private omnibus act as per the financial review of M/PCLG and expenditures as per the 2007 national budget.

^h Its income is revenue collected as the vehicle license fee and fees collected under Motor Traffic Act by PC-Financial Review of M/PCLG.

Source: A. S. Kumara. 2010. *Review of Transport Sector*. World Bank.

APPENDIX 4: PREVIOUS ADB COUNTRY STRATEGIES

	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
Positioning Criteria Basis for the sector strategy	The formulation of the sector strategy was guided by the Special Aid Group meeting for Sri Lanka in 1987, which mainly focused on the reconstruction and rehabilitation program of the Government of Sri Lanka.	Strategy for the sector was principally shaped by ADB's coordination with major development partners. Lessons from evaluation studies were used to some extent in the transport sector.	The formulation of the strategy employed ETSW and drew from studies by development partners (Transport Sector Strategy Study by the World Bank and UNDP in 1996), evaluation studies of ADB's Operations Evaluation Department, workshops and bilateral discussions, and forums with other development agencies.	The sector strategy was based on ETSW, poverty assessments, policy dialogues, consultations with stakeholders, and coordination meetings with other development agencies.
Government absorptive capacity and ownership	The strategy recognized the government's budgetary constraints, which could potentially limit the availability of counterpart funding for ADB-funded projects. The strategy also acknowledged the institutional and human resource constraints that might inhibit the effective implementation of projects, and limited sector capacity to absorb development assistance. Ownership of reform agenda in the transport sector was not directly addressed in the strategy.	The 1993 strategy recognized obstacles presented by the country's current account deficit, savings-investment gap, and budget deficit which affected Sri Lanka's capacity for public investments. Ownership of the sector agenda was not directly addressed in the strategy.	The strategy recognized the limited absorptive capacity of the country and sector institutions. In view of the country's external debt and goal of trimming the fiscal deficit, and the security and conflict situations (North and East) which was seen as a major risk in the implementation of the sector strategy, the overall country strategy suggested caution. The strategy, as a whole, was prepared in close cooperation with a government focal point group. Consultations were done through workshops with government and nongovernment representatives, and through discussions.	The 2004 strategy acknowledged that capital contributions to development projects from domestic government revenue would be limited. Thus, the crucial role of external financing was considered critical in the funding of physical infrastructures and also in support for institutional and policy reform. Ownership of the overall development plan was demonstrated in the process of country strategy and program preparation. Accountability and ownership was established through consultations, dialogues, forums, and agreements leading to the formulation of the CSP.
ADB's comparative advantage in the sector and harmonization	There was no direct reference to ADB's comparative advantage in the transport sector.	The 1993 strategy emphasized ADB's comparative advantage in physical infrastructure.	The strategy highlighted ADB's extensive involvement in the sector since 1985. Given the gradual withdrawal of the	The strategy recognized ADB's leadership in the transport sector, particularly as the largest funding agency to the road sector in Sri Lanka.

Positioning Criteria	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
<p>In terms of aid coordination, the strategy underscored close liaison with World Bank and IMF both at the macro and sector and project levels.</p>	<p>Japan (through OECF) has emerged then as a major donor in the road sector. ADB liaised closely with OECF to maximize coordination of their respective initiatives and to explore cofinancing activities.</p> <p>The strategy recognized the potential leading role that ADB could play in policy formulation, institutional strengthening, and improvements in the capacity and efficiency of both primary and secondary roads.</p>	<p>World Bank in the mid-1990s from lending and policy dialogue at the sector level, and the differing focus of bilateral funding agencies on the investment components of transport projects, ADB then became the lead agency engaged in policy dialogue in the sector.</p> <p>Among the bilateral funding agencies, the strategy identified Japan as a potential and significant partner for cofinancing or parallel financing operations, which could provide greater leverage to ADB's policy dialogue.</p>	<p>ADB's presence in policy dialogues and its provision of advisory technical assistance have paved the way for the formulation of policies and development framework for the sector (i.e., national road policy).</p> <p>The strategy stressed the importance of aid coordination with other major funding agencies, with regard to their geographic coverage and scope to avoid duplication of efforts and to maximize the impact of external assistance.</p>	
<p>Focus/selectivity and synergies</p> <p>(i) Issues/ challenges addressed</p>	<p>The overall strategy highlighted the problem of financing and implementation of the program for reconstructing and rehabilitating economic and social infrastructure in the North and East following the signing of the Indo-Sri Lanka peace accord in 1987.</p> <p>Main issues identified were poor condition of the road network, particularly in the conflict-affected areas, and the poor performance of sector institutions.</p>	<p>The strategy recognized that Sri Lanka's physical infrastructure was inadequate and its management weak.</p> <p>In the road sector, areas outside of Greater Colombo suffer from poor serviceability which deters potential growth of economic activities.</p> <p>Poor management has played a major role in the delayed construction and inadequate maintenance of Sri Lanka's roads and other physical infrastructures. Attention was needed for improving the efficiency of</p>	<p>The strategy identified key issues in the sector including (i) low cost recovery for roads, (ii) the frail financial position of bus transport services, and (iii) large investment requirements.</p> <p>Meanwhile, telecommunications was considered to be in need of expansion.</p> <p>Container-handling capacity in the port of Colombo was recognized to be needing expansion in view of the rapid expansion of transshipment services, resulting in increased average vessel waiting and berth times.</p>	<p>Roads</p> <p>The strategy identified the critical needs in the sector including (i) sufficient road maintenance; (ii) improvement and rehabilitation of deteriorated roads; (iii) construction of expressways connecting major cities to accelerate economic growth; (iv) improvement of bus transport services; (v) development of nationwide road network master plan to define the most efficient core network, and to assess the nationwide needs on road investment; and (vi) private sector participation in designing, constructing, operating, and maintaining the road network.</p> <p>Ports</p> <p>Major development challenges for</p>

Positioning Criteria	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
(ii) Sector focus	<p>In view of the emphasis given to the reconstruction and rehabilitation program, sector intervention would be focused on the North and East.</p> <p>In terms of the nature of intervention, more attention would be given to rehabilitation and maintenance rather than new construction and augmentation of capital assets, such as roads. This element of the sector strategy was consistent with the policy direction of the government at the time.</p>	<p>existing capacity.</p> <p>Private sector participation in road maintenance would be explored, as well as the establishment of regulatory mechanisms to oversee private sector involvement.</p>	<p>Strengthening sector policies and institutions, and involvement of all levels of the network in the roads sector received priority, given the importance of roads in linking the domestic economy and promoting the decentralization of economic opportunities.</p> <p>The emphasis for ADB operations was on key corridors emanating from Colombo and on establishing modalities of operation and private sector involvement, such as contracts for construction and maintenance that can be replicated in sector activities financed by the government and other funding agencies.</p> <p>Given the role played by other bilateral and multilateral funding agencies, and the difficulties in promoting policy reforms, no direct involvement was envisaged for railways.</p>	<p>ports include (i) low labor efficiency and productivity at the Colombo Port, (ii) slow bureaucratic procedures not just at the port authority but also at customs, (iii) lack of infrastructure capacity at Colombo Port, and (iv) limited participation of the private sector.</p> <p>Roads The strategic thrust of sector operations in the medium term would be on the overall improvement in sector performance. ADB's assistance for reform processes would be provided in a comprehensive/programmatic manner, based on an agreed medium- and long-term framework, to emphasize national ownership of reform processes.</p> <p>ADB would explore possible PPP arrangements in developing expressways.</p> <p>Considering the large amount of investment requirement in the medium term, there was a need to provide project preparatory facility to assist the government in preparing projects ready to be financed by funding agencies, development partners as well as private investors.</p> <p>Ports The strategy is to (i) enhance private sector development through promotion of an enabling environment for private sector activities, and (ii) facilitate private sector investment through PPP and direct investment in private companies.</p>

Positioning Criteria	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
<p>(iii) Instruments used to address challenges</p>	<p>For interventions in the transport sector, lending would continue to be a major instrument, along with continued coordination with other development partners involved in the sector.</p> <p>There was no reference to any economic and sector work for the transport sector.</p>	<p>In terms of operational modalities, the strategy enumerated program and sector lending, advisory TA, economic/sector work, and policy dialogues as important features of ADB's intervention in the medium-term, to be supported by appropriately directed project loans.</p>	<p>Lending will continue to be a major instrument of ADB operations in the sector. There would be increasing sector loan modality in the case of investment projects to make it possible to design loans of adequate size and policy relevance.</p> <p>Cofinancing would be pursued more aggressively in the sector to ensure critical mass of ADB operations.</p> <p>Advisory TA projects at the sector level would continue to focus on strengthening policy and institutions and the legal and regulatory framework in sectors where ADB could play a lead role, such as roads.</p> <p>The strategy also emphasized the need for more economic and sector work to assess the constraints to private sector development and involvement in infrastructure and utilities.</p>	<p>As a large number of projects in the road sector are to be financed, ADB would assist by financing a part of the required investment through sector loan modality. The sector and programmatic approach was envisioned to bring together ADB's interventions for the road sector, creating an opportunity to link the financing of successive projects to the implementation of a common medium-term reform agenda. Continuing policy dialogue and assistance in creating a sustainable road maintenance financing mechanism and private sector participation were also seen as important keys toward sustainable road sector development.</p>
<p>Coherence of issues, focus, and instruments</p>	<p>The strategy was reasonably coherent although it was narrowly focused on physical improvements because of World Bank's predominance at the policy front.</p>	<p>The strategy was well positioned to address sector needs beyond physical rehabilitation of the sector's asset base. However, it was less coherent on how ADB could improve the policy environment in which the sector was functioning.</p>	<p>Based on the analysis of key sector challenges, constraints, and aid harmonization efforts, the sector strategy was reasonably coherent in its choice of issues, sector focus, and instruments.</p>	<p>On the basis of the analysis of the key challenges in the sector and identification of lessons from previous interventions and effects of ADB assistance, the sector strategy was considered coherent in terms of its choice of issues, sector focus, and instruments.</p>

Positioning Criteria	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
<p>Long-term continuity of the sector strategy</p>	<p>Continuity was not directly mentioned but the emphasis given on the inadequacy of physical infrastructures and the poor conditions of a large portion of the country's physical assets provided impetus for continued intervention in the transport sector.</p>	<p>In the road sector, continuity was observed because roads were acknowledged as key to linking poor and isolated regions to major development centers, although continuing focus on geographic areas of planned interventions under the strategy was not directly addressed.</p>	<p>The sector strategy proposed continuing intervention in light of ADB's comparative advantage in the sector and the analysis of the needs and challenges in the transport sector.</p>	<p>The 2004 strategy stressed the large investment requirements in the sector as well as significant gaps in reforms and policy initiatives. ADB has been playing a dominant role in the provision of investments, policy dialogues, and TA. Hence, ADB's presence in the sector was regarded as likely to continue into the next strategy period.</p>
<p>Risk assessments and monitoring mechanisms to achieve the sector strategy's envisaged results</p>	<p>Risks were identified a macro-level but there was not sufficient evidence of analysis risks at the sector level. Monitoring mechanisms were not addressed in the strategy.</p>	<p>Risks pertaining to macroeconomic conditions, such as the country's current account deficit, inflation, and budget deficits were identified. No specific risks were identified for the transport sector.</p>	<p>The strategy identified risk factors for the country as a whole. It did not address risks that were specific to the transport sector. Nevertheless, the strategy highlighted monitoring at two levels: (i) at the risk level, to allow adjustments to ADB operations when warranted by changing domestic or international circumstances to mitigate their negative impact or take advantage of the opportunities they create; and (ii) at the sector level, to focus on operations and improvements brought about by sector interventions. Country economic reviews and annual sector reviews were the primary monitoring mechanisms cited in the strategy. The strategy for the transport sector emphasized that the strategy's success would be based on whether the proposed reforms would have been implemented, and that sector institutions would be adequately equipped with institutional, human,</p>	<p>Several risks were identified for the country as a whole including (i) continued politicization of reform agenda, (ii) resurgence of civil conflict, (iii) occurrence of external shocks that could dampened domestic economic conditions, (iv) possibility of failings internal to ADB, which may reduce the impact and efficacy of the strategy, and (v) risk associated with the impact of proposed reforms on the poor which is considered unsettling. These risks were identified for the whole strategy but no specific risks were identified for the sector. The monitoring and evaluation of the achievements in the government's poverty reduction strategy program was planned to be conducted through the process of an annual update of CSP. Particular efforts would be made to assess in qualitative terms if not quantitative, the local impact of</p>

Positioning Criteria	1988 Country Strategy	1993–1997 Country Strategy	1998–2003 Country Strategy	2004–2008 Country Strategy
			<p>financial, and technical resources. It would also depend on the implementation performance of all ADB-financed transport development investments.</p>	<p>ADB's poverty reduction projects. At the sector level, several benchmarks would be used to monitor sector performance including the accomplishment of policy and institutional reform action plans; the extent of private sector participation; as well as the improved road conditions, bus transport services, and road safety.</p>

ADB = Asian Development Bank; CSP = country strategy and program; ETSW = economic, thematic and sector work; OECF = Overseas Economic Cooperation Fund, PPP = public-private partnership; RDA = Road Development Authority; TA = technical assistance; UNDP = United Nations Development Programme.
 Source: ADB Independent Evaluation Department.

APPENDIX 5: SOUTHERN TRANSPORT DEVELOPMENT PROJECT¹

A. Introduction

1. In December 2004, the Compliance Review Panel (CRP) registered a request for a compliance review of the Southern Transport Development Project (STDP)² in Sri Lanka. The request for compliance review was submitted by the Joint Organization of the Affected Communities (JOACs) of the Colombo–Matara Highway. The CRP determined that the request was eligible and the Board of Directors of the Asian Development Bank (ADB) authorized the CRP to conduct a compliance review. The CRP reviewed and investigated the request and submitted a final report with its findings and recommendations to the Board in June 2005. The Board approved the CRP's recommendations.

2. The request for compliance review was filed after the complaint was submitted by the JOACs to ADB's special project facilitator in June 2004; entered step 7 of the consultation phase of the ADB Accountability Mechanism, which enabled the JOACs to have the parallel process of both consultation and compliance review. The special project facilitator concluded the consultation process on 1 February 2005, without any agreement reached by the parties.

3. The CRP issued its draft report upon completion of its review, which was provided on 6 May 2005 to ADB Management and the JOACs for comments. The JOACs' response was received on 8 June 2005 and Management's response on 9 June 2005. The CRP considered the responses and made changes it deemed necessary before issuing the final report to the ADB Board on 22 June 2005 with its recommendations for ensuring project compliance.

B. Description of the Project

4. The STDP consisted of (i) the southern highway component, which involved the construction of a new southern highway linking Colombo with Galle, the capital of the Southern Province of Sri Lanka, and Matara; and (ii) the road safety component to help the government address Sri Lanka's serious road traffic accident situation. The highway construction was to total about 143 kilometers (km), comprising a main alignment of about 128 km and about 15 km of access highways for the 9-km Panadura access road and the 6-km Galle access road. The STDP also supported policy and institutional reform. The STDP had two primary objectives: (i) to spur economic development in the southern region of Sri Lanka, and (ii) to significantly reduce the high rate of road accidents. The STDP's secondary objective was poverty reduction.

C. History³

5. Most of the issues of the STDP were created by shifting the highway traces during preparation and project implementation. The safeguard documents could not follow the changes of the trace and became incomplete, and detailed design work could not be carried out in a timely manner. The public was not fully informed of the safeguard issues. Five key different traces were discussed during preparation and implementation:

- (i) an upgrading of the existing A2,⁴ as well as providing bypasses for the main urban centers;

¹ The history of the project up to 2005 has extracted from the Compliance Review Panel Final Report of 2005.

² ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

³ The major source of the history by 2005 is the final report on CRP Request No. 2004/1 on the Southern Transport Development Project in Sri Lanka.

- (ii) the so-called original trace—new construction traversing the mountainside of inland areas and requiring skillful civil work;
- (iii) an alternative trace—an oceanside trace that was conceived as an alignment more likely to attract short distance traffic and, consequently, to also have shorter connections and be more likely to relieve congestion on the existing A2;
- (iv) the combined trace, which was the route in the report and recommendation of the President (RRP) approved in 1999—a compromise trace in the middle of original trace and alternative trace that combined much of the original trace with closer connections to Galle and to the coast near Colombo, which made it more attractive than the original trace to traffic using the A2; and
- (v) the final trace⁵—the trace on which the final environmental impact assessment (EIA) and the resettlement implementation plan (RIP) were submitted to ADB.

The loan became effective by submitting the RIP in 2002. The final trace lies in most areas closer to the original trace.

6. **Project preparation.** By the early 1990s, congestion and problems of access to the southern parts of Sri Lanka along the A2 southern highway reached a critical point due to urbanization along the road. Traffic accidents were a large problem. Although Sri Lanka had never constructed a greenfield motor highway, opting instead to upgrade and make marginal improvements of the road network existing at independence, varying traces of the a 128-km long road were discussed and studied by the government. As envisioned, the highway would ultimately have four to six lanes, although the initial configuration under the project would be two. In 1993, the government commissioned a study that included examining four possible alignments for an expressway. In 1994, the government commissioned the University of Moratuwa to prepare an EIA for the so-called original trace. This EIA, completed in 1996, considered a corridor about 122 meters (m) wide. This EIA was not approved by the Central Environmental Authority (CEA), as it wanted further alternatives to be considered.

7. In October 1997, ADB approved a project preparatory technical assistance (TA) for the Southern Transport Corridor Project (TA 2892-SRI)⁶ with financing of \$1.0 million to undertake a feasibility study to determine the viability of the STDP, including a study of alternatives. The consultants engaged under this TA project were the Wilbur Smith Associates (WSA).⁷ WSA submitted an inception report in May 1998. In November 1998, ADB, the government, and the WSA identified the combined trace as the preferred trace. The WSA submitted its final report in March 1999. The WSA noted in the feasibility study that the government continued to prefer alignments well inland and believed that a more inland route would have the greatest effect while recognizing that this may hinder the attraction of local traffic and would require lengthier connections to the A2 national highway.

8. The feasibility study of TA 2892-SRI recommended the combined trace as the basis for progressing with the project due to the extent of preparatory work completed and level of government commitment. The report also mentioned that the alternative trace closer to the coast were investigated

⁴ The A2 is an A-grade road in Sri Lanka. It connects Colombo and Wellawaya via Hambantota. The highway passes through Wellawatte, Ratmalana, Kalutara, Wadduwa, Beruwala, Bentota, Kosgoda, Ambalangoda, Hikkaduwa, Galle, Koggala, Weligama, Matara, Gandara, Dikwella, Tangalle, Hungama, Hambantota, Weligatta, Tanamalwila, Kuda Oya, and Teluulla.

⁵ Wilbur Smith Associates' inception report of March 2000 stated that about 50 km of the final trace was between a few hundred meters and 2.5 km from the combined trace. The "safeguard mission" conducted its own comparison and concluded that at least 26 km of the final trace alignment extended beyond a 2 km corridor centered on the combined trace, 15 km extended beyond a 3 km corridor, and 5 km extended beyond a 4 km corridor.

⁶ ADB. 1997. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Corridor Project*. Manila (TA 2892-SRI, approved on 9 October).

⁷ This was done through a contract funded by ADB under the Road Network Improvement Project and signed between the RDA and the Design Consultants (WSA). In association with Resources Development Consultants, Pacific Consultants International, and Beca International Consultants to carry out the engineering design services on 28 October 1999. (ADB. 1998. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Network Improvement Project*. Manila [Loan 1649-SRI(SF), approved on 8 December]).

and shown to attract greater traffic volumes. The combined trace followed the original trace for about 60% of its length, and avoided a number of sensitive wetlands and watersheds, as well as densely populated townships and urban areas. TA 2892-SRI final report of March 1999 included an initial social impact assessment and an Initial environmental examination on the combined trace as the preferred trace and recommended a "more precise definition" of the detailed alignment and a "more detailed mapping" of an approximately 3 km wide corridor to minimize resettlement. The social impact assessment (SIA) carried out by the University of Colombo in March 1999 also considered the combined trace and was based on information gathered from questionnaires and surveys on directly affected people along an 80 m wide right of way measured from the centerline of the combined trace.

9. In February 1999, ADB changed its classification of the STDP from a category B project made in 1997 to a category A project because WSA identified several significant environmental impacts resulting from the project, including involuntary resettlement and impacts on hydrological conditions, fisheries, aquatic ecology, and wetlands. Accordingly, the Road Development Authority (RDA) asked the University of Moratuwa to conduct a new, updated category A EIA for the combined trace. Since 60% of the combined trace was the same as the original trace, the RDA chose to update the 1999 EIA for the original trace, from which much of the text for the new EIA was copied. None of the information from the 1996 EIA was updated. Detailed studies were carried out in the corridor of 400 feet (122 m) width.

10. In March 1999, after completion of the feasibility study, ADB approved another project preparatory TA (TA 3184-SRI)⁸ for the STDP with financing of \$190,000. This TA was to assist the RDA to implement the development and poverty impact study and the enhanced economic analysis and to prepare the summary environmental impact assessment (SEIA) report. The discussions between ADB and the government had largely reached a stalemate over the issue of economic return, with calculations then showing a rate of return lower than 10%, and it was important to do additional analysis to sort out these disagreements. The studies were completed by August 1999. TA 3184-SRI stated that an ADB loan for the STDP was included in ADB's 1999 country assistance program for Sri Lanka. The CRP was surprised that this TA was not referred to in the text of the RRP presented to the ADB's Board, which specifically cites TA 2892-SRI as the project from which the STDP developed.

11. In implementing TA 2892-SRI and TA 3184-SRI and to process the STDP, ADB carried out a fact-finding mission in April–May 1999. During this mission, ADB noted that a satisfactory road link to Galle was not included in the project. The RDA and ADB agreed to include such a link in the project. As the CRP noted, it was included in the RRP without the required social or environmental assessments. This fact-finding mission was followed by an appraisal mission in June–July 1999.

12. Under TA 3184-SRI, the SEIA report for the proposed new highway was prepared. The SEIA report was circulated to the Board on 20 July 1999, 120 days prior to Board approval of the project, as required. The SEIA discussed environmental and social issues in what it said was a highway corridor of 3–4 km in width centered on. The CRP noted that the accuracy of this SEIA has been questioned by some ADB staff. In May 1999, the RDA submitted the EIA report to the CEA for environmental clearance and approval, as well as to ADB for review and comments. On 23 July 1999 the CEA issued a letter to RDA granting approval for implementation of the project and approving the combined trace, subject to 58 conditions. The CEA also published in August 1999 a notice of its approval of the EIA "subject to specified terms and conditions" in three Sinhala-, Tamil-, and English-language Sri Lankan newspapers. The conditions included (i) avoiding the Weras Ganga and Bolgoda Lake wetland by moving the trace to the original RDA trace and avoiding the Koggala and Madu Ganga wetlands; and (ii) selecting the final trace, which it stated would minimize the relocation of people. The CEA also noted that the EIA study of the project had considered only two alternative traces and that if the final trace was to be

⁸ ADB. 1999. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Preparation of the Southern Transport Development Project*. Manila (TA 3184-SRI, approved on 14 April).

different from either of these traces, a supplementary EIA study would have to be carried out for the new trace.

13. On 3 September 1999, ADB's Office of Environment and Social Development acknowledged the CEA clearance and terms and conditions. On 7 September 1999, it supported the resettlement action in the CEA's conditional approval. ADB loan negotiations were held 4–6 October 1999. The RRP for the STDP issued on 3 November 1999 stated in para. 78, that the "Project received Central Environment Authority clearance on 25 July 1999" without acknowledging that there were 58 conditions attached to the CEA's approval. The RRP was approved on 25 November 1999.

14. **Project implementation.** Following the Board's approval, ADB fielded an inception mission in Sri Lanka 7–10 December 1999. The CRP found from this mission's aide-mémoire that subsequent changes in the alignment were to be made. On 16 December 1999, the loan agreement and project agreement under the ADB loan were signed.

15. In December 1999 and January 2000, the WSA, as the detailed design consultants for the ADB section walked the length of the ADB section through Akmeemana area to enlist inputs to the design and make final adjustment to the alignment. On 17 January 2000, the RDA officially confirmed the final trace as the accepted basic alignment for the ADB section. The final trace deviated from the trace approved in the RRP at a few locations and had shifted westward by about 1 km within the study area defined in the EIA report. In March 2000, WSA issued its inception report on the detailed design, which contained its assessments of the limitations of both the EIA and the SIA and its recommendations for remedying these limitations. The RDA did not implement those recommendations.

16. In June 2000, WSA provided the RDA with a detailed map of the 3–4 km wide corridor within which the final trace was to be located. Soon afterwards, further deviations were suggested based on discussions by WSA, the RDA, and ADB. WSA noted the need for additional EIA and social assessment work for the major deviations in the highway alignment. With the final adjustments, the final trace lies in most areas closer to the original trace. Because 75% of the alignment on the ADB section had changed, WSA conducted a socioeconomic survey of a 30% sample of the population to be affected within a 100-m band of the new alignment and of the 6 km Galle access road of the ADB section. The final alignment was determined with findings from the household survey to reduce the number of houses to be affected. From May to August 2000, the 1999 SIA was updated and completed in November 2000. WSA studied the environmental impacts of the final trace and prepared an environmental findings report in November 2000.

17. In October 2002, loan effectiveness was declared. The loan effectiveness, typically expected within 3 months from loan signing, was held up partly due to the execution of the Japan Bank for International Cooperation (JBIC) loan agreement but mainly to the time required for the RDA's submit an RIP that was satisfactory to ADB. The JBIC loan agreement was signed in March 2001 and became effective in May 2001.

18. In June 2004, the request for the compliance review was filed by the JOACs as an umbrella organization for the Gama Surakeema Sanvidhanaya (GSS) and the United Society for Protection of Akmeemana (USPA). The JOACs individually named were Sarath Athukorale, L.D.L. Pathmasiri, and A.A.D. Sunil Ranjith Dayaratne, and 25 other identified affected people who had asked that their identity be kept confidential. The CRP found the evidence of authority of representation of the 25 people by the JOACs satisfactory.

19. The CRP noted that the GSS and the USPA had filed requests under the previous inspection policy. The GSS, an organization of residents in the northern section, said that they were negatively affected by the project as a result of ADB's violations of a number of its policies and filed an inspection

request with the board inspection committee (BIC). A similar request was filed by the USPA, another local organization in the ADB section.

20. The CRP report also noted that, after considering these two requests and the response of Management, the BIC concluded that there was insufficient basis to recommend an inspection to the Board. The CRP further noted that the BIC recommended to the Board that "Management should make strenuous efforts to use its good offices to bring about effective mediation and a satisfactory resolution of the outstanding resettlement issues." From March to September 2002, the RDA and the Ministry of Highways conducted intensive consultation and mediation with community representatives and affected people to understand and address their concerns. Consequently, the number of affected people was claimed to be reduced from 240 to 32 households. Further, the government and ADB resorted to an ADB-funded third party, independent of the government and the affected households, done by a local nongovernment organization (Arthacharya Foundation), supplemented by the advice of an independent international resettlement specialist.

21. In determining its findings the CRP took note of new evidence provided by the JOACs to the CRP, among others, new information on issues of adequacy of environmental and social assessments for the final trace; Management's response, during the previous inspection requests, built partly on a court case irrelevant to the final trace, and clarifications on what constitutes a corridor and its width.

D. Issues Identified by the Compliance Review Panel

22. The JBIC's construction loan for the JBIC section was approved in 2001, after its engineering services loan for preliminary and detailed engineering design, which included additional environmental studies. This JBIC loan approval was based on the final trace and not on the combined trace. The CRP noted that, in May 1996, ADB proposed a feasibility study for the project, which materialized in TA 2892-SRI in October 1997.

23. In May 1996, ADB also proposed that, after a detailed feasibility study, ADB might then consider an engineering loan to undertake detailed engineering, the necessary environmental and social impact analyses, and preparation of bidding documents. ADB also assumed the engineering loan modality would be adopted for preparing the STDP. The this TA engineering loan included in a December 1996 memorandum of understanding did not materialize in ADB's 1997 or 1998 country program for Sri Lanka.

24. The CRP report draws attention to the sequence and timing of the following events: (i) the feasibility study in TA 2892-SRI, approved in October 1997; (ii) the proposed engineering loan, which did not materialize in ADB's 1998 country program for Sri Lanka; (iii) the second project preparatory TA, approved in April 1999; and (iv) WSA's engagement in October 1999 as the preliminary and detailed design consultant. ADB was also clear that the project processing schedule required the preliminary design to be completed prior to appraisal. ADB staff told the CRP of the need for an engineering loan to precede a construction loan, especially given that the STDP was a greenfield project with manifold socioeconomic implications. In ADB's business practices in lending operations, one would expect a longer time frame for processing projects from project fact-finding stage to loan approval but in the case of the STDP this was done hurriedly.

25. In the CRP's final report of 2005, the CRP concludes that during the period from project processing to its implementation lapses of compliance had occurred with the following applicable ADB policies and operational procedures:

- (i) **Operations Manual Section 20: Environmental Considerations in Bank Operations.**⁹ The CRP found that Management could not be satisfied with the sufficiency of the EIA done

⁹ ADB. 1997. Environmental Considerations in Bank *Operations Manual*. OM Section 20. Manila (Issued on 7 January).

in 1999 and the ensuing environmental findings report by for the ADB section. In addition, the review of the environmental impacts of the Galle access road had not been adequate and some stretches of the final trace well away from the combined trace needed more attention. Public information and participation in the environmental review process had been inadequate since late 1999.

- (ii) **Operations Manual Section 21: Gender and Development in Bank Operations.**¹⁰ The CRP found ADB out of compliance before the Board approval because no gender analysis had been done, although the RRP stated that the project had significant impact on women. After the Board approval, the commitments had made for special gender action plans have not appeared in the implementation or monitoring details of the project.
- (iii) **Operations Manual Section 22: Benefit Monitoring and Evaluation.**¹¹ The CRP, after reviewing both the benchmark analysis in the project documentation as the monitoring system that had been developed by 2005, found that the project could not be in compliance with the requirements of this section until further steps were taken.
- (iv) **Operations Manual Section 40: Formulation and Implementation of Loan Covenants.**¹² Since the CRP found that various policies and commitments had not remained in compliance over time, especially with regard to resettlement, the failure of Management to restore compliance was, by itself a matter of noncompliance with this section since many of the issues had involved commitments made at Board approval and in the RRP and the loan agreement.
- (v) **Operations Manual Section 47: Incorporation of Social Dimensions in Bank Operations.**¹³ The loss of compliance with this section derived in part from the shifting of the traces, along with an absence of analysis of the Galle access road. The emphasis in the Operations Manual, however, was on the vulnerability of certain population groups and households, which needed to be identified and assisted throughout the process to ensure they were better off after the project was completed. The weakness of the Management Information System and the rudimentary income restoration program were serious breaches of compliance and this would pose major challenges to bring the project back into compliance with this section.
- (vi) **Operations Manual Section 50: Involuntary Resettlement.**¹⁴ The CRP concludes that compliance with this OM section has been problematic since Board approval, with the significant shifts of the trace without public participation. The CRP was also concerned about Management's inattention to independent monitoring and the need for supporting performance in the areas of compensation and resettlement.
- (vii) **Project Administration Instruction No. 5.04: Change in Project Scope or Implementation Arrangements.**¹⁵ The CRP identified a number of major changes in the project that might normally trigger a review by the operations department and believed that the project would be out of compliance until a formal determination on the change of scope issue has been settled.

¹⁰ ADB. 1997. Gender and Development in Bank Operations. *Operations Manual*. OM Section 21. Manila (Issued on 7 January).

¹¹ ADB. 1997. Benefit Monitoring and Evaluation. *Operations Manual*. OM Section 22. Manila (Issued on 7 January).

¹² ADB. 1995. Formulation and Implementation of Loan Covenants. *Operations Manual*. OM Section 40. Manila (Issued on 12 December).

¹³ ADB. 1997. Incorporation of Social Dimensions in Bank Operations. *Operations Manual*. OM Section 47. Manila (Issued on 7 January).

¹⁴ ADB. 1997. Involuntary Resettlement. *Operations Manual*. OM Section 50. Manila (Issued on 7 January).

¹⁵ ADB. 2001. Change in Project Scope or Implementation Arrangements. *Project Administration Instructions*. PAI 5.04. Manila (Issued in December).

E. Recommendations of the Compliance Review Panel and Compliance of the Recommendations

26. **Recommendations.** The CRP had two categories of recommendations to the Board: (i) measures addressing issues that might cause difficulties in complying with ADB's policies and operational procedures in the ADB-assisted projects (general recommendations), and (ii) measures relevant to current implementation problems necessary to bring the project back into compliance (specific recommendations).

27. In the first category, general recommendations, the Board asked that Management take the following measures:

- (i) Review selected road projects as to how changes of scope might make the application of environment and resettlement policies difficult.
- (ii) Review cofinancing arrangements in selected projects to determine if such arrangements have a damaging effect on policy compliance for the whole project, and make recommendations to strengthen policy compliance for these projects.
- (iii) Develop additional guidance for ADB's Handbook for Resettlement: A Guide to Good Practice dated 1998¹⁶ for staff to develop major infrastructure projects with borrowers with little or no comparable project experience, especially in Category A projects. The guidance should particularly address the issues of implementing agencies having adequate institutional capacity and resources in carrying out and monitoring resettlement and ensuring that appropriate legislation is in place to carry out such resettlement.
- (iv) Provide to the CRP, with a copy to the Board, by 31 August 2005, a course of action with timelines on implementation of these measures for the CRP's monitoring and reporting to the Board.

28. In the second category, specific recommendations, the Board asked that Management to take the following measures:

- (i) Assess the environmental impacts of the Galle access road and any stretch of the ADB section on the final trace different from the combined trace, including consulting project-affected people.
- (ii) Ensure the incorporation of the environmental impact assessments and the recommended mitigation measures of any stretch of the ADB section on the final trace different from the combined trace and of the Galle access road in the environment management plan for the project.
- (iii) Review the cofinancing arrangements in the STDP, with a view to strengthening policy compliance for the whole project.
- (iv) Conduct an analysis of gender issues on the project and ensure that the programs under the project adequately address these gender issues.
- (v) Require that all affected peoples be fully compensated by actual payment before they are moved.
- (vi) Determine whether there had been a change of scope in the project, as provided in the Project Administration Instruction No. 5.04.
- (vii) Assist in the income restoration program and the establishment of household benchmarks through the Management Information System for the affected people as called for in the RIP.
- (viii) Ensure that full project information, especially the essential elements of the RIP, be provided in an appropriate language to each affected household, rather than simply making them available at the district offices.

¹⁶ ADB. 1998. *Handbook for Resettlement: A Guide to Good Practice*. Manila.

- (ix) Help establish well-staffed monitoring of resettlement activities by an independent institution, forwarding concerns to the RDA for urgent action from the affected people.
- (x) Require immediate provision of utilities and infrastructure to resettlement sites.
- (xi) Require a special emphasis in the RIP and the income restoration program for women, if necessary by the allocation of additional staff to track their recovery as affected people.
- (xii) Assist in the preparation of a detailed project framework for benefit monitoring and evaluation activities to include outputs, indicators of achievements, and means of verification on social issues.
- (xiii) Assist in the preparation of an additional assessment of project beneficiaries along the final trace to establish baseline information for benefit monitoring and evaluation activities.
- (xiv) Update the project profile, or its equivalent by the Project Information Document, on the ADB website, where the latest posting is 15 March 2000, at least on a monthly basis with full information for all categories, until the project is brought into compliance.
- (xv) Provide to the CRP, with a copy to the Board, by 31 August 2005, a course of action with timelines on implementation of these measures for the CRP's monitoring and reporting to the Board.

29. **Compliance and implementation of the recommendations.** Annual monitoring reports were undertaken to observe the compliance and implementation of the recommendations of the CRP for 2005–2006, 2006–2007, 2007–2008, 2009–2010, and 2010–2011.

1. First Monitoring Report, 2005–2006

30. The CRP reviewed three progress reports: (i) progress reports dated 27 October 2005, 8 February 2006, and 28 April 2006; (ii) additional documents and information provided at the request of the panel; and (iii) 16 and additional material provided by ADB during and after a panel monitoring mission in Sri Lanka from 30 May to 6 June 2006.

31. The CRP found that ADB's implementation of the general and project-specific remedial actions had resulted in some progress in complying with the Board's remedial actions and bringing the project into compliance:

- (i) Management had complied with the general recommendation (iv) and specific recommendations (xiv) and (xv).
- (ii) Management had partially complied with the specific recommendations (i), (iv), (viii), (ix), (x), and (xi).
- (iii) Management had not complied with the general recommendations (i), (ii), and (iii) and specific recommendations (ii), (iii), (v), (vi), (vii), (xii), and (xiii).

2. Second Monitoring Report, 2006–2007

32. For the monitoring report 2006–2007, the CRP reviewed four progress reports dated 1 September 2006, 31 March 2007, 15 May 2007, and 2 October 2007, along with other documents and information provided at the request of the CRP.

33. The CRP found that ADB's implementation of the general and project-specific remedial actions had resulted in significant progress in complying with the Board's remedial actions and bringing the project into compliance:

- (i) Management had complied with general recommendations (i), (ii), and (iv) and specific recommendations (i), (ii), (iii), (iv), (viii), (x), (xi), (xiv), and (xv).

- (ii) Management had partially complied with the specific recommendations (vi), (vii), (xi), and (xiii).
- (iii) Management has not complied with general recommendation (iii) and specific recommendations (v) and (xii).

3. Third Monitoring Report, 2007–2008

34. For the third annual monitoring report, the CRP reviewed the progress reports on the implementation of the course of action provided by ADB Management dated 31 March 2008 and 30 September 2008, together with other documents and information provided at the request of the CRP. The report concluded that considerable progress had been made in implementing the CRP's recommendations to bring the STDP into full compliance. Of the original 19 recommendations, Management had not complied with four. Of those four, management had only partially complied with specific recommendations (vii) and (ix) and had not complied with general recommendation (iii) and specific recommendation (v). In the case of specific recommendation (v), due to changing circumstances, the original recommendation could not be complied with, yet the same issues with additional resettlement and compensation continued to exist, especially in the southernmost 30 km of the highway.

4. Fourth Monitoring Report, 2009–2010

35. In the fourth report of 2 July 2010, the CRP focused on the four recommendations not found to be complied with in the previous annual monitoring report.

36. The CRP reported that considerable progress had been made in implementing the recommendations formulated in 2005. The CRP acknowledged the efforts of ADB and of the borrower to bring the STDP into full compliance. Of the original 19 recommendations, only two that were remained outstanding—general recommendation (iii) and specific recommendation (vii), both of which were in partial compliance.

5. Fifth Monitoring Report, 2010–2011

37. The fifth annual monitoring report covering 15 May 2010 to 22 March 2011 considered the two remaining recommendations—general recommendation (iii) and specific recommendation (v) to now have been fully complied with. It found that the specific recommendation (v), which required that all affected persons be fully compensated by actual payment before they were moved, could no longer be complied with due to the completion of land acquisition. Given assurances by ADB that it would monitor the remaining compensation issues, no further monitoring by the CRP of implementation of the RIP and land acquisition was found to be required.

38. In summary, while the scope and depth of ADB's noncompliance with ADB policies reported in the 2005 compliance review report was very significant, the CRP monitoring reports found significant progress had been made during the 5-year monitoring period in implementing the recommendations made. The compliance review and monitoring added value to the project. All the STDP stakeholders recognized this no matter how they felt initially about the compliance process. The recommendations suggested by the CRP have not only resulted in the project being brought into compliance but also in some significant positive changes in the government's approach to infrastructure projects. With the fifth monitoring report, the CRP recommended that the monitoring may now be brought to an end and there is no need to monitor further.

F. Further Changes on the Southern Transport Development Project

39. A subsidiary loan on the STDP in 2008 expanded a section of the road from two lanes to four lanes to match the JICA section. JICA was working on two sections of road, one of which was four-lane and the other, southernmost section, only two lanes before a change of scope to make the entire road four lanes. The government decided to make both ADB and JICA's sections of the highway a toll, which was not envisaged when ADB approved the project. The government has already signed a loan agreement with JICA to purchase tolling equipment and toll plazas to establish a toll way on the STDP. The loan agreement between the government and JICA was signed in July 2008. The toll plaza contractor was mobilized and the works were completed in the middle of 2011.

40. It appears that it was during the discussion for the supplementary loan for JICA funding for their section in 2008 that the idea of tolling was included. JICA decided to fund for the entire road. The RDA has confirmed that, before this date, there was no decision to have tolls on the STDP. In fact, there were no design provisions either. It is not clear how and from whom the policy level approval to toll the STDP was obtained.

APPENDIX 6: STRATEGIC POSITIONING IN THE TRANSPORT SECTOR

Policy	Government of Sri Lanka Strategy	ADB Positioning
Roads		
Objective	<p>Ensure that transport infrastructure facilities and services are adequately developed to meet the demand of the community.</p> <p>Provide a reliable, safe, and speedy transport system, which is comfortable and affordable to the community.</p> <p>By 2020, Sri Lanka will have a modern network of roads throughout the country, which will enable the acceleration of the economic growth with reduced travel time, cost, and improved safety.</p>	<p>ADB's strategic thrust is the overall improvement in sector performance.</p> <p>The overall focus of the program has not changed from the CPS, 2009–2011, although there is more emphasis on transport in the 2011–2013 program.</p> <p>ADB is the largest funding agency to the road sector in Sri Lanka and continues to coordinate with other major funding agencies with regard to geographic coverage and scope to avoid duplication of efforts and efficient use of resources.</p>
Addressing network deficiencies and improving road sector financing	<p>Development, construction, rehabilitation, and maintenance of expressways, interregional national highway and other roads continue. The entire national road network will be upgraded to solid condition. Provincial roads connected with growth centers will be converted into national level roads. Other provincial level roads will be rehabilitated to facilitate the demand.</p> <p>New links, particularly in areas of industrial growth and agriculture development centers will be introduced to speed up movement of materials and products.</p> <p>Connection to the missing links, bridges and cross-drainage works will be provided.</p> <p>The existing road network, built 50 years ago, will be converted to the modern standards.</p> <p>The development of rural roads will be continued.</p> <p>Carefully selected and economically maintainable new four lane roads will be built.</p>	<p>ADB will support the optimum integration of the road network with other modes of transportation.</p> <p>ADB's proposed areas of intervention include road construction, road rehabilitation, and multimodal transport.</p> <p>ADB will continue to finance strategic investments in the network, including the need to link less-developed regions to markets and service centers, reduce transport cost, and improve connectivity.</p>
Enhancing institutional capacities to improve the performance of the road sector	Reforms of road sector institutions will be undertaken. Special attention will be paid on man power development.	<p>Ensure greater institutional capacities at central, provincial, and local levels.</p> <p>ADB will continue to support for the improvement of the policy, regulatory, and institutional frameworks in the</p>

Policy	Government of Sri Lanka Strategy	ADB Positioning
		<p>following areas: (i) policy frameworks: enhance the RMTF in terms of independence and resources; (ii) regulatory frameworks: submission to Parliament of the National Thoroughfares Bill and of the Motor Traffic Act; and (iii) institutional strengthening: (a) complete and continue past institutional strengthening efforts at central and provincial road authority levels, and (b) enhance institutional capacity for development of policy, and planning and programming frameworks for intermodal transport, and policy reforms.</p> <p>Capacity development in technical strengthening will continue with support to the RDA for establishing a centralized procurement unit, and enhancing the RDA's capacity to independently prepare feasibility studies and detailed designs.</p> <p>Capacity development in financial management will focus on (i) ensuring a gradual increase of resources to the RMTF, and transparent disbursement of funds, and (ii) developing effective investment programs for intermodal transport.</p>
Encouraging private contractors to contract out maintenance and operations	Investment opportunities for the public-private partnership for expressway development will be opened.	<p>Asset sustainability through better maintenance and maintenance funding for existing roads.</p> <p>ADB will continue to support activities that strengthen private sector participation.</p> <p>ADB will continue to support the strengthening of the RMTF and capacity development in managing it.</p>
Minimizing detrimental impacts on the environment.	Appropriate social and environmental management policies and practices for prevention and mitigation of adverse impacts of road construction, operation and maintenance for the protection of environment, communities and public life will be established.	Protect the environment and mitigate social impacts of road works and traffic.
Providing an acceptable level of safety to road users	High priority will be accorded to maintenance and rehabilitation of the existing road network paying attention to pedestrian safety.	

Policy	Government of Sri Lanka Strategy	ADB Positioning
Introducing proper traffic management systems	Traffic management measures such as road pricing, construction of flyovers, fixing of signal lights and the construction of grade separator interchanges will be introduced as they will avoid unnecessary delays.	
Ensuring on time completion of road projects	The existing capacity of road sector contractors will be increased by providing proper training opportunities and ensuring the usage of new technology.	Development of the national contracting industry. Larger supply of aggregates, sand, and bitumen to control price escalations.
Ports and Railways		
	Encourage private sector participation and foreign direct investment. Development of port infrastructure will continue to be a priority. Improve the railway system to facilitate the transportation of goods and/or cargo. Upgrade rail lines as double tracks. Upgrade railway stations and main bus stands to act as commercial centers.	In ports ADB will continue to support projects that increase port capacity and private sector development by fostering an enabling environment and encourage public-private partnerships.
	Encourage the use of public transport, high occupancy vehicles and non-motorized transport. It will seek to influence modal shift from road to rail transport and from private modes to higher occupancy modes using regulatory and fiscal measures.	
	Ensure the systematic infusion of capital into the development of new transport infrastructure through Government funding as well as private investment. Investment opportunities for public-private partnerships for expressway development will be opened. Revenue for tolls will be used to finance road construction.	
	Increase investments in the road sector to ensure that the road network meets current and expected future demand in the transport of passengers and freight and ensure utilization of resources.	
	Improve the quality of roads by using effective and innovative modern techniques of design, construction and maintenance.	
	Assess the existing capacity of the infrastructure and add capacity to the road network through widening, improving and new road construction.	

Policy	Government of Sri Lanka Strategy	ADB Positioning
	<p>Improve institutional capacities of the road administration.</p> <p>Reforms in the regulatory framework will be undertaken. Special attention will be paid for the development of manpower such as managers, engineers and technicians who hold responsibility for development of the road sector. The Universities of Moratuwa, Ruhuna, Peradeniya and the Open University will be provided with the financial and other required facilities for conducting research for development of roads with modern technology.</p>	
	<p>Ensure that the required actions are taken to protect the environment.</p> <p>More efforts will be made to improve the environmental friendliness of road materials such as asphalt.</p> <p>Studies will be done to ascertain information on how roads may affect the ecosystem.</p>	
	<p>Develop the local road construction industry.</p>	
	<p>Support the development of expressways that will facilitate the movement of inputs and outputs of economic activities.</p> <p>Four lane networks will be constructed to meet the rapid growth in demand for transport together with new links in the areas of industrial growth.</p>	
	<p>Provide important linkages to growth centers to support Colombo, Dambulla, Hambantota, Trincomalee, Anuradhapura, Polonnaruwa, Jaffna, and Kegalle. The road network within these areas will converted into four lane standard.</p>	

ADB = Asian Development Bank, RDA = Road Development Authority, RMTF = Road Maintenance Trust Fund.

Sources: ADB. 2008. *Country Partnership Strategy. Sri Lanka 2009–2011*. Manila; and Government of Sri Lanka. 2010. *Sri Lanka—The Emerging Wonder of Asia. Mahinda Chintana. Vision for the Future. The Development Policy Framework*. Colombo.

APPENDIX 7: SELECTION METHODOLOGY

1. The physical investment of the Road Sector Development Project (RSDP)¹ aimed to rehabilitate 980 kilometers (km) of provincial roads. There were 182 separate road sections spread over four provinces. The selection of the provincial roads to be rehabilitated was a key to secure relevance of the physical component to the objective of the RSDP.
2. The report and recommendation of the President (RRP) said that several steps were used in the selection of road segments for in the provincial road improvement project. A survey was carried out on more than 2,000 provincial roads in the four provinces covering a combined length of about 5,100 km. Simplified economic evaluations were carried out for the preliminary screening of candidate roads. Drawing upon the social indicators obtained for each road, a social development factor was calculated for each candidate road and this was used to produce a social ranking. A combined economic and social ranking was then prepared and used for selecting roads for improvement in each of the four provinces.
3. There were five considerations in the social scoring of project roads: (i) intensity of facilities along the road, such as schools, hospitals, and religious places; (ii) whether the road was nominated as part of a bus route; (iii) whether bus service was in operation; (iv) the proportion of total families made up of Samurdhi grantees; and (v) the proportion of total inhabitants made up of public assistance program recipients. Roads in developed and busy areas rather than poor areas would get priority under the first three parameters. Although the last two parameters would help find roads in impoverished areas, the project preparatory technical assistance (TA)² final report said that, when the social ranking was combined with the economic ranking, relatively heavier traffic roads over longer distance were chosen in most cases. These roads were considered likely to show a strong relative net present value of economic return in selection of provincial roads. The tables of the top 100 ranked roads in the four provinces in the final report showed most had an economic ranking higher than their social ranking. The objective of the selection methodology was to provide a mix of roads that overall provided sufficient economic return to support investment as well as an attractive rate of social benefit, including the potential to alleviate poverty. But the selection methodology did not clearly link the priority roads to poverty alleviation and did not select roads that would support proactive poverty alleviation.
4. Since most of the data for the economic analysis was not direct observation³ and the valuation of social impact in the methodology was weak, the selection of provincial road sections did not have a clear link to the project's objectives of contributing to the expansion of economic opportunities and the reduction of poverty.
5. According to the final report of the Second Provincial Roads Improvement project, 296 provincial roads were selected but the RRP included only 182 road sections in the project. The economic reevaluation prepared by the supervision consultants in February 2008 said only 52 roads were taken from the selected provincial roads in the project (footnote 2). Most of the project roads were selected from outside the TA screening process. The mechanics of the final screening and decision making are not clear, nor is the relevance of the selected provincial roads to the objectives of the project. During

¹ ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI, approved on 19 December).

² ADB. 1997. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Second Provincial Roads Improvement*. Manila (TA 2904-SRI, approved on 30 October).

³ Traffic counts were conducted on only 80 of more than 2,000 provincial roads for 9 hours, between 6 am and 3 pm, on 1 day during the week of 31 January 2000. Traffic volumes on the other roads were the desktop estimates of divisional officers and from moving observation counts during the condition survey. A road roughness test vehicle was not available but the roughness was derived from the extent and severity of the pavement distress record made by a visual survey.

the reconnaissance mission of the Independent Evaluation Department in October 2010, some of the provincial road administrations said that the methodology for selecting the provincial roads was not cleared with them and some of the selected roads were not their priority. In addition, during project implementation, it was also reported that some priorities changed for reasons that appeared more political than economic and social evaluation.

APPENDIX 8: IMPLEMENTATION PERFORMANCE

1. Table A8.1 provides a summary of the implementation issues of road projects in Sri Lanka.

Table A8.1: Implementation Issues

Project Name	Findings and/or Issues
Southern Transport Development Project ^a	<p>The loan was approved on 25 November 1999 and became effective in October 2002. Original closing date was December 2006. Closing has been extended at least three times. All civil works have been completed under the first loan. Loan closing for the second loan is December 2011.</p> <p>Awarding of civil works contracts was due to problems in land acquisition and resettlement, which were conditions for loan effectiveness.</p> <p>Issues included (i) lack of clarity on the roles and responsibilities of the construction supervision consultant, management consultant, and the RDA; (ii) late mobilization of contractors and performance issues; (iii) a 2003 flood; (iv) significant disbursement delays; (v) environmental complaints from local communities due to noise and building cracks; (vi) delays in the handover of lands at one particular location due to objections of affected people and court cases filed by affected people; (vii) delay in provision of counterpart funds.</p> <p>Fatal accidents involving ordinary people during project construction occurred when (i) an 18-year-old mother of an 8-month-old infant died instantly when struck by a large piece of rock from blasting; (ii) a 19-year-old student was killed in a stampede under a collapsed underpass; and (iii) people who started using the expressway prior to opening were involved in traffic accidents.</p>
Road Sector Development Project (RSDP) ^b	<p>Implementation delays due to weather and availability of bitumen. Some contracts pre-terminated, due to performance issues.</p> <p>All subcomponents of the reform program were not monitored by ADB and implementing agencies.</p> <p>Loan remains financially open. Loan savings will be allocated to another project.</p> <p>The TA for passenger transport services improvement^c that was attached to the RSDP and designed to complement the loan by supporting reforms in the sector was rated <i>unsuccessful</i> by the technical assistance completion report due to a failure to deliver specific outputs. The RSDP also included consultancy service for a detail engineering design of 411 kilometers (km) of national highways, including a topographic survey, tender documents, resettlement and utility relocation plans, and environmental and social studies. Due to the consultant's unsatisfactory performance, the design scope had to be reduced from 411 km to 130 km and the resettlement and utility relocation plans and environmental and social studies removed from the contract. A total of \$0.71 million was paid to the consultancy firm against a contract value of \$1.20 million. The detail design of 113 km of road sections was used in the NHSP but the RDA staff and supervision consultants informed the IED mission that the design suffered from many deficiencies and had to be redone correctly.</p>
Road Project Preparatory Facility ^d	<p>The loan was approved on 13 April 2004 and became effective on 15 September 2004. The original closing date is in September 2008. The new closing date is 30 June 2012. The project did not use advance procurement.</p> <p>Issues included (i) pre-termination of an implementation consultant due to poor performance, (ii) need for additional feasibility studies and detailed designs, and (iii) lack of essential staff resources to implement package II.</p>
National Highways Sector Project ^e	<p>The loan was approved on 15 December 2005 and became effective on 20 February 2007.</p> <p>Major changes of scope in the project were approved on 1 April 2008 and 9 November 2010. Original designs for ICB02 and ICB03 were changed due to poor designing by PPTA consultants.</p>

Project Name	Findings and/or Issues
	<p>Implementation delay was also due to (i) major design change because of inappropriate designs prepared at the feasibility stage, and (ii) legal action from a losing bidder. New tenders had to be solicited. As a result, project closing was extended by 15 months.</p> <p>Implementation of safeguard policies was delayed due to lack of commitment from relevant agencies. Resettlement compensation was delayed for ICB01 and ICB03. Complaints received from the affected people of Habaran–Kantale Road regarding compensation payments.</p>
Eastern and North Central Provincial Road Project ^f	<p>The loan was approved on 16 September 2009 and became effective on 13 November 2009. Consultants were mobilized in January 2010. No implementation delays at the time of IEM. The RPPF paved the way for advance procurement for this project. Most of the contracts for the Eastern Province were mobilized on 18 January 2010.</p> <p>Mobilization of contractors at the start of the project (first half of 2010) was slow. In addition, by the end of the first half of 2010, 40% of experts in the original teams of project implementation consultants had already been replaced and mobilizing substitutes took time. As of November 2010, no slippage was expected except for contract EPBP03. Cost overrun is expected on EP10D to allow for future road widening. Recent flooding caused some slight delays that may subsequently translate to cost overruns.</p> <p>Disbursement rate was slow in 2010. To address this issue, a fulltime accountant was engaged, which resulted in an improved quality of withdrawal applications. The project coordination unit was also advised to submit withdrawal applications for replenishments on a monthly basis.</p>
Northern Road Connectivity Project ^g	<p>The loan was approved on 18 June 2010 and became effective on 22 October 2010. No implementation issues have arisen, as of IEM. Advance procurement became possible because of the RPPF. Advance action was approved for procurement of works and recruitment of consultants. This allowed the civil contracts for the provincial component to take off soon after loan effectivity.</p> <p>The national component is on track and no delay is foreseen.</p>
Colombo Port Efficiency and Expansion Project (CPEEP) ^h	<p>The loan was approved on 27 September 2001 and became effective on 7 May 2002. TA had six loan extensions since it commenced in 2001. The original completion date was 29 February 2004 and then it was extended to 31 August 2005, 31 August 2006, 31 August 2007, 31 August 2008, 28 February 2010, and 31 December 2011. Although there were the outstanding components, the loan was closed in August 2010. The closing date was retroactively set as 16 November 2009 since no disbursement had been made after 12 November 2009. No activity occurred during the last extension and the project was closed with some components uncompleted.</p> <p>This decision of the South Asia Transport and Communications Division of ADB not to prepare project completion report (PCR) for CPEEP was made based on Central Operations Services Office's (COSO) interpretation of the Project Administration Instruction No. 6.07 to a SATC question: is a PCR required for a TA loan that has resulted into a loan? COSO's reply was that, "if the TA loan is designed to support the implementation of an investment project (either in this case to prepare detail design, or to provide consulting services to support implementation after design), the PCR of the investment project should include all supporting projects including TA loans, standing alone or piggybacked TA." This study believes that COSO's general interpretation should not be applied to the CPEEP. Although both loans have supported the same port, not all of the activities of the CPEEP were to support implementation of the Colombo Port Expansion Project (CPEP). The CPEEP consisted of three components in effect (para. 76) but the institutional and regulatory reform and the formulation of the concession packages were not in support of the CPEP's implementation. This means that a PCR for the CPEP cannot cover all of the CPEEP's components. Envisaged CPEEP activities that were not related to the preparation of the CPEP included a review and update of port legislation; establishment of a port regulator; review of the Sri Lanka Ports Authority Act regulations for a regulator; improving the efficiency of the Jaya container terminal; defining positions for the JCT management team; implementation of the</p>

Project Name	Findings and/or Issues
	<p>corporatization of the JCT; introduction of ISO 9002 procedures and certification documentation procedures; review of electronic data interchanges; development of a strategy to make Sri Lanka a PC distribution hub; preparation of a business plan to attract distribution hubs; developing a business plan for the South Harbor Development Project marketing strategy, options, analysis, and business plan; concession documentation and bidding; preparation of concession documents; preparation of expressions of interest; evaluation of expressions of interest; concession bidding; evaluation of bids (technical, commercial, and operational evaluation); and concession negotiations. CPEEP activities related to the preparation of the CPEP were engineering details civil works layout survey and site investigation detailed engineering parameters and navigation system design, EIA Report preparation, EIA approval, initial social analysis and report, and poverty impact Study and report). The RRP of the CPEP was not defined as the follow-on project, e.g., the CPEEP envisaged that the second stage of the reforms would be completed during the implementation of the Colombo Port Development Project but it was not taken over in the CPEP; (iii) since the CPEEP was approved in 2001, if a PCR was held until the completion of the CPEP, it will be hard to evaluate the CPEEP because a lot of information will be molded into the existing information framework and because of high turnover of involved staff; (iv) the loans are complex and challenging so stuffing them up in one PCR will cause loss of valuable information; and (v) the earlier evaluation will provide more timely suggestion for following up actions and lessons learned from the experiences to improve the performance of ongoing and future ADB-financed projects.</p>
Colombo Port Expansion Project ⁱ	<p>The CPEP also suffered delays due to delay of the loan effectiveness. The project was due to be completed by August 2010. Loan effectiveness was conditional on the issue of an invitation letter to the selected terminal operator. As this had not taken place, renegotiation between the borrower and ADB ensued and an amendment to the loan agreement was made to waive the given effectiveness condition and introduce a new condition that the award of the south container terminal concession should be made within 18 months after the effective date of the loan. Subject to this new condition, the loan became effective on 2 May 2008. The new deadline to select an operator was 2 November 2009. This deadline also was not met due to delays.</p>

ADB = Asian Development Bank, ICB = international competitive bidding, IEM = independent evaluation mission, JCT = Jaya Container Terminal, PPTA = project preparatory technical assistance, RDA = Road Development Authority, RPPF = Road Project Preparatory Facility.

^a ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

^b ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

^c ADB. 2002. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Passenger Transport Services Improvement Project*. Manila (TA 4075-SRI, approved on 19 December); attached to ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

^d ADB. 2004. *Report and Recommendation of the President to the Board of Directors: Proposed Technical Assistance Loan to the Democratic Socialist Republic of Sri Lanka for the Road Project Preparatory Facility*. Manila (Loan 2080-SRI[SF], approved on 13 April).

^e ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the National Highways Sector Project*. Manila (Loan 2217-SRI, approved on 15 December).

^f ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Eastern and North Central Provincial Road Project*. Manila (Loan 2546-SRI[SF], approved on 16 September).

^g ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Northern Road Connectivity Project*. Manila (Loan 2639-SRI and Loan 2640-SRI[SF], approved on 18 June).

^h ADB. 2001. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic in Sri Lanka for the Colombo Port Efficiency and Expansion Project*. Manila (Loan 1841-SRI[SF], approved on 27 September).

ⁱ ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Colombo Port Expansion*. Manila (Loan 2319-SRI, approved on 27 February).

Source: ADB Independent Evaluation Department.

2. Table A8.2 provides the status of deviations from cost estimates of road projects in Sri Lanka.

Table A8.2: Status of Deviations from Cost Estimates

Project Name	Findings and/or Issues
Southern Transport Development Project ^a	Cost overrun due to resettlement costs and change in scope. ADB approved a change in scope: (i) upgraded 30 km of the two-lane highway to four lanes from Kurundugahahetekma to Pinnaduwa; (ii) the alignment change; and (iii) expansion of the carriageway from two lanes to four lanes. These were the reasons for the supplementary loan.
Road Sector Development Project ^b	Actual cost exceeded appraisal by \$9.6 million or 10.3%. Cost overrun on provincial road component due to (i) high bid prices for all three phases, due to market situation and shortage of materials; and (ii) price escalation The loan remains financially active because of plans to use the savings from the changes in the US dollar and special drawing rights exchange rate for another ADB-funded project.
National Highways Sector Project ^c	Cost overruns are expected due to changes in scope from double bituminous surface treatment to asphalt concrete. There was a redoubling of the costs estimated at appraisal, so that \$47.3 million had to be reallocated from the financing of land acquisition and resettlement expenditures along Colombo links to the road rehabilitation component. Due to cost overruns, scope was reduced in some road segments
Eastern and North Central Provincial Road Project ^d	Cost overruns are expected in the Eastern and North Central Provinces, because of (i) the request of Eastern Province Road Development Department to provide for future widening of the road in anticipation of the increase in vehicular traffic once the JICA-funded vehicular bridge across the Batticaloa Lagoon is completed, (ii) underestimation of quantities in the contract documents prepared under the RPPF and (iii) flood damage that occurred before work started and during the implementation.

ADB = Asian Development Bank, JICA = Japan International Cooperation Agency, RPPF = Road Project Preparatory Facility.

^a ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

^b ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

^c ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the National Highways Sector Project*. Manila (Loan 2217-SRI, approved on 15 December).

^d ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Eastern and North Central Provincial Road Project*. Manila (Loan 2546-SRI[SF], approved on 16 September).

Source: ADB Independent Evaluation Department.

APPENDIX 9: SUSTAINABILITY OF ADB-ASSISTED PROJECTS

A. Road Maintenance Mechanism, including the Trust Fund

1. The Asian Development Bank's (ADB) country strategy for Sri Lanka focuses on contributing to sustainable poverty reduction. At a high-level forum held on 23 March 2001, the Government of Sri Lanka and ADB concluded that ADB support for the road sector is important for poverty reduction. Improved road sector performance was expected to facilitate economic growth, raising incomes, creating employment, and thereby reducing poverty.

2. The ADB operational strategy for the road sector in Sri Lanka focuses on improving overall sector performance through implementation of institutional and sector reform. ADB-financed technical assistance (TA)¹ had identified inefficiency in the sector and inadequate maintenance linked to lack of institutional capacity as the primary reasons for the poor performance.

3. The report and recommendation of the President (RRP) for the Road Sector Development Project (RSDP)² in 2002 noted that many weaknesses existed in the current approach to financing roads and their maintenance. It also noted that although road user charges generate substantial government revenues, more than half of these revenues were spent outside the road sector even though the amount assigned to the road maintenance expenditures was much too low when compared with levels generally recommended for other developing countries. The report also noted that many roads deteriorated to the extent that they could be restored to good condition only by undertaking major rehabilitation works at a much greater cost than adequate maintenance would have required.

4. The action plans for reengineering of the Road Development Authority (RDA) referred to in the RRP included two activities pertaining to road maintenance: (i) strengthening of road maintenance, and (ii) road maintenance funding. These were intended to progressively develop the RDA's business processes so that it could manage the national highway system effectively and efficiently.

5. The reengineering action plans for strengthening road maintenance management were intended to (i) establish an objective system; and (ii) develop capacity for planning and programming of routine and periodic road maintenance works, using a pavement management system that used economic rates of return. The routine maintenance management system was to be established in 2003 and the annual reports for periodic maintenance to be prepared by 2005. In this pursuit, the consultant recruited was to (i) help the RDA implement road maintenance budgeting and expenditure control (RMBEC),³ (ii) install a computer system in the maintenance management unit and all provincial and/or district division offices, (iii) assist in routine and periodic maintenance performance and budgeting, (iv) carry out studies of maintenance methods and management to improve performance, (v) add bridge maintenance to RMBEC, (vi) assist in completing the development and implementation of the pavement management system, (vii) collect the necessary road condition data, (viii) develop an economic pavement maintenance policy, (ix) introduce a pavement periodic maintenance and rehabilitation program, (x) establish minimum levels of service criterion, and (xi) provide training in the operation of the pavement management software where required.⁴

¹ ADB. 1998. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Reengineering of the Road Sector Institutions*. Manila (TA 3110-SRI, approved on 8 December); attached to ADB. 1998. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the Road Network Improvement Project*. Manila (Loan 1649-SRI[SF], approved on 8 December).

² ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grants to the Democratic Socialist Republic of Sri Lanka for the Road Sector Development Project*. Manila (Loan 1986-SRI[SF], approved on 19 December).

³ Developed under ADB. 2001. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the Road Maintenance Budgeting and Expenditure Control*. Manila (TA 3691-SRI, approved on 27 July).

⁴ Footnote 2, Project Administration Manual (2003).

6. The reengineering action plan on road maintenance funding was intended to increase road maintenance financing and streamline road maintenance budgeting and expenditure control so that a sustainable road maintenance financing mechanism that would progressively increase maintenance budgets to the levels required to sustain the country's road assets, could be agreed upon by 2005. The government's assurance of its commitment to this plan and meeting these targets was obtained. A consultant was recruited to review existing road user charges and taxes and assess the shortfall. The consultant was also expected to formulate appropriate financing mechanisms to reduce this shortfall in financing and to assess the amount that could be raised under different options and, if necessary, by establishing a special road funding mechanism, and to make recommendations on its structure, composition, necessary management guidelines, legal instruments, performance indicators, and training required to implement the fund.

7. The RRP also noted that the provincial road administrations (PRAs) had few planning or other skills or inventories of road conditions and did not have objective systems or tools for prioritizing roads for periodic and routine maintenance. The annual budgets for provincial roads were funded mainly from central government allocations and supplemented by revenues raised by provincial councils. It also noted that the existing level of funding was insufficient for councils to adequately maintain their road networks and that a need existed to increase road budgets and assign more funds to road maintenance.

8. The RRP envisaged that the project would transform the four selected PRAs into professional road infrastructure managers with a focus on maintaining the provincial road network efficiently and effectively by improved planning through the use of planning tools, including software for design work and for programming and expenditure control of the road maintenance budget, to tender out maintenance and upgrading works, as well as to improve implementation and contract management. New structures were to be introduced to divide responsibilities between headquarters and divisional level offices of the agencies with all road works, except for emergency works, to be contracted out. Modern road management as well as office management practices were to be introduced. Moreover, objective road maintenance estimates were to be prepared for each province. This was based on the assurance that the government would by 2004 allocate a road maintenance budget of 10% more than in 1999 and that provincial councils would (i) establish a dedicated road agency, (ii) ensure that all routine and periodic maintenance would be contracted out starting in 2003, and (iii) implement performance-based maintenance contracts for at least 20% of the maintainable road length in 2005. It would also be based on a government commitment that an approved road maintenance financing mechanism would be applied commencing in 2005. A consultant was recruited to provide services to implement these steps under the institutional development program component of the RSDP to each of the PRAs.

1. National Highways

9. The road maintenance management system in the RDA has improved when compared with the situation at the beginning of the RSDP. However, several of the specific outputs set out in the RRP and project administration memorandum (footnote 4) have not materialized and many of the outcomes have been below expected levels:

- (i) The RMBEC, which was developed for the maintenance management unit of the RDA, is not used today due to technical deficiencies that the relevant consultants could not correct. However, because of this process, the concept of and need for a maintenance program is now well-understood and accepted in the RDA.
- (ii) Consequent to this, the requirement for the RMBEC to include bridges was not satisfied. The RDA is currently considering the development of a bridge management system under funding by the Japan International Cooperation Agency (JICA).

- (iii) The introduction of the Highway Development and Management Model (HDM-4), as a replacement for the RMBEC has been more productive on the other hand, even though the majority of staff trained in the HDM-4 are no longer in the respective divisions and the manuals prepared under the RSDP are not being used. However, the training and documentation obtained under a subsequent World Bank technical assistance has supported the continuing use of the HDM-4.
- (iv) Given that the actual prioritization of maintenance programs is usually based on a multitude of other technical criteria (e.g., traffic volume and axle loads) and non-technical criteria (e.g., political and social importance), the output of the HDM-4 is not directly used at present in the determination of the final annual maintenance programs, although it was intended to be used for the selection of maintenance activities under the Road Maintenance Trust Fund (RMTF).⁵
- (v) The economic pavement management policy referred to in the project is limited to the inputs and outputs determined by the HDM-4. The absence of a multi-criterion approach does not facilitate the evaluation of non-technical criteria against technical criteria in objectively determining the priorities between the different criteria.
- (vi) While the RSDP facilitated the first exercise in collecting road condition data for the entire national and the respective project provincial road networks, no sustainable program has continued to update this data annually. The absence of current data available for input to the HDM-4 has made its output irrelevant. However, this too has now been corrected in the RDA with the receipt in 2010 of the falling weight deflectometer and the multi-criterion profilometer under World Bank assistance that will enable the speedy collection of road condition data. The problem in the PRAs is yet to be resolved.

10. Hence, it may be concluded that the consulting services for strengthening pavement maintenance management in the RDA have not delivered all the desired outputs. Even the outcomes related to the observable outputs of the project did not occur by the target date and being delivered due to subsequent intervening inputs. However, the project has achieved the institutionalization of the concept and created the value of a pavement management system and a desire within the RDA to develop it further from what the RSDP achieved.

11. Historically, road maintenance funding has come from budgetary allocations made under the road maintenance head. Since 2006, it has been titled "maintenance of roads and bridges" or the RMTF, with a budgetary allocation of SLRs3.0 billion. This increased to SLRs6.7 billion for 2010. However, due to an increased budget for new road construction and improvement, the percentage of maintenance allocation in the RDA budget in 2010 was less than in 2006. The ratio of the maintenance has been on the downward trend, except in 2010 (Table A9).

⁵ ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Democratic Socialist Republic of Sri Lanka for the National Highways Sector Project*. Manila (Loan 2217-SRI, approved on 15 December).

Table A9: Annual Allocation for Road Maintenance, 2004–2011
(SLRs million)

Year	Maintenance	Total	Maintenance (% of total)
2004	1,116	16,610	6.7
2005	1,880	21,064	8.9
2006	2,990	37,158	8.0
2007	3,410	44,601	7.6
2008	3,103	67,140	4.6
2009	3,049	90,483	3.4
2010	6,725	84,689	7.9
2011	5,000	102,296	4.9

Note: The budget in 2011 is the initial allocation.

Source: Sri Lanka Road Development Authority.

12. Under the provisions of a trust ordinance, the RMTF has been set up. The approval was granted on 26 October 2005 as a condition for loan negotiations of the project. A board of trustees was appointed by the Secretary of the Treasury to facilitate the initial arrangements on the setting up of the fund. The RMTF board consisted of the deputy secretary to the Treasury as chairman, the secretary of the Ministry of Highways (MOH)⁶ or his successor, and the chairman of the Finance Commission.

13. In addition to the board, a technical advisory committee (TAC) was appointed by the secretary of the Treasury, with representatives from the Ministry of Finance and Planning (MOF), the MOH, the Ministry of Provincial Council and Local Government, National Contractor Association, freight forwarders, the National Transport Commission, and academia and other stakeholders specializing in fields relevant to road transport. The chairman of the TAC was the secretary of MOH.

14. The RMTF was operational in 2006, with a budgetary allocation of about SLRs3.0 billion. This increased to SLRs6.7 billion for 2010. There is yet no arrangement for direct contribution to the fund from a fuel levy even though a nominal arrangement is in place to account for a portion of the fuel levies when annual budgetary allocations are prepared. Even though creating a separate account in the Central Bank was proposed, the RMTF has operated only as a separate budget vote item. This means that the intended project outcome of the setting up a road fund to have total control in the disbursement of these funds has not materialized.

15. The recruitment of staff and the setting up of a secretariat did not transpire either, which means that technical capability in fund management for maintenance or in the assessment of road user charges has not been developed as envisaged. Maintenance management, the method of distributing these funds, and the failure to apply performance indicators all remain unchanged. The extension of a road fund to the provinces has not happened. However, at present there appears to be greater awareness of the functions and the benefits of such fund.

16. Consultancy services were procured under a World Bank TA to set up guidelines, manuals, and procedures and train staff at the MOF to manage the RMTF. This consultancy did not produce the desired outcomes partly due to the poor performance of the consultant and to the fact that the Treasury did not recruit or designate staff for these purposes.

17. ADB, the government, and the World Bank were to jointly review the work of the RMTF 3 years after its creation to evaluate its effectiveness in providing sustainable road maintenance financing, to examine ways of improving its operations, and when appropriate, to bring forward legislation to establish a dedicated fund managed by an independent board.

⁶ This is now the Ministry of Ports and Highways (MOPH).

18. The World Bank TA was adjusted to train MOH staff in the management of a road fund. New consultants were recruited for this purpose and the project was planned to be completed in September 2011. New cadre posts, including an engineer and accountant for the MOPH have been approved for this purpose. The trust deed was to be amended to transfer the management to the MOPH and a Cabinet paper for this purpose is under preparation.

19. Under an interim arrangement, the MOPH will manage the funds under the designated supervision of an additional secretary. Under the World Bank TA, \$5.0 million has been pledged to this fund. Government budgetary allocations for the fund have been allocated from the 2011 vote as before. The details of the new management structure or the composition of the board of trustees has not been finalized.

2. Provincial Roads

20. In pursuit of improving the use of planning tools for the PRAs, RMBEC and the respective road inventories were developed in 2005. These were used to compile the budget estimates for the PRAs for 2006 but most PRAs gave up on the RMBEC after 2007 because the consultant could not correct the technical problems that arose when updating the road inventory database. Hence, the data collected in 2005 has not been updated and the program is largely unused today. Impressed by the capabilities of the road maintenance program and making use of foreign training received under the RSDP, however, the Western Province RDA has developed its own Excel-based program for maintenance management. Even though officers from every PRA were trained in the use of HDM-4 under the RSDP, it is still unused today, except in Uva Province, where some renewed efforts are being made for its use in a current foreign funded project. At best, this was an exercise in awareness and has not been developed to an adequate and consistent level of competency across all PRAs.

21. In the case of the provincial roads, despite the assurances provided by the government at the commencement of the RSDP, funds received for road maintenance from the central government through the Finance Commission have remained relatively unchanged for all PRAs. These allocations are made under an object code of recurrent expenditure for buildings and structures and so must compete with other maintenance requirements as well. Each provincial council also votes expenditure from own revenues for maintenance. However, such funds are driven largely by political concerns without consideration of road network requirements. The actual funding for maintenance of provincial roads has remained around 40%–70% of the average SLRs100,000 per kilometer required, except in Western Province, which has a significantly higher income from revenue through annual licensing of motor vehicles.

22. Nonetheless, in 2009, the North Central provincial council increased its budgetary allocation for the maintenance of the province's roads, rehabilitated under the RSDP at the request of the provincial road agency. Uva Province, on the other hand, has been able to secure funding under a subsequent World Bank project that includes a component for maintenance of previously rehabilitated roads. The PRA in Western Province has been able to obtain from the provincial council a greater proportion of vehicle revenue license income for road maintenance work in the province. However, no mechanism has been developed yet by any level of government or government agency to determine and sustain sufficient financing for adequate road maintenance.

B. Performance-Based Maintenance

23. According to the RRP of the RSDP, performance-based maintenance contracts for 5–7 years duration were to be implemented starting in 2005 to keep 20% of the provincial road network in sustainable condition. However, no consistent or sustained increase in maintenance funding for this purpose has been provided to the PRAs.

24. The Western Province RDA and the North Western provincial road development department (RDD) have started contracting out maintenance services. Other than in the Western provincial RDA, the funds available for road maintenance are much lower than the required level and the implementation of performance-based contracts is made difficult since contracts have to be negotiated at values far below the expenditure needed to ensure quality. The qualitative outputs of these contracts are rarely observable as a result and thus make monitoring performance impossible. In most cases, all contracts are renewed irrespective of previous performance. However, these two PRAs consider that the performance-based concept makes management of maintenance work more efficient, less costly, and easier to manage.

25. **Western Province.** The RSDP helped the Western provincial RDA develop a maintenance management program, which included a request for a portion of the annual vehicle licensing revenue received by the provincial council to be made available for road maintenance. This transfer allowed the RDA to increase its funding for maintenance from SLRs100.0 million in 2006 to around SLRs500 million in 2010, with an increase up to SLRs600 million anticipated for 2011. The RDA introduced performance-based maintenance contracts on the rehabilitated roads in Western Province after the completion of the RSDP. In 2010, 10 such contracts covering approximately 250 km were implemented and an equal length of additional roads is targeted for 2011. These contracts are awarded for 1–2 years on the basis of competitive bidding and the monthly cost has ranged from SLRs6,000 to SLRs10,000 per kilometer. Monthly performance assessments are made by the divisional executive engineer of the RDA who certifies payment. Several contracts have been terminated due to failure to meet quality requirements, such as being free of edge failure, rutting, and potholes. It is reported that performance-based maintenance contracts appear to cost less than that of direct-labor maintenance. However, such contracts have not been used for roads requiring rehabilitation because they are costly. Hence, the rate at which roads would be included in this scheme in future will depend on the rate at which rehabilitation is completed.

26. **North Western Province.** Based on the availability of inventory data and consulting services provided under the RSDP, the North Western provincial RDD started contracting out maintenance to the private sector in 2007 with the award of 38 contracts of 3 years each. Each package was around 50 km in length, with a maximum of two packages per contractor. Maintenance done through contracts now covers about 1,700 km of a 2,246 km road network. The RDD said the remaining sections are not in good enough condition for private sector maintenance and await rehabilitation or improvement. However, the contracts in North Western Province are not performance-based. The current budget for contract maintenance averages about SLRs5,300 monthly and the RDD calculates that this would rise to around SLRs10,000 per km per month if it required performance-based contracts. In contrast with the Western Province RDA, it has chosen to forego performance guarantees in order to cover more of its network with its limited budget. Beyond the option not to renew contracts, it cannot enforce a minimum level of quality and not adequately assessed and are unlikely to be terminated for poor performance during the contract period. On completion of the first 3-year contract, all contracts were extended for 1 year.

27. **North Central Province.** The North Central provincial RDA maintains 1,750 km of provincial road but has not implemented performance-based maintenance because it lacks the budget resources to do so. Its maintenance budget increased from SLRs50.0 million in 2010 to SLRs75.0 million in 2011 to allow it to maintain the rehabilitation of the roads developed under the RSDP but it undertakes this maintenance itself.

28. **Uva Province.** The Uva provincial RDD has not yet decided on a policy regarding performance-based maintenance. Currently, road sections in good condition are in the care of local residents appointed to provide clearing, cleaning, and assistance in applying premix repair of potholes over a 3-km section of road for a monthly fee of SLRs2,500. The Uva RDD calls this “community participation

maintenance” and currently has 150 people under contract. Other maintenance activities are handled by its work force.

29. The absence of output from the RMBEC program to provide updated maintenance requirements has also been a drawback in developing performance-based contracts and streamlining maintenance management. However, PRAs report that even the efforts to obtain estimates based on initial data inputs return very high cost estimates for maintenance, which are not practical because they mean that only a very few kilometers can be improved each year. Thus, the North Western Province RDD, for example, distributes maintenance funds at a uniform rate by dividing the annual allocation by the road length considered to need intervention over a given year.

30. Overall, the outcome envisaged by the RSDP of increased maintenance funding has not materialized in a sustainable way. Neither has performance-based contracting become fully operational, except in Western Province.

31. increased maintenance funding has not materialized in a sustainable way. Neither has performance-based contracting become fully operational, except in Western Province.

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33. Performance-based contracts for road maintenance were to be introduced for the national highways by the RDA in 2011 for a section of the A4.⁷ Several 3-year performance-based contracts are also to be called for the maintenance of the Southern Transport Development Project.⁸

⁷ At 430 kilometers, the A4 is the longest highway in Sri Lanka. It connects Colombo with Batticaloa, through a large number of important cities in Western, Sabaragamuwa, Uva, and Eastern provinces. The highway passes through Kirulapone, Maharagama, Homagama, Hanwella, Avissawella, Eheliyagoda, Kuruwita, Ratnapura, Lellopitiya, Pelmadulla, Balangoda, Beragala, Koslanda, Wellawaya, Buttala, Monaragala, Liyangolla, Siyambalanduwa, Hulanuge, Lahugala, Pottuvil, Komari, Thirukovil, Akkaraipattu, Oluvil, Karaitivu, Kalmunai, Periyakallar, Chettipalayam, Arayampathy, and Kattankudy.

⁸ ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Southern Transport Development Project*. Manila (Loan 1711-SRI[SF], approved on 25 November).

APPENDIX 10: PROJECTS FOR THE COLOMBO PORT

1. Two sovereign projects that have been undertaken in the port subsector in the evaluation period. The following section briefly describes the outputs of the subsequent projects in the port subsector by Asian Development Bank (ADB). The interrelationship between these projects is extremely important and is described in the following section as well.

A. Colombo Port Efficiency and Expansion Project

2. The technical assistance (TA) loan for the Colombo Port Efficiency and Expansion Project (CPEEP) was to help the government realize the potential of Colombo Port to become a major internationally competitive port in South Asia by creating the environment to allow (i) expansion of private sector participation in the port sector, (ii) commercialization of public sector operations and thereby improved efficiency, and (iii) the adaptation of a strategic approach to enlarging Colombo Port and maximizing private sector funding.¹

3. To help achieve these objectives, the TA loan included the provision of consulting services to help the government undertake two sets of tasks, in particular. Part A included:

- (i) preparation of draft legislation to revise the Sri Lanka Ports Authority (SLPA) Act to optimize the use of private sector concessions;
- (ii) preparation of the necessary documentation for the establishment of a competition regulator;
- (iii) corporatization of the Jaya Container Terminal (JCT), including the identification of core staff for the JCT management team, and top-level management positions in finance, marketing and information and communications technology services, with a view to increase its efficiency;
- (iv) management of the introduction of the International Standard Organization 9002 (ISO 9002) to the JCT;
- (v) preparation of a master plan to simplify port documentation and cargo clearance procedures, including implementation of an electronic data interchange that would improve the efficiency of clearance of goods; and
- (vi) preparation of the necessary enabling regulations and legislation for the establishment of dedicated facilities for international trade operations such as international procurement centers.

Part B included:

- (i) preparation of the strategy to enlarge the container capacity of Colombo Port, maximizing the use of private sector funding through a review of the market for the investment project, confirmation of demand projections, and the preparation of marketing and business plans, including a business plan that would have to prepare options for packaging concessions;
- (ii) preparation of the contractual documentation required to commence the construction of the first phase of the investment project, based on detailed engineering designs, and continuation until the award of construction contracts and the concession; and
- (iii) preparation of a summary environmental impact assessment, a full environmental impact assessment, an initial social analysis, a full social analysis, if required, and a poverty impact study for the investment project.

¹ ADB 2001. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Colombo Port Efficiency and Expansion Project*. Manila (Loan 1841-SRI[SF], approved on 27 September).

4. The government agreed to time-bound covenants related to institutional and policy reforms, the successful accomplishment and implementation of which were to comprise a condition for processing a further loan by ADB for the Colombo Port Development Project.² The institutional and policy reforms were to be carried out in phases, with the first phase commencing under the TA. It was expected that the reforms would be completed during the implementation of the CPDP.

5. The report and recommendation of the President (RRP) mentioned that the government had agreed that the processing of a further loan (the Colombo Port Expansion Project [CPEP])³ by ADB would be conditioned on (i) all personnel for the JCT line management positions being filled; (ii) the filing of the ISO 9002 compliance application; (iii) the JCT labor rationalization plan having been approved by a corporatized JCT board, implementation of the plan having commenced, and the plan being acceptable to ADB; (iv) the organizational structure and functions of the port regulator having been finalized; and (v) private sector participation in the CPEP being agreed upon at the tripartite review of the business plan to be prepared under the TA loan.

B. Colombo Port Expansion Project

6. The RRP of the CPEP says it consist of two components: (i) harbor infrastructure development and (ii) container terminal development. However, ADB did not finance the container terminal component and has not been tangibly or legally involved in the component.

7. The conditions for loan effectiveness of the project were that the government would first ensure that (i) following an open competitive bidding process, the SLPA had issued an invitation to the selected terminal operator(s) prior to commencing the negotiations for the terminal build-operate-transfer concession agreement; and (ii) a subsidiary loan agreement was signed between the government and the SLPA, and a legal opinion on the subsidiary loan agreement, the loan agreement, and the project agreement in a form and substance satisfactory to ADB was submitted by the government and the SLPA, respectively, to ADB.

C. The Implementation

8. The implementation of the CPEP was originally to be completed by August 2003 and the loan closing was to be in February 2004. The project required six loan extensions⁴ because of the failure to select a suitable operator to award the concession on the south container terminal within the loan closing date, which was a loan effectiveness condition in the CPEP. The request for proposal (RFP) to select a terminal operator was issued to bidders on 23 February 2007 and final evaluation report was submitted in November 2007. There had been no decision on the bids by the Cabinet-appointed negotiating committee on 9 January 2008 when the Cabinet of Ministers issued a decision on the subject of national interest in recommending tender awards. Based on this Cabinet decision, the Cabinet-appointed negotiating committee recommended and the Cabinet approved the cancellation of the RFP process on 12 March 2008. It was to be followed by a retender process with a fresh RFP. The reason given for cancellation was that national interest had not been properly addressed in the RFP documents.

² ADB. 1999. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to and an Equity Investment in South Asia Gateway Terminals (Private) Limited for the Colombo Port Development Project in the Democratic Socialist Republic of Sri Lanka*. Manila (Equity Investment 7153 and Loan 1689-SRI, approved on 11 May).

³ ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Colombo Port Expansion Project*. Manila (Loan 2319-SRI, approved on 27 February).

⁴ The independent evaluation mission noted that none of the loan extensions were mentioned in any back-to-office report of any review mission by ADB. The fact that there were several loan extensions was only brought to the attention of the independent evaluation mission during interviews with the SLPA and through a PCR obtained from the executing agency of the project, i.e., the Ministry of Ports and Aviation. The six loan extensions were on 31 August 2005, 31 August 2006, 31 August 2007, 31 August 2008, 28 February 2010, and 31 December 2010.

9. This cancellation created a problem since loan effectiveness of the CPEP was conditional on the issue of an invitation letter to the selected terminal operator. The result was a renegotiation between the borrower and ADB, and thereafter, an amendment to the loan agreement to waive the given condition and introduce a new condition that the award of the terminal concession should be made within 18 months after the effective date. Subject to this new condition, the loan became effective on 2 May 2008. The new deadline to select an operator fell on 2 November 2009 but was not met either due to delays. A new RFP document for south container terminal concession was issued 16 February 2009 and adopted BOT terms for the concession agreement. ADB received letters requesting extension and are preparing to extend the deadline up to September 2011. The BOT for the one of three terminals was to be signed in August 2011.

10. The RRP for the CPEEP noted that the World Bank had assisted the port sector under its Port Efficiency Project starting in 1997 and had funded studies into the legal, regulatory, and management aspects of the port sector as a whole and Colombo Port in particular. At that time, it had attempted to implement a port reforms agenda that was similar to that envisaged by the CPEEP. The proposals had included (i) corporatization of JCT, (ii) setting up of a port regulator, (iii) amendment to SLPA Act, and (iv) ring fencing and handover of commercial activities in the port to the private sector. But the World Bank had suspended this project and these efforts in 1999 due to lack of agreement with the government on restructuring the port sector.

11. The RRP also noted that improving the efficiency of the port sector in Sri Lanka required reforms. The World Bank's experience had shown that these reforms would not be forthcoming without support at the highest political level. Yet ADB went ahead with the project. The RRP stated that the 2000 election had brought in a government that had committed itself to reform and that the election had also brought a minister to the Ministry of Port Development and Development of the South who had adopted a radical reform agenda and was receptive to restructuring the state's role in the port sector. In the event, however, the expected support for reform did not materialize.

12. The RRP of the CPEP stated that the CPEEP had included two policy covenants. The first covenant was for the JCT to be transformed into a corporate entity wholly owned by the government. The objective was to increase overall port efficiency by increasing JCT's efficiency and by making the landlord port model the dominant model in the Colombo Port. However, the government was not able to corporatize the JCT and the landlord port model was not established. The second policy covenant of the CPEEP was to reform the regulatory structure for the ports sector through legislation, especially to curb any anticompetitive behavior on the part of established operators. This also was not achieved.

The Asian Development Bank's Support for the Transport Sector in Sri Lanka

This sector assistance program evaluation provides an independent assessment of ADB-financed projects and technical assistance in the transport sector in Sri Lanka from 1999 to 2010. It identifies areas for improving the effectiveness of ADB's interventions in the sector and provides evaluation lessons and recommendations.

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